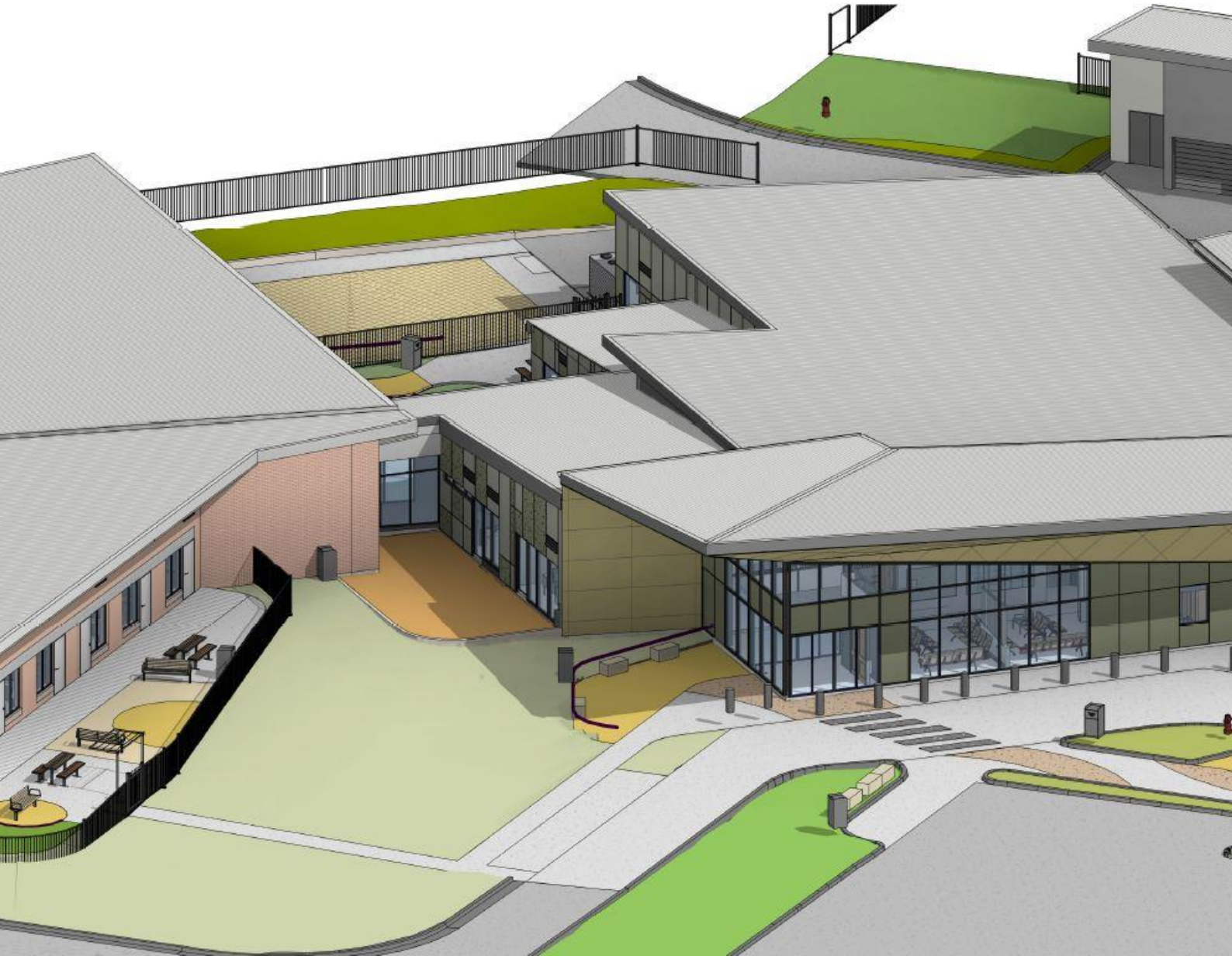

BLAYNEY MULTIPURPOSE SERVICE

ESD DGN 058 Performance Specification

Prepared for
NSW Government | Health Infrastructure

Issue for Tender
Revision 01

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1 General

1.1 Introduction

LCI Consultants have been engaged by NSW Health Infrastructure (HI) to prepare this Ecological Sustainable Design (ESD) Design Guidance Note (DGN 058) Performance specification for the proposed Blayney Multipurpose Services (Blayney MPS) Redevelopment located at 3 Osman Street, Blayney NSW 2799.

A key requirement of the project is that its design & construction must meet the sustainability expectations of NSW HI as laid out in the HI Design Guidance Note No. 58 (DGN 058) ESD Evaluation Tool. Application of this ESD Evaluation Tool involves a self-assessed & peer-reviewed compliance process against credit criteria nominated using the Green Building Council of Australia's (GBCA) Green Star Design & As Built v1.3 rating scheme.

Being located outside of the Sydney, Wollongong and Newcastle area, this project (at overall completion after all relevant stages of construction) must achieve a minimum of 45 points (4 Star Green Star Design & As Built v1.3 Equivalency) under HI's ESD DGN 058 Evaluation tool, which is deemed to be reasonably comparable to a 'self-certified' 4 Star Green Star equivalent level.

It is noted that implementation of the NSW HI ESD Evaluation tool in DGN 058 does NOT produce or correspond to an official certified Green Star rating. **No claim** can be made that the project is targeting a Green Star rating, nor that Green Star compliance has been met. In addition, it is not intended that the project be claimed to definitively achieve a 4 Star Green Star Design & As Built v1.3 equivalent level of performance. The NSW HI DGN 058 ESD process does not have any formal registration with, submission to, or assessment by the Green Building Council of Australia. In lieu of this, the ESD initiatives implemented for the project design and construction will be peer reviewed & assessed by an independent ESD consultant (engaged by NSW HI) against the ESD DGN 058 performance requirements.

It is the responsibility of the Head Contractor and its team to further develop the design during design finalisation and coordinate & incorporate the required DGN 058 ESD initiatives within the overall design & construction of the project.

1.2 Document Objective

This ESD performance specification outlines the Head Contractor's and engaged sub-contractor's responsibilities in delivering the DGN 058 ESD Performance requirements through the design finalisation, construction, commissioning, and operational phases of the development.

This ESD Performance specification shall be read in conjunction with all other contract design documentation and specifications. It is noted that not all DGN 058 Green Star Equivalency requirements may have been fully incorporated or coordinated within the current stage of the tender design (including other disciplines such as architectural, building services, structure, interior design etc.).

Where any discrepancies exist between the ESD Performance Specification and other relevant contract design documentation, this ESD performance specification shall take initial precedence from a sustainability/ESD perspective unless other statutory, safety or specific project requirements are present. However, the Contractor shall still be required to seek clarification from the Project Manager, NSW HI and the relevant consultant on all discrepancies prior to design & construction.

Note: the DGN 058 ESD requirements in this specification do not relieve the Head Contractor of any other obligations under the contract.

1.3 ESD Performance Requirements & Targets

The minimum ESD performance requirements for the development overall include (but are not limited to) the following:

- Compliance with NCC2019 Section J Amendment 1 Energy Efficiency Requirements
- Minimum 10% Improvement over the minimum NCC 2019 Section J Amendment 1 Energy Efficiency Requirements (as per DGN 058); and
- Demonstration of achievement of a minimum 45 points at overall project completion (As Built) as per the DGN 058 ESD Evaluation Tool Pathway for Blayney MPS Redevelopment. Achievement of this target (to the satisfaction of the NSW HI Independent ESD Peer Reviewer) is deemed to be notionally comparable to a 4 Star Green Star Design & As Built v1.3 Equivalency level.

2 Health Infrastructure NSW Design Guide Note 58 Ecological Sustainable Design

This Specification shall be read in conjunction with the NSW Health Infrastructure Design Guide Note No. 058 Ecological Sustainable Design and the Green Star Design & As Built v1.3 submission guidelines (where relevant). The HI DGN 058 has been developed by NSW Health Infrastructure (NSW HI) and outlines the general ESD requirements, including the roles and responsibilities of the NSW HI Independent ESD consultant/reviewer and the Contractor's ESD Consultant. The roles and responsibilities and timing of submissions and reviews shall be co-ordinated with the NSW HI Independent ESD reviewer.

A key requirement of the project is that its design & construction must meet the sustainability expectations of NSW HI as laid out in the HI Design Guidance Note No. 58 (DGN 058) ESD Evaluation Tool. Application of this ESD Evaluation Tool involves a self-assessed & peer-reviewed compliance process against credit criteria nominated using the Green Building Council of Australia's (GBCA) Green Star Design & As Built v1.3 rating scheme. In summary, the HI ESD Evaluation tool generally utilises the same credit points scoring system and documentary evidence as Green Star Design & As Built to demonstrate equivalency with the best practice sustainable design.

Being located outside of the Sydney, Wollongong and Newcastle area, this project (at overall completion after all relevant stages of construction) must achieve a minimum of 45 points (4 Star Green Star Design & As Built v1.3 Equivalency) under HI's ESD DGN 058 Evaluation tool, which is deemed to be reasonably comparable to a 'self-certified' 4 Star Green Star equivalent level.

As nominated within DGN 058, at the point of procurement of the Head Contractor, a minimum of 5 buffer points shall be allowed for by the design to allow for some variation during the design finalisation & construction period. Accordingly, a minimum of 50 credit points has been identified to be achieved by the Head Contractor & its sub-contractors as part of this tender.

2.1 Green Star Design & As Built v1.3 and DGN 058 ESD Evaluation Tool

Green Star is a voluntary scheme administered by the national, not-for-profit organisation, Green Building Council of Australia (GBCA). The Green Star suite of tools provides an environmentally sustainability rating of a building's performance. The tools are performance based and assess the environmental attributes of new and refurbished buildings in every state across Australia. The Green Star Design & As Built v1.3 rating system is scaled to a star level from 0 to 6 stars. The Green Star total weighted point threshold for each star rating is illustrated in Figure 1.

Figure 1: Green Star Rating Scale

It is noted that implementation of the NSW HI ESD Evaluation tool in DGN 058 does NOT produce or correspond to an official certified Green Star rating. The HI ESD Evaluation tool generally utilises the same credit points scoring system and documentary evidence as Green Star Design & As Built to demonstrate equivalency with the best practice sustainable design.

This ESD Performance Specification provides detailed information to the Head Contractor and its team to deliver a minimum assessed 45 points at overall construction completion (through the DGN 058 Green Star Equivalency self-certification & peer review process).

The design finalisation, construction and commissioning work shall be completed by the Head Contractor (and its sub-consultants & sub-contractors) such that the development maintains sufficient targeted points to achieve the minimum 45 credit points at project completion. A minimum of 50 credit points has been identified to be achieved by the Head Contractor & its sub-contractors as part of this tender.

All relevant documentation and reports shall be prepared by the Head Contractor (including its design and construction team) and submitted to the NSW HI ESD Peer Reviewer for assessment at various stages of construction and completion.

2.2 DGN 058 Targeted Credit Points Summary

The number of points available in each category, and the points targeted in the respective categories is summarised below and in more detail within **Appendix A.** Additional buffer points have been included as a safety margin above the minimum 45 points required to be achieved at construction completion.

Table 1: DGN 058 Green Star Equivalency Category and Points Summary

Environmental Category	4 Star Target	Points Available
Management	14	14
Indoor Environmental Quality (IEQ)	10	17
Energy	6	22
Transport	1	10
Water	5	12
Materials	6	14
Land Use and Ecology	3	6
Emissions	2	5
Total Points	47	100
Sub-Total Percentage Score	47	100
Innovation	5 (plus 1 point TBC)	10
Grand Total Percentage Score	**52 (plus 1 point TBC)**	

2.3 DGN 058 Green Star Equivalency Responsibilities

2.3.1 Head Contractor's DGN 058 Responsibilities

In this specification, the terms:

- 'Head Contractor' and 'Contractor' have the same meaning, namely the party contractually bound to complete the Works under the contract.
- 'Principal' and 'Client' have the same meaning, namely NSW HI or its authorised representative.

It is the Contractor's responsibility to provide or coordinate with its relevant sub-contractors, to provide all listed documents and compile/request and obtain all documentation relevant to the credit requirements.

The Contractors must satisfy themselves that they have sufficient resources allowed to prepare the required documentation and evidence required for DGN 058 compliance.

The following identifies the general responsibility of the Head Contractor in relation to the DGN 058 credit compilation and submission for assessment with NSW HI's ESD Peer Reviewer:

> The Head Contractor and its sub-contractors shall provide all relevant documentation, material, installation, commissioning, certification, incidentals and the like necessary to ensure the targeted DGN 058 points are achieved in accordance with the overall project programme.

> The Head Contractor shall maintain primary responsibility for ensuring the performance requirements outlined within this ESD specification are met, including obtaining and verifying compliance documentation from all consultants & sub-contractors.

> The Head Contractor shall employ the services of a ESD Consultant (Head Contractor's ESD Consultant) as per DGN 058 to manage the design finalisation of the ESD Strategy and to review the required documentation evidence at various stages.

- The Head Contractor shall allocate sufficient dedicated resources internally to manage, request and collect the documentation for DGN 058 compliance.
- Read this specification in conjunction with the Green Building Council of Australia (GBCA's) Green Star Design & As Built v1.3 Submission Guidelines to fully understand all compliance requirements related to the target rating. It is the Head Contractor's responsibility to verify the requirements of the Green Star submission in terms of each credit according to the Green Star Design & As Built v1.3 Submission guidelines.
- It is the Head Contractor's responsibility to actively coordinate with and request relevant documentation (drawings, reports, mark-ups etc.) from its design sub-consultants and sub-contractors during the different stages of this process. The Head Contractor must collect and compile for submission all necessary information as outlined in this document and as required to achieve the targeted minimum DGN 058 Green Star Equivalency 45 points (and any other necessary buffer points).
- Ensure that the Contractor's relevant consultants and sub-contractors are aware of their DGN 058 Green Star Equivalency responsibilities, including preparation of design & As Built compliance reports, calculations, materials tracking, drawings, manuals and certification.
- Coordinate with the Head Contractor's ESD Consultant to review, compile and package responsible credits, including PDF formatting, clouding/highlighting/bookmarking of PDF's prior to HI's ESD Consultant review. The Head Contractor shall ensure that:
    - All supporting Green Star Equivalency related documents (copy of receipts, letters, reports, memo, note, specifications, drawings etc) shall be ordered according to the credit number order, and filed according to the relevant Green Star Equivalency Credit category in folder(s).
    - All letters and memo must be formally signed and dated letters on company letterhead nominating this specific project.
    - All supporting documents shall be provided in Portable document format (pdf), and Excel (.xls or .xlsx) where applicable and clearly highlight requested information.
- Attend required status update meetings with NSW HI's ESD Consultant
- Track the progress of its documentary evidence collection through a DGN 058 Green Star Equivalency tracking schedule.
- The Head contractor shall prepare ESD material tracking templates for review prior to implementation as follows:
    - Materials pre-assessment forms for subcontractors prior to letting (if required).
    - Monthly material tracking registers for ongoing monthly tracking of materials contributing to the DGN 058 Green Star Equivalency submission; and
    - Finalise material tracking registers in accordance with DGN 058 Green Star Equivalency credit submissions.
- The Head contractor shall provide regular ESD materials tracking registers for review during the construction phase.
- Where deviations/departures from materials preassessment form occurs, the Head Contractor shall be responsible for confirming compliance with the Green Star Equivalency requirements.
- **The Head Contractor shall allow for all additional fees required to undertake additional DGN 058 Green Star report preparation and simulation modelling during design finalisation and construction stage for the following credits:**
    - **Credit 3: Preparation of a Green Star Equivalency Climate Adaptation Plan including climate change risk assessment.**
    - **Credit 14.1: Green Star Equivalency Thermal Comfort Modelling**
    - **Credit 15E: Green Star Equivalency Greenhouse Gas Emissions modelling**
    - **Credit 16B: Green Star Equivalency Peak Electricity Demand Reduction Modelling**

2.3.2 Head Contractor's Design Consultants, Peer Reviewers, Sub-contractors, and Suppliers DGN 058 Responsibilities

The Head Contractor's design & construction team (consultants, sub-contractors, suppliers) are responsible to incorporate the required DGN 058 Green Star Equivalency requirements into their respective design & procurement documentation, track its implementation and provide documentary evidence, calculations, reports, drawings, and the like to demonstrate successful compliance.

The Head Contractor's design & construction team shall coordinate with the Head Contractor and the Head Contractor's ESD consultant for delivery of the documentation necessary for submission to the NSW HI ESD Peer Reviewer.

2.3.3 Head Contractor's ESD Consultant DGN 058 Responsibilities

It is the responsibility of the Head Contractor and its team to further develop the design during design finalisation and coordinate & incorporate the required DGN 058 ESD initiatives within the overall design & construction of the project.

The Head Contractor's ESD Consultant shall be engaged by the Head Contractor for the design finalisation, construction, and completion phase. The following describes the Head Contractor ESD Consultant's general DGN 058 responsibilities (subject to future contractual & commercial agreements):

- Provide design advice for all elements that effects the DGN 058 Green Star Equivalency outcomes of the project.
- Review design changes and details for compliance with DGN 058 Green Star Equivalency
- Respond to relevant requests for ESD information.
- Attendance at ESD meetings as required.
- Collate DGN 058 Green Star Equivalency Submission for NSW HI's ESD Peer Review, based on the documentation prepared by others. *Note: It is not the role of the Head Contractor's ESD Consultant to author, audit or prepare Green Star documentation drawings/manuals/calculations/reports (other than as contractually engaged to do so)*

2.4 Specific DGN 058 Scope Clarifications for Blayney Multipurpose Service

2.4.1 Nominated Areas

Different credits within the DGN 058 system apply to different spaces within the building. The definitions of the nominated areas are described in the following table. Examples of the nominated areas for this development are also provided, however, where a space does not clearly fit into one of the Space Types, the Contractor shall raise this with its ESD Consultant and NSW HI's ESD Consultant as soon as possible.

The following area classification below is indicative only and could potentially change subject to confirmation by the NSW HI's ESD Consultant.

Space Types	Definition	Example
Primary	All areas where a person is expected to work or remain for an extended period of time.	Aged care bedrooms, IPU bedrooms, Consulting rooms, Offices
Secondary	All areas used to support the principal activity of the primary space. These spaces will be regularly occupied; however, a single person is unlikely to remain within for more than 2 hours.	Waiting Area at reception, meeting rooms, gym, staff rooms
Tertiary	All areas which are either transient spaces or accessed intermittently.	Corridors, plantrooms, storage, amenities, laundry, service areas, utility rooms
Excluded Areas	All areas that are excluded due to a medical specialist or health functional requirement	Refer to the following section

2.4.1.1 Exclusions from Nominated Areas (applicable for Indoor Environment Quality Credits)

For the purposes of DGN 058 Green Star Equivalency, any critical treatment/specialist areas or spaces that have hygiene & functional requirements can be excluded from certain Indoor Environment Quality (IEQ) credit compliance (normally applicable to primary & secondary occupied spaces). This exclusion is possible only if reasonable justification can be provided.

Examples of Blayney Multipurpose Service spaces/rooms that can be excluded from compliance with certain DGN 058 IEQ Green Star Equivalency credits include:

- Ambulatory Care Bays
- Resus Bay
- Acute Treatment
- IPU/RAC bedrooms where compliance with Green Star Acoustic reverberation requirements cannot be easily achieved.
- Any other emergency treatment areas or functional areas where health operational requirements take precedence.

For the purposes of the DGN 058 Green Star Equivalency IEQ assessment, the Head Contractor shall prepare an Area Definition Mark-up to identify:

- Primary Spaces
- Secondary Space
- Tertiary Spaces
- Excluded areas for health & functional reasons.

For IEQ compliance of credits such as internal lighting comfort, visual comfort (glare & daylight & views) & acoustics, it is sufficient for documentation evidence to be submitted only for typical representative rooms/areas (in lieu of the entire assessable floor area). The coverage and types of rooms/areas selected should be reasonable.

2.4.2 Nominated Building Services

Examples of nominated building services within Blayney MPS subject to the DGN 058 Green Star Equivalency assessment will generally include:

- Mechanical systems (such as Heating, Ventilation and Air Conditioning systems).
- Building Management and Control System (BMCS).
- Lighting and associated controls (excluding specialist lighting or lighting required for health/medical requirements).
- Electrical systems (such as electrical solar PV system, electrical supply & distribution systems, and alarm systems).
- Hydraulic systems (such as water supply distribution systems, rainwater collection & reuse, domestic hot water, sewage collection and distribution systems, stormwater collection and distribution systems, pumps).
- Fire detection systems, smoke alarm systems and emergency warning systems.
- Fire protection systems, including sprinklers, hydrants, hose reels, pumps and other equipment.
- Vertical Transport (only if present & relevant, otherwise Not Applicable for the project)
- Landscape Irrigation

2.4.2.1 Exclusions from Nominated Building Services

For the purposes of DGN 058 Green Star Equivalency, other specialist/critical medical building services specific to a health building can be excluded from “Materials and IEQ credits” assessment, such as:

- Medical Imaging
- Medical Gases
- Suction gas
- Nurse Call
- Security
- Medical/dental/internal fit-out equipment & services generally

- Laboratories or Pharmacies Services (only if present)
- Any process services (process cooling, refrigeration, cold rooms, and the like)
- Any other hospital service where health operational requirements take precedence.

2.4.3 Scope of DGN 058 Assessment: Base Building and Fit-out

The DGN 058 Green Star Equivalency assessment does not generally include 'fit-out' items such as fixed/loose furniture, fit-out equipment, kitchen equipment, medical & dental equipment and the like that are typically within the domain of a Green Star Interiors Fit-out Assessment. The scope of assessment is generally limited to 'base building' with some elements of integrated fit-out included (e.g., partitions, finishes, flooring).

2.5 DGN 058 Green Star Equivalency Credit Applicability & Responsibilities Matrix

This section provides a general credit applicability and responsibilities matrix to provide a better understanding of the overall process for the DGN 058 Green Star equivalency process. Additional trades may be required to comply with certain credits, beyond those that are identified. It is the Head Contractor's responsibility to ensure that each relevant trade provides the necessary documentation to achieve compliance. This section should be read in conjunction to Section 3 of this specification.

