When I'm working on a problem, I never think about beauty. I think only how to solve the problem. But when I have finished, if the solution is not beautiful, I know it is wrong.
Richard Buckminster Fuller

Mechanical Engineering
Lighting Design
Sustainable Design
Electrical Engineering

Copenhagen
London
Sydney
Hong Kong
New York

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

SUSTAINABLE DESIGN

STEENSEN VARMING

Consultant Advice Note

Sydney February 6, 2020
Project No. 187153

Alexandra Bogdanova
Sustainability Consultant

alexandra.bogdanova@steensenvarming.com
+61 / 2 9967 2200

Project Name:	Santa Sophia	**Document No**	S03
Project No:	187153	**Revision**	03
Checked:	BJ		
Subject	Pathway to formal GS		

1.0 Current Status

1.1 Summary

The project was recently asked to achieve an official 4-star Green Star certification. As a team, the principles of sustainable design were integrated from project commencement and continued through to the current stage, in order to achieve valuable benefits for the project.

At this stage, the school is targeting a minimum of 52 points in reference to the Green Star tool.

Additionally, the project is targeting 13 WELL feature credits, and 20 BATT (Building as a Teaching Tool) elements. This is ultimately beyond the 4-star Green Star / 45 points requirements.

Note:

- The WELL standard is an international assessment method that encourages healthy eating choices and active lifestyles, as well as promoting natural light and a high standard of air quality, based on seven years of scientific, medical and architectural research.
- The Building as a Teaching Tool is a directive as a company, we try to pursue for all but most specifically educational facilities. There's not a registered standard but rather a collective of research-based studies and strategies from around the world. It has a strong emphasis on demonstrating the purpose of building elements, how the building operates and responds to changing occupant behaviours and external climate factors.

At this stage, it's anticipated the requirement for a 4 Star Green Star certification, is documentation rather than a design exercise.

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

1.2 Partially Achieved Credits

In addition to our 52-point score at present, the project has identified a further 13 points available that are currently partially achieved due to meeting the intent of the credit (75% or more) although the requirements may not have been adhered to in full compliance with Greenstar. For example, the materials credit was agreed to be addressed through a summary table of all related products/materials, with confirmation from Buildcorp and spot checks by Steensen Varming. However, all certificates and receipts have not been requested. This approach would provide the project with the maximum benefit, but with lesser evidence collection, management and subsequent time and fees.

The list of "Partially Achieved" items is shown below;

- 3.0 Implementation of Climate Adaptation Plan
- 9.2 Provision of Outdoor Air
- 11.1 General Illuminance and Glare Reduction
- 12.0 Glare Reduction (if Glare reduction is not officially achieved, the 12.1 and 12.2 can't be achieved either)
- 13.2 Engineering Wood Products
- 14.2 Advanced Thermal Comfort
- 20.2 Timber
- 26.1 Stormwater Peak Discharge
- 27.0 Light Pollution to Neighbouring Bodies

This responds back to the intent of our project specific ESD framework, which is not to be a points chasing exercise, but rather target relevant sustainable design features, within the functional and operational requirements of the building.

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

1.3 4 Star Target

A quick review of all targeted credits was done to identify the easiest and most cost-effective that must be achieved to target 4 stars GS. 45 points + 7 buffer have been left in the table below that we believe will with the least effort bring the project to the required level. We have removed those with a physical or design cost associated with them as much as reasonably possible.

