# Assessment of Consistency with Statutory Plans

**Table 1** – State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55)

| SEPP Clause | Requirement | Proposal |
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| **Clause 7(1)A** | A consent authority must not consent to the carrying out of any development on land unless:<br>a) it has considered whether the land is contaminated, and<br>b) if the land is contaminated, it is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for the purpose for which the development is proposed to be carried out, and<br>c) if the land requires remediation to be made suitable for the purpose for which the development is proposed to be carried out, it is satisfied that the land will be remediated before the land is used for that purpose. | ▪ An assessment of contamination on the site is located at **Section 7.5** of the EAR. |

**Table 2** – State Environmental Planning Policy (Infrastructure) 2007

| Section | Requirement | Proposal |
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| **Clause 85 Development immediately adjacent to rail corridors** | (1) This clause applies to development on land that is in or immediately adjacent to a rail corridor, if the development:<br>(a) is likely to have an adverse effect on rail safety, or<br>(b) involves the placing of a metal finish on a structure and the rail corridor concerned is used by electric trains, or<br>(c) involves the use of a crane in air space above any rail corridor. | ▪ The proposed development is adjacent to a rail corridor however it will not trigger these matters and therefore does not require referral on this basis. |
| **Clause 86 Excavation in, above or adjacent to rail corridors** | (1) This clause applies to development (other than development to which clause 88 applies) that involves the penetration of ground to a depth of at least 2m below ground level (existing) on land:<br>(a) within or above a rail corridor, or<br>(b) within 25m (measured horizontally) of a rail corridor. or<br>(c) within 25m (measured horizontally) of the ground directly above an underground rail corridor. | ▪ The proposed development will not involve penetration of ground to a depth of at least 2m within 25m of a rail corridor and therefore does not require referral on this basis. |

| Section | Requirement | Proposal |
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| **Clause 104 Traffic generating development** | (1) This clause applies to development specified in Column 1 of the Table to Schedule 3 that involves:<br>(b) an enlargement or extension of existing premises, being an alteration or addition of the *relevant size or capacity*. | ▪ The proposed development is considered a traffic generating development by virtue of Schedule 3 and will therefore be referred to the RTA. |
| | **Schedule 3 Traffic generating development to be referred to the RTA**<br>*Column1* *Column 2*<br>Industry 20,000m$^2$ in area | |

**Table 3** – Newcastle Local Environmental Plan 2003

| Section | Requirement | Proposal |
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| **Clause 16 Zonings** | *Zone 4 (c) Steel River Zone*<br>2 Zone objectives<br>(a) To facilitate the development of employment-generating industrial, research, service or storage activities.<br>(b) To allow commercial, retail or other development only where it is:<br>(i) ancillary to the use of land within this zone for industrial, research, service or storage purposes, or<br>(ii) primarily intended to provide personal services and community facilities to persons occupied or employed in activities otherwise permitted in this zone or for the benefit of the local community.<br>(c) To ensure that any such commercial, retail or other development is unlikely to be prejudicial:<br>(i) to employment-generating activities, or<br>(ii) to the viability of existing commercial centres. | ▪ The proposed use is consistent with the zone objectives as it will provide an employment generating industrial use<br>▪ The proposed industrial use is permissible in the 4(c) Steel River Zone. |
| | 3 Development without consent<br>Any development identified in clause 13. | |

| Section | Requirement | Proposal |
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| | 4 Development only with consent<br>Any development not identified in item 3 or 5. | |
| | 5 Prohibited development<br>Development for the purpose of:<br>advertising structures, aerodromes, agriculture, airstrips, bed and breakfast accommodation, boarding houses, camping grounds or caravan parks, cemeteries, commercial offices, dwellings or dwelling-houses, exhibition homes, exhibition villages extractive industries, hazardous industries, hazardous storage establishments, heliports hospitals, hotels, institutions, local shops, mines, motels, natural water-based aquaculture, offensive industries, offensive storage establishments, pond-based aquaculture, roadside stalls, serviced apartments, shops, urban housing | |
| **Clause 36 Land in Zone 4 (c) at Mayfield West** | (4) Permissible development<br>The consent authority shall not grant consent to the carrying out of development on land to which this clause applies unless:<br>(a) the development is allowed with consent within Zone 4 (c) and complies with the environmental envelope, and<br>(b) the environmental effects of any aspect of the development relating to air quality, noise emissions or water quality that have not been addressed in the Strategic Impact Assessment Study, meet any relevant standards determined by the Department of Environment and Climate Change. | ▪ The development is allowed with consent within Zone 4(c) and generally complies with the environmental envelope as assessed in **Table 4** below.<br>▪ The environmental effects of the development generally meet the relevant standards determined by DECC. |

