

# Gartree 2

## Appendix A

### BREEAM 2018 New Construction

# Pre-Assessment Report

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GTX0000 Project Wide

661277-0000-MAC-GTX0000-ZZ-RP-J-0002

Issue number P03

S3 – For Review & Comment

11/08/2021

Security Classification: OFFICIAL

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## Document History

Issue	Date	Comment	Author	Chk'd
P01	23/04/2021	First issue. S3 – For Review & Comment	KH	DW
P02	17/05/2021	Second issue. S3 – For Review & Comment	KH	HF
P03	11/08/2021	Third issue. S3 – For Review & Comment	KH	HF

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# 1 Introduction

Mace Group Ltd has been appointed to carry out BREEAM Pre-Assessment for the MoJ’s New Prisons Programme. A site-wide assessment approach has been taken for the new prison.

This Pre-Assessment has been developed by a licenced BREEAM assessor and BREEAM AP, as a result of reviewing the latest designs, discussions with specialist consultants and commitments from the client and expected contractor performance. Further updates of the BREEAM score will be carried out as the design develops.

This report is intended as a summary of the BREEAM Pre-Assessment review for the following project:

<b>Project Name</b>	MoJ New Prisons Programme: Gartree 2
<b>BREEAM Version</b>	BREEAM 2018 New Construction
<b>Assessment Stage</b>	Pre-Assessment Stage
<b>Target Rating</b>	Excellent with endeavours for Outstanding (85%)

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## 2 Scoring scenarios

The following score is targeted:

Scenario	Score	BREEAM Rating
Outstanding	87.41%	Outstanding
Outstanding uplift	99.30%	Outstanding

In addition, performance against the minimum standards (required for the specified target rating) under each scenario is summarised below;

Issue	Targeted
Man 03 - Responsible Construction Practices	Yes
Man 04 – Commissioning and Handover	Yes
Man 04 – Seasonal Commissioning	Yes
Man 05 - Aftercare	Yes
Ene 01 – Reduction of energy use and carbon emissions	Yes
Ene 02 – Energy Monitoring	Yes
Wat 01 – Water Consumption	Yes
Wat 02 - Water Monitoring	Yes
Mat 03 - Responsible Sourcing of Materials	Yes
Wst 01 - Construction Waste Management	Yes
Wst 03 - Operational Waste	Yes

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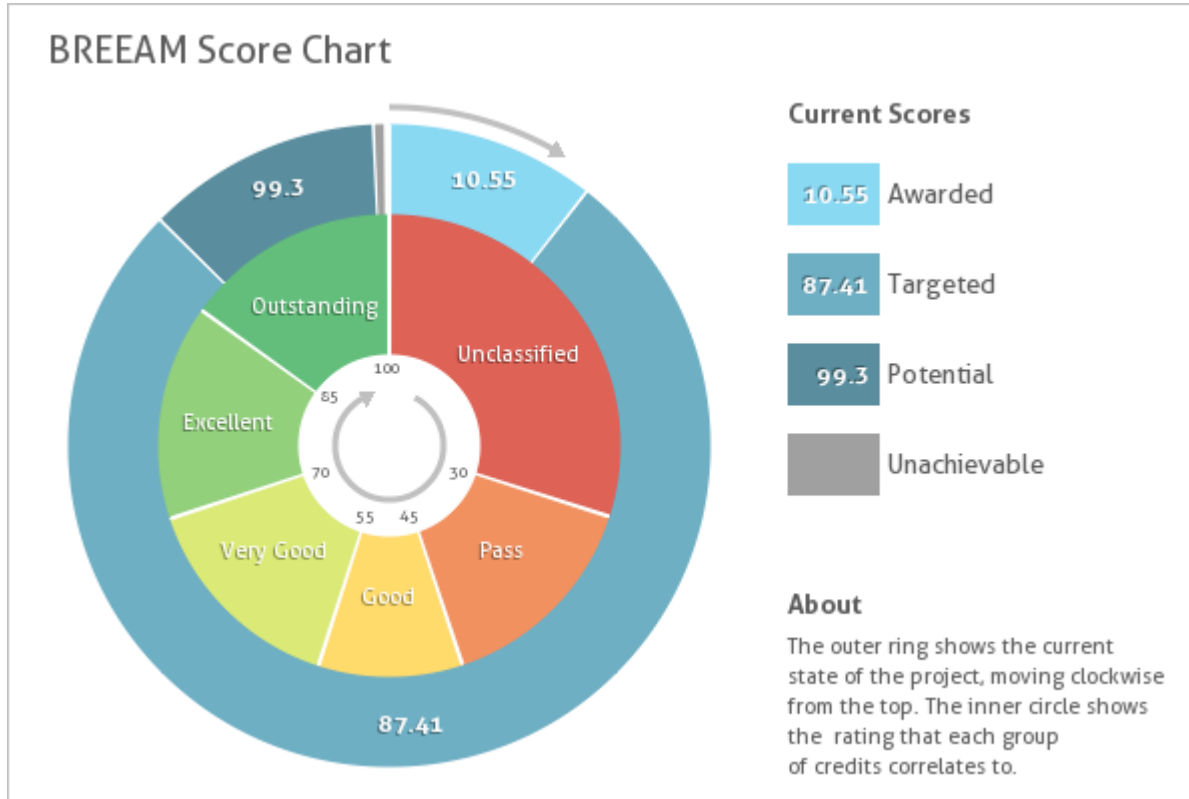
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### 3 Summary of Performance