		Low Risk	High Risk	Sum
MANAGEMENT	14	11	0	11
1.0 Accredited Professional	1	1	0	1
2.0 Environmental Performance Targets	Req.	Req.	0	Req.
2.1 Services and Maintainability Review	1	1	0	1
2.2 Building Commissioning	1	1	0	1
2.3 Building Systems Tuning	1	1	0	1
2.4 Independent Commissioning Agent	1	1	0	1
3.0 Implementation of a Climate Adaptation Plan	2	0	0	0
4.1 Building Operations and Maintenance Information	1	1	0	1
5.1 Environment Building Performance	1	1	0	1
5.2 End of Life Waste Performance	1	1	0	1
6.0 Metering	Req.	Req.	0	Req.
6.1 Monitoring Systems	1	1	0	1
7.0 Environmental Management Plan	Req.	Req.	0	Req.
7.1 Environmental Management System	1	1	0	1
7.2 High Quality Staff Support	1	0	0	0
8A Performance Pathway: Specialist Plan	1	1	0	1
INDOOR ENVIRONMENTAL QUALITY	17	6	3	9
9.1 Ventilation System Attributes	1	1	0	1
9.2 Provision of Outdoor Air	2	0	0	0
9.3 Exhaust or Elimination of Pollutants	1	1	0	1
10.1 Internal Noise Levels	1	1	0	1
10.2 Reverberation	1	1	0	1
10.3 Acoustic Separation	1	0	0	0
11.0 Minimum Lighting Comfort	R	R	0	R
11.1 General Illuminance and Glare Reduction	1	0	0	0
11.2 Surface Illuminance	1	0	1	1
11.3 Localised Lighting Control	1	0	0	0
12.0 Glare Reduction	Req.	0	Req.	0
12.1 Daylight	2	0	0	0
12.2 Views	1	0	0	0

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

13.1 Paints, Adhesives, Sealants and Carpets	1	0	1	1
13.2 Engineered Wood Products	1	0	1	1
14.1 Thermal Comfort	1	1	0	1
14.2 Advanced Thermal Comfort	1	1	0	1
ENERGY	22	10.7	1	11.7
Conditional Requirement	Req.	Req.	0	Req.
15E GHG Emissions Reduction - Reference Building Pathway	20	8.7	1	9.7
16B Modelled Performance Pathway: Reference Building	2	2	0	2
TRANSPORT	10	3	0	3
17A Performance Pathway	10	3	0	3
WATER	12	2	0	2
18A Potable Water - Performance Pathway	12	2	0	2
MATERIALS	18	1	1	1
19A.1 Comparative Life Cycle Assessment	-	0	0	0
20.1 Structural and Reinforcing Steel	1	0	0	0
20.2 Timber	1	0	0	0
20.3 Permanent Formwork, Pipes, Flooring, Blinds and Cables	1	0	1	1
21.0 Product Transparency and Sustainability	3			3
22A&B Reduction of Construction and Demolition Waste	1	1	0	1
LAND USE & ECOLOGY	6	1	0	1
23.0 Endangered, Threatened or Vulnerable Species and Communities	R	R	0	R
23.1 Ecological Value	3	0	0	3
24.0 Conditional Requirement	R	R	0	R
24.1 Reuse of Land	1	0	0	1
24.2 Contamination and Hazardous Materials	1	1	0	1
25.0 Heat Island Effect Reduction	1	0	0	0
EMISSIONS	5	2	0	2
26.1 Stormwater Peak Discharge	1	0	0	0
26.2 Stormwater Pollution Targets	1	0	0	0
27.0 Light Pollution to Neighbouring Bodies	R	R	0	R
27.1 Light Pollution to Night Sky	1	1	0	1
28.0 Legionella Impacts from Cooling Systems	1	1	0	1
29.0 Refrigerant Impacts	1	0	0	0
INNOVATION	44	10	0	10
Energy Metering Integrity	1	1	0	1
Reconciliation Action Plan	1	0	0	0
Green Star – Performance - Green Cleaning	3	1	0	1

- Procurement and Purchasing - Groundskeeping Practices				
WELL BULDING STANDARD	10	8	0	8
Total		**47.7**	**5**	**52.7**

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

2.0 Costs

2.1 Certification

Additional fees will be involved in the certification of the project. A rough estimate (excluding GST) partially in the table below.