**Table 4** – SIAS

| Section | Requirement | Proposal |
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| **9.2 STANDARDS AND REQUIREMENTS (INDIVIDUAL INDUSTRIES)** | | |

| Section | Requirement | Proposal |
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| **9.2.1 Participation in Environmental Envelope** | The various parties which have responsibility relating to the environmental envelope are described in Section 8.2 of this SIAS. These parties are individual industries, the Environment Protection Authority, Newcastle City Council and the Steel River Estate Management Company (EMC). The responsibility of the individual industries locating in Steel River are listed in the following sections: | ▪ As Part 3A of the EP&A Act applies to the development the environmental envelope does not apply. However, in accordance with the DGRs the envelope was considered during the detailed design of the proposal and assessed in the following table. |
| **8.3 Ambient Air Quality Standards** | | |
| **8.3.1 Criteria Pollutants** | The ambient air quality at the estate boundary and at the most affected receiving location outside the estate boundary, ie the ambient air quality which results from emissions from all premises within the estate, shall not exceed the ambient air quality standards as shown in Table 1. These five standards have been identified as the parameters, most likely to protect the environment and community health in urban areas. | ▪ An air quality assessment was undertaken by URS and is located at **Appendix K** and summarised in the EAR at **Section 7.3**. |
| **8.3.2 Dust Deposition** | During the development and construction of the estate a dust deposition standard of 4 g/m²/month (annual average) will apply. An air quality management plan is required in order to prevent short-term dust events during the construction period. For the purposes of the environmental envelope, "development and construction" applies to the first three years after the gazettal of the new LEP for Steel River. It is expected that the majority of site preparation works and primary construction will be completed within this period. Dust deposition shall be monitored for compliance purposes as a part of the ambient air quality monitoring during this phase. | ▪ The proposed development is outside of the "development and construction" period defined in the SIAS. As reflected in the Statement of Commitments, construction dust mitigation methods will be implemented in accordance with the recommendations in the Air Quality Assessment prepared by URS at **Appendix K.** |
| **8.3.3 Design Ground Level Concentration Criteria** | The odour and organic compound impacts within the estate which result from emissions from individual premises within the estate, shall not exceed the design ground level concentration criteria as shown in Table 3. | ▪ An Air Quality Assessment was undertaken by URS and is located at **Appendix K**. The assessment demonstrates that the proposal does not exceed the design ground level concentration criteria as shown in Table 3 of the SIAS. |

| Section | Requirement | Proposal |
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| **8.3.4 Air Emission Limits** | i) Design Ground Level Concentration Criteria<br>The design ground level concentration criteria shown in Table 3 above shall be used to develop source specific emission limits for each of the pollutants covered and for each industry entering the site.<br>ii) Clean Air Regulations<br>Industries which require licensing under the Clean Air Act 1961 (scheduled premises), shall also be required to comply with the emission limits prescribed in the Clean Air Regulations. Non-scheduled premises shall be expected to use appropriate | ▪ An air quality assessment was undertaken by URS and is located at **Appendix K**. The assessment demonstrates that the proposal may require licensing under the Clean Air Act 1961 and KI is committed to working with the relevant authorities to secure the relevant license. |
| **8.4 Noise Emission Standards** | | |
| **8.4.1 Noise Criteria - Overview** | The noise criteria for the Steel River estate are based on planning noise levels set for each of the different receiver zones surrounding the estate. These receiver zones follow the land zonings of 2(a), 4(b), 5(a), (b), (c) and (e), 6(a) and 3(d) with the exception of an additional zone, 2(a)1. This zone is the first row of residences in zones 2(a) which are adjacent to Industrial Drive and opposite the estate. This additional zone of 2(a)1 allows for noise criteria which corresponds to the Environment Protection Authority's Environmental Noise Control Manual planning category of residential area on a busy road or near an industrial area. | ▪ Noted |
| **8.4.2 Noise Criteria** | Table 4 below sets the maximum daytime and night-time $^{L}$A10 noise levels for each zone shall not be exceeded by noise from the estate when measured at, or calculated for, any point within the zone. Similarly noise from the estate shall not exceed the sleep disturbance criteria $^{L}$A1 for night-time for zones 2(a), 2(a) 1, 6(a) and 3(d) as shown in Table 4. | ▪ A Noise Assessment was undertaken by URS and is located at **Appendix L**. The assessment demonstrates that while the proposal does in some cases exceed the maximum night-time LA10 noise levels for each zone it will have no adverse impact on the amenity of surrounding sensitive land uses. |

