

SANDY BROWN

Consultants in Acoustics, Noise & Vibration

Memo: M013-B

Date: 21 April 2021

Project: 18346

Pages: 9

From: José M. González

Reviewer: James Atha

Manchester Goods Yard

Acoustic testing schedule

This memo details the proposed Shell & Core acoustic commissioning testing for Manchester Good Yard.

It is understood the development is targeting 'excellent' under BREEAM 2018 New construction- Office at Shell & Core.

It is advisable that the proposed schedule of testing should be submitted to the BREEAM assessor for comment prior to the testing.

Hea 05– Acoustic performance for Shell & Core

Offices

The Hea 05 credit can be awarded if indoor ambient noise levels meet with the criteria set by BS8233.

Retail/commercial units

The Hea 05 credit can be awarded if indoor ambient noise levels comply with the design ranges given in Section 7 of BS 8233:2014.

Measurements

The proposed spaces in which measurements are proposed in line with the BREEAM requirements are indicated as IANL (in blue) in the mark-ups at the end of this memo. In each space 3 x 5 minute noise measurements will be undertaken in line with the methodology set out in the BREEAM Testing, measurement and calculation procedures (pages 113 and 114).

Additional sample noise measurements in spaces of interest are shown as S (in pink) in the mark-ups at the end of the memo.

Pol 05– Reduction of noise pollution

The plant noise level from the assessed building, as measured in the locality of the nearest or most exposed noise sensitive development, must be at least 5 dB lower than the background noise throughout the day and night.

The proposed spaces in which measurements are proposed are indicated as P (in green), in the mark-ups at the end of the memo. The final measurement locations will be select on-site by the engineer carrying out the measurements.

Our 3D plant noise egress model will be updated with the results of the Pol 5 testing for comparison to the design criteria and the BREEAM Pol 05 credit criterion.