Table 1 Costs

Description	Approximate cost in AUD
Registration cost	$37,000 (From GBCA website)
CIR (credit interpretation request)	$1,200 (allowance to submit 6)
Steensen Varming GS management	Management/compiling credits/CIRs/Coordination etc: $40,000-$60,000 Compliance Modelling: $40,000-$60,000. Total: $80,000-$120,000
Buildcorp GSAP engagement	$80,000-$100,000 (based on a person 3-4 days a week through the life of the project) – Managing subcontractors, collating evidence, reviewing the submission, tracking materials etc.
Mechanical Subcontractor (extra documentation)	$20,000
Architect extra documentation	$20,000
Lighting Designer extra calculation	$5,000
Sub-contractors response to credits	$50,000
Climate Adaptation Plan + Workshop	10,000-15,000 (May not be required)
Blind installation throughout	Assumed not targeted
Total	**$293,200 - $353,200**

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

3.0 ESD Framework

As mentioned in section 1.2 certain targeted credits are under high risk in compliance with official GS. Apart from that, all credits remain the same status as presently shown in the ESD Framework below. This includes all targeted points as the project stands at the moment, without achieving official certification.

Concepts and Features	Status	Risk	Status / Comments
MANAGEMENT			
1 Green Star Accredited Professional			
1.0 Accredited Professional	Closed	NA	Item closed
2 Commissioning and Tuning			
2.0 Environmental Performance Targets	Closed PCC	Low	17/01/20_AB_Requirements addressed in the design and arch/hydr/mech/elec specifications; Subcontractors to provide as-built drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
2.1 Services and Maintainability Review	To do	Low	Teams to provide extracts from maintainability report
2.2 Building Commissioning	To do	Mid	Teams to provide extracts from commissioning reports and summary of the commissioning plan
2.3 Building Systems Tuning	To do	Low	Steensen Varming are involved to provide building tunning after completion.
2.4 Independent Commissioning Agent	To do	Low	ICA was appointed. Provide ICA report and outcomes
3 Adaptation and Resilience			
3.0 Implementation of a Climate Adaptation Plan	Closed PCC	Low	17/01/20_AB_Design addressed climate adaptation principles, also a requirement from EFSG. Subcontractors comply with drawings and specifications. Changes of materials, system performance and location may impact on the compliance.
4 Building Information			
4.1 Building Operations and Maintenance Information	To do	Low	Prepare building logbook. Contractor to confirm that all systems have been installed as per design.
5 Commitment to Performance			

5.1 Environment Building Performance	Closed PCC	Low	17/01/20_AB_Requirements addressed in the design and arch/hydr/mech/elec specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
5.2 End of Life Waste Performance	To do	Low	24/01/20_Materials selection is covered in arch spec. Client's policy to outline the end of life process.
6 Metering and Monitoring		0	0
6.0 Metering	Closed PCC	Low	17/01/20_AB_Requirements addressed in the electrical and mechanical design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
6.1 Monitoring Systems	Closed PCC	Low	17/01/20_AB_Requirements addressed in the electrical and mechanical design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
7 Responsible Construction Practices			
7.0 Environmental Management Plan	To do	Low	21/01/20_AB_Requirement is covered in ESD specifications. The contractor must provide evidence of compliance.
7.1 Environmental Management System	To do	Low	21/01/20_AB_Requirement is covered in ESD specifications. The contractor must provide evidence of compliance.
8 Operational Waste			
8A Performance Pathway: Specialist Plan	Ongoing	Low	21/01/20_AB_Bin location to be included on landscape drawings. Project to specify waste streams.
INDOOR ENVIRONMENTAL QUALITY			
9 Indoor Air Quality			
9.1 Ventilation System Attributes	Closed PCC	Low	17/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
9.2 Provision of Outdoor Air	Closed PCC	Low	17/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.

9.3 Exhaust or Elimination of Pollutants	Closed PCC	Low	17/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
10 Acoustic Comfort			
10.1 Internal Noise Levels	Closed PCC	Low	17/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
10.2 Reverberation	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that elements/structure have been installed as per the design and respond to performance requirements.
10.3 Acoustic Separation	Ongoing	High	21/01/20_AB_Not likely to achieve, however, keep as the potential for now.
11 Lighting Comfort			
11.0 Minimum Lighting Comfort	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that light fittings have been installed as per the design and respond to performance requirements.
11.1 General Illuminance and Glare Reduction	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that light fittings have been installed as per the design and respond to performance requirements.
11.2 Surface Illuminance	Ongoing	High	21/01/20_AB_BVN/Client to confirm ceiling material selection
12 Visual Comfort			
12.0 Glare Reduction	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation of blinds location.
12.2 Views	Closed	NA	Item closed
13 Indoor Pollutants			
13.1 Paints, Adhesives, Sealants and Carpets	Closed PCC	High	21/01/20_AB_Covered in arch spec. Contractor to provide the documentation.
13.2 Engineered Wood Products	Closed PCC	High	21/01/20_AB_Covered in arch spec. Contractor to provide the documentation.
14 Thermal Comfort			