| Section | Requirement | Proposal |
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| **8.4.4 Negotiated Noise Management Agreements** | Where the noise criteria set out in Table 4 are unable to be met and a proponent seeks development consent, the approach to managing noise impacts from the proposed industry may be by way of negotiated agreement. This approach permits, after all feasible and reasonable noise mitigation measures have been applied, a process of negotiating an agreed outcome between the proponent and the affected community to address elements of the local noise profile which may be problematic. Independent mediators may be used to assist the negotiation process. | ▪ The proposal does not meet the criteria set out in Table 4, however, the Noise Assessment at **Appendix L** demonstrate that the proposal will have no adverse acoustic impacts and no noise management agreement will be necessary. |
| **8.5 Water Quality Standards** | | |
| **8.5.1 Stormwater Quality** | Any stormwater discharged from the estate to the Hunter River (or any tributary drain) shall be of a quality which is consistent with the ANZECC guidelines for protection of aquatic ecosystems. The ANZECC guideline for protection of aquatic ecosystems is reproduced as Table 5. Stormwater shall be managed to minimise the potential for recharge of shallow groundwater on the Steel River Estate. | ▪ The stormwater discharged from the estate to the Hunter River will be of a quality consistent with the ANZECC guidelines as detailed in **Section 7.8**. |
| **8.5.2 Industrial Process Water** | No contaminated industrial process water shall be discharged from any industry on the estate to surface waters on the estate or to the Hunter River. No process water shall be discharged to groundwater. All industrial process water which cannot be reused on the site shall be disposed of to the reticulated sewage system, or removed from the site by the tanker for re-use or disposal at an approved facility. | ▪ The Cooling Tower(s) will generate approximately 5m$^3$ per day of wastewater that is proposed to be discharged to the existing sewer under a future Trade Waste Agreement with Hunter Water. |
| **8.5.3 Groundwater and Water Re-use** | No contaminated groundwater shall be discharged from the estate to the Hunter River. Any industry which generates industrial waste water shall contribute to ongoing research and development to explore new mechanisms for minimising water consumption and maximising water re-use opportunities within the estate. | ▪ No contaminated groundwater will be discharged from the Estate to the Hunter River. |
| **8.6 Waste Management** | | |

| Section | Requirement | Proposal |
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| **8.6 Waste Management** | Essentially, the requirements for waste with which future industries on Steel River shall comply can be listed as follows:<br>i) The production, transport, reprocessing and disposal of wastes are regulated by the Waste Minimisation and Management Act (1995).<br>ii) Generators of hazardous or industrial waste may be required to obtain a licence from the EPA.<br>iii) Transporters of hazardous or industrial waste may be required to obtain a licence from the EPA.<br>iv) Any activity treating or reprocessing hazardous or industrial waste may be required to obtain a licence from the EPA<br>v) Each industry locating on the Steel River estate shall prepare and implement a waste management plan which is consistent with the estate EMS.<br>vi) The estate EMS shall be linked to other regional waste re-use or recycling initiatives and information systems.<br>vii) Where an Industry Waste Reduction Plan applies to an industry classification located on the site, the industries activities shall be consistent with the IWRP.<br>viii) In respect of reporting, the EMC shall prepare an annual report which documents waste generation and management initiatives. | ▪ Waste Management has been addressed in **Section 7.13** of the EAR.<br>▪ The proposed development will not generate any hazardous industrial waste which requires a licence from the EPA. |
| **8.7 Energy Management** | | |

| Section | Requirement | Proposal |
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| **8.7 Energy Management** | These and other requirements in respect of energy on the Steel River site can be summarised as follows:<br>i) Individual proponents shall demonstrate that relevant national guidelines for energy efficient industrial design have been used in the layout and design of buildings and equipment located on that premises.<br>ii) The EMC shall contribute to research into regional sourcing of renewable energy supplies.<br>iii) The EMC shall develop and implement an energy efficiency plan for the estate, as part of the EMS for the estate.<br>iv) In respect of reporting, the annual report of the performance of the estate shall include information on initiatives to improve the efficiency of energy use within the estate. | ▪ An assessment of the proposals energy efficiency and ecological sustainable design are detailed in **Sections 7.10** and **7.14** and in the Architectural Design Statement located at **Appendix A**. |
| **8.9 Design Guidelines and Objectives** | | |