Key

"M" Minimum Requirement

✓ Responsible Disciplines (General)

- Not targeted at completion of Design Development. Contractor to propose if credit if achievable in subsequent stages

#	Credit Title	Points Available	Points Targeted	Client	Head Contractor	Mechanical	Electrical	Lighting	Hydraulic	Fire	Structural	Civil	Facade	Acoustic	Landscape	Architect	Vertical Transport	BMCS
Management																		
1.0	Accredited ESD Consultant	1	1	✓	✓													
2.0	Environmental Performance Targets	M	M	✓	✓													
2.1	Services and Maintainability Review	1	1		✓	✓	✓	✓	✓	✓							✓	✓
2.2	Building Commissioning	1	1		✓	✓	✓	✓	✓	✓							✓	✓
2.3	Building Systems Tuning	1	1		✓	✓	✓	✓	✓	✓							✓	✓
2.4	Independent Commissioning Agent	1	1	✓	✓													
3.0	Implementation of a Climate Adaptation Plan	2	2		✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		
4.1	Building Information	1	1		✓	✓	✓	✓	✓	✓							✓	✓

#	Credit Title	Points Available	Points Targeted	Client	Head Contractor	Mechanical	Electrical	Lighting	Hydraulic	Fire	Structural	Civil	Facade	Acoustic	Landscape	Architect	Vertical Transport	BMCS
5.1	Environmental Building Performance	1	1	✓	✓	✓	✓		✓									✓
5.2	End of Life Waste Performance	1	1	✓														
6.0	Metering	M	M		✓	✓	✓		✓									✓
6.1	Monitoring Systems	1	1		✓	✓	✓		✓									✓
7.0	Environmental Management Plan	M	M		✓													
7.1	Formalised Environmental Management System	1	1		✓													
7.2	High Quality Staff Support	1	1		✓													
8B	Prescriptive Pathway - Facilities	1	1	✓	✓											✓		
Indoor Environmental Quality																		
9.1	Ventilation System Attributes	1	1		✓	✓												
9.3	Exhaust OR Elimination of Pollutants	1	1	✓	✓	✓												
10.1	Internal Noise Levels	1	1		✓	✓								✓				
10.2	Reverberation	1	1		✓									✓		✓		
11.0	Minimum Lighting Comfort	M	M		✓		✓	✓										
11.1	General Illuminance & Glare Reduction	1	1		✓		✓	✓										
11.3	Localised Lighting Control	1	1		✓		✓	✓										
12.0	Glare Reduction	M	M	✓	✓											✓		
12.2	Views	1	1		✓											✓		
13.1	Paints, Adhesives, Sealants & Carpets	1	1		✓	✓	✓	✓	✓	✓			✓	✓		✓	✓	
13.2	Engineered Wood Products	1	1		✓	✓	✓	✓	✓	✓					✓	✓		
14.1	Thermal Comfort	1	1		✓	✓												
Energy																		
15E.0	Conditional Requirement	M	M		✓	✓	✓	✓	✓				✓				✓	✓
15E.1	Intermediate Building Improvement	4	0		✓	✓	✓	✓	✓				✓				✓	✓
15E.2	Proposed Building Improvement	16	3		✓	✓	✓	✓	✓				✓				✓	✓
15E.5.2	Fuel Switching	2	2		✓	✓	✓	✓	✓									

#	Credit Title	Points Available	Points Targeted	Client	Head Contractor	Mechanical	Electrical	Lighting	Hydraulic	Fire	Structural	Civil	Facade	Acoustic	Landscape	Architect	Vertical Transport	BMCS
16B	Modelled Performance Pathway: Reference Building	2	1		✓	✓	✓	✓	✓									
Transport																		
17B.3	Low Emissions Vehicle Infrastructure	1	1		✓		✓									✓		
Water																		
18B.1	Sanitary Fixture Efficiency	1	1		✓				✓						✓	✓		
18B.3	Heat Rejection	2	2		✓	✓												
18B.4	Landscape Irrigation	1	1		✓				✓						✓			
18B.5	Fire System Test Water	1	1		✓				✓	✓								
Materials																		
19B.1	Concrete	3	1		✓													
19B.2	Steel	1	1		✓						✓							
20.1	Structural and Reinforcing Steel	1	1		✓						✓							
20.3	Permanent Formwork, Pipes, Flooring, Blinds & Cables	1	1		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
21	Product Transparency	3	1		✓											✓		
22.0	Reporting Accuracy	M	M		✓													
22B	Percentage Benchmark	1	1		✓													
Land Use & Ecology																		
23.0	Endangered, Threatened or Vulnerable Species	M	M		✓										✓	✓		
23.1	Ecological Value	3	1		✓										✓	✓		
24.0	Sustainable Sites	M	M															
24.1	Reuse of Land	1	1	✓												✓		
24.2	Contamination and Hazardous Materials	1	1		✓													
Emissions																		
27.0	Light Pollution Neighbouring Properties	M	M		✓		✓	✓							✓	✓		
27.1	Light Pollution Night Sky	1	1		✓		✓	✓							✓	✓		
28	Microbial control	1	1		✓	✓												

#	Credit Title	Points Available	Points Targeted	Client	Head Contractor	Mechanical	Electrical	Lighting	Hydraulic	Fire	Structural	Civil	Facade	Acoustic	Landscape	Architect	Vertical Transport	BMCS
Innovation																		
30C.1	Ultra-Low VOC Paints	1	1		✓	✓	✓	✓	✓			✓	✓		✓			✓
30D.1	Financial Transparency	1	1		✓													
30D.2	Incorporation of Indigenous Design	1	1	✓	✓										✓	✓		
30D.3	Local Procurement – Local Services and Skilled Labour	1	1		✓													
30D.4	Reconciliation Action Plan	1	1 (TBC)	✓	✓													
30E.1	Design for Robustness	1	1	✓											✓	✓		

3 DGN 058 Green Star Design & As Built v1.3 Equivalency - Credit Requirements

This section provides the specific credits that are being targeted for this project at the current stage of design, and the relevant compliance strategy that will be used to achieve them. This section should be read in conjunction with **Appendix A**. The technical requirements in this specification have been derived from the Green Star Design & As Built v1.3 Submission Guidelines. Where there are any differences in technical requirements between this specification and the Green Star Design & As Built v1.3 Submission Guidelines credit requirements, this shall be raised with the Project Manager and client for Tender Clarification.

3.1 Responsibility

The detailed design finalisation, construction and commissioning work shall be completed by the Head Contractor and its team, such that the overall development maintains the MINIMUM targeted total DGN 058 score of 45 points with an additional minimum 5-point buffer. This corresponds to a self-assessed & notional 4 Star Green Star Design & As Built v1.3 Equivalency outcome. It is the Head Contractor's responsibility to provide all the listed documentation as well as request and obtain all relevant documentation from its sub-consultants, sub-contractors and suppliers.

3.2 Targeted Green Star Equivalency Credit Summary

3.2.1 Management

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
1.1	**Accredited ESD Consultant**	Head Contractor	1	1
	The Head Contractor (HC) shall engage a suitably qualified ESD Consultant as the HC's Green Star Accredited Professional (GSAP) for the design finalisation, construction, and completion phase of the project. The GSAP shall manage and co-ordinate the Green Star Equivalency process and collaborate with the HC and HI's ESD Consultant in delivering the DGN 058 certification. The GSAP shall co-ordinate and review the necessary contractor and subcontractor information, to ensure the documentation is suitable for the DGN 058 credits and submission. The GSAP shall compile the contractor and subcontractor documentation into a format suitable for the DGN 058 assessment. **HC Action / Documentation Requirements** The HC shall provide: • Letter of appointment confirming appointment of a GSAP for HC's ESD Consultant. • Sample meeting minutes demonstrating input from the GSAP • Letter from HC confirming GSAP has satisfactorily fulfilled their engagement responsibilities as per scope of works and requirements of this credit.			
2.0	**Environmental Performance Targets**	Head Contractor	Credit Minimum	Credit Minimum

	The Head Contractor shall prepare a Design Intent Report (DIR) describing the Nominated Services functions, operations, and maintenance for all components of the building has been produced.
	
	The DIR shall include:
	• A description of the basic functions, operations and maintenance of the nominated building systems including:
	  ○ A description of its intended operation and maintenance requirements; and
	  ○ A list of what the main components are (including controls), their operation and the importance of their efficient use			

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
	• The targets for the project energy and water consumption and energy and water budgets for nominated building systems (only if relevant, otherwise targets to only be established in future operation). • A description of how energy, water and aspects of indoor environment quality are metered and monitored. This includes a meter diagram that illustrates the sub-metering arrangements in operation. Alternatively, the Head Contractor can also show that the above information (as required within the Design Intent Report) is provided to the client through As Built handover information at project completion Such information can be uploaded at project completion through the relevant online Facilities Management Systems (WebFM Omtrak or equivalent). **HC Action / Documentation Requirements** The HC shall provide: • Design Intent Report or Equivalent OR • Evidence that Building Handover information uploaded onto online Facilities/Construction Management systems generally contain the necessary DIR information. Provide screenshots and extracts from information submitted within online system.			
2.1	**Services and Maintainability**	Head Contractor, ICA and Services	1	1
	The Head Contractor shall: • Carry out the comprehensive Services and Maintainability Review, led by the Head Contractor or Independent Commissioning Agent (ICA) (if appointed), during the design finalisation stage and prior to construction. • Outcomes of review must be summarised in a 'Services and Maintainability Report'. This report must be agreed and signed off by the involved parties (sub-contractors, ICA, peer reviewers, facilities management as relevant). • Action items resulting from this review shall be incorporated in the Design Intent Report or transmitted to the owner as outlined in Credit 2.0 Environmental Performance Targets. The Services and Maintainability Review is to facilitate input from the design team, the facilities manager and operations staff (if known), and any relevant suppliers and subcontractors (if engaged). The review must address the following aspects for all nominated building systems: • Commissionability; • Controllability; • Maintainability; • Operability, including 'Fitness for Purpose'; and • Safety. The Services and Maintainability Review must be carried out sufficiently early in the design finalisation phase and PRIOR to construction commencement, to allow time for any action items identified in the review to be incorporated. Any outstanding items should be closed out as soon as practicable. **HC Action / Documentation Requirements** The HC shall provide: • The Head Contractor shall prepare and submit, or assist the ICA to prepare and submit, a Services Maintainability Review Report (or equivalent document/evidence) • Services & Maintainability Review Register including actions/outcomes (or equivalent document/evidence)			
2.2	**Building Commissioning**	Head Contractor, ICA and Services	1	1
	The Head Contractor shall coordinate, develop and implement a commissioning plan for all building services in accordance with the building services tender design specifications, AND in compliance with the general intent of one or more of the following approved standards. The commissioning plan must allow for all pre-commissioning and commissioning activities outlined in these standards. The approved commissioning standards include:			

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
	• AIRAH DA27 Building Commissioning 2011 • AIRAH DA28 Building Management and Control Systems (BMCS) 2011 • ASHRAE Commissioning Guideline 1.1-2007 (for mechanical services) • BSRIA The Soft Landings Framework, Australasia • CIBSE Commissioning Code M: Management 2003 (and the ancillary codes for relevant services) • Commissioning Code A: Air Distributions Systems 2006 • Commissioning Code B: Boilers 2002 • Commissioning Code C: Automatic Controls 2001 • Commissioning Code L: Lighting 2018 • Commissioning Code R: Refrigerating Systems 2002 • Commissioning Code W: Water Distribution Systems 2010 The Commissioning Plan must cover all building services and must include at least the following: • the objectives, or basis, of the design • the scope of the commissioning plan • the commissioning team list, the individual responsibilities and interface matrix • the general sequence of commissioning • the proposed commissioning procedures • the witnessing requirements • the commissioning program • the requirements for subcontractor commissioning manuals If an ICA is appointed by the client to manage the commissioning process, the Contractor and its subcontractors shall follow the directions of the ICA in the creation and implementation of the commissioning plan. The Head Contractor shall produce a Commissioning Programme for their works which will be reviewed for timeframe and coordination by the ICA. **<u>HC Action / Documentation Requirements</u>** The HC shall provide: • A detailed Commissioning Plan; • Commissioning Report(s) (prepared by Head Contractor or ICA if appointed) demonstrating that comprehensive pre-commissioning activities and commissioning activities have been performed to all nominated systems in accordance with the noted standards as relevant to each nominated system.			
2.3	**Building System Tuning**	Head Contractor, ICA & Services	1	1
	The Head Contractor and its subcontractors shall: • Undertake building systems tuning for a minimum 12 months immediately after occupation to ensure that all building services operate efficiently and in accordance with the design. The Contractor and its sub-contractors must undertake minimum quarterly adjustments/tuning and measurements/reviews/monitoring for the first 12 months after occupation and a review of building system manufacturer warranties. • Appoint a building tuning team including the facilities manager, the ICA (where appointed) to adjust building systems to account for all identified deficiencies through analysis of data from monitoring system and assessment of feedback from occupants on building occupations. • Develop a building tuning manual and building tuning plan to the satisfaction of the client and ICA based on contractual requirements and/or any relevant AIRAH, CIBSE or ASHRAE codes. • Provide input on the outcomes of the tuning process for the building tuning report for the building owner and design team • The Head Contractor shall perform any rectification or tuning works as required to ensure that the building operates in accordance with the design documentation The building tuning process shall require the analysis of data from the monitoring systems and assessment of feedback from occupants on building conditions. The building tuning process and reporting must include the following:			

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
	• Tuning and verification to ensure that nominated systems are performing at optimum efficiency & design potential during all variations in climate, occupancy, part load and full load conditions; • Review of environmental performance against the environmental targets • Tuning to ensure that system performance and operation is aligned to the attributes of the building space it serves; • Tuning to ensure that the systems are not consuming more energy as attributed in order to meet the ESD targets; • Collection of user feedback to match the system performance with the occupant's needs; • Adjustment of the nominated systems to account for all deficiencies discovered; and • Management, communication, and assignment of responsibilities for the tuning process with the team. **HC Action / Documentation Requirements** The HC shall provide: • Head Contractor Building Tuning Commitment Contract extracts or letter of commitment. • Building Tuning Plan (if available)			
2.4	**Independent Commissioning Agent**	Head Contractor, Services, Client	1	1
	An Independent Commissioning Agent (ICA) or equivalent may be engaged to advise, monitor, and verify the commissioning and tuning of the nominated systems throughout the design, tender, construction, commissioning and tuning phases. The Contractor shall follow all direction from the ICA during design and construction phases to develop and implement a commissioning plan. The Head Contractor shall comply with the following requirements: • Work in collaboration with the Independent Commissioning Agent (ICA) to provide commissioning of all services • Coordinate with the project ICA, sub-contractors, and facilities management representatives to carry out a Services and Maintainability Review • Liaise with the project ICA to ensure that commissioning is undertaken with a multi-trade approach; • Accept the project ICA's program; • Coordinate & conduct all commissioning related activities as directed by the project ICA; • Identify the levels of staffing and resources as required by the commissioning agent to enable the post-handover building tuning to be undertaken in accordance with the Green Star Equivalency requirements. Note: the above requirements do not relieve the sub-contractor of any other testing and commissioning obligations under the contract. If an ICA individual is not explicitly appointed by NSW HI, the Head Contractor and its team shall utilise the NSW HI Peer Review process (involving HI's technical consultants) to demonstrate compliance with this credit via an alternative pathway. Sufficient evidence of compliance with the NSW HI Peer Review process shall be submitted for assessment. **HC Action / Documentation Requirements** The HC shall: • Coordinate with ICA to carry out pre-commissioning and commissioning activities. • Provide commissioning and building tuning results in accordance with the relevant credits targeted. OR • If no individual ICA is appointed, the Head Contractor shall provide sufficient evidence of compliance with the NSW HI Peer Review process (involving HI's technical consultants). For example, evidence of drawing & commissioning results reviews being addressed and any witness testing by HI's peer reviewers			
3.0	**Climate Action Plan**	Head Contractor & ESD Consultant	2	2
	The Head Contractor shall engage an ESD consultant to prepare a project specific DGN 058 Credit 3 Climate Adaptation Plan to identify climate change risks and the corresponding solutions that have been included within the building design and construction.			

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
	The plan shall include a list of actions and responsibilities for anticipated 'addressable' high & extreme risks, but only in the context of the specific project constraints (e.g., site/budget/technical limitations, extent of design development already undertaken). Risks that cannot be feasibly addressed at design finalisation stage due to existing project constraints may be excluded with reasonable justification. *Note: The overall building design developed to date has already incorporated some climate change risk mitigation measures* The Head Contractor shall ensure that all design responses to all addressable major risk items have been implemented in the design & construction phase. **HC Action / Documentation Requirements** The HC shall provide: • Climate Adaptation Plan • As Built drawings/reports as relevant to demonstrate design responses (if required) to the Climate Adaptation Plan			
4.1	**Building Information**	Head Contractor & Services	1	1
	Operations and Maintenance Information Requirements The Contractor shall provide a comprehensive O&M manual for all building systems; The O&M manual shall generally include the following: • A summary sheet of relevant building service contacts; • System-level information for nominated systems; • Introduction and scope, including physical and functional descriptions; • Operating parameters and procedures; • Preventive maintenance requirements, including procedures and schedules; • Corrective maintenance requirements, including repair requirements; • Service contacts, and any warranties and certificates; and • Up-to-date As Built drawings incorporating at least: - Building services and schematics covering all relevant building services; - Any architectural & façade/building envelope drawings • Details (only if relevant) on targets for, energy use, greenhouse gas emissions, potable water, and indoor environment quality including air quality and thermal comfort indices. These must assist the operation team to optimise performance of the space; • Details on the metering and sub-metering strategy employed by the space, including any instructions for data collection and analysis; and • Triggers for updating O&M information e.g., refurbishment of a fitout space, recommissioning, building owner targets or benchmarks change, or a new operational process or an existing one is changed. • Appropriate content for all nominated systems is readily available; • Confirmation the appropriate user group has access to the information they require to deliver best practice environmental outcomes; • Guidance on keeping information up to date is provided to facilities management • Confirmation this has been delivered to the building owner **Building Log Book Requirements** The Contractor shall provide a Building Log Book developed generally in line with "CIBSE TM31: Building Log Book Toolkit"; covering all nominated building systems. It should be a reference point and provide links to all other key information and documentation such as drawings, O&M manuals, BMCS functional information, and warranty documents. The Log Book should generally include the following: • Descriptions of building systems including their use and performance; • Activities for ongoing compliance, operations and maintenance; • Recommissioning procedures,			

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
	• Tuning protocols. • Recommendations to improve the system where appropriate. **Building User Information Requirements** The Contractor and its sub-contractors shall prepare a "building user information" guide for the use of all relevant Stakeholders. The building user information must be provided in a digital format such as Word document or a website / digital display device. The relevant Stakeholders, for the purposes of this Credit, is understood to be visitors and occupants (day-to-day users of space), depending on the level of information that is relevant to that audience. The amount and details of 'Building User Information' shall be relevant to the particular audience. For example, if the premises are owner-occupied, the information provided to users must be geared towards general staff that occupy the space. If the space is leased from a landlord, the information provided must be geared towards the person responsible for the management of the tenanted space; this may be a tenant representative or an office manager. Building User Information shall be able to be updated and edited by the facilities management team to ensure it remains current and relevant to building users throughout the life of the building. The following typical information shall be provided to building users. The detail required for each of these issues shall be agreed with the client if necessary: • Description of initiatives designed to enhance energy efficiency and minimise greenhouse gas emissions, and measures that must be taken by users during day-to-day operation to maximise their effectiveness; • Description of initiatives intended to enhance and minimise water use and the measures that must be taken by users during day-to-day operation to maximise their effectiveness; • Description of basic function and operation of any nominated building systems that building users may come in direct contact with including any occupant activated controls; • List of relevant contacts for maintenance information, operational issues, complaints or other feedback, • Description of alternative transport initiatives promoted within premises (such as bicycle facilities, end-of-trip facilities, carpooling or car-share), location of a transport plan (if available or if relevant); • Local public transport information, maps and timetables; • Description of the operational waste requirements for the building users, including what waste streams can or cannot be collected for recycling at the premises; • Information on how to maximise the efficiency potential offered by base building services and nominated building systems; • Information on how to best maximise day lighting, sights and views; and • Information on 'green' make-good requirements for tenants at end-of-life (if available or relevant). *Note: Not all the above content may be relevant to the Blayney MPS project. Items that are 'not relevant' or 'not applicable' may be excluded.* All building user information must be available to the building owner and facilities management team at the time of practical completion. It is acknowledged that ongoing tuning may require updates to building user information and its content may extend beyond practical completion. Alternatively, the Head Contractor can also show that the above information (as required within Building O&M manuals, Building Log Book and Building Users Guide) is provided to the client through As Built handover information at project completion. Such information can be uploaded at project completion through the relevant online Facilities/Construction Management Systems (WebFM Omtrak or equivalent). **<u>HC Action / Documentation Requirements</u>** The HC shall provide: • Head Contractor to produce Operations and Maintenance Manual (O&M), and confirmation that O&M information has been delivered to the building owner for all Nominated Building Services noted. • Head Contractor to produce a Building Log Book, and confirmation that a building log book has been provided to the building owner • Head Contractor to produce Building User Guide.			

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
	OR • Evidence that Building O&M Manuals have been uploaded onto online Facilities Management systems and contain the necessary information. Provide screenshots and extracts from information submitted within online system. • Sufficient evidence to show that the information typically or generally required within the "Building Log Book" and "Building Users Guide" have been uploaded onto online Facilities/Construction Management systems. Provide screenshots and extracts from information submitted within online system.			
5.1	**Environmental Building Performance**	Client, Head Contractor	1	1
	The Head Contractor shall be aware that the Client has committed to set, measure and report on its environmental performance for at least two of the following performance metrics: • Greenhouse gas emissions; • Potable water usage; • Operational waste; and • Indoor environment quality. Note: Future performance targets do not need to be calculated or simulated for the project. **HC Action / Documentation Requirements** The HC shall provide: • Assistance to procure commitment letter (or equivalent) from client • Sufficient metering & monitoring infrastructure for future operational monitoring by client			
5.2	**End of Life Waste Performance**	Client	1	1
	The Head Contractor shall be aware that the Client has committed to either "reduce demolition waste at the end of life of interior fit-outs", OR "extend the life of the interior fit-out or finishes to at least 10 years, barring minor wear and tear or minor repairs". **HC Action / Documentation Requirements** The HC shall provide: • Assistance to procure commitment letter (or equivalent) from client			
6.0	**Metering**	Head Contractor & Services	Credit Minimum	Credit Minimum
	The Contractor shall provide accessible metering to monitor all major uses of energy and water for the building. In addition to the minimum sub-metering requirements of NCC Section J, the Contractor shall ensure that major energy and water consumption in the building is sub-metered to the degree of resolution that is satisfactory to the client. This will generally the Head Contractor to install sub-metering generally as follows: • Major electrical energy loads shall be separately sub-metered (e.g., Mechanical air-conditioning systems, MSSBs, Domestic Hot Water Heat Pumps & DHW heaters, lighting, equipment power, Electric Vehicle Charging); • Solar Photovoltaic generation system shall be separately metered • Major Water Uses shall be separately sub-metered (e.g., Domestic Hot Water, Aged Care, Healthone, Kitchen etc.) • All existing and new utility meters shall meet metering guidelines under the weights and measures legislation, as outlined under the current National Measurement Regulations. The Contractor shall verify that all existing and new utility meters meet these requirements; • Meters shall be located in an area that allows regular monitoring and maintenance by facilities managers and other facilities management personnel. • All meters shall be connected to an automatic meter monitoring system • All meters must be validated using the most current 'Validating Non-Utility Meters for NABERS Ratings' protocol • If desired by the client, the meters and corresponding meter monitoring system must be capable of producing alerts if any inaccuracies in the meter network are found. Inaccuracies are defined as in excess of meter			

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
	tolerances (e.g., 'Class 1' meters shall not have inaccuracies of more than 1% due to metering accuracy class). The Monitoring system is to be continual (15mins to 1hr interval readings), and meter accuracy reconciled to appropriate standards, including, but not limited to, NABERS Protocol or National Measurement Institute (NMI) standards **<u>HC Action / Documentation Requirements</u>** The HC shall provide: *See below 6.1 Monitoring Systems*			
6.1	**Monitoring Systems**	Head Contractor & Services	1	1
	The Head Contactor shall provide an automatic meter monitoring system capable of capturing and processing all data produced by the installed energy and water meters. The Head Contactor shall develop an energy & water meter monitoring & reporting strategy/description to the satisfaction of the client. The monitoring strategy must include a metering schedule including the meter name/number/location and the end use it is measuring. **Automatic Meter Monitoring Systems** The Head Contractor shall provide automatic monitoring systems that record both consumption and demand of energy and water and are capable of producing reports on quarterly hours (15 min interval), hourly, daily, monthly and annual energy use for all meters. The installed meters must be capable of producing an output that can be transmitted to a central location (either onsite or offsite). This central location must provide data retrieval and reporting mechanisms. As a minimum, the automatic monitoring system must be capable of: • Collecting data from all meters; • Provide quarter hourly, hourly, daily, monthly, and annual energy use reports for all meters; • Alerting to missing data due to failures; • Recording and processing of data on energy use or water consumption at user adjustable intervals; • Raising an alarm when the energy or water use increase beyond certain parameters and automatically and instantly issue an alert the facilities manager; • Providing a breakdown of the information by building system (mechanical, electrical, etc.), or by space (where applicable and possible) • Including the consumption water or energy, the load versus time (load profile), and the power factor (in the case of energy); and • Producing, as a minimum, a quarterly report that is automatically emailed to the facilities manager responsible for the building. **<u>HC Action / Documentation Requirements</u>** The HC shall provide: • Head contractor to provide as built drawings showing the location of all energy and water meters in the project and the associated energy and water end uses; • Meter monitoring & reporting strategy/description and meter schedule • Letter of confirmation from the contractor/metering provider demonstrating that the metering systems are continually and automatically monitored by a system that is able to produce alerts if any inaccuracies/errors are found, and that correction and revalidation to any faulty meters are to be carried out • Automatic monitoring system data sheets or description describing the systems features and capabilities; and • Commissioning Report demonstrating that the meter monitoring system is connected to all meters and correctly recording meter data as per the NABERS meter validation protocol			

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
7.0	**Environment Management Plan**	Head Contractor	Credit Minimum	Credit Minimum
	The Head Contractor shall implement a comprehensive, project–specific Environmental Management Plan (EMP) for the works in accordance with Section 4 of the NSW Environmental Management System Guidelines and shall implement a formalised systematic and methodical approach to planning, implementing and auditing this EMP during construction, to ensure the construction team achieves compliance with the EMP. All Contractors shall make themselves aware of all requirements in this EMP and shall follow all guidance provided in this EMP. All Sub-Contractors working for the Head Contractor shall adhere to the Contractors EMP and EMS. **HC Action / Documentation Requirements** The HC shall provide: • Head Contractor is to develop and implement a project specific EMP in compliance with the latest NSW Environmental Management System Guidelines and AS/NZS ISO 14001. The EMP must be implemented from the beginning of construction works, including any excavation and demolition. • Head Contractor shall ensure sub-contractor adherence to EMP requirements. This may through a confirmation letter from the Head Contractor, or a policy document stating the process undertaken to ensure compliance.			
7.1	**Formalised Environment Management System (EMS)**	Head Contractor	1	1
	The Contractor shall ensure the Environmental Management System used on site throughout all construction phases has been formalized by a third-party organization that provides “independent verification of system compliance” to one of the following standards: • ISO 14001; • BS 7750; and/or • The European Community’s EMAS. The third-party organization must be a member of the International Accreditation Forum. A Head Contractor that holds this accreditation is an acceptable method of demonstrating compliance for this requirement. Additionally, project teams must report any nonconformities recorded by the EMS during construction. Where non-conformities with the EMS have been recorded, corrective and preventative actions must also be demonstrated. **HC Action / Documentation Requirements** The HC shall provide: • Contractor formalised EMS including an external auditor’s report confirming formalised management system was in place and operational at the time of construction works • Contractor ISO14001 certificate showing the date of issue prior to the commencement of demolition & construction works; and • Where available, inspection reports from EMS showing that site audits took place as per the EMS and conformity was verified and any nonconformity was corrected (including audit records).			
7.2	**High Quality Staff Support**	Head Contractor	1	1
	Part 1: Health Impacts of Site Activities Programs and policies shall be in place by the Head Contractor that go beyond legal requirements for occupational health and safety (OHS) and extend into wellbeing promotion. The responsible party shall implement policies and			

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available

programs to promote health and wellbeing on-site. The programs shall target both physical and mental health outcomes.