14.1 Thermal Comfort	Closed PCC	Low	20/01/20_AB_Requirements addressed in the mechanical design and specifications; Thermal modelling report states required thermal comfort levels are achieved; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
14.2 Advanced Thermal Comfort	Closed PCC	Low	20/01/20_AB_Requirements addressed in the mechanical design and specifications; Thermal modelling report states required thermal comfort levels are achieved; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
ENERGY			
15 Greenhouse Gas Emissions			
Conditional Requirement	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
15E GHG Emissions Reduction - Reference Building Pathway	Closed PCC	Low	21/01/20_AB_Energy report produced by Steensen Varming states the improvement in energy consumption by 47-60% to compare with a base case. Confirmation of installed systems is required after construction completion.
16 Peak Electricity Demand Reduction			
16B Modelled Performance Pathway: Reference Building	Closed PCC	Low	21/01/20_AB_Energy report produced by Steensen Varming states the improvement. Confirmation of installed systems is required after construction completion.
TRANSPORT			
17 Sustainable Transport			
17A Performance Pathway	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that bike racks are installed, identify a number of the carpark.
WATER			
18 Potable Water			
18A Potable Water - Performance Pathway	Ongoing	Mid	21/01/20_AB_Information for the calculation was requested Varming-GCOR-000601 All responsible to fill up the required section of the form.
MATERIALS			
19 Life Cycle			
20 Responsible Building Materials			
20.2 Timber	Closed PCC	High	21/01/20_AB_Covered in arch spec. Contractor to provide the documentation.

20.3 Permanent Formwork, Pipes, Flooring, Blinds and Cables	Closed PCC	Mid	21/01/20_AB_Covered in arch spec. Contractor to provide the documentation.
21 Sustainable Products			
22 Construction and Demolition Waste			
22A&B Reduction of Construction and Demolition Waste	To do	Mid	21/01/20_AB_Requirement is covered in ESD specifications. The contractor must provide evidence of compliance.
LAND USE & ECOLOGY			
23 Ecological Value			
23.0 Endangered, Threatened or Vulnerable Species and Communities	Closed	NA	Item closed
24 Sustainable Sites			
24.0 Conditional Requirement	Closed	NA	Item closed
24.2 Contamination and Hazardous Materials	To do	Low	21/01/20_AB_Requirement is covered in ESD specifications. Early works contractor to provide evidence of compliance.
25 Heat Island Effect			
EMISSIONS			
26 Stormwater			
26.1 Stormwater Peak Discharge	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation of drainage, road design in compliance with the design.
26.2 Stormwater Pollution Targets	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation of drainage, road design in compliance with the design.
27 Light Pollution			
27.0 Light Pollution to Neighbouring Bodies	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that light fittings have been installed as per the design and respond to performance requirements.
27.1 Light Pollution to Night Sky	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that light fittings have been installed as per the design and respond to performance requirements.
28 Microbial Control			