| Section | Requirement | Proposal |
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| **8.9.2 Allotment and Building Design** | **i) Allotment Size and Configuration**<br>*Objectives*<br>The objectives are:<br>▪ to provide a range of allotment sizes which can adequately accommodate buildings, manoeuvring, storage areas, car parking and landscape treatment for the efficient operation of industry while not detrimentally affecting the amenity of adjoining land and the public domain; and<br>▪ to provide allotments of sufficient size to enable future expansion of development and potential uses within abutments.<br>*Guidelines*<br>▪ Industrial allotments should generally be greater than 10,000m$^2$ (a minimum of 5000m$^2$) and of a square or rectangular shape to maximise the efficient use of land.<br>▪ Allotments for other purposes shall be of such a size and shape as maybe required to optimise the efficient use of land.<br>▪ Allotments should generally provide a minimum road frontage of 60m.<br>▪ Allotments should not have direct access off Industrial Drive, Tourle Street or the Pacific Highway.<br>▪ Allotment size and configuration should be designed having regard to the implications on site coverage, site layout and set back guidelines.<br>▪ Consideration should be given to potential for shared access and future subdivision arrangements. | ▪ The site occupies a previously subdivided allotment.<br>▪ The allotment is greater than 10,000m$^2$ and will have a road frontage in excess of 60m.<br>▪ No direct access is proposed to Industrial Drive, Tourle Street or the Pacific Highway. |

| Section | Requirement | Proposal |
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| | **ii) Site Layout**<br>*Objective*<br>▪ The objective is to ensure that allotments are developed in an orderly manner having regard to the visual impact of structures and facilities and the legibility of vehicular and pedestrian movement.<br>*Guidelines*<br>▪ Loading, storage and external work areas should be located generally to the rear of allotments.<br>▪ Buildings, fencing and landscape treatment should be used to screen visually obtrusive activities.<br>▪ Components of the buildings which incorporate offices, caretaker dwellings, show rooms and customer services areas which are generally of a high architectural design standard, should be located towards the front of the allotment to present an attractive facade to the street frontage. | ▪ A Visual Impact Assessment is located at **Section 7.9** of the EAR.<br>▪ The loading area is located at the rear of the allotment and main storage area in the centre of the site.<br>▪ Landscaping has been provided around the boundaries of the site as shown on the Landscape Plan at **Appendix A**. |

| Section | Requirement | Proposal |
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| | **iii) Site Coverage**<br>*Objectives*<br>The objectives are:<br>▪ to ensure a consistent maximum density of development and utilisation of sites for efficient operation; and<br>▪ to ensure sufficient site area is provided for buffers and landscape treatment to achieve a quality visual environment and effective habitat areas.<br>*Guidelines*<br>▪ The combined building and external hard paved surfaces (including access, car parking, storage, work, turning areas), should not exceed 80% of the site.<br>▪ Not less than 20% of the site area should be landscaped. This area should not contain car parking, vehicular access, turning, loading, storage and work areas. Landscaping should include tree planting, mulched planting areas, grass and pedestrian/cycle pathways. As a minimum requirement, mulch planting beds containing trees, shrubs and groundcovers should occupy 5% of the total site area.<br>▪ The total ground floor area of all buildings on an allotment generally should not exceed 70% of the area of the allotment. | ▪ The proposed development complies with all the site coverage guidelines specified in Section iii) Site Coverage.<br>▪ The combined building and external hard paved areas do not exceed 80% of the site.<br>▪ Over 20% of the site is landscaped as shown on the Landscape Plan at **Appendix A.**<br>▪ The total ground floor area of all buildings does not exceed 70%. |

| Section | Requirement | Proposal |
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| | **iv) Set Backs**<br>*Objectives*<br>The objectives are to:<br>▪ set buildings back from boundaries at a distance which ensures that there is no detrimental impact on the public domain and where appropriate allows for provision of access car parking and extensive landscape areas between the building and the road; and<br>▪ set building and external paved areas back to provide a landscape buffer to areas to effectively screen external storage, work areas and on site car parking from nearby residential areas and the public domain.<br>*Guidelines*<br>▪ A minimum front building setback of 10m should be provided from all internal roads indicated on the master plan Figure 7 in this SIAS. However, this may be reduced to a 5m setback for 40% of the site width, provided that all site access and landscape treatments set out in these guidelines can be achieved and provided that the building design contributes to the enhancement of the streetscape.<br>▪ Front or side building setbacks should be increased where allotments abut future secondary roads or on corner allotments.<br>▪ A minimum development setback (including external work, storage and car parking areas) of 5m shall apply to all external site boundaries of the Steel River site. This setback shall be heavily landscaped with screen planting, except where landscaping may reduce surveillance of public areas by adjacent development.<br>▪ A minimum development setback from side and rear property boundaries of 6m shall be provided to buildings and external work and storage areas. | ▪ The proposed development complies with all the setback guidelines specified in Section iv) Set Backs.<br>▪ A minimum 10m setback has been provided from all internal roads.<br>▪ All development is set back greater than 5m from the external site boundaries of the Steel River site. |