At least three distinct issues, with one of those specifically addressing mental health impacts, must be addressed. Issues that may be considered include:

- healthier eating and active living;
- reduced harmful alcohol and drug and tobacco-free living;
- increase social cohesion, community, and cultural participation;
- understanding depression;
- preventing violence and injury;
- suicide prevention;
- decrease psychological distress.

The responsible party should carry a needs analysis of site workers and contractors to determine appropriate actions. The policies and programs must be relevant to all construction workers on site for the whole duration of construction. A mix of programs is acceptable throughout the duration of construction.

Programs and Policies

The following is a brief list of initiatives which could be implemented on site for, made available to, or discussed with all construction workers for the whole duration of construction:

- Beyond Blue
- Mates in Construction
- Lifeline
- Headspace
- White Ribbon
- Nutrition Organisation

Part 2: Knowledge of Sustainable Practices

The responsible party must provide training to site workers on project specific sustainable practices and initiatives. The training must include information on any sustainable building certification(s) sought; explain the value of certification; and the role site workers play in delivering a sustainable certified building.

The training must be provided to all contractors and subcontractors that were present for at least three days on site. Training can be provided through one, or a combination of:

- On-site training, such as by including the items above as part of site induction practices.
- Off-site training, such as by providing sustainability training to site workers via a TAFE or similar program within the last 3 years.
- Online training, such as by a third party service that can provide training on sustainability topics and track personnel who have taken the relevant materials within the last three years.

HC Action / Documentation Requirements

The HC shall provide:

- Extracts of evidence detailing the programmes and policies implemented to promote health and wellbeing on site
- Evidence detailing the process to manage training, and track workers trained. Examples of evidence include extracts from the training policy, a report from a third-party provider, or similar
- Extracts of training such as screenshots, presentation, or similar, showing the information provided as part of training.

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
8B	**Operational Waste Prescriptive Pathway (Facilities)**	Architect & Head Contractor	1	1
	The waste and recycling storage facilities for the project have been located and sized to suit the specific needs of the project for collection of operational "general waste, recyclable waste, and clinical waste". This is deemed to be satisfactory from a DGN 058 Credit 8B.1 (Separation of Waste Streams), 8B.2 (Dedicated Waste Storage Area), and 8B.3 (Access to Waste Storage Area) design point of view. Note: Comparison of the waste area & location design to other unrelated 3rd party best practice guidelines is not deemed necessary. The Head Contractor shall finalise the location of the waste facilities in accordance with the architectural and civil design drawings, and construct accordingly. **HC Action / Documentation Requirements** The HC shall provide: • As built drawings showing the size and location of the relevant waste facility areas • Brief narrative on how the waste facility areas have been sized, number of bins, and details of frequency of collection of waste			

3.2.2 Indoor Environment Quality

Credit Code	Credit Title	Responsibility	Points Targeted	Points Available
9.1	**Ventilation System Attributes**	Mechanical & Head Contractor	1	1
	The Head Contractor shall ensure the mechanical ventilation system is designed and installed in accordance with the following requirements. **9.1.1 Entry and Outdoor Pollutants** The building mechanical ventilation system shall be designed to comply with the NCC and AS1668.2:2012 for minimum separation distances between pollution sources and outdoor air intakes. Compliance is to be demonstrated in accordance with the distances specified in the standard and any other relevant project requirements (statutory, contractually or other technical requirements). **9.1.2 Design for Ease of Maintenance and Cleaning** Any mechanical ventilation systems within the building, whether existing or new, must have adequate access for maintenance and cleaning to all moisture and debris catching components within the air distribution system in accordance with manufacturer's specifications or the mechanical specifications. Moisture-producing and debris-catching components include items such as cooling coils, heating coils, fan coil units, humidifiers and filters. **9.1.3 Cleaning Prior to Use and Occupation** Prior to occupation/operation and use, the Head Contractor shall ensure all new and existing ductwork that serves the building from the air handling unit to the supply vents have been cleaned in accordance with the recognised standards: - AIRAH HVAC 2010 Hygiene Best Practice Guidelines; - ASHRAE 62.1 – 2010, Section 5; - ACR 2006 Assessment, Cleaning and Restoration of HVAC Systems; and - SMACNA IAQ Guidelines for Occupied Buildings under Construction.			

Credit Code	Credit Title	Responsibility	Points Targeted	Points Available
	Where construction management processes are in place to ensure that all new ductwork, or ductwork that has been recently cleaned, remains free of moisture and debris until occupation, this ductwork can be considered to be clean. All new ductwork must be kept sealed and kept free of moisture & debris until occupation/operation. **HC Action / Documentation Requirements** The HC shall provide: • As Built Mechanical drawings of the ventilation system • Drawing markup and/or schedule demonstrating all outdoor air intakes and exhaust pollution sources complies with the NCC and AS1668.2:2012 minimum separation distances • Detailed drawings of air handling units and/or fan coil units showing access to all moisture and debris catching components for cleaning and maintenance. • Extracts from the HC's Construction Environmental Management Plan (or equivalent) specifying the construction management process to ensure all new ductwork, or ductwork that has been recently cleaned, remains free of moisture and debris until occupation/operation • Evidence (e.g. photographs, audit reports, letters etc.) confirming all new ductwork, or ductwork that has been recently cleaned, remains free of moisture and debris until occupation/operation.			
9.3	**Exhaust OR Elimination of Pollutants**	Mechanical & Head Contractor, Client	1	1
	The Head Contractor shall ensure pollutants associated with the sources are exhaust or eliminated in accordance with the following requirements. **Printing and Photocopying Equipment** All NEW printing, multi-functional devices (MFD) and/or photocopying equipment supplied and installed by the client (or Head Contractor only if relevant) must be certified in accordance with one of the following test standards: • ECMA-328; • RAL-UZ 171; or • GGPS.003 Re-used/relocated/existing Printing, MFDs and/or photocopying equipment supplied by the client are **excluded** from demonstrating compliance with Credit 9.3 Printing and Photocopying Equipment requirements. Only brand new equipment purchased for the project will need to be considered. **Cooking Processes and Equipment** The Head Contractor shall ensure all kitchens must be ventilated in accordance with AS 1668.2:2012 and must be directly exhausted to outside. Commercial (large) kitchen must be physically separated from the adjacent spaces. Residential kitchens or Servery kitchens (non-commercial) is not required to be physically separated, but must utilize either: • A non-recirculating exhaust system, exhausting directly to outside; or • A recirculating system, with filtration media that has been proven to effectively remove kitchen pollutants. Note a 'kitchen' is defined as a space that includes cooking equipment such as stove tops or ovens. Kitchenettes or tea points with basic tea/coffee making or simple reheat equipment are not included. **HC Action / Documentation Requirements** The HC shall provide: • ECMA 328, RAL-UZ 122 or GGPS.003 certificates for all new printing/MFDs/photocopying equipment supplied and installed by the Head Contractor to the project. *Note: If no such printing/photocopying equipment is supplied & installed by the Head Contractor, this requirement is not applicable to the HC.* • Supporting evidence demonstrating all kitchens are ventilated in accordance with AS 1668.2:2012 • As Built architectural drawings showing commercial kitchens are physically separated from adjacent spaces			

Credit Code	Credit Title	Responsibility	Points Targeted	Points Available
	• As-Built mechanical and/or architectural drawings showing kitchen are provided with a dedicated separate kitchen exhaust system to direct kitchen exhaust to outside.			
10.1	**Internal Noise Levels**	Acoustics & Head Contractor	1	1
	Credit 10.1 applies to all primary and secondary spaces (the nominated area for this credit). At least 95% of the nominated areas must comply. Refer to Section 2.4.1 of this specification for the definitions of the nominated areas. The Head Contractor shall ensure the internal ambient noise levels in the nominated area (primary and secondary spaces) are no more than 5dB(A) above the lower figure in the range recommended in Table 1 of AS/NZS 2107:2016. The noise measurement and documentation must be provided by a qualified acoustic consultant and in accordance with AS/NZS 2107:2016. Noise measurement must account for all internal and external noise including noise arising from building services equipment, noise emission from outdoor sources such as traffic, and (where known) noise from industrial process. Occupancy noise is excluded. Compliance shall be demonstrated through measurement, and the measurements shall be conducted in at least 10% of the spaces in the nominated area. The selection of representative spaces must be justified and must consider how the spaces are considered to be the most conservative with respect to both internal, and external noise sources. The range of measurement locations shall be representative of all spaces available within the nominated area. All relevant building systems must be in operation at the time of measurement. The Acoustic Consultant shall nominate the scope of primary and secondary spaces to be tested for Credit 10.1 assessment and if any adjustments to compliance is required. Any spaces that have a critical or medical/functional requirement that prevents Credit 10.1 compliance can be excluded from the DGN 058 assessment (to be agreed with NSW HI and Acoustic Consultant) **HC Action / Documentation Requirements** The HC shall provide: • Acoustic Design Specification/report outlining internal noise level requirements for the nominated spaces. • Commissioning Report results by a Qualified Acoustic Consultant detailing compliance to the relevant measured noise levels and targeted noise levels.			
10.2	**Reverberation**	Acoustics & Head Contractor	1	1
	Credit 10.2 applies to all primary and secondary spaces (the nominated area for this credit). At least 95% of the nominated areas must comply. Refer to Section 2.4.1 of this specification for the definitions of the nominated areas. The Head Contractor shall ensure the reverberation time in the nominated area (primary and secondary spaces) is below the maximum amount stated in the 'Recommended Reverberation Time' provided in table 1 of AS/NZ 2107:2016. Where note 3 of Table 1 AS/NZ 2107:2016 applies and requires that reverberation times be minimised as far as practical, acoustic absorption should be installed in the noise sensitive space. Acoustic absorption should be applied in locations appropriate to the function of the space, and located to maximise the acoustic performance of materials selected. The resulting performance of the installed acoustic absorption, irrespective of quantity or location installed, must result in a reverberation time equivalent to or lower than the reverberation time predicted for treating at least 50% of the combined floor and ceiling area with a material having a noise reduction coefficient (NRC) of at least 0.5.Alternatively, compliance may be demonstrated by treating 50% of the combined floor and ceiling area with a material having a NRC of at least 0.5. Dedicated teaching space must have reverberation times in the lower half of the range specified in Table 1 of AS/NZS 2107:2016.			

Credit Code	Credit Title	Responsibility	Points Targeted	Points Available
	Compliance shall be demonstrated through measurement, and the measurements shall be conducted in at least 10% of the spaces in the nominated area. The selection of representative spaces must be justified and must consider how the spaces are considered to be the most conservative. The range of measurement locations shall be representative of all spaces available within the nominated area. All relevant buildings systems must be in operation at the time of measurement. Nominated areas designed with specific infection control/cleaning requirements (with hard surfaces) or special functional requirements that prevent Credit 10.2 compliance can be excluded (to be agreed with NSW HI and Acoustic Consultant). **HC Action / Documentation Requirements** The HC shall provide: • Acoustic Design Specification/report outlining reverberation time requirements for the nominated spaces. • Commissioning Report results by a Qualified Acoustic Consultant detailing compliance to the relevant measured reverberation times and targeted reverberation times levels.			
11.0	**Minimum Lighting Comfort**	Electrical/Lighting & Head Contractor	Credit Minimum	Credit Minimum
	Credit 11.0 applies to all primary and secondary spaces (the nominated area for this credit). At least 95% of the nominated areas (or 95% of number of fittings) must comply. Refer to Section 2.4.1 of this specification for the definitions of the nominated areas. The Head Contractor shall ensure that all internal lights in the nominated areas meet the following requirements. Lighting for medical or specialist requirements is excluded from assessment. Any spaces that have a critical or medical/functional requirement that prevents compliance can be excluded from the DGN 058 assessment. **11.0.1 Flicker-Free Lighting** The Head Contractor shall ensure that all internal lights in the nominated areas are flicker-free with LED lighting with electronic drivers that feature 12-bit or greater resolution. **11.0.2 Colour Quality** The Head Contractor shall ensure all light sources in the nominated area have a minimum Colour Rendering Index (CRI) of 80. **HC Action / Documentation Requirements** The HC shall provide: • As-Built Internal Lighting Drawings • As-Built Luminaire Schedules covering all lights in the nominated areas • Product data sheets demonstrating compliance with the credit requirements			
11.1	**General Illuminance & Glare Reduction**	Electrical/Lighting & Head Contractor	1	1
	Credit 11.1 applies to all primary and secondary spaces (the nominated area for this credit). At least 95% of the nominated areas must comply. Refer to Section 2.4.1 of this specification for the definitions of the nominated areas. The Head Contractor shall ensure the design of the installed lighting system complies with the following requirements. Lighting for medical or specialist requirements is excluded from assessment. Any spaces that have a critical or medical/functional requirement that prevents compliance can be excluded from the DGN 058 assessment.			

Credit Code	Credit Title	Responsibility	Points Targeted	Points Available
	11.1.1 General Illuminance The Head Contractor shall ensure the lighting system design installed to the nominated spaces achieves a maintained illuminance that meets the levels recommended in the relevant standard. Standards for best practice general illuminance shall meet the relevant sections of AS1680 for the appropriate space use. Compliance can be demonstrated through modelling or measuring or measuring of the whole nominated area or a representative floor or section. Assessment (either modelling or measuring) must be carried out in accordance with Appendix B or AS 1680.1:2006. The maintained illuminance level shall be calculated on an area-weighted average for each nominated space. The maintained illuminance values must achieve a uniformity of no less than that specified in Table 3.2 of AS 1680.1:2006, with an assumed standard maintenance factor of 0.8 Where recommended maintained illuminance values for a particular space are not specified, the values to be used must relate to the closest type of task as defined in AS/NZS 1680.1:2006 Table 3.1 **11.1.2 Glare Reduction** The Head Contractor shall ensure the glare from lamps must be limited within the nominated area through a combination of either: • Ensuring all bare light sources are obscured from direct viewing from all viewing angles of occupants (through baffles, louvres, translucent diffusers, etc.), including occupants looking directly upwards; OR • The lighting system complies with the luminaire selection system as detailed in Section 8.3.4 of AS/NZS 1680.1-2006; OR • Unified Glare Rating (UGR) calculated for the lighting on a representative must not exceed the maximum values listed in Table 8.2 of AS/NZS 1680.1-2006. UGR must be calculated in accordance with the procedure outlined in Clause 8.3.3 of AS/NZS 1680.1-2006 **HC Action / Documentation Requirements** The HC shall provide: • As-Built Internal Lighting Drawings • As-Built Isolux Plot Lighting Calculation Summary (addressing all 11.1.1 General Illuminance and 11.1.2 Glare Reduction requirements). Lighting calculations for compliance only need to be presented for typical representative spaces (based on having a reasonable coverage) • As-Built Luminaire Schedules including all lights of the nominated areas that are fitted with glare accessories to address 11.1.2 Glare Reduction			
11.3	**Localised Lighting Control**	Electrical/Lighting & Head Contractor	1	1
	Credit 11.3 applies to all primary and secondary spaces (the nominated area for this credit). At least 95% of the nominated areas must comply. Refer to Section 2.4.1 of this specification for the definitions of the nominated areas. Localised lighting control (including turning lights on & off and adjusting the light levels where necessary) shall be provided as per the Electrical Lighting Design Documentation and to the specific requirements of NSW HI. The Head Contractor shall ensure a DALI lighting control system is installed for the building, and that is capable of allowing future provisions of localised lighting control (including dimming) to the nominated areas. At this stage, the Head Contractor shall be aware that the localised DIMMABLE lighting controls are intended to be provided to the following spaces (TBC): • Child family health room (Health One) • ED Interview Room • Multipurpose Cultural Room • Palliative Care Lounge • Etc. Please refer to the Electrical Lighting Documentation and NSW HI requirements for specific areas that require dimmable lighting controls.			

Credit Code	Credit Title	Responsibility	Points Targeted	Points Available
	HC Action / Documentation Requirements The HC shall provide: • As-Built Lighting Control Functional Description Report • As Built Lighting Control Zone Layout • Commissioning extracts of the lighting control system			
12.0	**Glare Reduction**	Architect & Head Contractor	Credit Minimum	Credit Minimum
	Credit 12.0 applies to all primary spaces only (the nominated area for this credit). At least 95% of the nominated areas must comply. Refer to Section 2.4.1 of this specification for the definitions of the nominated areas. The Head Contractor shall provide and install shading blinds or screens in the nominated areas with viewing facades and skylights. All blinds or screens shall meet the following criteria: • Blinds must provide glare reduction to at least 95% of the area of viewing façade and skylights • Blinds must have a visual light transmittance (VLT) of ≤ 10% • Blinds must be controlled by all affected occupants within each individual space. • Manual or automated internal, in-glazing, or external blinds can be used • Where automated blinds are used, they must be controlled either by a management system or by a manually-activated switch. If blinds and screens are automatically controlled, they must also be equipped with a manual override function accessible by occupants in each of the adjacent spaces served. For blinds/curtains supplied and installed by the client, it is the responsibility of the client (and NOT the Head Contractor) to ensure the above requirements listed above has been demonstrated. **HC Action / Documentation Requirements** The HC shall provide: • As Built Architectural FFE schedule of blinds specification • Blinds Fabric Product Datasheet confirming VLT • As Built Architectural Plans or Detailed Drawings of nominated spaces with installed blinds by Head Contractor			
12.2	**Views**	ESD Consultant & Architect	1	1
	Credit 12.2 applies to all primary spaces only (the nominated area for this credit). At least 95% of the nominated areas must comply. Refer to Section 2.4.1 of this specification for the definitions of the nominated areas. The Head Contractor shall be made aware that the project has been designed for at least 60% of the nominated area to have a clear line of sight to a high quality external view. All floor areas within 8m from a compliant window, atrium, or view can be considered to meet this credit criterion. If any changes to these elements are proposed, the Head Contractor shall ensure that at least 60% of the nominated area with clear line of sight to a high quality external view is maintained. **HC Action / Documentation Requirements** The HC shall provide: • As Built Architectural Plans • Markup and/or calculation confirming external views compliance			

Credit Code	Credit Title	Responsibility	Points Targeted	Points Available
13.1	**Paints, Adhesives, Sealants & Carpets**	Head Contractor & Services & Trades	1	1

The Head Contractor shall ensure that a minimum 95% of all paints, carpets, adhesives and sealants applied internally have certified low volatile organic compound (VOC) content that does not exceed the VOC limits defined by Green Star and are to provide evidence from suppliers quantifying the products supplied and information confirming the products supplied were used. Compliance for internally applied paints, adhesives and sealants is measured by volume. Compliance for carpets is measured by area.

At least 50% of paints (by volume) applied on site shall achieve a maximum TVOC content of <5g/litre, as outlined in Section 3.2.9 Innovation – Credit 30C Ultra Low VOC Paints. This requirement shall be met on top of the requirements for Credit 13.1. Product compliance must be verified by one of the approved paint test methods.

The following items are excluded from this credit:

- Glazing film, tapes, and plumbing pipe cements;
- Products used in car parks; and
- Paints, adhesives and sealants used off-site, for example applied to furniture items in a manufacturing site and later installed in the fitout; and
- Adhesives and mastics used for temporary formwork and other temporary installations.

Total VOC (TVOC) values must reflect the final ready to use product, inclusive of tints (in the case of paints) and made in grams of VOC per litre (g/L) of ready to use product

13.1.1 Paints, Adhesives, and Sealants

The following table lists the maximum VOC limits allowed for the paints, adhesives and sealants:

Product Category	Maximum TVOC VOC Content of Ready to Use Product (g/litre)
General purpose adhesives	50
Interior wall and ceiling paint, all sheen levels	16*
Trim, varnishes and wood stains	75
Primers, sealers and prep coats	65
One and two pack performance coatings for floors	140
Acoustic sealant, architectural sealant, waterproofing membranes and sealant, fire retardant sealants and adhesives	250
Structural glazing adhesive, wood flooring and laminate adhesives and sealants	100

** Note that the project is also targeting Ultra Low VOC Paints, where the Contractor shall ensure over 50% of paints (by volume) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods.*

<u>Paints, adhesives and sealants testing methods</u>

The following VOC test methods are relevant to paints:

- ISO Method 17895 (2005), for a material with a presumed VOC content <1 %;
- ISO Method 11890-2 (2006), for a material with a presumed VOC <15%;
- ISO Method 11890-1 (2007), for a material with a presumed VOC content >15%; or
- ASTM D3960, which is comprised of four individual testing procedures that measures TVOC (02369) as well as density (014 75) and water content (04017). Exempt compounds (04457) must not be subtracted in the calculation of VOC content.

The testing method for adhesive and sealants is the ASTM D3960 as detailed for paints as well as South Coast Air Quality Management District Rule 1168.

<u>Theoretical VOC Calculations</u>

Where TVOC content for the individual paints, adhesives and sealants ingredients is known, a theoretical calculation based on the subtotal of the known VOC values of the product's raw material components is

Credit Code	Credit Title	Responsibility	Points Targeted	Points Available

acceptable. This is not relevant to carpets and engineered wood products where experimental testing is required. The calculations must include the following:

- Numerical TVOC results expressed in g/L of product; and
- Statement that the results have been obtained based on the subtotal of the known TVOC values of the product's raw ingredients.

Note: This TVOC method is not an acceptable option for Innovation claims.

13.1.2 Carpets

Carpets shall be installed that comply with one of the following methodologies

Method 1 – The products comply with the following test standards

Test Protocol	Limit
ASTM D5116 – Total VOC limit	0.5mg/m2 per hour
ASTM D5116 – 4 – PC (4 – Phenyl cyclohexene)	0.05mg/m2 per hour
ISO 16000 / EN 13419 – TVOC at three days	0.5mg/m2 per hour
ISO 10580 / ISO/TC 219 (Document N238) – TVOC at 24 hours	0.5mg/m2 per hour

Method 2 – Product Certification

The product is certified under a recognised GBCA product certification scheme. The following schemes and relevant standards have been assessed as compliant with the requirements of the GBCA's Assessment Framework for Product Certification Schemes. Click on the relevant scheme below for detail.

Carpet Institute of Australia Limited, Environmental Certification Scheme (ECS) v1.3

- ECS Level 2 - Level C recognition;
- ECS Level 3 - Level B recognition; and
- ECS Level 4 (two options) - Level A recognition.

Ecospecifier GreenTag GreenRate v3.2

- GreenTag GreenRate Level C - Level C recognition;
- GreenTag GreenRate Level B - Level B recognition; and
- GreenTag GreenRate Level A - Level A recognition.