The overall summary, taking into account section scores and minimum standards shows that a BREEAM Outstanding rating is achievable. Further detailed design work following award of planning will be required to secure the targeted credits.

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## 4 Credits Table

		Available	Targeted	Potential
<b>Management</b>				
Man 01	Project brief and design	4	4	4
Man 02	Life cycle cost and service planning	4	4	4
Man 03	Responsible construction practices	6	6	6
Man 03 – Exemplary (1)	Responsible construction practices	1	1	1
Man 04	Commissioning and handover	4	4	4
Man 05	Aftercare	3	3	3
<b>Standard Management Credit Total:</b>		<b>21</b>	<b>21</b>	<b>21</b>
<b>Exemplary Management Credit Total:</b>		<b>1</b>	<b>1</b>	<b>1</b>
<b>% Management Total (Standard + Exemplary):</b>			<b>12</b>	<b>12</b>
<b>Health &amp; Wellbeing</b>				
Hea 01	Visual comfort	5	2	3
Hea 01 – Exemplary (1)	Visual comfort	1	0	0
Hea 01 – Exemplary (2)	Visual comfort	1	0	0
Hea 02	Indoor air quality	4	4	4
Hea 02 – Exemplary (1)	Indoor air quality	1	0	0
Hea 04	Thermal comfort	3	1	3
Hea 05	Acoustic performance	3	3	3
Hea 06	Security	1	1	1
Hea 06 – Exemplary (1)	Security	1	0	0
Hea 07	Safe and healthy surroundings	2	1	2
<b>Standard Health &amp; Wellbeing Credit Total:</b>		<b>18</b>	<b>12</b>	<b>16</b>
<b>Exemplary Health &amp; Wellbeing Credit Total:</b>		<b>4</b>	<b>0</b>	<b>0</b>
<b>% Health &amp; Wellbeing Total (Standard + Exemplary):</b>			<b>9.33</b>	<b>12.44</b>

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Energy				
Ene 01	Reduction of energy use and carbon emissions	13	10	10
Ene 01 – Exemplary (1)	Reduction of energy use and carbon emissions	3	0	0
Ene 01 – Exemplary (2)	Reduction of energy use and carbon emissions	2	2	2
Ene 02	Energy monitoring	2	2	2
Ene 03	External Lighting	1	1	1
Ene 04	Low carbon design	3	2	2
Ene 05	Energy efficient cold storage	2	2	2
Ene 06	Energy efficient transportation systems	2	2	2
Ene 08	Energy efficient equipment	2	0	2
<b>Standard Energy Credit Total:</b>		<b>25</b>	<b>19</b>	<b>21</b>
<b>Exemplary Energy Credit Total:</b>		<b>5</b>	<b>2</b>	<b>2</b>
<b>% Energy Total (Standard + Exemplary):</b>			<b>14.16</b>	<b>15.44</b>
Transport				
Tra 01	Transport assessment and travel plan	2	2	2
Tra 02	Sustainable transport measures	10	8	9
<b>Standard Transport Credit Total:</b>		<b>12</b>	<b>10</b>	<b>11</b>
<b>Exemplary Transport Credit Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>
<b>% Transport Total (Standard + Exemplary):</b>			<b>8.33</b>	<b>9.16</b>
Water				
Wat 01	Water consumption	5	3	3
Wat 01 – Exemplary (1)	Water consumption	1	0	0
Wat 02	Water monitoring	1	1	1
Wat 03	Water leak detection	2	2	2
<b>Standard Water Credit Total:</b>		<b>8</b>	<b>6</b>	<b>6</b>
<b>Exemplary Water Credit Total:</b>		<b>1</b>	<b>0</b>	<b>0</b>
<b>% Water Total (Standard + Exemplary):</b>			<b>5.25</b>	<b>5.25</b>