| Section | Requirement | Proposal |
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| | **v) Building Form**<br>*Objective*<br>▪ The objective is to provide buildings that have a strong theme or design concept through the element of form that can carry a palette of materials in an articulated fashion.<br>*Guidelines*<br>▪ Blank unarticulated walls should be avoided.<br>▪ The functions of the building may be reflected in the articulation of the building envelope.<br>▪ Creative roof designs are encouraged.<br>▪ There should be a smooth and preferably a seamless transition of the building appearance from the front of building functions to the rear of building functions.<br>▪ Building mass can also be articulated through use of sunshades, terraces, balconies, canopies, columns and other elements that provide depth. | ▪ A Visual Impact Assessment assign the building form is located at **Section 7.9** of the EAR.<br>▪ The functions of the building have been reflected in the articulation of the building envelope. |

| Section | Requirement | Proposal |
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| | **vi) Building Height**<br>*Objective*<br>▪ The objective is to create a harmonious streetscape and visual environment, and to achieve a consistency between buildings by limiting the height of buildings.<br>*Guidelines*<br>▪ Buildings fronting main roads should be greater than 6.5m in height.<br>▪ Generally, buildings should be 1-2 storey constructions to a maximum height of 12m above finished ground level immediately below that point.<br>▪ Variations to permit buildings with more storeys or a height of greater than 12m, may be allowed where it can be demonstrated that no harm will be caused to the amenity of the surrounding locality. Development that is greater than 12m should generally be well set back from the front facade of the building.<br>▪ Building service appendages, such as lift motor room, air conditioning equipment, and exhausts, should generally not project beyond the same height limitations. It is preferred that any protruding services/ equipment should either be concealed from view behind parapet walls or be housed within the building envelope entirely.<br>▪ Rooftop radio, television and microwave antennas/towers must be approved by the Estate Management Company. | ▪ The proposed development exceeds the 12m height guideline. However as demonstrated in the Visual Impact Assessment in **Section 7.9** of the EAR, no harm will be caused to the amenity of the surrounding locality. |

| Section | Requirement | Proposal |
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| | **vii) Building Address**<br>*Objectives*<br>The objectives are to:<br>▪ ensure that the entrances to buildings on allotments are clearly defined and well articulated.<br>▪ ensure the private built form contributes positively to the public domain.<br>*Guidelines*<br>▪ The building should have its entrances clearly defined through form, materials and colours used.<br>▪ Entries for vehicles/goods should be clearly defined yet secondary in design strength.<br>▪ Entries into buildings should have a hierarchy of design strength (articulation of form, materials and colours used) with the main pedestrian entry being most prominent followed by goods entries and emergency exits etc. | ▪ The building entries will be clearly defined by signage and fencing. |
| | **viii) Floor Space Ratio**<br>*Objective*<br>▪ The objective is to ensure compatibility of scale of buildings within the allotment boundaries.<br>*Guidelines*<br>▪ The maximum floor space ratio for any allotment should not exceed 1.5:1.<br>▪ The floor space ratio is the total area of all buildings on an allotment divided by the total area of the allotment.<br>▪ The total floor area of all buildings is measured to the exterior face of all walls with balconies and decking being excluded. | ▪ The proposed development does not exceed the 1.5:1 FSR. |

| Section | Requirement | Proposal |
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| | **ix) Storage and Work Areas**<br>*Objective*<br>▪ The objective is to ensure storage and external work areas are adequately catered for within allotments in a manner which is aesthetically pleasing and does not detrimentally affect the visual amenity of the area.<br>*Guidelines*<br>▪ All storage, work areas and garbage receptacles should be located at the rear of allotments and screened from public streets and residential areas by the use of buildings, screen fences or landscaping.<br>▪ All storage and work areas should be contained wholly within the confines of the allotment. The temporary storage of materials or carrying out of external work within the public road reserve is not permitted.<br>▪ Consideration may be given to shared storage and work areas with adjoining developments where clear site planning and efficient land use benefits can be demonstrated without impacting adversely on public amenity.<br>▪ Materials storage should generally occur within buildings. Where external storage is permitted, materials should not be stacked greater than a total height of 3m above natural ground level, unless adequate screening measures are implemented. | ▪ The loading and work areas are located at the rear of the allotment.<br>▪ The main storage area is located in the centre of the site and will be screened by the built form and landscaping on the site.<br>▪ Raw materials will be stored within the Batch House and Cullet Storage buildings. |