Australasian Furnishing Research and Development Institute, Sustainability Standard for Commercial Furniture - AFRDI Standard 150

- AFRDI Green Tick Level C/Silver - Level B recognition;
- AFRDI Green Tick Level B/Gold - Level A recognition; and
- AFRDI Green Tick Level A/Platinum - Level A recognition.

Good Environmental Choice Australia (GECA), including six standards

- GECA 28-2010 v2 - 'Furniture and Fittings' - Level A recognition;
- GECA 50-2011 v2 - 'Carpets' - Level A recognition;
- GECA 25-2011 v2 - 'Floor Coverings' - Level A recognition;
- GECA 04-2011 v2 - 'Panel Boards' - Level A recognition;
- GECA 40-2008 v1.1 - 'Hard Surfacing' - Level A recognition; and
- GECA 28-2006 Modified 2010 v2 - 'Furniture and Fittings' - Level B recognition.
- The Institute for Market Transformation to Sustainability (MTS) Sustainable Materials Rating Technology standard version 4.0 - SMaRT 4.0
- SMaRT 4.0 Sustainable Platinum - Level A recognition; and
- SMaRT 4.0 Sustainable Gold - Level A recognition.
- Refer GBCA Website for more information. The certificate shall include the products name and model.
- The Contractor is required to obtain approval from the Design Team or Principal before installing or substituting any finishes not specified.

Credit Code	Credit Title	Responsibility	Points Targeted	Points Available
	HC Action / Documentation Requirements The HC shall provide: • A Short Report & Master Tracking Sheet for each material type demonstrating compliance with the project's materials ESD requirements • Product VOC certificates or data sheets demonstrating emission levels: - For every compliant product nominated; - For every datasheet provided, the compliant VOC levels must be highlighted and referenced in the Short Report and master tracking sheets; - Stating the calculation method followed to determine TVOC levels of each specified product; and - The datasheets must come from a NATA or ISO/IEC 17025 registered laboratory quoting the TVOC level of each specified product or the manufacturer documenting the calculation method followed to determine TVOC levels of each specified product;			
13.2	**Engineered Wood Products**	Head Contractor & Services & Trades	1	1

The Head Contractor shall provide a minimum 95% of engineered wood products that meet the formaldehyde emission limits specified below. Engineered wood products include but are not limited to:

- Particleboard;
- Plywood;
- Medium Density Fibreboard (MDF);
- Laminated Veneer Lumber (LVL);
- High-Pressure Laminate (HPL);
- Compact Laminate; and
- Decorative overlaid wood panels.

Timber veneers itself alone are excluded (unless the veneer is adhered to an engineered wood product). Where only part of a product is composed of an engineered wood product, the limits apply only to that portion of the product, not the entire item.

The following applications of engineered wood products are excluded from this Credit:

- Formwork;
- Car parking area applications;
- Non-engineered wood products such as milled timber.

All engineered wood products used in the building must meet the relevant limits specified below as per the specified test protocol or have product specific evidence that it contains no formaldehyde.

Formaldehyde emission limit values for engineered wood products

Test Protocol	Emission Limit / unit of Measurement
AS/NZS 2269:2004 testing procedure AS/NZS 2098.11:2005 method 10 for plywood	≤ 1 mg/L
AS/NZS 1859.1:2004 – Particle Board, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤ 1.5 mg/L
AS/NZS 1859.2:2004 – MDF, with use of testing procedure AS/NZS 4266.16:2004 method 16	≤ 1 mg/L
AS/NZS4357.4 – Laminated Veneer Lumber (LVL)	≤ 1 mg/L
Japanese Agricultural Standard MAFF Notification No. 701 Appendix Clause 3 (11) – LVL	≤ 1 mg/L

Credit Code	Credit Title	Responsibility	Points Targeted	Points Available

JIS A 5908:2003 – Particle Board and Plywood, with use of testing procedure JIS A 1460	≤ 1 mg/L
JIS A 5905:2003 - MDF, with use of testing procedure JIS A 1460	≤ 1 mg/L
JIS A 1901 (not applicable to Plywood, applicable to high pressure laminates and compact laminates)	≤ 0.1 mg/m^{2}hr*
ASTM D5116 (applicable to high pressure laminates and compact laminates)	≤ 0.1 mg/m^{2}hr
ISO 16000 part 9, 10 and 11 (also known as EN 13419), applicable to high pressure laminates and compact laminates	≤ 0.1 mg/m^{2}hr (at 3 days)
ASTM D6007	≤ 0.12 mg/m^{3**}
ASTM E1333	≤ 0.12 mg/m^{3***}
EN 717-1 (also known as DIN EN 717-1)	≤ 0.12 mg/m^3
EN 717-2 (also known as DIN EN 717-2)	≤ 3.5 mg/m^{2}hr

*mg/m2hr may also be represented as mg/m2/hr.

***The test report shall confirm that the conditions of the Table above comply for the particular wood product type, the final results shall be presented in EN 717-1 equivalent (as presented in the table) using the correlation ratio of 0.98.

***The results shall be presented in EN 717-1 equivalent (as presented in the table), using the correlation ratio of 0.98.

Alternatively, engineered wood product that comply with a recognised product certification scheme could be potentially compliant. For more information, please refer to the GBCA website (https://new.gbca.org.au/product-certification-schemes/). The certificate must be current at the time of project registration or submission and list the relevant product name and model

HC Action / Documentation Requirements

The HC shall provide:

- A Short Report & Master Tracking Sheet for each material type demonstrating compliance with the project's materials ESD requirements
- Product certificates or data sheets demonstrating formaldehyde contents:
  - For every compliant product nominated;
  - For every datasheet provided, the compliant formaldehyde emission levels must be highlighted and referenced in the Short Report and master tracking sheets;
  - Stating the test measurement method followed to determine formaldehyde emission levels of each specified product; and

14.1	**Thermal Comfort**	Mechanical & Head Contractor & ESD Consultant	1	1

Credit 14.1 applies to all primary and secondary spaces (the nominated area for this credit). At least 95% of the nominated areas must comply. Refer to Section 2.4.1 of this specification for the definitions of the nominated areas.

For mechanically ventilated spaces, the project shall demonstrate that a minimum 95% of the nominated areas for 98% of the occupied hours achieves a Predicted Mean Vote (PMV) levels between -1 and +1 inclusive. PMV levels must be calculated in accordance with either ISO 7730-2005 or ASHRAE Standard 55-2013.

The Head Contractor shall appoint a suitably qualified professional to perform thermal comfort modelling calculations to ensure that all nominated spaces achieve a high degree of thermal comfort.

The Head Contractor shall ensure that all envelope elements and mechanical systems are installed and commissioned as designed to maintain the stated thermal comfort levels.

Nominated spaces designed with specific internal temperature condition requirements that prevent compliance with the Credit 14.1 Thermal Comfort requirements can be excluded from DGN 058 assessment.

Credit Code	Credit Title	Responsibility	Points Targeted	Points Available
	HC Action / Documentation Requirements The HC shall provide: • Green Star Equivalency Thermal Comfort Modelling Report • As Built Drawings showing thermal properties of roof, windows and façade • As Built Mechanical Drawings showing details of the HVAC system and zones • Commissioning Results that the building mechanical services system has been commissioned and installed systems operate as intended by the design			

3.2.3 Energy

Credit Code	Credit Title	Design Responsibility	Points Targeted	Point Available
15E.0	**GHG Emissions, Reference Building Pathway: Conditional Requirement**	Head Contractor, Architect & Services & ESD Consultant	Credit Minimum	Credit Minimum
	The Head Contractor shall ensure that all building services are designed, installed and commissioned to operate efficiently. Building fabric and glazing must be designed and installed to be energy efficient. Renewable Solar PV systems shall be installed as per the electrical design. The Contractor must obtain prior approval from the Principal for this project before modifying any building features or systems that will impact on the energy efficiency of the design. The Contractor shall be aware that the project is targeting points for 15E.5.2 Fuel Switching, for not using any fossil fuels on site. A DGN 058 Green Star Equivalency energy modelling report shall be provided by the Head Contractor, demonstrating the predicted energy improvements compared to benchmark and reference building models. **Conditional Requirement** The Head Contractor shall demonstrate through energy modelling that the predicted Proposed Building greenhouse gas (GHG) emissions are less than those of the equivalent Benchmark Building, and the GHG emissions from the Intermediate Building are less than those of the Reference Building. The Benchmark Building represents a 10% improvement on the Reference Building's GHG emissions. The Reference Building is a building which achieves minimal compliance with the NCC Section J 2019 Amendment 1 DTS provisions. **HC Action / Documentation Requirements** The HC shall provide: *See below 15E.2 for documentation required.*			
15E.1	**Building Fabric Improvement (Intermediate Building Energy model)**	Head Contractor, Architect & Services & ESD Consultant	0	4
	The Head Contractor shall demonstrate through energy modelling that the Intermediate Building predicted greenhouse gas (GHG) emissions are less than those of the Reference Building. **HC Action / Documentation Requirements** The HC shall provide: *See below 15E.2 for documentation required.*			

Credit Code	Credit Title	Design Responsibility	Points Targeted	Point Available
15E.2	**Proposed Building Improvement**	Head Contractor & Services	3	16
	The Head Contractor shall demonstrate through energy modelling that the Proposed Building has predicted GHG Emissions Reduction compared to a Benchmark Building case of 10% (corresponding to approximately 3 points) Note: The Benchmark Building represents a 10% improvement on the Reference Building's predicted Greenhouse Gas (GHG) Emissions. The Reference Building is a building which achieves minimal compliance with the NCC Section J 2019 Amendment 1 DTS provisions. **HC Action / Documentation Requirements** The HC shall provide: • As Built Energy modelling report in accordance with the Green Star DAB v1.3 Energy Consumption and Greenhouse Gas Emissions Calculation Guide • As Built drawings and equipment schedules; • Glazing Technical Datasheets where relevant; • Building Services Technical Data Sheets & Schedules where relevant; and • Commissioning results confirming the building operates as intended by the design.			
15E.5.2	**Fuel Switching**	Principal	2	2
	The Head Contractor shall be aware that the overall project (upon completion) is targeting 2 points for 15E.5.2 Fuel Switching, where no fossil fuels are burned on site to generate electricity, heating or cooling under normal operational conditions (excluding standby diesel generators). Note: For this DGN 058 Green Star Equivalency assessment, there will be no mandatory requirement to purchase renewable energy certificates to offset any emissions from standby diesel generators and the like. **HC Action / Documentation Requirements** The HC shall provide: • As Built confirmation that no fossil fuels are intended to be used on site during everyday normal operations.			
16B	**Peak Electricity Demand Reduction**	Head Contractor & Services	1	2
	The Head Contractor shall demonstrate through energy modelling that the building's peak electricity demand is reduced by a minimum 20% when compared to a reference building (utilising Green Star Design & As Built v1.3 modelling procedures). The Head Contractor shall ensure that all envelope elements and energy consuming systems are installed as designed to maintain the designed peak energy reduction levels. **HC Action / Documentation Requirements** The HC shall provide: • As Built Energy modelling report (including a section on the peak electricity demand reduction simulation) in accordance with the Green Star DAB v1.3 Energy Consumption and Greenhouse Gas Emissions Calculation Guide • Commissioning results confirming the building operates as intended by the design.			

3.2.4 Transport

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available
17B.3	**Sustainable Transport: Low Emissions Vehicle Infrastructure**	Head Contractor, Services & Architect	1	1

The Head Contractor shall provide the required number of Electric Vehicle (EV) chargers (4x) for the Fleet Parking area as nominated in the Electrical design documentation.

The 4x EV Chargers within Fleet Parking is deemed to satisfy the requirement that 5% of parking is dedicated to electric vehicles and charging infrastructure is provided for each EV space.

The Head Contractor shall install all facilities as per designed and recommended by Green Travel Plan

HC Action / Documentation Requirements

The HC shall provide:

- As Built Architectural and Electrical drawings that show the parking spaces and location of EV chargers

3.2.5 Water

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available
18B.1	**Sanitary Fixture Efficiency**	Hydraulic, Head Contractor, Architect	1	1

The Head Contractor shall ensure that sanitary water fixtures have WELS ratings that meet or be better than the WELS rating stated in the table below.

Note: Exemptions can be made if there are special health/medical/functional/specialist requirements for the water fixture:

Fixture / Equipment Type	WELS RATING
Taps	5 Star
Urinals (only if relevant)	5 Star
Toilet	4 Star
Showers	4 Star (>6.0 but <=7.5 L/min)
Clothes washing machines (Residential scale)	4 Star
Dishwashers (Residential scale)	5 Star

Note that the following is excluded from assessment:

- Commercial grade/scale clothes washing machines and dishwashers
- Any re-used items
- Bath taps, laboratory taps and taps dedicated to cleaning and facility management & wash down
- Kitchen taps
- Kitchen/Café Chilled, Boiling and Sparkling Tapware (e.g. Billi, Zip units)

HC Action / Documentation Requirements

The HC shall provide:

- WELS certificates for all toilets, urinals, taps and showers and dishwashers.

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available
18B.3	**Heat Rejection**	Mechanical, Head Contractor	2	2
	The Head Contractor shall be made aware the building utilises waterless heat-rejection systems. **HC Action / Documentation Requirements** The HC shall provide: • As Built Mechanical Drawings demonstrating waterless heat rejection systems only.			
18B.4	**Landscape Irrigation**	Landscape, Hydraulic, Head Contractor	1	1
	The landscaping and associated systems must be designed to reduce the consumption of potable water required for irrigation, through the installation of drip irrigation and drought tolerant planting. Where permanent landscape irrigation is provided, the contractor shall provide an automatic drip irrigation system. Non-permanently irrigated landscape to be hand-watered for establishment period. Note: The requirement for moisture sensor override for drip irrigation is optional only, to be confirmed if required by the client. **HC Action / Documentation Requirements** The HC shall provide: • As-built drawings showing landscaping design and landscape irrigation system • As-built drawings showing the extent of permanent landscape drip irrigation and areas of future hand watering only • Data sheet on landscape drip irrigation system			
18B.5	**Fire System Test Water**	Fire Services, Head Contractor	1	1
	The Head Contractor shall ensure that the fire protection system is designed & installed such that the fire sprinkler systems are fitted with isolation valves or shut-off points (on each floor or relevant area) for system-by-system testing. **HC Action / Documentation Requirements** The HC shall provide: • As-built drawings showing fire sprinkler systems and corresponding isolation valves to permit area-by-area testing			

3.2.6 Materials

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available
19B.1	**Life Cycle Impacts - Concrete**	Head Contractor & Structural & Concrete Supplier	1	3
	The Head Contractor shall ensure all concrete used on the project meets the following requirements: **19B.1.2 Water Reduction** The Head Contractor shall ensure the mix water for all concrete used in the project contains at least 50% captured or reclaimed water (measured across all concrete mixes in the project) by volume. **19B.1.3 Aggregates Reduction** The Head Contractor shall ensure at least 25% (by mass) of fine aggregate (sand) in the concrete are manufactured sand or other alternative materials (measured by mass across all concrete mixes in the project), provided that use of such materials does not increase the use of Portland cement by over five kilograms per cubic metre of concrete.			

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available
	Acceptable types of alternative fine aggregate are listed in the Cement Concrete and Aggregate Australia publications: *Use of Recycled Aggregates in Construction and Guide to the Specification and Use of Manufactured Sand in Concrete*. **HC Action / Documentation Requirements** The HC shall provide: • Concrete mixes schedule from the concrete supplier demonstrating compliance for water and fine aggregate used in the project (from start of construction to overall construction completion) • As Built confirmation that the credit criteria has been complied with			
19B.2	**Life Cycle Impacts - Steel**	Head Contractor & Structural & Steel Supplier	1	1

The project is a steel framed building.

The Head Contractor shall demonstrate a reduction in the mass of steel framing used when compared to standard practice through the Credit 19B.2A.A High Strength Steel initiative whereby 95% (by mass) of Category A products and 25% (by mass) of Category B products meet the strength grades specified in Table 19B.2A.1 and Table 19B.2A.2, as applicable.

Table 19B.2A.1: Minimum Strength Grades for Category A products

Category A Products	Minimum Strength Grade
Roof Sheeting	550 MPa
Wall Sheeting	550 MPa
Profiled Steel Decking	550 MPa
Purlins	450 MPa
Girts	450 MPa
Light Steel Framing Systems	450 MPa

Table 19B.2A.2: Minimum Strength Grades for Category B products

Category B Products	Minimum Strength Grade
Hot-Rolled Structural Steel Sections and Plate (UB, UC, PFC, EA, UEA, etc.)	350 MPa
Cold-Formed Sections (SHS, RHS, CHS, channels, angles)	450 MPa
Welded Sections (WB, WC)	400 MPa

HC Action / Documentation Requirements

The HC shall provide:

- Steel schedule from the steel supplier identifying all relevant 19B.2A.A High Strength Steel Category A and Category B steel products installed in the building (from start of construction to overall construction completion) and demonstrating how the credit criteria is met.
- As Built confirmation that the credit criteria has been complied with

20.1	**Structural and Reinforcing Steel**	Head Contractor & Structural & Steel Supplier	1	1

The project is a steel framed building.

The Head Contractor shall ensure:

- At least 95% (by mass) of the building's steel is sourced from a Responsible Steel Maker; AND
- At least 60% (by mass) of the fabricated structural steelwork is supplied by a steel fabricator/steel contractor accredited to the Environmental Sustainability Charter of the Australian Steel Institute (ASI)

Responsible Steel Maker:

For a steel manufacturer or a steel maker to be considered a responsible source of steel, they must show that they comply with both of the following initiatives:

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available
	• The steel making facilities where the structural and/or reinforcing steel for the project is sourced have a currently valid and certified ISO 14001 Environmental Management System (EMS) in place. Valid ISO 14001 Environmental Management System (EMS) certificates must be provided from the steel making facilities where the structural and/or reinforcing steels in the project were produced; and • The steel maker supplying the steel is a member of the World Steel Association's (WSA) Climate Action Programme (CAP). A current CAP certificate from the WSA, confirming that the steel maker is a member of the CAP, must be provided. Certificates are valid for a period of two years and must be current at the time that the Green Star documentation is submitted to achieve points for this criterion. <u>Responsible Steel Fabricator</u> For a steel fabricator to be considered a responsible source of steel, they must show that they are a current member of the ASI's Environmental Sustainability Charter Group All benchmark calculations in this credit are based on the mass of steel in the building. **<u>HC Action / Documentation Requirements</u>** The HC shall provide: • As-Built Structural drawings and specifications; • As Built Steel Quantity Summary schedule tabulating the steel types, quantity (by mass), source and specification; • The steel making facilities where the structural and/or reinforcing steel for the project is sourced have a currently valid and certified ISO 14001 Environmental Management System (EMS) in place; • The steel maker supplying the steel is a member of the World Steel Association's (WSA) Climate Action Programme (CAP); • Details of Steel Fabricators membership of ASI Environmental Sustainability Charter • Product Data sheets (if relevant)			
20.3	**Permanent Formwork, Pipes, Flooring, Blinds & Cables**	Head Contractor & Services & Trades	1	1
	The Head Contractor shall ensure that at least 90% (by cost) of all permanent formwork, pipes, flooring, blinds and cables used in the project either do not contain any PVC (and has a recognised product declaration) OR meet the GBCA *Best Practice Guidelines for PVC in the Built Environment*. The costs of non-PVC items must be accounted for in the analysis as per PVC containing products. For Products that do not contain PVC, the Contractor shall provide a safety data sheet (SDS) or equivalent that describes the composition of the products OR an Environmental Product Declaration (EPD) for the product. To demonstrate that a product complies with the *Best Practice Guidelines for PVC in the Built Environment* it must have one of the following: • A valid audit verification certificate for each of the PVC products specified or used in the project. The certificate must clearly state the product name, compliance against the GBCA's Best Practice Guidelines for PVC, date of validity, auditor's name, and signature. The auditor must be JAS-ANZ accredited. • A product accreditation certificate from a Green Building Council of Australia accredited scheme. The scheme must clearly reference the guidelines in their standard • Note: An *Auditor Verification Guidance* document is available on the GBCA website, this document provides the means by which the auditor must establish compliance.			

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available

The 'total cost of PVC products' for the purpose of providing cost calculations shall be determined by the cost of the entire product (excluding installation costs). Construction materials containing PVC will have to comply with 'best practice' guidelines for PVC and be independently certified.

The Head Contractor shall refer to the *Best Practice Guidelines for PVC in the Built Environment* documentation on the GBCA website and the BEP PVC Product Registry (Vinyl Council of Australia) for further information.

All PVC items related to health specialist services (medical gas, security, nurse calls, etc) are excluded from meeting Credit 20.3 PVC requirements.

HC Action / Documentation Requirements

The HC shall provide:

- Short report and Master Tracking Sheet of all permanent formwork, pipes, flooring, blinds and cables indicating material type;
- Summary of quantity (by cost) and types of permanent formwork, pipes, flooring, blinds and cables products;
- For each relevant item, provide product data sheets, audit verification certificate, accreditation certificate or other documentation to demonstrate compliance of PVC products with *Best Practice* Guidelines *for PVC in the Built Environment* for relevant products;
- Product data sheets for products that do not contain PVC.

21	**Product Transparency**	Head Contractor & Services & Trades	1	3

The Head Contractor shall ensure at least 3% (by cost) of total material cost is classified under at least one of the initiatives listed in table below.

Sustainability Initiative	Description	Sustainability Factor
Reused Products	Cleaning, making good, repairs, recovery and resurfacing are allowed	1.0
Recycle Content Products	The cost of the recycled product is to be scaled by the proportion of recycled content	1.0
Environmental Product Declarations – Product Specific	EPD to be: Issued in conformance with ISO14025 or EN15804 Independently audited Cradle-to-gate in scope as a minimum	0.75
Environmental Product Declarations – Industry Wide	EPD to: Issued in conformance with ISO14025 or EN15804 Independently audited Cradle-to-gate in scope as a minimum Include product manufacturer as a recognised participant	0.5
Third-Party Certification (Level A)	See for Third Party Certification schemes such as: Ecospecifier Green Tag GreenRate Good Environmental Choice Australia The Institute of Market Transformation to Sustainability – Sustainable Materials Rating Technology	1.0
Third-Party Certification (Level B)	See for Third Party Certification schemes such as: Ecospecifier Green Tag GreenRate Good Environmental Choice Australia The Institute of Market Transformation to Sustainability – Sustainable Materials Rating Technology	0.75
Third-Party Certification (Level C)	See for Third Party Certification schemes such as: Ecospecifier Green Tag GreenRate	0.5

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available
		Good Environmental Choice Australia The Institute of Market Transformation to Sustainability – Sustainable Materials Rating Technology		
	Stewardship Programs	A contractual between supplier and the building owner or tenant The supplier must agree to collect the item at the end of use (or lease in the case of leased items) for re-lease, re-use or recycling The contract may not include exemptions which relate to timing, quality or quantity that will be accepted for collection.		0.5

Points are awarded based on the percentage value of the products that meet one of the specified initiatives. This is demonstrated by calculating the Project Sustainability Value (PSV) and comparing it with the Project Contract Value (PCV).

That is, PSV ÷ PCV = % Compliant Products

Project Sustainability Value (PSV) = Product Cost ($) x Sustainability Factor (SF)

Project Contract Value (PCV)

The Project Contract Value is the dollar value that will be required to complete the works for the entire project, including site works (landscaping, external paving, etc.), but excluding all non-material costs. Project Contract Value is intended to be an approximation of the cost of materials used in the project. Project Contract Value (PCV) is equal to the Total Project Contract Value, minus the cost of the following elements:

- Demolition works;
- Consultants, design fees, project management fees;
- Works outside the project site area; and
- Buildings or areas within the site that are not being assessed for purposes of Green Star.

Accordingly, PCV is an indicative, approximate cost of the following:

- Loose furniture;
- Cladding;
- Fixed furniture;
- Masonry;
- Internal Partitions;
- Glazing;
- Assemblies;
- Ceilings
- Joinery;
- Timber
- Flooring;
- Steel
- Wall coverings;
- Concrete
- All other products or materials used in a project which could potentially have a 'Transparency or Sustainability Initiative', whether or not these are currently available.

Product Cost

Costs entered into the Sustainable Products Calculator can either include or exclude labour and transport associated with that product. However, this must be consistent for all costs entered. As such, all individual product costs, and the project's PCV, will either include or exclude labour and transport costs.