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<b>Materials</b>				
Mat 01	Environmental impacts from construction products - Building life cycle assessment (LCA)	7	7	7
Mat 01 – Exemplary (1)	Environmental impacts from construction products - Building life cycle assessment (LCA)	1	0	0
Mat 01 – Exemplary (2)	Environmental impacts from construction products - Building life cycle assessment (LCA)	1	1	1
Mat 01 – Exemplary (3)	Environmental impacts from construction products - Building life cycle assessment (LCA)	1	1	1
Mat 02	Mat 02 Environmental impacts from construction products - Environmental Product Declarations (EPD)	1	1	1
Mat 03	Responsible sourcing of construction products	4	4	4
Mat 03 – Exemplary (1)	Responsible sourcing of construction products	1	0	1
Mat 05	Designing for durability and resilience	1	1	1
Mat 06	Material efficiency	1	1	1
<b>Standard Materials Credit Total:</b>		<b>14</b>	<b>14</b>	<b>14</b>
<b>Exemplary Materials Credit Total:</b>		<b>4</b>	<b>2</b>	<b>3</b>
<b>% Materials Total (Standard + Exemplary):</b>			<b>17</b>	<b>18</b>
<b>Waste</b>				
Wst 01	Construction waste management	4	3	4
Wst 01 – Exemplary (1)	Construction waste management	1	0	1
Wst 02	Use of recycled and sustainably sourced aggregates	1	1	1
Wst 02 – Exemplary (1)	Use of recycled and sustainably sourced aggregates	1	0	0
Wst 03	Operational waste	1	1	1
Wst 05	Adaptation to climate change	1	1	1
Wst 05 – Exemplary (1)	Adaptation to climate change	1	0	1
Wst 06	Design for disassembly and adaptability	2	1	2
<b>Standard Waste Credit Total:</b>		<b>9</b>	<b>7</b>	<b>9</b>
<b>Exemplary Waste Credit Total:</b>		<b>3</b>	<b>0</b>	<b>2</b>
<b>% Waste Total (Standard + Exemplary):</b>			<b>4.66</b>	<b>8</b>

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Land Use & Ecology				
LE 01	Site selection	2	0	0
LE 02	Ecological risks and opportunities	2	2	2
LE 02 – Exemplary (1)	Ecological risks and opportunities	1	0	1
LE 03	Managing impacts on ecology	3	3	3
LE 04	Ecological change and enhancement	4	3	3
LE 04 – Exemplary (1)	Ecological change and enhancement	1	0	0
LE 05	Long term ecological management and maintenance	2	2	2
<b>Standard Land Use &amp; Ecology Credit Total:</b>		<b>13</b>	<b>10</b>	<b>10</b>
<b>Exemplary Land Use &amp; Ecology Credit Total:</b>		<b>2</b>	<b>0</b>	<b>1</b>
<b>% Land Use &amp; Ecology Total (Standard + Exemplary):</b>			<b>10</b>	<b>11</b>
Pollution				
Pol 01	Impact of refrigerants	3	1	3
Pol 02	Local air quality	2	2	2
Pol 03	Flood and surface water management	5	5	5
Pol 04	Reduction of night-time light pollution	1	1	1
Pol 05	Reduction of noise pollution	1	1	1
<b>Standard Pollution Credit Total:</b>		<b>12</b>	<b>10</b>	<b>12</b>
<b>Exemplary Pollution Credit Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>
<b>% Pollution Total (Standard + Exemplary):</b>			<b>6.66</b>	<b>8</b>
Innovation				
AI	Approved Innovation	1	0	0
<b>AI - Innovation Credit Total:</b>		<b>0</b>	<b>0</b>	<b>0</b>
<b>% Innovation Total (Standard + Exemplary):</b>			<b>0</b>	<b>0</b>
<b>OVERALL TOTALS</b>			<b>114</b>	<b>129</b>
<b>% OVERALL SCORE TOTALS</b>			<b>87.41</b>	<b>99.30</b>

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