| Section | Requirement | Proposal |
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| | **x) Building Materials**<br>*Objective*<br>▪ The objective is to ensure that materials used contribute positively to the image and ecological sustainability of the Steel River Eco Industrial Park.<br>*Guidelines*<br>▪ Material selection should generally consider the following issues:<br>- innovative and contemporary design;<br>- energy efficiency, both in terms of embodied energy and ongoing performance;<br>- low maintenance qualities.<br>▪ Where plain masonry block work, galvanised iron, zincalume or timber are to be used, they should be innovative and creative in use.<br>▪ New materials will be considered on their merits.<br>▪ Generally roof material will be pre-coloured metal where the roof is visible (ie. above 10o pitch).<br>▪ Reflective glazing in windows or walls is not encouraged. | ▪ The majority of the building will be constructed of steel as it:<br>- can be recycled at a future time when the building has reached the end of its lifecycle; and<br>- is low maintenance. |

| Section | Requirement | Proposal |
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| | **xi) Building Colour Schemes**<br>*Objectives*<br>The objectives are:<br>▪ to ensure a co-ordinated and harmonious appearance for buildings on individual allotments in relation to each other and the public domain; and<br>▪ to assist in promoting a clean and eco-friendly image for the Steel River Eco Industrial Park.<br>*Guidelines*<br>▪ A colour scheme for all buildings on an allotment shall be submitted to the Estate Management Company for approval prior to construction.<br>▪ Consideration of adjoining buildings within the Park (whether constructed or approved for construction) should be made when determining a colour scheme.<br>▪ Generally lighter colours are preferred over darker colours as the major base colour for buildings.<br>▪ Innovative and creative use of colour on the various components of the building is encouraged. | ▪ The proposed building will use European colour standard RAL 1051 (a shade of white) which is consistent with KI's corporate colour scheme and will assist to promote a clean and eco-friendly image for the Estate. |

| Section | Requirement | Proposal |
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| | **xii) Energy Efficient Building Designs**<br>Objective<br>The objective is to minimise energy use in all parts of buildings while providing a comfortable working environment.<br>*Guidelines*<br>▪ Buildings with a north-south orientation are preferred.<br>▪ Buildings should minimise the amount of exposed glass to the western face.<br>▪ Air conditioning should be zoned to enable the most efficient heating/cooling of the building.<br>▪ Roof and wall insulation should be used to reduce winter heat loss and summer heat gain. Correct sealing of doors and windows will also assist.<br>▪ Low energy lighting and appliances should be used.<br>▪ When selecting air conditioning systems and other energy using systems, evaluation should be undertaken on a life cycle cost basis.<br>▪ Selection of materials used in the buildings should be made from the least polluting and renewable/sustainable sources. Materials that have a high thermal mass (eg concrete, stone) can be used to store heat from sunlight and must be positioned correctly.<br>▪ The use of renewable energy technologies is encouraged, including photovoltaic cells, battery storage, solar water and solar space heaters.<br>▪ Designs that maximise the economic life of buildings by allowing changes in use with the minimum of alternation/retro-fitting are encouraged.<br>▪ Material selection should operate on the principle of choosing a material that has low embodied energy in comparison to other materials.<br>*Requirement*<br>▪ A building energy efficiency audit statement shall accompany any development application. | ▪ An overview of the building energy efficiency merits is included in the Architectural Design Statement at **Appendix A**. These include:<br>- use of low maintenance materials and landscaping;<br>- reusable construction materials;<br>- rain water harvesting; and<br>- use of natural lighting within the plant. |

| Section | Requirement | Proposal |
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| | **xiii) Landscape Development**<br>*Objectives*<br>The objectives are:<br>▪ to ensure a high standard of visual amenity and environmental quality of industrial developments, while enhancing the general streetscape and amenity of the Steel River Eco Industrial Park.<br>▪ to provide a consistent landscape treatment which enhances the corporate identity of the Steel River Eco Industrial Park. | ▪ The Landscape Plan at **Appendix A** illustrates the proposals high standard of landscaping through out the development which will enhance the streetscape and amenity of the Estate. |
| | **xiv) Flora and Fauna Protection**<br>*Objective*<br>▪ The objective is to improve the habitat value of the Mayfield area by providing habitats for nature species (especially birds) within the Steel River site.<br>*Guidelines*<br>▪ To maximise the habitat enhancement opportunities of landscaping on the site, native plant species should be used in the landscaping of rear and side allotment boundaries and along service corridors. Local flora should be emphasised.<br>▪ Open space areas, such as around the proposed water quality ponds, should incorporate dense plantings of shrubs as well as trees to provide cover for smaller birds.<br>▪ To minimise the risk of bird collisions no further electricity transmission lines, additional to those existing on site, should be allowed. | ▪ No trees will are proposed to be removed as part of the development.<br>▪ Dense planting is proposed across the site as shown on the Landscape Plan at **Appendix A**. |
| | **xv) Fencing and Screening**<br>*Objective*<br>▪ The objective is to ensure fencing and screen walls contribute to the amenity of the estate and meet the individual operational requirements of industries. | ▪ Fencing will be used to contribute to the amenity of the Estate by providing a clear division between the public and private domain and ensure the security of the facility and safety of the general public. |