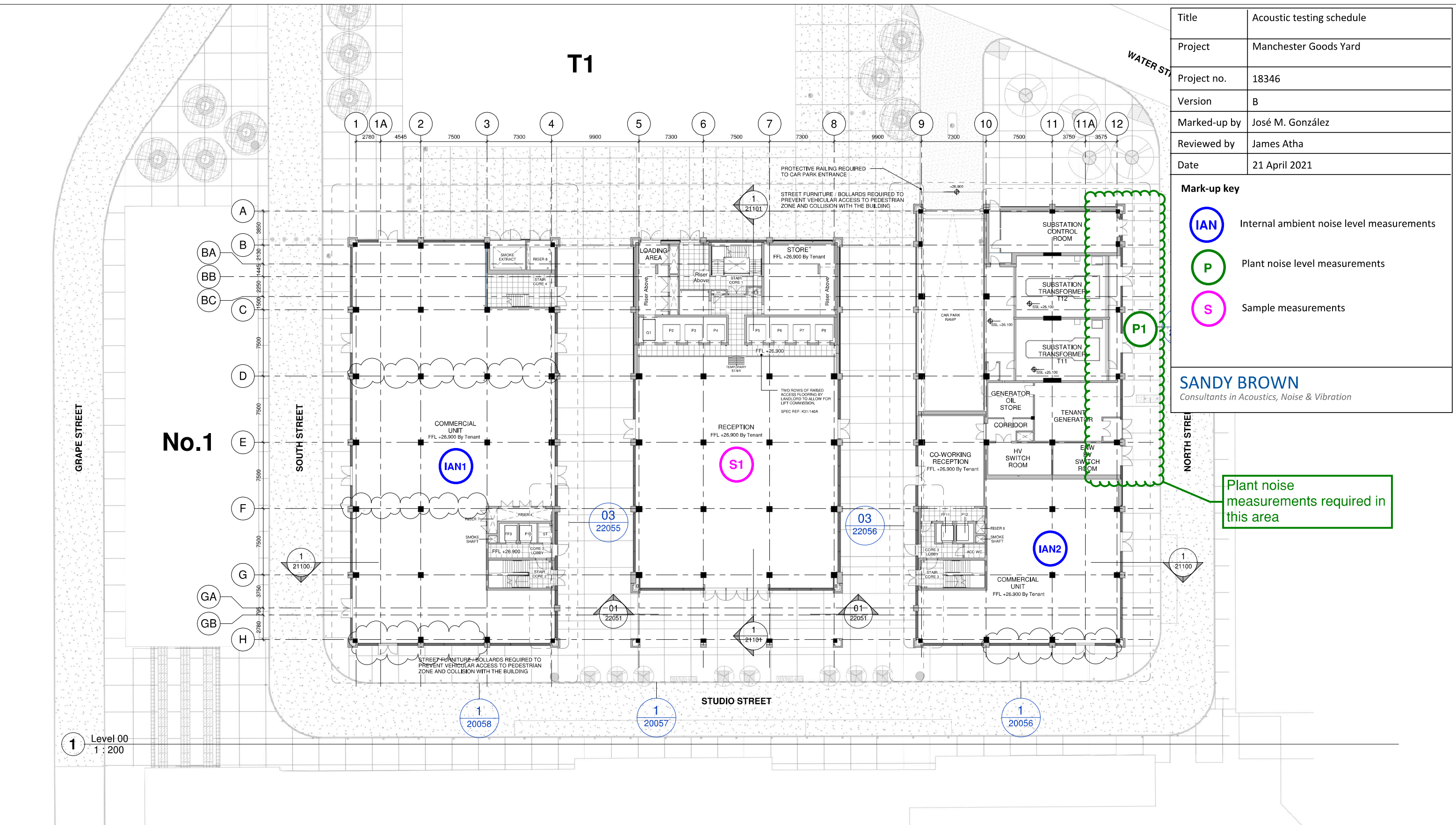
Sound insulation

The separating partitions indicated between units A and B, C and D, and F and E at Level 09 have been omitted, therefore no sound insulation testing are proposed.

Required site conditions

In order that the acoustic testing can be carried out efficiently, and that accurate test results can be obtained, the following site conditions are required for the duration of the testing:

- Quiet conditions – no noisy works can occur in the vicinity of the test rooms. This includes works such as hammering, use of power tools, ground works, testing of fire alarms etc. We can generally work around quiet finishing works such as decorating, although the rooms in which the tests are being carried out must be unoccupied.
- All partitions and floors complete, including the installation of sockets, completion of ceilings etc.
- All doors and windows must be installed and closeable.
- All Shell and Core plant items should be installed, commissioned and operating at maximum design duty. It would be worthwhile having an MEP engineer in attendance to allow equipment to be isolated/switched off if required.
- Power must be available in all rooms in which sound insulation testing is proposed (240V or 110V can be accommodated, but we must be informed of which is available prior to attending site).
- Rooms to be tested must be reasonably clear of building materials.



Title	Acoustic testing schedule
Project	Manchester Goods Yard
Project no.	18346
Version	B
Marked-up by	José M. González
Reviewed by	James Atha
Date	21 April 2021

Mark-up key

- IAN Internal ambient noise level measurements
- P Plant noise level measurements
- S Sample measurements

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Consultants in Acoustics, Noise & Vibration

Plant noise measurements required in this area

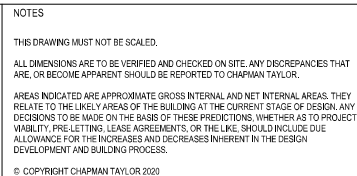
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Mark-up key

-  Internal ambient noise level measurements
-  Plant noise level measurements
-  Sample measurements