Where project teams are provided with some costs that include labour and transport, and some that exclude it, it is acceptable to choose one approach (i.e. include or exclude these costs) and then adjust the non-conforming figures accordingly.

As an example, the product costs available to a project team for loose furniture and flooring excludes labour and transport, but all other product costs include it. In this case, the project team could make educated estimates for the labour and transport costs associated with the installation of loose furniture and floor coverings and add these costs to the original values provided. If this kind of adjustment is performed, please describe the methodology and justification for these calculations.

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available
	HC Action / Documentation Requirements The HC shall provide: • A completed Green Star Sustainable Products Calculator; • Confirmation from supplier that products are reused, contain recycled content and the cost of the recycled/reused content; • Product Third Party Certification and evidence of product costs; • Environmental Product Declarations certificates and evidence of product costs (if available); • Product Stewardship agreement evidence of product costs; and • Transparency and Sustainability tracking schedule for all sustainable products			
22.0	**Reporting Accuracy**	Head Contractor & Waste Contractors & Waste Processing Facilities	Credit Minimum	Credit Minimum
	The Head Contractor to ensure all demolition and construction waste contractors and waste process facilities provide waste management and reporting service must hold a valid 'Compliance Verification Summary' issued by a 'Suitably Qualified Auditor', confirming compliance. If the Waste Contractor and Waste Processing Facilities cannot provide the 'Compliance Verification Summary', the Waste Contractor and Waste Processing Facilities must complete a 'Green Star Waste Contractor Disclosure Statement' or 'Green Star Waste Processing Facilities Disclosure Statement' outlining how much of the Green Star Construction and Demolition Waste Reporting Criteria has been implemented. Note: If Waste Contractor and Waste Processing Facilities cannot provide the Compliance Verification Summary or Disclosure Statement necessary for project specific & valid reasons, this shall be discussed as a potential credit departure with NSW HI. **HC Action / Documentation Requirements** The HC shall provide: • Compliance Verification Summary from all demolition and construction waste contractor(s) and waste processing facilities; or • Completed Disclosure Statement from waste contractor(s) and waste processing facilities outlining how much of the Green Star Construction and Demolition Waste Reporting Criteria has been implemented			
22B	**C&D Waste – Percentage Benchmark**	Head Contractor & Waste Contractors & Waste Processing Facilities	1	1
	Head Contractor shall demonstrate at least 90% (by mass) of the waste generated during construction and demolition has been diverted from landfill. Project is required to report the total amount of waste generated (kg) and the total amount of waste diverted from landfill (kg) from the start of construction to overall construction completion and report on the proportions diverted as a percentage. **HC Action / Documentation Requirements** The HC shall provide: • A Waste Report(s) that includes the following information: ▪ Summary of the Waste Management Plan for the construction and demolition works; ▪ Details of the Waste Contractor and Waste Processing Facility; ▪ Total waste generated from construction and demolition works on a monthly basis and throughout project (cumulative); ▪ Total construction and demolition waste sent to landfill and diverted from landfill (e.g., through recycling);			

3.2.7 Land Use and Ecology

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available
23.0	**Endangered, Threatened or Vulnerable Species**	Principal	Credit Minimum	Credit Minimum
	The Head Contractor shall be made aware that the credit minimum requirement is met as the project does not contain "critically endangered, endangered, or vulnerable species or ecological communities". No actions/documentation requirements for the Head Contractor. No further actions for any party for this credit.			
23.1	**Ecological Value**	Head Contractor, Landscape Contractor & Architect	1	3
	The Head Contractor shall be aware that the project is targeting 1 point for the improvement to the ecological value of the land. The proposed landscape design is composed of 100% native planting for the project. Existing site conditions/planting types have been estimated/approximated. The Contractor shall review any landscape design modifications made to ensure the changes do not adversely affect the ecological value calculator point outcome. **HC Action / Documentation Requirements** The HC shall provide: • Photo/Landscape Area markup of the original site landscape condition prior to development, identifying landscape areas of native vegetation and exotic vegetation. • As-Built Landscape Area markup of the proposed site landscape condition after development, identifying landscape areas of native vegetation and exotic vegetation. • Completed Green Star Ecological Value Calculator			
24.0	**Conditional Requirement**	Principal	Credit Minimum	Credit Minimum
	The Head Contractor shall be made aware that the credit conditional requirement is met as the project satisfies all conditions: • The project is not on land containing old-growth forest. • The project is not on prime agricultural land • The project does not impact on any wetland listed as being of 'High National Importance'. • The project does not have a significant impact on 'Matters of National Significance' listed under the Environmental Protection and Biodiversity Conservation Act (1999). No actions/documentation requirements for the Head Contractor. No further actions for any party for this credit.			
24.1	**Reuse of Land**	Principal	1	1
	The project is an existing site. The Head Contractor shall be made aware that 1 point is achieved as the project is on previously developed land. No actions/documentation requirements for the Head Contractor. No further actions for any party for this credit.			
24.2	**Contamination and Hazardous Materials**	Head Contractor	1	1
	The Contractor shall engage a suitably qualified professional to carry out a comprehensive hazardous materials survey on any existing buildings or structures on the project site as follows: • The Hazardous Materials Survey shall be comprehensive and carried out on any existing buildings or structures on the project site in accordance with the relevant Environmental and OH&S/WHS legislations.			

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available

Buildings where construction began after January 1, 2005 can be excluded from the survey. The results of the Hazardous Materials Survey shall include:

- Location of the hazardous materials (to be shown on plans/drawings)
- Composition and type of material and the material friability
- Risk to health, based on the condition, potential disturbance and occupancy level; and
- Recommendations to control or further minimise risk to occupant health.

The Contractor shall undertake the following:

- If the survey concluded that no hazardous materials were found in any existing buildings or structures on the project, no stabilisation or removal is required for this credit.
- Where the Hazardous Materials survey identifies the presence of asbestos, lead and/or PCBs in existing buildings or structures, a register and Hazardous Materials Management Plan shall be developed for each type of hazardous materials found. The register and management plans shall be kept current and in accordance with the applicable Codes of Practice for each type of hazardous material.
- If the Hazardous Materials survey identifies asbestos, lead or PCBs and the like on any existing buildings or structures, the materials shall be stabilised, or removed and disposed of in accordance with the standards or legislation listed in the following table:

List of Relevant Legislation and Standards

Hazardous Materials	Relevant Standards or Legislation
Asbestos	Occupational Health and Safety (OH&S) Legislation, Work Health and Safety (WH&S) legislation and relevant environmental legislation
Lead	AS4361 'Guide to Lead Paint Management'
Polychlorinated Biphenyls (PCBs)	ANZECC Polychlorinated Biphenyls Management Plan

HC Action / Documentation Requirements

The HC shall provide:

- Hazardous Materials Survey Report;
- Hazardous Materials Management Plan;
- Clearance Certificate confirming that hazardous materials have been stabilised and/or removed and disposed of.

3.2.8 Emissions

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available
27.0	**Light Pollution Neighbouring Properties**	Electrical/Lighting & Head Contractor	Credit Minimum	Credit Minimum

The Contractor shall ensure the design of the installed outdoor lighting system on the project complies with the AS 4282:1997 Control of the Obtrusive Effects of Outdoor Lighting. This applies to all boundaries, apart from boundaries with roads.

The boundary shall be taken as the site boundary, with no setback and no consideration of the location of adjacent buildings (i.e., worst-case scenario)

The following values from Table 2.1 of AS 4282:1997 must be applied:

- For Class 2 buildings (residential), the values in Columns 5A and B; or
- For Class 3 to 9 buildings (non-residential), the values in Column 3.C.

The system must comply with both pre- and post-curfew requirements

The Contractor shall ensure that all external lighting is designed, installed and commissioned in compliance with the credit criteria.

Credit Code	Credit Title	Design Responsibility	Points Targeted	Points Available
	HC Action / Documentation Requirements The HC shall provide: • Isolux Plot Lighting Calculation Drawings showing the as-built external lighting design is AS4282:1997 compliant. • As-Built External Lighting Layout • As-Built Luminaire Schedule covering all external luminaire.			
27.1	**Light Pollution Night Sky**	Electrical/Lighting & Head Contractor	1	1
	The Contractor shall ensure compliance with this credit using one of the following pathways 27.1A or 27.1B. **27.1A – Control of upward light output ratio (ULOR)** The Contractor shall ensure that no external luminaire on the project has a ULOR that exceeds 5% relative to its actual mounted orientation. It must be demonstrated that the ULOR provided or calculated in the documentation, is relevant to the as-installed orientation of the luminaire. Permanent awnings can be used as a means of demonstrating achievement of 5% ULOR requirement. **27.1B – Control of direct illuminance** The Contractor shall ensure that the direct illuminance from external luminaries on the project produces a maximum initial point illuminance value no greater than: • 0.5 Lux to the site boundary; and • 0.1 Lux to 4.5 metres beyond the site into the night sky, when modelled using a calculation plane set at the highest point of the building. Calculations for above must be in accordance with the requirements of AS 4282:1997 Control of the Obtrusive Effects of Outdoor Lighting. The calculation plane must cover the area between the site boundary and building façade or vertical service to be illuminated. The horizontal calculation plane shall be set at the top of the building fabric, excluding spires. Calculation plane grid points shall have 0.5m spacing and all illumination results shall be reported to 2 decimal places minimum. The Contractor to provide a short report and supporting documentation with as built drawings, luminaire schedule and calculation plots for all external lighting showing that all grid points on the calculation plane return a maximum reading of 0.5 LUX to the site boundary and no greater than 0.1 LUX to 4.5 m beyond the site into the night sky. **HC Action / Documentation Requirements** The HC shall provide: • As Built External Lighting Layout drawings showing the location of all external luminaires and showing the aiming point and mounting orientation of all external luminaires; • As Built luminaire schedule for all external lighting, nominating the type, lighting distribution and quantity of each luminaire and including the relevant photometric data showing that the luminaires do not have an upward light output ration that exceeds 5%; OR • Isolux Plot Calculation for all external lighting, showing that all grid points on the calculation plane return a maximum reading of 0.5 Lux to the site boundary and no greater than 0.1 Lux to 4.5m beyond the site into the night sky			
28	**Microbial Control**	Mechanical Contractor & Head Contractor	1	1
	The Head Contractor shall be made aware the building utilises waterless heat-rejection systems. **HC Action / Documentation Requirements** The HC shall provide: ○ As Built Mechanical Drawings demonstrating waterless heat rejection systems only.			

3.2.9 Innovation

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
30C.1	**Ultra-Low VOC Paints**	Head Contractor, Services and Trades	1	1
	The Contractor shall ensure that at least 50% of internally applied paints (by volume) have a maximum TVOC content of 5g/L. Product compliance must be verified by one of the approved paint test methods. Theoretical TVOC calculations are not acceptable for this Innovation claim. The Contractor shall provide evidence from suppliers quantifying the products supplied and information confirming the products supplied were used / installed in the project. The Contractor is required to obtain approval from the Design Team or Principal before substituting any finishes listed in this specification. **HC Action / Documentation Requirements** The HC shall provide: • A Master Tracking Sheet for each product type demonstrating compliance with the TVOC requirements • Product VOC certificates or data sheets demonstrating emission levels for every product nominated; • For every datasheet provided, the compliant VOC levels must be highlighted and referenced in the Short Report; • Approved test result for TVOC levels of each ultra-low TVOC specified product (calculation method not acceptable); and • The ultra-low TVOC test datasheets must come from a NATA or ISO/IEC 17025 registered laboratory identifying the TVOC level of each item and test method • Invoices or other proof of purchase for all relevant products used on site.			
30D.1	**Financial Transparency**	Head Contractor	1	1
	The Contractor shall complete the Green Star 'Financial Transparency Disclosure Template' that comprehensively itemises design, construction, documentation and project costs. In the case of building operations, the information provided will relate to the cost of collecting documentation, building operations and any building upgrades. **HC Action / Documentation Requirements** The HC shall provide: • Completed Green Star Financial Transparency Disclosure Template (in excel format), comprehensively itemising the costs associated with Green Star Equivalency credits • Statement from Head Contractor supporting the costs outlined in the Financial Transparency Disclosure Template			
30D.2	**Incorporation of Indigenous Design**	Head Contractor & Architect	1	1
	The Head Contractor shall be made aware that the design of the building is incorporating at a minimum the four Australian Indigenous Design Charter guiding principles, being: • Indigenous Led: Ensure Aboriginal and Torres Strait Islander representation in the creation of the design. • Community Specific: Ensure respect for the diversity of Aboriginal and Torres Strait Islander culture by following community specific cultural protocols • Impact of Design: Always consider the reception and implications of all designs so that they are respectful to Indigenous culture. • Shared Knowledge (collaboration, co-creation, procurement): Develop and implement respectful methods for all levels of engagement and sharing of Indigenous knowledge (collaboration, co-creation, procurement). The Head Contractor shall ensure the design features of the building that has been developed in accordance with the Australian Indigenous Design Charter guiding principles are implemented and installed in the project.			

Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
	HC Action / Documentation Requirements The HC shall provide: • Short narrative on how As Built compliance has been achieved (including provision of reports or drawings)			
30D.3	**Local Procurement – Local Services and Skilled Labour**	Head Contractor	1	1
	The Contractor shall demonstrate that at least 80% of the services and skilled labour employed by the project come from the local area (within 50km radius) surrounding the Blayney MPS site located at 3 Osman St, Blayney NSW 2799. The Contractor shall provide a register of staff location, comprehensively outlining location of all employed subcontractors' homes including Postal Codes and calculating 80% of staff lives within a maximum 50km radius of the site. Note: % Compliance benchmark and distance from site could be re-evaluated with NSW HI pending feedback from Head Contractor including sufficient project specific reasons/limitations **HC Action / Documentation Requirements** The HC shall provide: • A Completed Staff Register Location Disclosure (in excel format), comprehensively outlining location of all subcontractors' homes including Postal Codes and calculating 80% of staff lives within a maximum 50km radius of the site. • Site Annotation Map or Aerial Photo indicating 50km radius from site as supporting evidence to demonstrate that a percentage of the services and skilled labour employed by the project come from the local area surrounding the site.			
30D.4	**Reconciliation Action Plan**	Client, Head Contractor	1 (TBC)	1
	The Head Contractor shall be made aware that the NSW HI and Western NSW LHD have developed and published their own Reconciliation Action Plan (RAP). Refer to the following RAP: • NSW HI Reflect – RAP (February 2023 – June 2024): https://www.hinfra.health.nsw.gov.au/WWW_Hinfra/media/SiteImages/Content/Reflect-RAP_WEB.pdf • WNSWLHD Innovate RAP (June 2023 – June 2025): https://www.nsw.gov.au/health/wnswlhd/about-us/aboriginal-health/wnswlhd-rap The Head Contractor is also to nominate if it has its own RAP, or whether it has any plans that can achieve the general objectives of the NSW HI RAP and WNSW LHD RAP **HC Action / Documentation Requirements** The HC shall provide: • Short report of the how the general RAP strategies were adopted and implemented to the project.			
30E.1	**Design for Robustness**	Head Contractor, Architect	1	1
	The Head Contractor shall be made aware that the project contains features that protect exposed elements of the building and landscaping from damage from pedestrian traffic, internal vehicular/trolley movement, and external vehicular collision. Examples of features that protect exposed elements of the building include, but are not limited to: • Asset walls separated from vehicular traffic by a path or barrier • Wall/corner guards			

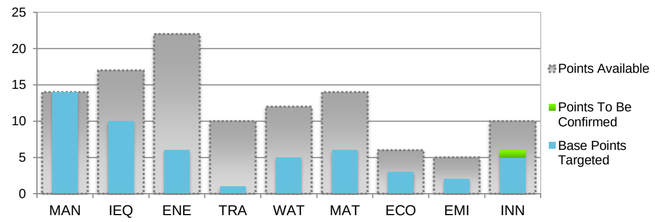
Credit Code	Credit Title	Responsibility	Points Targeted	Point Available
	• Bollards Examples of features that protect exposed elements of landscaping include, but are not limited to: • Pathways which are easily accessible and dissuade building users to walk across landscaped areas • Landscaped areas are fenced off The Head Contractor shall ensure the project design features that protect exposed elements of the building and landscaping from damage from pedestrian traffic, internal vehicular/trolley movement, and external vehicular collision are implemented and installed to the project. **HC Action / Documentation Requirements** The HC shall provide: • Short narrative and As-Built Architectural drawings showing features that protect exposed elements of the building and landscaping from damage from pedestrian traffic, internal vehicular/trolley movement, and external vehicular collision (as relevant).			

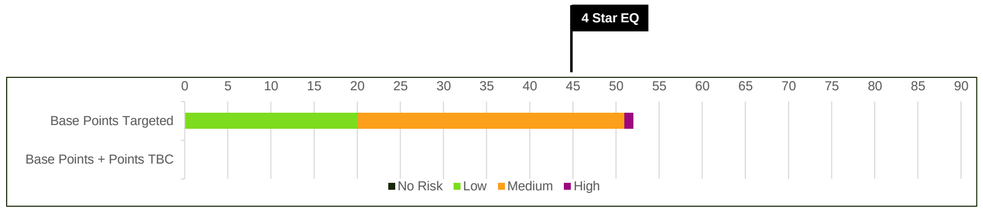
Appendix A – 4 Star DGN 058 Green Star Design & As Built v1.3 Equivalency Pathway for Blayney MPS Redevelopment

The following DGN 058 Green Star Design & As Built v1.3 Equivalency pathway outlines the ESD requirements of Blayney MPS to meet the targeted minimum 50 points (inclusive of points buffer).

DGN 058 GREEN STAR EQUIVALENCY DESIGN & AS BUILT V1.3 SCORECARD (MIN 45 POINTS TARGET)

Project: BLAYNEY MPS
Date: 18-Aug-23
Rev: 4
Issue: For Tender





4 Star EQ: 45 to 59 Points

MAX POTENTIAL SCORE (if including all Points TBC)	**53.0**

Note: **Please refer to DGN 058 ESD Performance Specification for details of compliance**

Credit Title	Aim of Credit	Credit Code	Criteria Title	Credit Requirements Summary *For full criteria refer to Green Star Design and As Built v1.3 Submission Guidelines and ESD Performance Specification*	Points Available	Risk	Base Points Targeted	Points To Be Confirmed	Lead Discipline	Comments
MANAGEMENT										
Accredited Professional	To recognise the appointment and active involvement of a Green Star Accredited Professional in order to ensure that the rating tool is applied effectively and as intended.	1.1	Accredited Professional	Contractual engagement of GSAP at all stages of the project from schematic design through to practical completion and certification	1	Low	1		ESD, Head Contractor, NSW HI	LCI as NSW HI's GSAP from schematic design to tender. Head Contractor to engage a GSAP for the project from construction to practical completion and certification.
Commissioning and Tuning	To encourage and recognise commissioning, handover and tuning initiatives that ensure all building services operate to their full potential.	2.0	Environmental Performance Targets	Minimum Credit Requirement: Documented targets for the environmental performance of the project to be set through a design intent report or an owner's project requirements document.	Credit Minimum	Low	Must Comply		NSW HI, Head Contractor & All Services Contractors	Note - 'Must Comply' means that the design and installation will have to comply with this conditional requirement NSW Government Resource Efficiency Policy (GREP) and NSW Health generally require that WNSW LHD will need to monitor energy + water + waste performance. The new Blayney MPS will need to incorporate sufficient energy (electricity) + water sub-metering to allow for WNSW LHD to monitor and report on consumption. It is recommended that the new facilities' energy + water + waste monitoring be undertaken by WNSW LHD in future (e.g. in accordance with compliance with NSW GREP and NSW Health policy). It is recommended that energy and water conservation targets are set after the 1st year of operation of the complete building, as calculations will not be sufficiently accurate. Head Contractor & Sub-contractors must develop design intent report to describe building services, main components, intended operations, maintenance requirements, metering and monitoring strategy (where relevant) and other related information. Alternatively, the required information should be demonstrated to have been uploaded onto the online Facilities/Construction Management system as part of project handover.
		2.1	Services & Maintainability Review	Comprehensive services and maintainability review of the project led by the Head Contractor or owner's representative (e.g. ICA) during the design stage and prior to construction	1	Medium	1		All Services Contractors, ICA, Head Contractor	Services & Maintainability reviews to be conducted by Head Contractor + subcontractors + ICA (if appointed) during design finalisation stage and BEFORE construction phase. Engagement of ICA TBC by NSW HI.
		2.2	Building Commissioning	Comprehensive pre-commissioning and commissioning activities are performed for all building services according to AIRAH/CIBSE codes for all services or ASHRAE for mechanical services only. ~~Air permeability test to be carried out in accordance with AS/NZS ISO 9972:2015.~~	1	Medium	1		All Services Contractors, ICA, Head Contractor	Building Services Sub-contractors must undertake relevant commissioning to meet the general intent of the Green Star commissioning requirements as noted within Services & ESD Specification (CIBSE/ASHRAE/AIRAH stds) and as directed by ICA (if appointed). Head Contractor and subcontractors to prepare Commissioning Plans and carry out comprehensive services commissioning in line with NSW HI, Services & ESD commissioning standards. No requirement to undertake Building Air Permeability testing for this credit.
		2.3	Building Systems Tuning	Tuning process in place requiring, as a minimum, quarterly adjustments and measurements for the first 12 months after occupancy and review of building system manufacturer warranties. Tuning process requires analysis of monitoring system data and assessment of occupant feedback on building conditions.	1	Low	1		NSW HI, Head Contractor & All Services Contractors	Head Contractor & Sub-contractors to contractually commit to undertake 12 month post occupancy building systems tuning period including quarterly adjustments. Building Tuning Manual/Plan to be developed by ICA (if appointed) & Head Contractor & Sub-contractors. Commissioning, re-commissioning, tuning & checking to be undertaken by Head Contractor & subcontractors.
		2.4	Independent Commissioning Agent (ICA)	Engagement of an ICA to advise, monitor, and verify the commissioning and tuning of all building systems	1	Medium	1		NSW HI	Engagement of ICA TBC by NSW HI. Note #1: As per DGN 058, the ICA initiative can utilise HI's comprehensive design, construction and peer review process as an alternative to an ICA.