| Section | Requirement | Proposal |
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| | **xvi) Lighting**<br>*Objectives*<br>The objectives are to:<br>▪ provide a functional and coordinated site lighting system which contributes to a safe and visually attractive environment; and<br>▪ ensure lighting does not cause distraction to vehicle drivers on internal or external roads or to the occupants of adjoining properties and residential land. | ▪ An assessment of the proposed lighting is located in the Visual Impact Assessment at **Section 7.9** and at the Architectural Design Statement at **Appendix A**. |

| Section | Requirement | Proposal |
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| | **xvii) Pedestrian and Cycle Access**<br>*Objective*<br>▪ The objective is to provide safe, convenient, attractive on-site pedestrian and cycle access linking each development to the site's circulation system.<br>*Guidelines*<br>▪ Pedestrian and cyclist access should be provided from public roads to individual allotment or building entries and where appropriate linking adjacent development site.<br>▪ Each development should provide for co-ordinated, continuous pedestrian connections which are accessible to the public 24 hours per day and link activity areas and destination points such as parking areas, plazas, open space or recreation areas with the allotments and adjoining buildings.<br>▪ Cycle parking shall be provided in each precinct at the rate of 1 space per 1,000 square metres of allotment area. These areas shall be screened from the building entry and adjacent public roads.<br>▪ Paving materials should be compatible with the architecture, durable, nonslip and easily maintained.<br>▪ Pathways should be designed for disabled access.<br>▪ Clear separation between vehicles and pedestrian/cycle pathways should be provided to minimise potential conflicts. Where pedestrian and cycle paths cross vehicular paths, a visual distinction should be made.<br>▪ Pedestrian/cycle paths linking the allotments with the public road should have a minimum unobstructed width of at least 2.5m except where the pedestrian/cycle path is contiguous with a kerb where the minimum width shall be 3.0m. | ▪ An assessment of pedestrian and cycling access is located at **Section 7.11** of the EAR. |

| Section | Requirement | Proposal |
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| **8.9.3 Parking and Unloading Areas** | **i) Parking**<br>*Objective*<br>▪ The objective is to provide efficient, safe and convenient movement for vehicles and pedestrians in an aesthetically pleasing landscaped setting.<br>*Guidelines*<br>▪ The aisle and parking stall dimensions shall be in accordance with current Newcastle City Council requirements.<br>▪ Parking is restricted to paved, designated parking spaces only, each owner or lessee shall be responsible for the compliance of their respective employees and visitors.<br>▪ Visitor drop off zones and parking should be provided near visitors entrances.<br>▪ All day employee parking should be separated from visitor parking and entrance traffic. The parking of trucks should not be permitted within building setback areas.<br>▪ Landscape islands should be provided within parking areas adjacent to boundary areas at a maximum interval of seven parking stalls and at the end of each run of stalls. These islands should have a minimum width equal to that of one parking stall.<br>▪ Within internal parking areas, landscape islands should be provided at the ends of all rows of parking. The parking islands should be provided at maximum interval of every 20 parking spaces. Minimum width of an island should be equal to two car parking spaces.<br>▪ A continuous vertical concrete kerb not less than 150mm in height should be provided around all parking islands and the perimeter of car parking areas to prevent vehicular intrusion. Allowance should be made for wheelchair/pram/cycle ramps as necessary.<br>▪ Barriers or wheel stops on the surface of parking areas and vehicular barriers within landscaped areas should not be permitted.<br>▪ Bollards are permitted adjacent to building entrance portals and loading docks within buildings to protect adjacent vertical surfaces.<br>▪ All parking spaces must be designated by contrast paving, reflective tiles or painted lines in accordance with Newcastle City Council requirements. | ▪ The staff and visitor parking areas have been separated from the truck parking and internal road network to ensure the efficient, safe and convenient movement of vehicles and pedestrian within the site.<br>▪ The provisions of landscaping within the parking areas is shown on the Landscape Plan at **Appendix A**. |