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

28.0 Legionella Impacts from Cooling Systems	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
INNOVATION			
30A Innovative Technology or Process			
Bubble deck	0.0	High	Is there still a bubble deck in the project?
30B Market Transformation			
Mech design - a new approach for schools	Ongoing	Low	24/01/20_Steensen Varming to draft a narrative about mechanical systems designed. Buildcorp to provide confirmation after completion of the installed and tunned systems as per design.
30C Improving on Green Star benchmark			
Ultra-Low VOC Paints: Credit 13 - Indoor Pollutants	Ongoing	High	24/01/20_BVN to confirm if the information is included in the specifications. Buildcorp to confirm if achievable.
Reduction of Construction and Demolition Waste: Credit 22 - Construction and Demolition Waste	To do	Mid	21/01/20_AB_Requirement is covered in ESD specifications. The contractor must provide evidence of compliance.
30D Innovation Challenge			
Energy Metering Integrity	Closed PCC	Low	24/01/20_Information is covered in mech and elec spec
Reconciliation Action Plan	Ongoing	High	24/01/20_TSA to provide the plan
30E Global Sustainability			
Green Star – Performance - Green Cleaning - Procurement and Purchasing - Groundskeeping Practices	To do	Mid	21/01/20_AB_Client confirmation is required. Operational item.
WELL BUILDING STANDARD	Ongoing	Low	Refer to the section below
WELL Targets			
Air Quality			
2 Smoking Ban	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings.
5 Air Filtration	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.

9 Cleaning Plan, Products & Storage	To do	Mid	21/01/20_AB_Client confirmation is required. Operational item.
10 Pesticide Management	To do	Mid	21/01/20_AB_Client confirmation is required. Operational item.
13 Air Flush	To do	High	21/01/20_AB_Item is included in ESD spec. Contractor to provide the report of the air flush test.
17 Direct Source Ventilation	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
19 Operable Windows	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that windows have been installed as per design.
20 Outdoor Air Systems	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
Water			
37 Drinking Water Promotion	Ongoing	Low	21/01/20_AB_BVN and landscape to provide drawings showing potable water stations and radius of use.
Food Provision			
Healthy Food Plan	To do	Mid	21/01/20_AB_Client confirmation is required. Operational item.
51 Food Production	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation location and size of the veggie garden
Light			
57 Low-Glare Workstation Design	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings.
58 Colour Quality	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that light fittings have been installed as per the design and respond to performance requirements.
Fitness			
64 Interior Fitness Circulation	Closed	NA	Item closed

Level 8, 9 Castlereagh Street
Sydney, NSW, 2000, Australia
ABN 50 001 189 037
t : +61 / 02 9967 2200
e : info@steensenvarming.com

68 Physical Activity Spaces	Closed	NA	Item closed
Comfort			
72 Accessible Design	Closed	NA	Item closed
74 Acoustic Planning	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that elements/structure have been installed as per the design and respond to performance requirements.
Mind			
84 Health and Wellness Awareness	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings.
86 Post Occupancy Surveys	To do	High	21/01/20_AB_Client confirmation is required. Operational item.
Building as a Teaching Tool			
Indoor Environmental Quality			
Indoor Air Quality	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
Acoustic Comfort	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
Lighting Comfort	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that light fittings have been installed as per the design and respond to performance requirements.
Visual Comfort	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that light fittings have been installed as per the design and respond to performance requirements.
Indoor Pollutants	Closed PCC	High	24/01/20_Information is covered in mech spec
Thermal Comfort	Closed PCC	Mid	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.

Smoking Ban	To do	Low	21/01/20_AB_Client confirmation is required. Operational item.
Direct Source Ventilation	Closed PCC	Mid	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
Energy			
Metering and Monitoring	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that systems have been installed as per the design and respond to performance requirements.
Greenhouse Gas Emissions	To do	Mid	Included in the mech, elec spec. To be part of the graphics package
Water			
Potable Water	Ongoing	Mid	Included in hydr, elec spec. To be part of the graphics package.
Transport & Fitness			
Sustainable Transport	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that bike racks are installed, identify a number of carpark, signage and colour coding.
Fitness Features	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings.
Materials & Waste			
Sustainable Materials & Products	Ongoing	High	Included in arch speck, to be part of the graphics package.
Operational Waste	Ongoing	Mid	Graphics package.
Environment			
Ecological Value	Ongoing	Mid	To be included in landscape and graphics package
Stormwater	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation of drainage, road design in compliance with the design.
Light Pollution	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation that light fittings have been installed as per the design and respond to performance requirements.
Healthy Eating			

Healthy Food Plan	To do	Mid	Operational matter.
Food Production	Closed PCC	Low	20/01/20_AB_Requirements addressed in the design and specifications; Subcontractors to provide as build drawings and confirmation location and size of the veggie garden.