DGN 058 GREEN STAR EQUIVALENCY DESIGN & AS BUILT V1.3 SCORECARD (MIN 45 POINTS TARGET)

Project: BLAYNEY MPS
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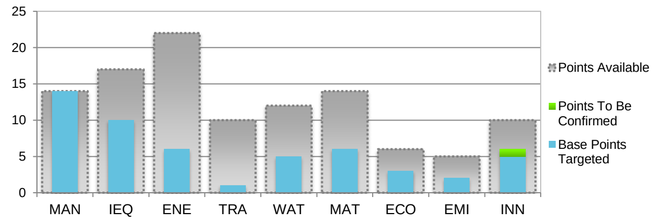

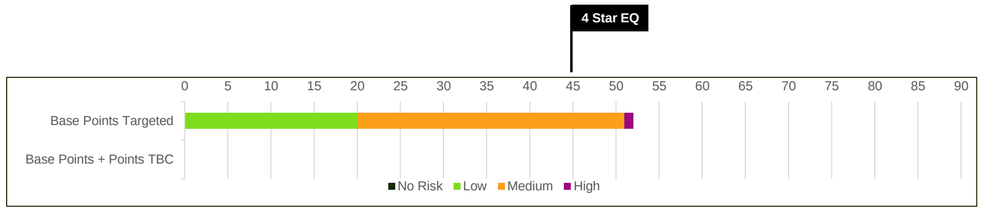

4 Star EQ: 45 to 59 Points

MAX POTENTIAL SCORE (if including all Points TBC)	**53.0**

Note: **Please refer to DGN 058 ESD Performance Specification for details of compliance**

Credit Title	Aim of Credit	Credit Code	Criteria Title	Credit Requirements Summary *For full criteria refer to Green Star Design and As Built v1.3 Submission Guidelines and ESD Performance Specification*	Points Available	Risk	Base Points Targeted	Points To Be Confirmed	Lead Discipline	Comments
Adaptation and Resilience	To encourage and recognise projects that are resilient to the impacts of a changing climate and natural disasters.	3.1	Climate Adaption Plan	Implementation of a Climate Adaption Plan according to AS5334:2013 or ISO31000-2009 & AGO, Climate Change Risks and Impacts	2	Low	2		ESD, Design Team	Climate Adaptation Plan to be prepared by Head Contractor's ESD Consultant to identify climate change risk in operation & feasible solutions. Risk mitigation against items such as flooding, increased ambient temperatures etc. to be considered. Design finalisation & construction team to review and implement feasible design initiatives in response to the climate adaptation plan and climate risk assessment (e.g. energy efficient building fabric etc.). Example climate change resilience measures already considered in the Tender design includes: - Structural: AS1170.2 Wind loading including climate change multiplier (however this is 1.0 for this region, i.e. no notable impact on design); - Electrical: Loss of main power supply will be covered by generator. - Electrical: Main switchboards and substation are located above 1:100 flood levels (NOT PMF) - Mechanical: Mechanical HVAC system design is based of 37.8°CDB / 23.2°CWB and have 10% safety factor in heat loads which will more than compensate for global warming over the life of the equipment - Architecture: Current building levels are above 1 in 100 flood levels - Architecture: The R-values for the walls are over and above min Section J requirements maximising thermal efficiency. - Architecture: Building orientation with Courtyard placements maximises the North orientation as much as possible with staging constraints. - Architecture: External Fabric is non combustible material. - Architecture: Roof slope is 5 degrees to mitigate ponding in heavy rainfall. - Architecture: Solar panels are designed for this project. - Architecture: Drip irrigation is proposed for key areas only (courtyards and along the main entry), and in other areas hand watering during the establishment period - Architecture: Planting selection focuses on native and low-water use species when established. Some selections are generally known for their ability to withstand drought conditions.
Building Information	To recognise the development and provision of building information that facilitates understanding of a building's systems, operation and maintenance requirements, and environmental targets to enable the optimised performance.	4.1	Building Operations & Maintenance Information	Produce comprehensive Building Operation and Maintenance, Building Log Book and Building Users Guide information must be made available to Facilities Management team. Relevant and current building user information is developed and made available to all relevant stakeholders.	1	Low	1		Head Contractor & All Services Contractors	Building Log Book, Building Users Guide and Building O&M manuals to be developed by Head Contractor & Subcontractors for NSW HI + LHD in line with specific HI and Green Star Equivalency requirements. Alternatively, the required information (as separate documents) should be demonstrated to have been uploaded onto the online Facilities/Construction Management system as part of project information handover.
Commitment to Performance	To recognise practices that encourage building owners, building occupants and facilities management teams to set targets and monitor environmental performance in a collaborative way.	5.1	Environmental Building Performance	Owner commitment to set performance targets for 80% of the Gross Floor Area (GFA) to measure, and report on at least two environmental building performance metrics such as GHG emissions, potable water usage, operational waste etc. OR achieve certified operational performance ratings in accordance with Green Star.	1	Low	1		LHD	WNSW LHD to formally commit (via declaration letter or equivalent) to monitoring/reporting of at least 2 environmental targets for the facility in future operation: - Greenhouse gas emissions (energy consumption); - Water usage; - Operational Waste This requirement on monitoring is consistent with the NSW GREP and NSW Health commitments Designers, Head Contractor & Services Sub-contractors to ensure energy & water metering & monitoring infrastructure is installed & commissioned to enable monitoring of the energy & water consumption.
		5.2	End of Life Waste Performance	Owner & Tenant commitment to reduce demolition waste at the end of life of an interior fit out or base building component for at least 80% of the GFA. Owner to commit to extending the life of the interior fitout to 10 years	1	Low	1		LHD	NSW HI & WNSW LHD to formally commit (via declaration letter or equivalent) to extending the life of the interior fitout & finishes (under its control) to at least 10 years, barring minor wear and tear or minor repairs.

DGN 058 GREEN STAR EQUIVALENCY DESIGN & AS BUILT V1.3 SCORECARD (MIN 45 POINTS TARGET)

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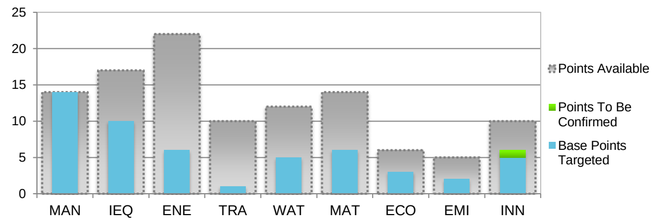

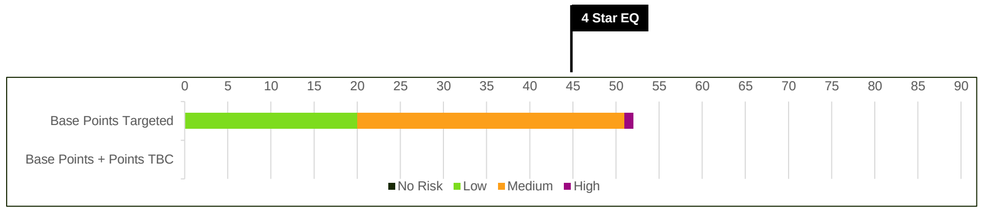

4 Star EQ: 45 to 59 Points

MAX POTENTIAL SCORE (if including all Points TBC)	**53.0**

Note: **Please refer to DGN 058 ESD Performance Specification for details of compliance**

Credit Title	Aim of Credit	Credit Code	Criteria Title	Credit Requirements Summary *For full criteria refer to Green Star Design and As Built v1.3 Submission Guidelines and ESD Performance Specification*	Points Available	Risk	Base Points Targeted	Points To Be Confirmed	Lead Discipline	Comments
Metering and Monitoring	To recognise the implementation of effective energy and water metering and monitoring systems.	6.0	Metering	Minimum Credit Requirement: Provide accessible metering to all energy and water consumption covering common and major uses and sources for distinct uses or floors (whichever is smaller). Energy items >100kVA must be individually metered. Meters are to be commissioned and validated as per NABERS protocol.	Credit Minimum	Medium	Complies		Electrical, Hydraulic, Mechanical, BMCS	Note: 'Complies' means that the design and installation will have to comply with this conditional requirement. Sub-meters linked to BMS/EMS must be provided to all major uses of electricity and water. For electrical, independent sub-metering is generally required for items such as air-conditioning, lighting, power, DHW heat pumps. Additional separate PRIVATE meters connected to BMCS/EMS will generally be required for energy (electricity) and water consumption as a minimum as follows: - Major mechanical and electrical loads - Domestic Hot Water energy - Renewable Energy Solar PV metering - Electric Vehicle Charging - Individual major water uses as nominated by NSW HI (e.g.; separate water sub-meters for DHW, Aged Care, HealthOne, kitchen, etc.). Note 1: Final extent of any additional energy & water sub-metering required above statutory requirements is to be confirmed by NSW HI Note 2: Hydraulic Engineer has advised existing gas will be removed and de-commissioned once the overall project is complete. Project will be fully electric with no gas supply.
		6.1	Monitoring Systems	Implementation of a monitoring strategy in accordance with a recognised standard (e.g. CIBSE TM39 Building Energy Metering), capable of capturing and processing data from all energy and water meters, and accurately and clearly presenting data consumption trends.	1	Medium	1		Electrical, Hydraulic, Mechanical, BMCS	BMCS/EMS to be provided with automatic remote meter monitoring capabilities (for electricity and water sub-meters). Meters and BMCS/EMS to be commissioned and validated as required in accordance with NABERS protocols. The BMCS/EMS automatic meter monitoring system (including meter connections to head-end PC/BMS) must be capable of: - Collecting data from all energy and water meters at regular intervals (e.g. 15mins, 30mins) - Alerting to missing data due to failures; - Recording and processing of data at user adjustable intervals; - Raising an alarm when the energy or water use increases beyond certain parameters; - Including the consumption water or energy, the load versus time (load profile), and the power factor (in the case of energy); and - Producing, as a minimum, a quarterly report that is automatically sent to the facilities manager responsible for the building.
Responsible Construction Practices	To reward responsible construction practices that manage environmental impacts, enhance staff health and wellbeing, and improve sustainability knowledge on site.	7.0	Environmental Management Plan (EMP)	Minimum Credit Requirement: Engaged Contractor must implement a project specific EMP meeting requirements of the NSW Environmental Management System Guidelines.	Credit Minimum	Low	Must Comply		Head Contractor	Head Contractor to provide & implement a project specific Environmental Management Plan as outlined in accordance with NSW Environmental Management Systems Guidelines.
		7.1	Formalised Environmental Management System	Engaged Contractor to have a Formalised Environmental Management System with evidence of independent auditing & system compliance to ISO 14001.	1	Low	1		Head Contractor	Head Contractor to have ISO 14001 certification and provide a formal audited Environmental Management System for the project
		7.2	High Quality Staff Support	Promote positive mental and physical health outcomes of site activities and culture of site workers through programs and solution on-site. Enhance site workers' knowledge on sustainable practices through on-site, off-site, online education programs	1	Medium	1		Head Contractor	Head Contractor to provide the following training to site workers: - ESD information training (Green star equivalency target, Climate Change information) as part of induction - Promote Mental and Physical Health Information (understanding depression, healthy eating, reduced alcohol and drug + tobacco free living etc.)

DGN 058 GREEN STAR EQUIVALENCY DESIGN & AS BUILT V1.3 SCORECARD (MIN 45 POINTS TARGET)

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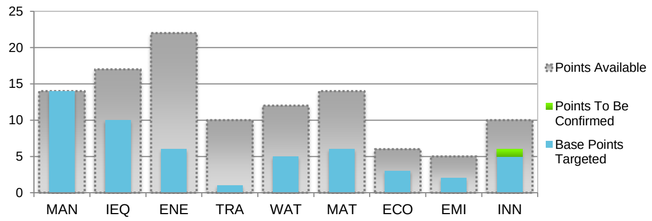

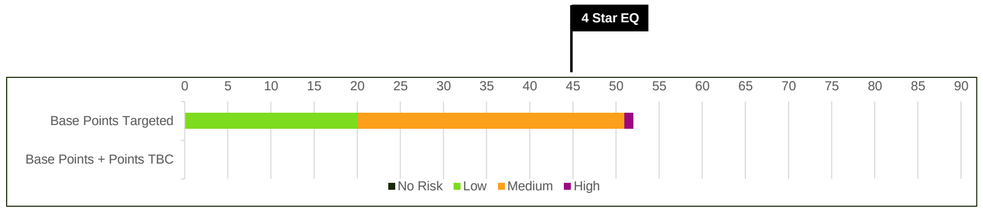

4 Star EQ: 45 to 59 Points

MAX POTENTIAL SCORE (if including all Points TBC)	**53.0**

Note: **Please refer to DGN 058 ESD Performance Specification for details of compliance**

Credit Title	Aim of Credit	Credit Code	Criteria Title	Credit Requirements Summary *For full criteria refer to Green Star Design and As Built v1.3 Submission Guidelines and ESD Performance Specification*	Points Available	Risk	Base Points Targeted	Points To Be Confirmed	Lead Discipline	Comments
Operational Waste: Prescriptive Pathway	To recognise projects that implement waste management plans that facilitate the re-use, upcycling, or conversion of waste into energy, and stewardship of items to reduce the quantity of outgoing waste.	8A	Performance Pathway: Specialist Plan	Engagement of a qualified waste auditor/professional specialist to prepare and implement an Operational Waste Management Plan (OWMP) for the project in accordance with best practice approaches. Requirements of the OWMP must be reflected in the development waste facilities provided.	1					
		8B	Prescriptive Pathway: Facilities	Provide occupant waste storage containers for separation of all applicable waste streams, have a dedicated waste storage area for collection of all waste sized to handle all waste streams that is provided to meet best practice access requirements.	1	Low	1		Arch, Head Contractor	The project has a dedicated outdoor bin enclosure (approx. 35 sqm) with general, recycling waste bins for collection. Per the functional design brief, waste storage and collection are as follows: - Cleanaway contracted. Several spaces will be provided in an outdoor area: - 2 x skips for general waste. Collected fortnightly. - 6 x sulo bins for recycling. Collected twice a week by council. - 1 x skip for cardboard recycling. Collected fortnightly. - 1 x confidential / secure document disposal bin. Collected when full. - Clinical waste including sharps and cytotoxic will need to be stored in an air conditioned room. Collected monthly The waste area is designed to meet the operational requirements of the project. No comparison required against City of Sydney guidelines. Head Contractor to construct to architectural & civil plans
				Category Total	**14**		**14**	**0**		
INDOOR ENVIRONMENT QUALITY										
		9.1	Ventilation System Attributes	Mechanical ventilation systems are to be: - designed in accordance with NCC and AS1668.2:2012 regarding separation of outdoor air intakes & pollution sources to minimise entry of pollutants; - designed with provision of access for maintenance and cleaning to moisture and debris-catching components; and - all new ductwork to be sealed and kept free of moisture & debris until occupation/operation. Any retained & re-used ductwork (if relevant) to be cleaned in accordance with acceptable industry standards	1	High	1		Mechanical	Note the modified credit criteria to suit the project Mechanical ventilation systems should be: - designed in accordance with NCC and AS1668.2:2012 regarding separation of outdoor air intakes & pollution sources to minimise entry of pollutants; - designed with provision of access for maintenance and cleaning to moisture and debris-catching components (filters and coils) in accordance with manufacturer's specifications or mechanical specifications - all new ductwork to be sealed and kept free of moisture & debris until occupation/operation. Any retained & re-used ductwork (if relevant) to be cleaned in accordance with acceptable industry standards
		9.2	Provision of Outdoor Air	For mechanically ventilated or mix mode spaces, outdoor air is provided at a rate 50% (1 point) /100% (2 points) greater than the minimum required by AS1668.2-2012, or CO2 concentrations are maintained below 800ppm/700ppm through a CO2 monitoring & control system For naturally ventilated spaces 2 points are awarded where the requirements if AS 1668.4-2012 are met.	2		0		Mechanical	For mechanical ventilated primary & secondary spaces, this requires min +50% OA improvement over AS1668.2 to be specified as per 9.2A. Based on the local climate zone, this may not be recommended for the project as it will increase required mechanical plant capacity and energy consumption. Mechanical designer advises this credit cannot be achieved as it may impact BCA compliance. As such, no point(s) is targeted.

DGN 058 GREEN STAR EQUIVALENCY DESIGN & AS BUILT V1.3 SCORECARD (MIN 45 POINTS TARGET)

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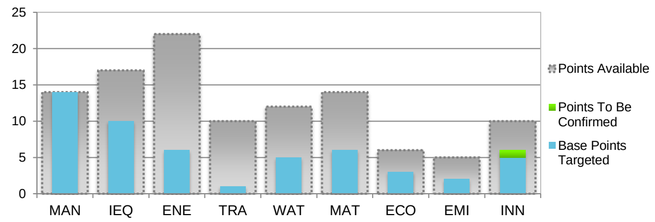

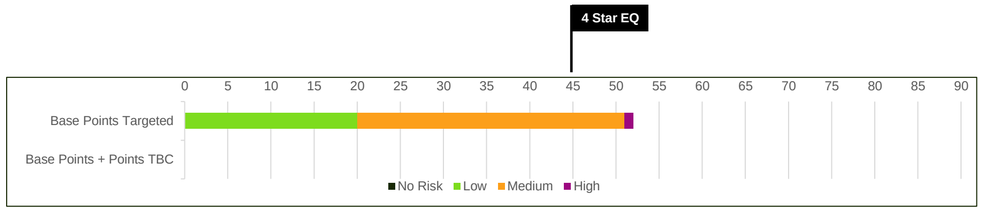

4 Star EQ: 45 to 59 Points

MAX POTENTIAL SCORE (if including all Points TBC)	**53.0**

Note: **Please refer to DGN 058 ESD Performance Specification for details of compliance**

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Indoor Air Quality	To recognise projects that provide high indoor air quality to occupants	9.3	Exhaust OR Elimination of Pollutants	Provide exhaust systems in accordance with AS1668.2-2012 to remove pollutants from printing and photocopy equipment, cooking processes and equipment, and vehicle exhaust &/OR remove the source of these pollutants. (For photocopiers & printers & MFDs, equipment with listed low chemical emissions certifications can be used in place of dedicated printroom exhaust ventilation)	1	Medium	1		Mechanical, LHD	<u>Vehicle Exhaust</u> - Not applicable as car park is external <u>Cooking processes and Equipment</u> Kitchens must be directly exhausted to outside and as per AS1668.2. Commercial (large) kitchen to be physically separated from adjacent spaces. Residential kitchens/Servery Kitchen is not required to be physically separated, but must utilise either: a) A non-recirculating exhaust system, exhausting directly to outside; or b) A recirculating system, with filtration media that has been proven to effectively remove kitchen pollutants. Mechanical Designer confirms: - Dedicated kitchen exhaust will be provided for the Kitchen. - RAC Servery Kitchen (non-commercial, residential kitchen) rangehood will be ducted to outside. <u>Printing and Photocopying Equipment:</u> Any future brand new Printing/Multi-functional Devices (MFD)/Photocopying equipment should ideally be certified in accordance with one of the following Green Star recognised low emission test standards: - ECMA-328; - RAL-UZ 171; or - GGPS.003 Any re-used printers/MFDs/photocopiers are excluded from Credit 9.3 assessment.
Acoustic Comfort	To reward projects that provide appropriate and comfortable acoustic conditions for occupants	10.1	Internal Noise Levels	Internal noise levels in the nominated area considering all internal & external noise sources are to be no more than 5dB(A) above the lower figure in the range recommended in AS/NZS 2107:2016. TBC by Acoustic Consultant if the Mechanical Ventilation Acoustic Criteria or Natural Ventilated Acoustic Criteria is to be implemented	1	Medium	1		Acoustic Consultant	The project is classified as a "Mechanically ventilated" building. Internal ambient noise levels to be no more than 5 dB(A) above the lower figure in the range in Table 1 AS/NZS 2107:2016 for all primary and secondary spaces. Acoustic testing of representative areas confirming Credit 10.1 compliance is required at completion. Acoustic Consultant to nominate scope of tested spaces and if any adjustments to compliance criteria is required. Any spaces that have a critical or medical/functional requirement that prevents compliance can be excluded from the DGN 058 assessment.
		10.2	Reverberation	The reverberation time in the nominated area must be below the maximum stated in AS/NZS 2107:2016	1	Medium	1		Acoustic Consultant	Reverberation times (RT) to generally be below maximum stated in Table 1 of AS/NZS 2107:2016 for applicable & feasible areas. Areas that may have specific infection control/cleaning requirements (with hard surfaces) or special functional requirements that prevent compliance with default reverberation times to be excluded (to be agreed with NSW HI and acoustic consultant). Acoustic testing of representative areas confirming Credit 10.2 compliance is required at completion.
		10.3	Acoustic Separation	The partition between the nominated enclosed (typically occupied) spaces should be constructed to achieve a weighted sound reduction index (Rw) of at least 45 OR the sound insulation between enclosed spaces complies with DW + LAeqT > 75	1		0		Acoustic Consultant	Not targeted. The acoustic consultant has advised this initiative can be accommodated if extra credit points are needed. Acoustic consultant recommends 10.3B Sound Insulation method to be pursued for demonstrating Credit 10.3 compliance but notes this will require detailed assessment of layouts. Testing required at completion if Credit 10.3 is targeted.

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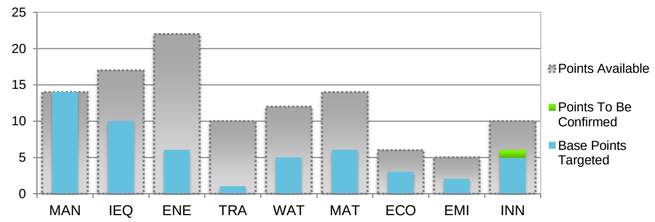

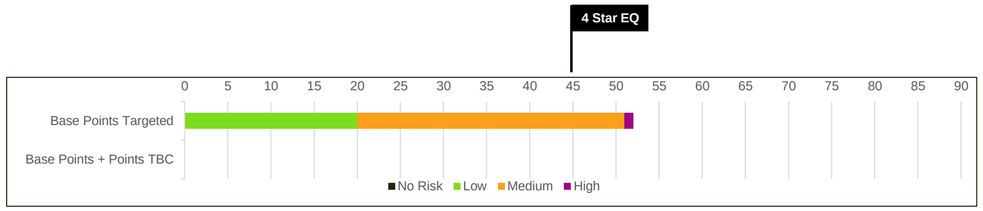

4 Star EQ: 45 to 59 Points

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Note: **Please refer to DGN 058 ESD Performance Specification for details of compliance**

Credit Title	Aim of Credit	Credit Code	Criteria Title	Credit Requirements Summary *For full criteria refer to Green Star Design and As Built v1.3 Submission Guidelines and ESD Performance Specification*	Points Available	Risk	Base Points Targeted	Points To Be Confirmed	Lead Discipline	Comments
Lighting Comfort	To encourage and recognise well-lit spaces that provide a high degree of comfort to users	11.0	Minimum Lighting Comfort	Minimum Credit Requirement: All lights in the nominated area are installed with ballasts (flicker free) and have a minimum Colour Rendering Index (CRI) of 80	Credit Minimum	Low	Must Comply		Arch, Electrical	Flicker Free lighting and Colour Quality: ALL internal luminaires MUST be flicker free with LED lighting electronic drivers with 12 bit or greater resolution. All internal lighting Colour Rendering index must be > 80. Lighting for medical or specialist requirements is excluded from assessment.
		11.1	General Illuminance & Glare Reduction	Maintained illuminance meets the recommended levels of AS1680.2.1, and lighting glare is eliminated.	1	Medium	1		Electrical	Internal Lighting levels for primary and secondary spaces must comply with "best practice" requirements for maintained illuminance, uniformity AND Glare Reduction of the relevant AS1680 standards. Internal glare reduction to be demonstrated based on having diffusers or Unified Glare Rating calculation method. For example, all bare light sources must be fitted with translucent diffusers, louvres, baffles etc. that obscures the direct light source from all viewing angles of occupants, including occupants looking directly upwards Note: It is recommended the primary and secondary spaces subject to Credit 11.1 assessment should be applied to areas such as RAC bedrooms, IPU bedrooms, HealthOne office rooms, HealthOne meeting rooms, and HealthOne Consult rooms as these spaces are anticipated to be predominantly occupied for extended periods of time. Lighting calculations for compliance only need to be presented for typical representative spaces (based on having a reasonable coverage) Lighting for medical or specialist requirements is excluded from assessment. Any spaces that have a critical or medical/functional requirement that prevents compliance can be excluded from the DGN 058 assessment.
		11.2	Surface Illuminance	A combination of lighting and surfaces in the nominated area improve uniformity of lighting to give visual interest. Over 95% of nominated area's **ceiling** to have a surface reflectance value >0.75 and a direct/indirect lighting system such that the ceiling area has an average surface illuminance of at least 30% of the lighting levels on the working plane.	1				Arch, Electrical	Not targeted. Normally difficult to achieve in practice and may require direct/indirect lighting system
		11.3	Localised Lighting Control	Occupants have the ability to control the lighting in their immediate environment including on/off switching and adjusting lighting levels.	1	Medium	1		Electrical	Note the modified credit criteria to suit the project. Provision of DALI Lighting Control System for overall building and localised dimming control to specific areas (child family health room (Health one), ED Interview Room, Multipurpose Cultural Room, Palliative Care Lounge) will be sufficient. Please refer to Electrical Lighting Documentation and NSW HI requirements for further information on requirements. Head Contractor to provide lighting control description and commissioning to suit the requirements of NSW HI and LHD.