| Section | Requirement | Proposal |
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| | **ii) Loading, Unloading and Servicing Areas**<br>*Objective*<br>▪ The objective is to provide for the design of loading and servicing areas in a functional and aesthetically pleasing manner.<br>*Guidelines*<br>▪ All loading and servicing areas should be located to the side or rear of buildings and effectively screened from any street frontage, adjoining buildings and residential areas.<br>▪ Each individual allotment should provide sufficient on-site loading facilities to accommodate its activities within the allotment but where sharing facilities is possible, it will be encouraged. All loading movements, including turnaround areas, should be made within allotments. | ▪ The proposed loading dock is located at the rear of the plant and will not be visible from the street frontage, adjoining buildings or residential areas.<br>▪ No sharing of loading docks is proposed. |

| Section | Requirement | Proposal |
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| **8.9.4 Geotechnical Requirements** | **i) Geotechnical Inspection**<br>Prior to the development of individual lots it is a requirement that a site - specific geotechnical inspection be undertaken to identify requirements for foundations to suit the proposed buildings and pavements and the expected ground settlement within the lot.<br>**ii) Foundations**<br>Foundations for buildings and ground floors will depend on a number of factors such as loadings, acceptable tolerances in floor levels, and the profile of the subsurface materials. Foundation types will therefore range from high level pad or strip footings to deep piled foundations.<br>**iii) Impact on River Bank**<br>Generally it is preferable to locate buildings 20m away from the existing bank beside the river to avoid additional loadings on the bank. Therefore, it is a requirement that an additional geotechnical analysis is carried out in order to design building foundations which will not impact on the bank. | ▪ A geotechnical review was undertaken by URS, the review was used to inform the detailed design of the proposal to ensure that the foundations are suitable for the proposed development.<br>▪ The proposed plant is located 20m away from the river bank. |

| Section | Requirement | Proposal |
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| **8.9.5 Traffic and Transport** | Development on the Steel River site shall be consistent with the objective of minimising vehicular traffic generation.<br>i) Individual Industries in respect of individual industries, some of the ways in which this objective can be achieved are as follows:<br>▪ Forecast peak hour traffic generation should not exceed 16 vehicles per hour per site hectare two way (in plus out) (12 vehicles per hour per site hectare if reduced car use objectives are to be met).<br>▪ Parking should be provided in accordance with the parking code of Newcastle City Council or as otherwise required by Council. Council will consider a reduction in on-site parking requirements when:<br>- on-street parking is maximised by street design (angle or right angle parking);<br>- parking can be shared by developments with peak demands at different times of the day;<br>- there is easy access to parking and a high turnover rate.<br>▪ Provision should be made for bicycle parking at the rate of 5 spaces per 100 employees. | ▪ A Traffic Assessment is located at **Appendix N** and is summarised at **Section 7.11** of the EAR. The report demonstrates that the proposal will have no adverse traffic impacts.<br>▪ Parking has been provided in accordance with the parking code of Newcastle City Council. |

| Section | Requirement | Proposal |
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| **8.10 Hazards and Risk Management** | | |
| **8.10 Hazards and Risk Management** | Development on the Steel River site shall be consistent with the following specifications in respect of the management of hazards and risks.<br>(i) For land use safety planning the assessment of individual risk levels should be used to ensure that no particular individual is exposed to unduly high levels of risk, and societal risk used to ensure that the risk impact on the surrounding environmental community as a whole is not excessive. It should also indicate the extent of compliance with the qualitative and quantitative risk criteria set out in NSW Department of Planning Hazardous Industry Planning Advisory Paper No. 4, Risk Criteria for Land Use Safety Planning.<br>(ii) For development of a potentially hazardous industry, early consultation with the Council, (and possibly the Department of Urban Affairs and Planning (DUAP) and other relevant authorities) should be carried out.<br>(iii) If the development is potentially hazardous, a preliminary hazard analysis (PHA) should be prepared either under the EP&A Act or SEPP 33. The PHA involves a comprehensive hazard identification including the identification of hazardous incident scenarios and reference to the proposed operational and organisational safeguards.<br>(iv) An evaluation of risks associated with the transport of dangerous goods that could result from accidental release of those materials and cause harm to the environment or public health may be required for potentially hazardous developments. The analysis should be based on the methodology outlined in the Guidelines for Land Use and Environmental Safety Planning for Hazardous Materials - Road Transport Considerations issued by DUAP. | ▪ A risk assessment study is located at **Appendix I** and is summarised at **Section 7.12** of the EAR. The study demonstrates the risk potential of the development is low and the recommended risk mitigations and minimisation measures have been adopted in the Statement of Commitments. |