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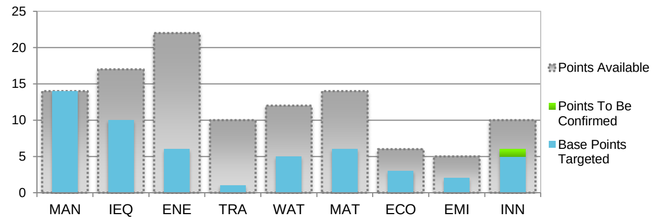

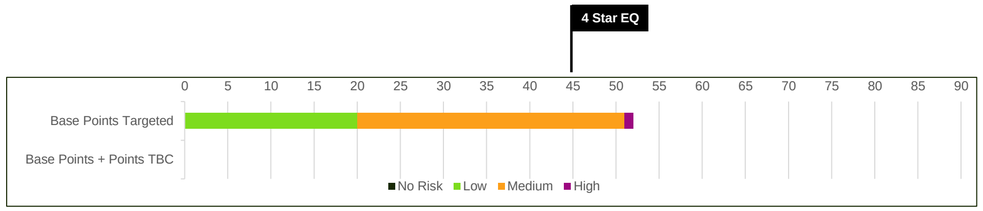

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Credit Title	Aim of Credit	Credit Code	Criteria Title	Credit Requirements Summary *For full criteria refer to Green Star Design and As Built v1.3 Submission Guidelines and ESD Performance Specification*	Points Available	Risk	Base Points Targeted	Points To Be Confirmed	Lead Discipline	Comments
Visual Comfort	To recognise the delivery of well-lit spaces that provide high levels of visual comfort to building occupants	12.0	Glare Reduction	Minimum Credit Requirement: Demonstrate that glare from sunlight through the viewing facades in the nominated area is reduced through a combination of blinds, screens, fixed devices, or other means. Where the functional requirements of an are require the exclusion of daylight and views, these areas may be excluded.	Credit Minimum	Low	Must comply		Arch	"Must Comply" means that the project requires GS compliant adjustable internal blinds (VLT < 10%) or curtains to all facade vision glazing (including glazed doors) and skylights (if applicable) that is part of primary OCCUPIED spaces (Aged Care, IPUs, offices, consulting rooms etc.). Architects confirms "sheets + block out blinds to all IPU bedrooms, Consult Rooms, Offices, Dining and Lounge area". Curtains (or the like) supplied and installed in future by LHD to all facade vision glazing (including glazed doors) to the RAC bedrooms must meet VLT < 10% requirement, but is excluded from scope of assessment if it is not the responsibility of the Head Contractor Note: It is recommended the primary spaces subject to Credit 12.0 blinds provision requirement should be applied to RAC bedrooms, IPU bedrooms, HealthOne office rooms and HealthOne Consult rooms as these spaces are anticipated to be predominantly occupied for extended periods of time. Scope of spaces subject to Credit 12.0 blinds requirements to be agreed by NSW HI
		12.1	Daylight	At least 40% of the nominated area must demonstrate a daylight factor (DF) of 2%.	2				ESD, Arch	Point not targeted for now but could be investigated by Head Contractor in future as an OPTIONAL GS SCOPE: Daylight Factor modelling will need to be undertaken to target 1 point (40% nominated area compliance) at least, but pending the confirmation of the Visible Light Transmittance (VLT) of the glazing (particularly for IPUs, Aged Care rooms). Not all rooms will comply.
		12.2	Views	At least 60% of the nominated area has a clear line of sight to an external view or a high quality internal view. Floor area within 8m from a compliant window, atrium or view can be considered to meet the criteria.	1	Medium	1		ESD, Arch	At least 60% of the relevant primary OCCUPIED areas (IPUs, Aged Care Rooms, Offices etc.) shall comply with the requirement to have access to good external views. Preliminary assessment of the 100%DD Architectural plans indicate approximately **71%** (TBC) of primary occupied spaces achieve good external views. Primary occupied spaces considered for assessment includes RAC bedrooms, IPU bedrooms, HealthOne Office rooms and HealthOne Consult rooms. Note: It is recommended the primary spaces subject to Credit 12.2 Views assessment should be applied to RAC bedrooms, IPU bedrooms, HealthOne office rooms and HealthOne Consult rooms as these spaces are anticipated to be predominantly occupied for extended periods of time. Scope of assessed spaces to be agreed by NSW HI
Indoor Pollutants	To recognise projects that safeguard occupant health through the reduction in internal air pollutant levels	13.1	Paints, Adhesives, Sealants & Carpets	At least 95% of all internally applied paints, adhesives, sealants and carpets meet the stipulated 'T-VOC limits'	1	Medium	1		All	At least 95% of all internally applied paints, adhesives, sealants and carpets to meet Green Star VOC limits. Head Contractor will need to ensure that all trades will need to comply as relevant, and track quantities & types of products used. Suppliers must provide the relevant certifications.
		13.2	Engineered Wood Products	Engineered Wood Products: At least 95% of all engineered wood products meet the stipulated formaldehyde limits	1	Medium	1		Arch, Head Contractor,	At least 95% of all engineered wood products must meet GBCA formaldehyde limits. Includes joinery, doors, partitions, furniture, decorative timber etc. All trades will need to comply as relevant. Head Contractor will need to ensure that all trades will need to comply as relevant, and track quantities & types of products used. Suppliers must provide the relevant certifications.
Thermal Comfort	To recognise projects that achieve high levels of thermal comfort	14.1/2	Thermal Comfort	For mechanically ventilated spaces, a Predicted Mean Vote (PMV) levels between -1 and +1 must be achieved (1 point) and PMV levels between -0.5 and +0.5 much be achieved for advanced thermal comfort (2 points)	2	Medium	1		ESD, Mechanical, Arch	Head Contractor shall engage an ESD Consultant to undertake GS Thermal Comfort modelling to target at least 1 point in future. Assuming fully air-conditioned spaces, 1 point will likely be achievable based on the required outcomes to comply with the Section J JV3 Building Fabric assessment.
				Category Total	**17**		**10**	**0**		

DGN 058 GREEN STAR EQUIVALENCY DESIGN & AS BUILT V1.3 SCORECARD (MIN 45 POINTS TARGET)

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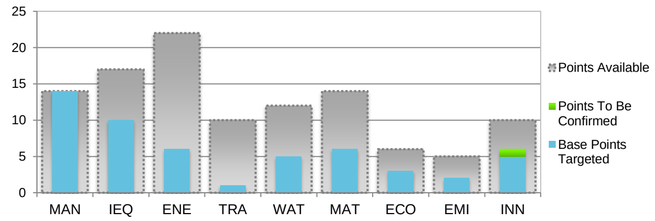
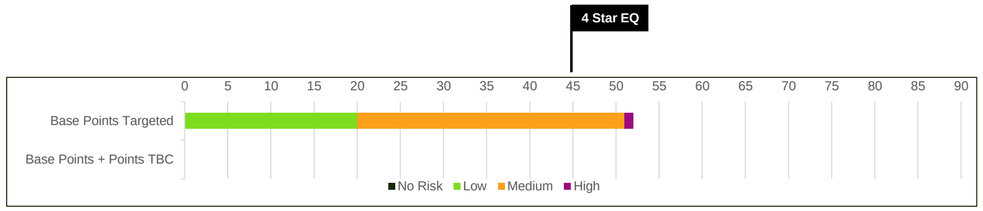
Rev: 4
Issue: For Tender





4 Star EQ: 45 to 59 Points

MAX POTENTIAL SCORE (if including all Points TBC)	**53.0**

Note: **Please refer to DGN 058 ESD Performance Specification for details of compliance**

Credit Title	Aim of Credit	Credit Code	Criteria Title	Credit Requirements Summary *For full criteria refer to Green Star Design and As Built v1.3 Submission Guidelines and ESD Performance Specification*	Points Available	Risk	Base Points Targeted	Points To Be Confirmed	Lead Discipline	Comments
ENERGY										
Greenhouse Gas Emissions	To encourage reduction of greenhouse gas (GHG) emission associated through energy efficiency measures and to drive uptake of renewable energy	15E.0	Conditional Requirement	Reference Building Pathway. Predicted GHG emissions of Proposed Building must be at least 10% improvement on NCC 2019 Reference case DTS Building	Conditional	Low	Must Comply			Predicted GHG emissions of Proposed Building must be at least 10% improvement on NCC 2019 Section J Amdt1 Reference case DTS Building. Proposed Building Fabric must be at least equal to or better than minimum NCC 2019 Section J Amdt 1 reference DTS Building Fabric (insulation, glazing)
		15E.1	GHG Emissions Reduction: Building Fabric	Improvements on the Building's Fabric (Intermediate Building Energy Model against a Reference DTS Building Energy Model	4	Medium	0		Mech, Arch	Assume that Proposed Building Fabric will be equal to or better than minimum NCC 2019 Section J reference DTS building fabric (insulation, glazing etc.). Head Contractor shall engage an ESD Consultant to prepare a Green Star Equivalent Energy Modelling Report and Section J JV3 Building Fabric report to demonstrate compliance.
		15E.2	GHG Emissions Reduction	GHG Emissions Reduction for Proposed Building against Benchmark Energy Model (benchmark model is 10% better than DTS Reference Building)	16	Medium	3		Mech, Arch, All services	Predicted operational GHG emissions from Proposed Building Model must be at least 10% LESS than those of the equivalent "Benchmark Building Model" (Note: Benchmark building is already 10% better than NCC 2019 Section J Deemed-To-Satisfy fabric + services). Overall Proposed Building Model must demonstrate approximately min 20% GHG improvement compared to min Section J 2019 Amdt 1 DTS building'. Head Contractor shall engage an ESD Consultant to prepare a Green Star Equivalent Energy Modelling Report
		15E.3	Off-Site Renewables	Project must demonstrate that a supply contract is in place to procure 100% off-site renewable electricity for a minimum period of 10 years immediately after Practical Completion	8		0		NSW HI	Not targeted
		15E.4	District Services	District services for project (district chilled water, district hot water etc.)	7		0			Not targeted as district CHW & HHW system is not available
		15E.5.1	Transition Plan	Transition plan has been developed showing how the building will transition away from the use of fossil fuels by 2030, and commitment is made public	1		0		NSW HI	Not targeted
		15E.5.2	Fuel Switching	No fossil fuels are used on site to generate electricity, heating, cooling or cooking (Full Electrification). ~~Where a minor amount of fossil fuel (less than 1%) is used on site for purposes where it can be demonstrated that there are no commercial alternatives (e.g. cooking or emergency generators). Renewable Energy Certificates equal to these emissions for the period of ten years following practical completion must be purchased and retired upfront, or through a contractual agreement with the utility. The RECs purchased must be recognised directly support renewable energy generation in Australia. Refer to the Renewables and Offsets in Green Star Guide for more details.~~	2	Low	2		NSW HI	Design intent is for the building to be "All electric" with no fossil fuels (e.g. natural gas) to be burned on site during regular operation of the new facility. No natural gas for cooking also. It is understood standby diesel generators are only to be used in the event of a power failure (not regular operation of the building). Note: For this DGN 058 Green Star Equivalency assessment, there will be no mandatory requirement to purchase renewable energy certificates to offset any emissions from standby diesel generators and the like.
		15E.5.3	On-Site Storage	There is a renewable energy storage procurement and reuse strategy, and the stored renewable energy is used to reduce evening peak demand	1		0			Not targeted if on-site renewable energy storage is not present.
Modelled Performance Pathway (max 20 of 20 points)		-	-	-	-					
		-	-	-	-					
		-	-	-	-					
					-					

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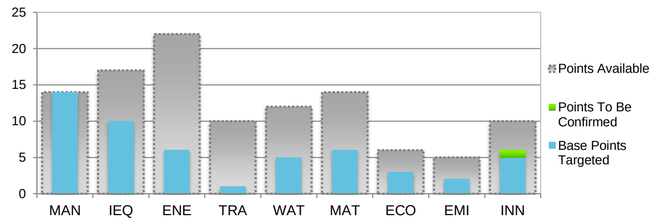

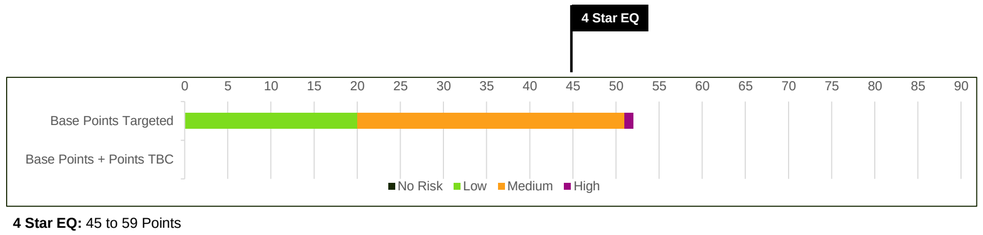

4 Star EQ: 45 to 59 Points

MAX POTENTIAL SCORE (if including all Points TBC)	**53.0**

Note: **Please refer to DGN 058 ESD Performance Specification for details of compliance**

Credit Title	Aim of Credit	Credit Code	Criteria Title	Credit Requirements Summary *For full criteria refer to Green Star Design and As Built v1.3 Submission Guidelines and ESD Performance Specification*	Points Available	Risk	Base Points Targeted	Points To Be Confirmed	Lead Discipline	Comments
Peak Electricity Demand Reduction	To encourage the reduction of peak demand load on the electricity network infrastructure	16A	Prescriptive Pathway: On-site Energy Generation	The use of on-site electricity generation systems reduces the total peak electricity demand by at least 15% (1 point)	-					
Modelled Performance Pathway (max 2 of 2 points)		16B	Modelled Performance Pathway: Reference Building	Improvement in Proposed Building Peak Electricity Demand over Reference Building Peak Electricity Demand v1.3 - sliding scale 10-30% 20% improvement = 1 point; 30% improvement = 2 points	2	Medium	1		Mech, Arch, All services	The Head Contractor shall demonstrate through energy modelling that the building's peak electricity demand is reduced by a minimum 20% when compared to a reference building (utilising Green Star Design & As Built v1.3 modelling procedures). Head Contractor shall engage an ESD Consultant to prepare a Green Star Equivalent Energy Modelling Report
				Category Total	**22**		**6**	**0**		
TRANSPORT										
Sustainable Transport: Prescriptive Pathway	To reward projects that implement design and operational measures that reduce the carbon emissions arising from occupant travel to and from the project, when compared to a reference building. This also promotes the health and fitness of commuters, and the increased liveability of the location	17A	Performance Pathway	Up to 10 points are awarded where the proposed transport solutions on site decrease emissions from transport, decrease mental and social impacts of commuting, and encourage uptake of healthier active transport options based on comparison to a Reference Building.	10					
		17B.1	Prescriptive Pathway	B.1 Access by Public Transport (up to 3 points) - Points are awarded based on the accessibility of the site by public transport	3					
		17B.2		B.2 Reduced Car Parking Provision (1 point) - Reduction of car parking spaces for the proposed building compared to maximum rates allowed	1					
		17B.3		B.3 Low Emission Vehicle Infrastructure (1 point) - 15% of parking is for fuel efficient vehicles and a maximum of 5% for motorcycle parking OR 5% of parking is dedicated to electric vehicles and charging infrastructure	1	Low	1			Requires minimum 5% of parking to be dedicated for electric vehicles (EV) and charging infrastructures. Traffic consultant confirms a total 50 car parking spaces on site (including EV + Non EV spaces). Traffic consultant confirms four EV charging spaces will be located in the fleet area only. This corresponds to 8% provision (> 5% minimum) for EV parking spaces.
		17B.4		B.4 Active Transport Facilities (1 point) - Provision of bicycle parking (occupants and visitor) and associated facilities (showers & lockers)	1					
		17B.5		B.5 Walkable Neighbourhoods (1 point) - At least 8 amenities are within 400m of the development; OR achieve a walk score of at least 80	1					
				Category Total	**10**		**1**	**0**		
WATER										
Potable Water: Prescriptive Pathway	To encourage building design that minimises potable water consumption in operations	18A	Performance Pathway	Up to 12 points are awarded for predicted reduction in potable water use across all building uses when compared to a Reference Building.	12					
		18B.1	Prescriptive Pathway	B.1 Sanitary Fixture Efficiency (1 point) - WELS Ratings of at least 5 Star for Taps, 5 Star for Urinals, 4 Star for Toilets, 4 Star (≤7.5 l/min) for Showers, 4 Star for Clothes Washing Machines, 5 Star for Dishwashers.	1	Medium	1			All amenities Taps, Urinals, Toilets, Showers, Clothes Washing Machines and Dishwashers must be compliant with minimum WELS Star Rating nominated in Green Star. Note that the following is excluded from assessment: - Commercial grade/scale clothes washing machines and dishwashers - Any re-used items - Bath taps, laboratory taps and taps dedicated to cleaning and facility management & wash down - Kitchen taps - Kitchen/Café Chilled, Boiling and Sparkling Tapware (e.g. Billi, Zip units)
		18B.2	Prescriptive Pathway	B.2 Rainwater Reuse (1 point) - Rainwater collection & on-site reuse system incorporating a tank sized to 10L/m2.	1		0			Recommend consideration of rainwater tank for landscape irrigation, even if rainwater tank capacity does not fulfil strict Green Star prescriptive criteria.
		18B.3	Prescriptive Pathway	B.3 Heat Rejection (2 points) - No water consumption used for heat rejection equipment.	2	Low	2		Mechanical	All HVAC system is assumed to be air-sourced split/VRF FCU systems

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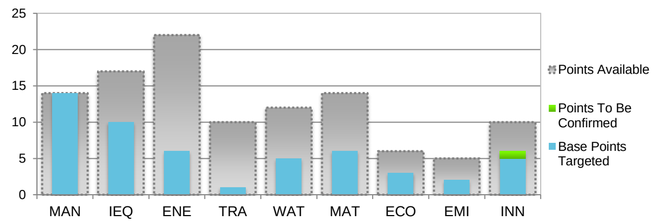

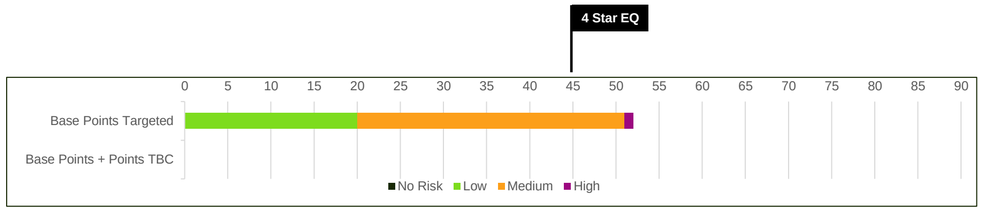

4 Star EQ: 45 to 59 Points

MAX POTENTIAL SCORE (if including all Points TBC)	**53.0**

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		18B.4	Prescriptive Pathway	B.4 Landscape Irrigation (1 point) - Drip irrigation system with moisture sensor override is used OR no potable water is used for irrigation.	1	Medium	1		Landscape arch, Head Contractor	Where permanent landscape irrigation is provided, the contractor shall provide an automatic drip irrigation system. Non-permanently irrigated landscape to be hand-watered for establishment period. Hydraulic Engineer confirms there are two rainwater tanks proposed for the project intended to serve landscape irrigation
		18B.5	Prescriptive Pathway	B.5 Fire System Test Water (1 point) - No water is expelled for system testing OR 80% of test water is captured & reused on-site OR If sprinkler systems installed, each floor must be fitted with isolation valves & shut-off points for system-by-system testing	1	Medium	1		Fire Protection	The Head Contractor shall ensure that the fire protection system is designed & installed such that the fire sprinkler systems are fitted with isolation valves or shut-off points (on each floor or relevant area) for system-by-system testing.
				Category Total	**12**		**5**	**0**		
MATERIALS										
Life Cycle Impacts: 19B Life Cycle Impacts	To reward the reduction of the environmental impacts of building materials for the whole building over its entire life cycle	19A.1	Comparative Life Cycle Assessment	Up to 6 points are awarded based on the extent of environmental impact reduction achieved under six environmental impacts categories compared against a Reference Building using a Life Cycle Assessment (LCA) (sliding scale 0 to 6 points for 30%-130% impact reduction)	6					
		19A.2	Additional Life Cycle Impact Reporting	An additional point is awarded where the LCA is used to inform building design process or as-built outcome	4					
		19B.1	Concrete	**19.B.1.1 Portland Cement Reduction** - Portland cement content is reduced by 30% OR 40% across all concrete used in the project against a reference case (1 OR 2 points)	5		0		Structural Engineer, Head Contractor, Concrete Supplier	Credit for use of concrete with reduced portland cement content not targeted
				19.B.1.2 Water Reduction - Mix water for all concrete used contains at least 50% captured or reclaimed water (0.5 points)		Medium	0.5		Structural Engineer, Head Contractor, Concrete Supplier	The Head Contractor shall ensure the mix water for all concrete used in the project contains at least 50% captured or reclaimed water (measured across all concrete mixes in the project) by volume. Head Contractor to investigate with Concrete Supplier and Structural Engineer.
				19.B.1.3 Aggregates Reduction - At least 40% of coarse aggregate in the concrete is crushed slag aggregate or another alternative material, OR at least 25% of fine aggregate (sand) inputs in the concrete are manufactured sand or other alternative material (0.5 points)		Medium	0.5		Structural Engineer, Head Contractor, Concrete Supplier	The Head Contractor shall ensure that at least 25% of fine aggregate (sand) inputs in the concrete are manufactured sand or other alternative materials. Head Contractor to investigate with Concrete Supplier and Structural Engineer.
		19B.2	Steel	Steel Framed Building - *Reduced Mass of Steel Framing* - Reduce the mass of steel framing used by one of the following options (1 point): - Using high strength steel that meet specific strength grades for usage type; OR - Reduce mass of steel by 5% when compared to a suitable reference building. Concrete Framed Building - *Reduced Use of Steel Reinforcement* - Reduce the mass of steel reinforcement used by at least 5% when compared to a standard practice building (1 point)		Medium	1		Head Contractor, Structural	Structural Engineer advises it is feasible to specify the relevant high strength steel grades to achieve the Credit 19B.2A.A High Strength Steel initiative under the Credit 19B.2A Reduced Mass of Steel Framing pathway. Requires at least 95% (by mass) of Category A products (i.e. roof sheeting, wall sheeting, profiled steel decking, purlins, girts, light steel framing systems) and 25% of Category B products (i.e. hot-rolled structural steel sections and plate, cold-formed sections, welded sections) to meet the strength grades specified in Table 19B.2A.1 and Table 19B.2A.2, as applicable. Head Contractor to investigate with Steel Supplier and Structural Engineer.
		19B.3	Building Reuse	*Façade Reuse* - At least 50% OR 80% of the building facade is retained (1 OR 2 points) *Structure Reuse* - At least 30% OR 60% of the existing major structure is retained (1 OR 2 points)			0			Not targeted
		19B.4	Structural Timber	Minimum Requirement: All structural timber are responsibly sourced. Points are awarded based on the % of structural timber used compared to the building's GFA - 30 / 70 / 90% = 1 / 2 / 3 points.			0			Not targeted

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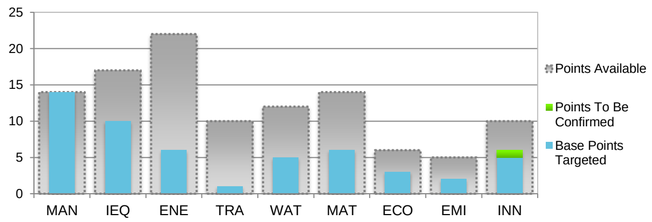

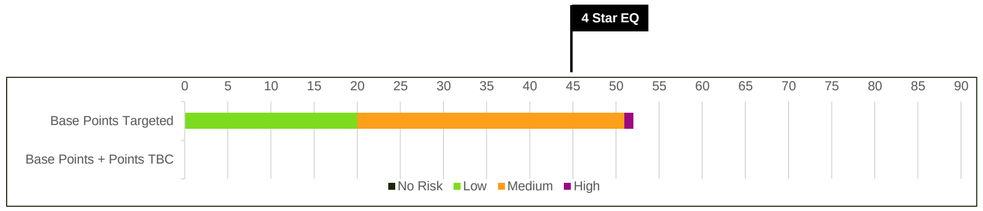

4 Star EQ: 45 to 59 Points

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Responsible Building Materials	To reward projects that include building materials that are responsibly sourced or have sustainable supply chain.	20.1	Structural and Reinforcing Steel	**95% of the building steel is sourced from a Responsible Steel Maker; and** - *For steel framed buildings:* at least 60% of the fabricated structural steelwork is supplied by a steel fabricator accredited to the Australian Steel Institute; OR - *For concrete framed buildings* : at least 60% of all reinforcing bar and mesh is produced using energy-reducing processes	1	Medium	1		Head Contractor, Steel Supplier, Structural	At least 95% (by mass) of steel to be sourced from a Responsible Steel Maker (ISO14001 EMS for steel making facilities, member of World Steel Associations Climate Action Program). Structural engineer confirms the new building is considered to be a "Steel Framed" Building. In addition to the above Responsible Steel Maker requirement, at least 60% (by mass) of fabricated structural steelwork is to be supplied by a steel fabricator/steel contractor accredited to the Environmental Sustainability Charter of the Australian Steel Institute.
		20.2	Timber Products	At least 95% (by cost) of all timber used is certified by a forest certification scheme OR is from a reused source	1					Not targeted
		20.3	Permanent Formwork, Pipes, Flooring, Blinds & Cables	At least 90% (by cost) of all permanent formwork, cables, pipes, flooring and blinds do not contain PVC and have an Environmental Product Declaration (EPD) OR meet Best Practice Guidelines for PVC	1	Medium	1		Arch, Head Contractor, All services	At least 90% by cost of all permanent formwork, pipes, flooring, blinds, cables shall be PVC-free or Green Star "Best practice" sustainable PVC. This includes any fit-out items (electrical + comms cabling, pipes, blinds, flooring, carpets etc.). Note: PVC items related to health specialist services (medical gas, security, nurse call, etc) to be exempt from meeting Credit 20.3 PVC requirements.
Sustainable Products	To encourage sustainability and transparency in product specification.	21.1	Product Transparency	Points are awarded via the Product Transparency & Sustainability Calculator where the Product Sustainability Value (PSV) achieves a percentage of the Product Contract Value (PCV) - 3 / 6 / 9% = 1 / 2 / 3 points. PSV is contributed to for products that; have reused content, have recycled content, are environmentally certified or have stewardship programs.	3	Medium	1		Head Contractor, Suppliers	At least min 3% of total material cost to be certified to sustainability framework. To be further reviewed and may be achieved through product specifications that emphasise use of sustainable certified products for major construction cost items including: - Steel with Environmental Product Declarations (EPDs) - Liberty Primary Steel, BlueScope, Australian Reinforcing Company, Infrabuild - Concrete with EPDs - e.g. Boral - Paints with EPDs (e.g. Dulux) - Plasterboard with Eco Certification - Knauf/Gyprock specific products - Joinery/Partitions with Eco Certification (Green Tag) - Laminex specific products - Carpets with Eco Certification For products with EPDs, refer to https://epd-australasia.com/
Construction and Demolition Waste	To reward projects that reduce construction waste going to landfill by reusing or recycling building materials.	22.1	Demolition and Construction Waste	Percentage Benchmark: 90% of the waste generated during construction and demolition has been diverted from landfill (1 point)	1	Medium	1		Head Contractor, Demolition & Excavation Contractor, Waste Processing Facilities	Min 90% of construction and demolition waste to be diverted from landfill. ALL demo/construction waste contractors and waste processing facilities MUST have Green Star Compliance Verification certification. If waste contractors and/or waste processing facilities do not own a Green Star Compliance Verification certification, the waste contractors and/or waste processing facilities MUST complete a Green Star Waste Contractor Disclosure Statement or Green Star Waste Processing Facilities Disclosure Statement. Note: If Waste Contractor and Waste Processing Facilities cannot provide the Compliance Verification Summary or Disclosure Statement necessary for project specific & valid reasons, this shall be discussed as a potential credit departure with NSW HI.
				Category Total	**14**		**6**	**0**		

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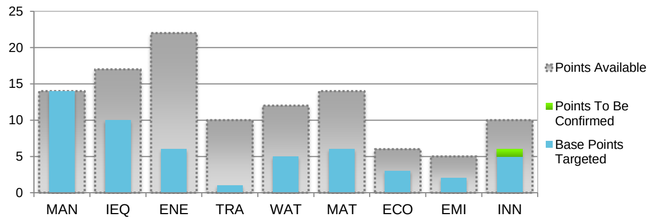

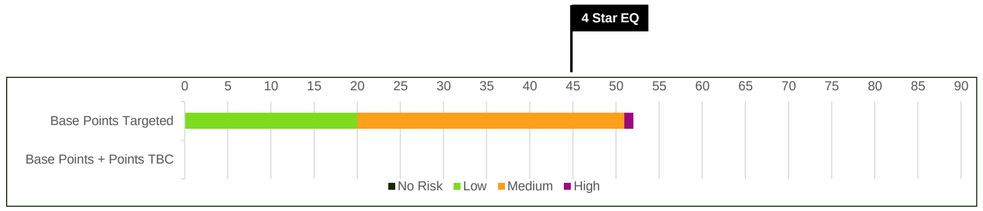

4 Star EQ: 45 to 59 Points

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LAND USE & ECOLOGY										
Ecological Value	To reward projects that improve the ecological value of their site	23.0	Endangered, Threatened or Vulnerable Species	Minimum Credit Requirement: Demonstrate no critically endangered, endangered, vulnerable species or ecological communities were present on the site at the time of purchase.	Credit Minimum	Low	Must comply			The project complies by default as it is an existing site with no endangered/vulnerable species or ecological communities on site. No further action for this credit for all parties.
		23.1	Ecological Value	Points are awarded based on the relative improvement of ecological value by 20% / 40% / 60% (1 / 2 / 3 points)	3	Medium	1		landscape arch, Head Contractor	The Head Contractor shall ensure that the new landscape planting is 100% native plants. Assuming the existing site vegetation is 77% exotic and 24% native (by area) and the retained site vegetation is 66% exotic and 34% native (by area), the project is estimated to achieve at least 1 point assuming the proposed tender landscape design is composed of 100% native vegetation (as confirmed by the Landscape Architect). Note: Existing site planting/types prior to development can only be estimated.
Sustainable Sites	To reward project that choose to develop sites that have limited ecological value, that reuse previously developed land, and that remediate contaminated land	24.0	Conditional Requirement	The site did not include old growth forest or wetland of 'High National Importance', or did not impact on 'Matters of National Significance'	Conditional	Low	Complies		ESD, NSW HI	The project complies by default, i.e. the site did NOT include old growth forest, prime agricultural land, wetland of 'high national importance' or impact on 'matters of national significance'. No further action for this credit for all parties.
		24.1	Reuse of Land	At least 75% of the site was previously developed land	1	Low	1		ESD, NSW HI	The project complies by default as it is an existing site No further action for this credit for all parties.
		24.2	Contamination and Hazardous Materials	Any significant site contamination is identified with remedial steps undertaken to decontaminate site prior to construction	1	Low	1		Head Contractor	Recommend targeting Credit 24.2B based on Asbestos or other hazardous materials being removed from existing buildings to be demolished. Requires hazmat survey on existing buildings, asbestos/hazardous materials disposal records, clearance certificate. Head Contractor to note requirements for sub-contractors. Also, TBC if site land itself has any in-ground contamination that needs to be remediated
Heat Island Effect	To encourage and recognise projects that reduce the contribution of the project site to the 'heat island effect'	25.1	Heat Island effect	At least 75% of the whole site area to comprise of one of a combination of: - Vegetation; - Green roofs; - Roofing material with high solar reflectance index (initial SRI>82 or 3yr SRI>64); - Water bodies; and - Hard-scaping elements shaded by overhanging vegetation or roof - Unshaded hard-NSW HI with high SRI (initial SRI>39 or 3yr SRI>34).	1				Arch, landscape Arch	Not targeted
				Category Total	**6**		**3**	**0**		
EMISSIONS										
Stormwater	To reward projects that minimise peak storm water outflows from the site and reduce pollutants entering the public stormwater infrastructure or other bodies.	26.1	Peak Discharge	Demonstrate a reduction in peak sewer discharge comparing pre-development to post-development discharge (for 5 year ARI)	1				Civil	Post development peak Average Recurrence Interval (ARI) discharge from the site to not exceed the predevelopment peak ARI event discharge. Per the Civil stormwater consultant feedback, accompanied with their Civil works design report, the increase in impervious area from the hospital redevelopment has led to an increase in stormwater discharge rate compared to predevelopment flows under 5-year and 100-year ARI event. As such, Credit 26.1 can no longer be targeted.
		26.2	Stormwater Pollution Targets	Stormwater discharged from the site must meet the following Pollution Reduction Targets: - Total Suspended Solids (TSS) - 80% - Gross Pollutants - 85% - Total Nitrogen (TN) - 30% - Total Phosphorus (TP) - 30% - Total Petroleum Hydrocarbons - 60% - Free Oils - 90%	1				Civil, Arch	Per the Civil stormwater consultant feedback, accompanied with their Civil works design report, WSUD items (such as rainwater gardens, bioretention trenches, swales and rainwater tanks) have been included in design to reduce stormwater pollutions but not to the reduction levels required by Green Star. As such, Credit 26.2 can no longer be targeted.

DGN 058 GREEN STAR EQUIVALENCY DESIGN & AS BUILT V1.3 SCORECARD (MIN 45 POINTS TARGET)

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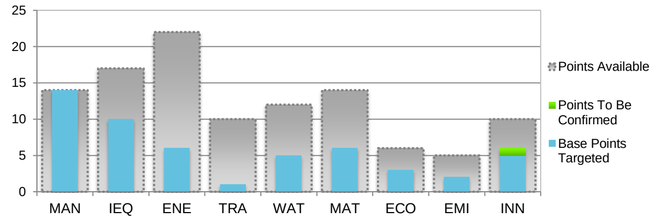

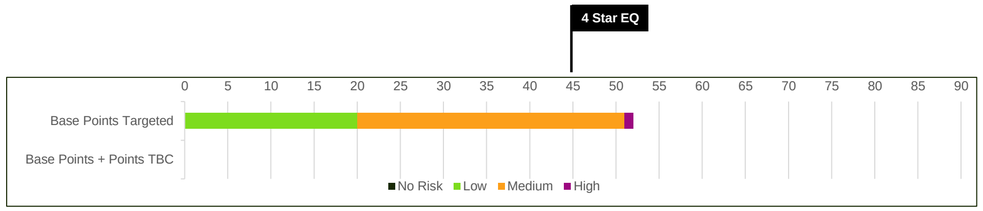

4 Star EQ: 45 to 59 Points

MAX POTENTIAL SCORE (if including all Points TBC)	**53.0**

Note: **Please refer to DGN 058 ESD Performance Specification for details of compliance**

Credit Title	Aim of Credit	Credit Code	Criteria Title	Credit Requirements Summary *For full criteria refer to Green Star Design and As Built v1.3 Submission Guidelines and ESD Performance Specification*	Points Available	Risk	Base Points Targeted	Points To Be Confirmed	Lead Discipline	Comments
Light Pollution	To reward projects that minimise light pollution.	27.0	Light Pollution Neighbouring Properties	Minimum Credit Requirement: Light Pollution to Neighbouring Properties: All outdoor lighting must comply with AS4282:1997	Credit Minimum	Low	Must comply		Electrical	All outdoor lighting must comply with AS 4282:1997 Control of obtrusive effects of outdoor lighting. Conditions are applied to all boundaries except roads. The boundary is taken as the site boundary, with no setback and no consideration of the location of adjacent buildings (i.e. worst case scenario). For Class 3-9 buildings (non-residential) the values in column 3.C from Table 2.1 apply of AS1482:1997. The system must comply with both pre and post curfew requirements.
		27.1	Light Pollution Night Sky	Light Pollution to Night Sky: No external luminaire has a Upward Light Output Ratio (ULOR) that exceeds 5%; OR External luminaries produces a maximum initial point illuminance value of no greater than 0.5 Lux to the site boundary and 0.1Lux to 4.5m beyond the site into the night sky	1	Low	1		Electrical	External luminaires to have Upward Light Output Ratio ULOR < 5%, OR external lighting design to be evaluated for light spill to site boundary and night sky in accordance with Green Star rules. Electrical designer to design and install for compliance
Microbial Control	To recognise projects that implement systems to minimise the impacts associated with harmful microbes in building cooling systems.	28.1	Microbial control	Demonstrate the building is: - naturally ventilated; or - has waterless heat rejection systems; or - has water-based heat rejection systems that includes measures for Legionella control and Risk Management (1 point)	1	Low	1		Mech	Target this point based on the understanding of HVAC and any process cooling to be all Air-cooled (waterless heat rejection)
Refrigerant Impacts	To encourage practices that minimise the environmental impacts of refrigerants and air conditioning equipment.	29.1	Refrigerants	1 Point is awarded for achieving 1 of the following: - The combined Total System Direct Environmental Impact (TSDEI) of the refrigerant is less than 15; - The combined TSDEI of the refrigerant is between 15 and 35, AND a leak detection system with automated recovery covering plant >50kWr; - All refrigerants used have a zero Ozone Depletion Potential (ODP); AND a Global Warming Potential (GWP) of 10 or less; OR - No refrigerants are used	1				Mech	Not likely achievable based on likely type of refrigerant used for AC units - Mechanical Designer confirms R-410A refrigerant is used (high GWP). Given the proposed refrigerant used, no point is targeted.
				Category Total	**5**		**2**	**0**		
				BASE TOTAL POINTS	***100***		**47**	**0**		
INNOVATION										
Innovative Technology or Process	The project meets the aims of an existing credit using a technology or process that is considered innovative in Australia or the world	30A	Innovative Technology or Process	Not targeted for now						
Market Transformation	The project has undertaken a sustainability initiative that substantially contributes to the broader market transformation towards sustainable development in Australia or the world	30B	Market Transformation	Not targeted for now						
Improving on Green Star Benchmarks	The project has achieved full points in a Green Star credit and demonstrates a substantial improvement on the benchmark required to achieve full points.	30C	Supplementary or Tenancy Fitout Systems Review	Services and maintainability review to be undertaken for "tenancy fitout systems" in addition to base building systems.						Point TBC if needed in future
			Ultra Low VOC Paints	One (1) additional point may be awarded where over 50% of paints (by cost) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods.		Medium	1		Arch & Head Contractor	Target to have Ultra Low VOC Paints - over 50% of internally applied paints to have TVOC content <5g/L
			Stormwater Pollution Targets	Up to two (2) additional points may be awarded where projects can demonstrate achieving Pollution Reduction Targets from column B (1 point) or C (2 points)					Civil	Not targeted

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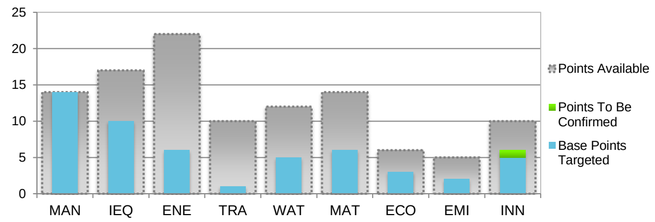

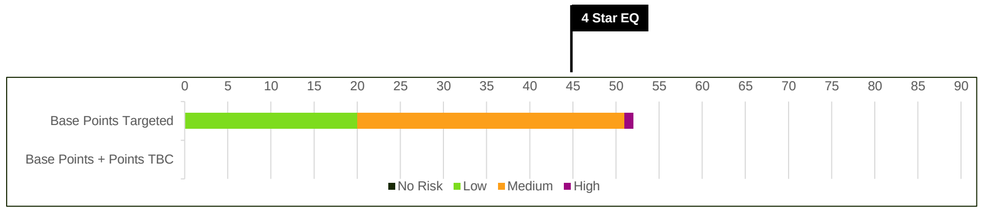

4 Star EQ: 45 to 59 Points

MAX POTENTIAL SCORE (if including all Points TBC)	**53.0**

Note: **Please refer to DGN 058 ESD Performance Specification for details of compliance**

Credit Title	Aim of Credit	Credit Code	Criteria Title	Credit Requirements Summary *For full criteria refer to Green Star Design and As Built v1.3 Submission Guidelines and ESD Performance Specification*	Points Available	Risk	Base Points Targeted	Points To Be Confirmed	Lead Discipline	Comments
Innovation Challenge	The project can target any of the current Innovation Challenges that are published on the GBCA website.		Incorporation of Indigenous Design	To encourage the incorporation of Aboriginal and Torres Strait Islander participation in the design development of the projects and visibility throughout the project's life cycle using Indigenous Design and Planning principles. Project teams must demonstrate that the Australian Indigenous Design Charter guiding principles are incorporated in the design of the building: - How local Aboriginal and Torres Strait Islander communities have been engaged throughout the design development; - How the project has been designed to acknowledge and recognise the Indigenous culture of the site; - How information on the reconciliation and cultural values of the project will be made available to the public, visitors and building tenants in the operational phase of the project's life. Project team must demonstrate engagement has happened from concept design and continues through to operational handover.	10	Medium	1		NSW HI & Arch & Landscape Arch	Architectural Concept report Section 9.0 has references to engagement with Aboriginal Cultural Consultant (Connection with Country) and incorporation of indigenous design elements. Examples reference therapeutic landscape, indigenous medicinal planting, yarning circles etc. The Wiradjuri community members and Knowledge Holders were invited to participate in discussions during the design development of the project. Focus group sessions were held in November 2022, May 2023 and July 2023. Refer to Blayney MPS - Draft Connecting With Country Report prepared by NBRS for design response outcomes through the engagement with the Aboriginal and Community representatives. The four principles from the Australian Indigenous Design Charger has been adopted to ensure cultural safety for participants and the design team for the life of the engagement: - Indigenous Led: Ensure Aboriginal and Torres Strait Islander representation in the creation of the design. - Community Specific: Ensure respect for the diversity of Aboriginal and Torres Strait Islander culture by following community specific cultural protocols - Impact of Design: Always consider the reception and implications of all designs so that they are respectful to Indigenous culture. - Shared Knowledge (collaboration, co-creation, procurement): Develop and implement respectful methods for all levels of engagement and sharing of Indigenous knowledge (collaboration, co-creation, procurement). Architect and Head Contractor to ensure the indigenous design outcomes from the engagement with the Aboriginal and Community representatives has been integrated into the project design & construction
			Financial Transparency	Project to disclose costs associated with Green Star for both implementation and documentation. Cost breakdown per credit required.		Low	1		Head Contractor	Head Contractor to complete Green Star Financial Transparency Spreadsheet on cost for Sustainable Initiatives
			High Performance Site Offices	To improve the sustainability performance of site offices thus increasing health and productivity outcomes of site workers.					Head Contractor	Not targeted for now, however Head Contractor to review Green Star High Performance Site Office Checklist and implement requirements in site office (reuse furniture, low VOC paints, new LED internal lighting for better IEQ, energy efficient and water efficient whitegoods appliances etc.)
		30D	Local Procurement - Local Services and skilled labour	Project to aim for minimum 80% of site workers to come from within 50km of site. Needs to be tracked from online induction register.		Medium	1		Head Contractor	Point targeted. Head Contractor to aim for minimum 80% of workers to come from within 50km of site (default benchmark suggested by Green Star). Needs to be tracked from online induction register. 50km from site would include most of Bathurst and Orange. Note: % Compliance benchmark and distance from site could be re-evaluated with NSW HI pending feedback from Head Contractor including sufficient project specific reasons/limitations
			Community Benefits	The Building must be a place that the community can engage and interact with and act as a centre of activity for the community, meeting place, cultural significance and source of pride to local residents.					NSW HI, LHD, Arch	Point TBC if needed in future. Documentation to show that a 'needs analysis' or equivalent process has been undertaken of surrounding community, including community briefings, meetings, workshops. A strategy (or equivalent document) should be presented on how it provides social/community benefits in consultation with the community.
			Reconciliation Action Plan	To encourage organisations to take formalised steps to provide opportunities for Aboriginal and Torres Strait Islander peoples. 1. Develop a Reconciliation Action Plan (RAP), as defined and endorsed by Reconciliation Australia. The RAP must be endorsed by Reconciliation Australia. The Green Star project being rated must play a central role in the delivery of the Reconciliation Action Plan. 2. Demonstrate evidence that relevant Indigenous organisations have been consulted in the development of the RAP. 3. A structure is in place to deliver the plan including a RAP Working Group, with a RAP Coordinator as part of the Working Group, comprising Indigenous and non-Indigenous staff members from all business areas. 4. Public reporting is undertaken to Reconciliation Australia (or equivalent body) and in the organisation's Annual Report, or project website, to report on tangible		High		1	Head Contractor	Point To Be Confirmed: Head Contractor to demonstrate if it has its own Reconciliation Action Plan (or equivalent strategy), or how the general objectives of either NSW HI Reflect - Reconciliation Action Plan (February 2023 - June 2024) or the WNSWLHD Innovate Reconciliation Action Plan (June 2023 - June 2025) could be applied for the project. References: - NSW HI Reflect - RAP: https://www.hinfra.health.nsw.gov.au/WWW_Hinfra/media/SiteImages/Content/Reflect-RAP_WEB.pdf - WNSWLHD RAP: https://www.nsw.gov.au/health/wnswlhd/about-us/aboriginal-health/wnswlhd-rap

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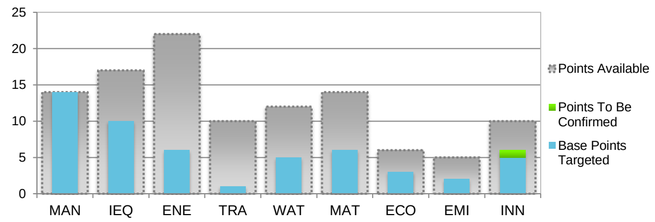

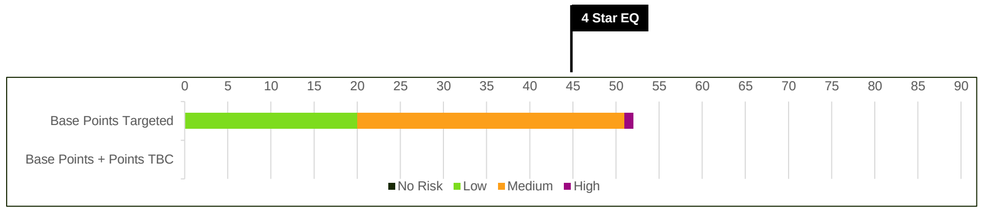

4 Star EQ: 45 to 59 Points

MAX POTENTIAL SCORE (if including all Points TBC)	**53.0**

Note: **Please refer to DGN 058 ESD Performance Specification for details of compliance**

Credit Title	Aim of Credit	Credit Code	Criteria Title	Credit Requirements Summary *For full criteria refer to Green Star Design and As Built v1.3 Submission Guidelines and ESD Performance Specification*	Points Available	Risk	Base Points Targeted	Points To Be Confirmed	Lead Discipline	Comments
			Universal Design	To challenge projects to provide safe, equitable and dignified access for persons with disabilities. Requires Accessibility Specialist to develop a 'needs analysis report' for stakeholders and prepare an 'Accessibility Plan'. Projects will only be rewarded for going beyond compliance with access standards and legislation. To claim this Innovation Challenge the project team must: - Review the Design for Dignity Guidelines, or similar guidelines for inclusive design and dignified access. - Perform a 'needs analysis' identifying the project's accessibility issues. See the Guidance section for additional detail. - Develop an 'accessibility plan' (or similar) that provides strategies to address the needs determined and identifies actions for how the project will incorporate inclusive design. - Implement the 'accessibility plan' and demonstrate that accessibility initiatives have been carried out for the project.					Accessibility Specialist	Point TBC if needed in future. Requires Accessibility Specialist to develop a 'needs analysis report' for stakeholders and prepare an 'Accessibility Plan'. Plan should include list of design solutions and responsibilities for the needs that have been identified. Design outcomes must show that project has exceeded minimum compliance with disabilities access standards and legislation.
Global Sustainability	Project teams may adapt an approved credit from a Global Green Building Rating tool that addresses a sustainability issue that is currently outside the scope of this Green Star rating tool.	30E	Global Sustainability	Design for Robustness (from BREEAM)		Low	1			Tender design contains features that satisfy the Design for Robustness credit from BREEAM, including internal measures (crash rails/handrails, blockwalls, FC wall lining, door protection, corner guards) and external measures (bollards, fenced off areas for landscaping, provision of accessible pathway to avoid damage walking directly over landscaping). Head Contractor & architect to ensure that the necessary measures are incorporated into the construction.
				Category Total	**10**		**5**	**1**		

Environmental Category	Points Available		Base Points Targeted	Points To Be Confirmed		Comments
Management	14		14	0		
Indoor Environment Quality	17		10	0		
Energy	22		6	0		
Transport	10		1	0		
Water	12		5	0		
Materials	14		6	0		
Land Use & Ecology	6		3	0		
Emissions	5		2	0		
TOTAL POINTS	**100**		**47**	**0**		
WEIGHTED SCORE	**100**		**47**	**0**		
Innovation	10		5	1		Only a maximum of 10 Innovation Points can contribute to a Green Star rating
TOTAL WEIGHTED SCORE (Including Innovation)	**110**		**52**	**1**		
MAX POTENTIAL SCORE (Including Innovation and all Points TBC)			**53**			
4 Star - 45 to 59.9 score | **5 Star** - 60 to 74.9 score | **6 Star** - 75+ score						