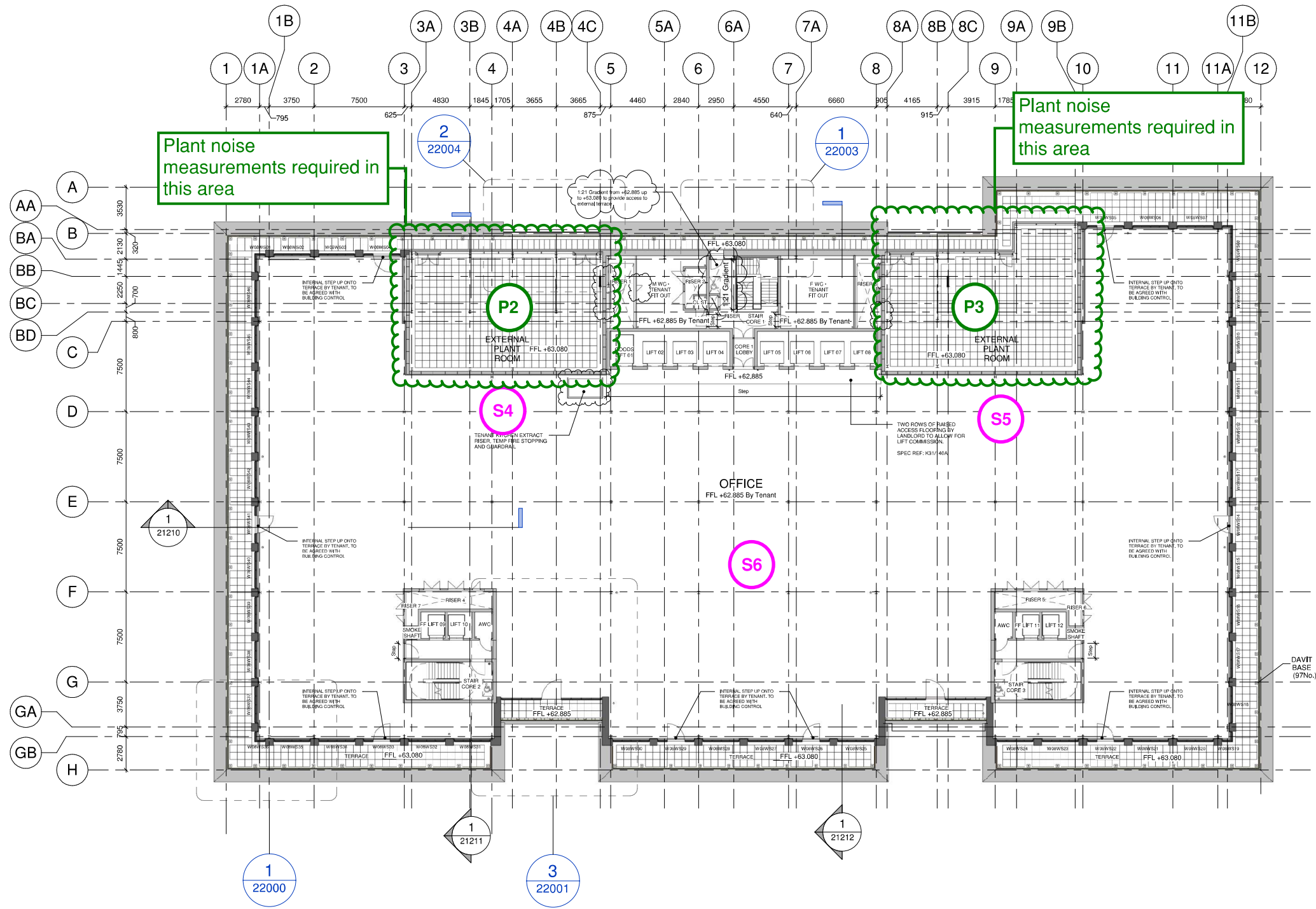
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PROJECT STATUS	CONSTRUCTION INTENT
CLIENT	 ALLIED LONDON DEVELOPMENT MANAGEMENT 33 Cork Street, London W1S 3WQ

DRAWING TITLE									
GENERAL ARRANGEMENT PLAN - MEZZANINE LEVEL FLOOR PLAN									
1 : 200 @ A1 2 10 20M									
RETURN AIR NO		ISSUE DATE		DRAWN BY		CHECKED BY			
261MGY		NOVEMBER 2018		AE		MD			
PROGRAMMED	DESIGNED	CHECKED	VOLUME	LEVEL	ROLL	NUMBER	REVISION		
SJQ	600	CTA	XX	L00M	DR A	20003	C06		



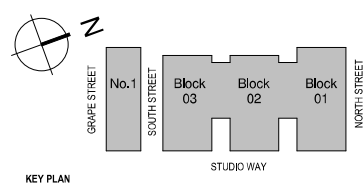
1 Level 08
1 : 200

Title	Acoustic testing schedule
Project	Manchester Goods Yard
Project no.	18346
Version	B
Marked-up by	José M. González
Reviewed by	James Atha
Date	21 April 2021

Mark-up key

- IAN Internal ambient noise level measurements
- P Plant noise level measurements
- S Sample measurements

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NOTES

THIS DRAWING MUST NOT BE SCALED.
ALL DIMENSIONS ARE TO BE VERIFIED AND CHECKED ON SITE. ANY DISCREPANCIES THAT ARE, OR BECOME APPARENT SHOULD BE REPORTED TO CHAPMAN TAYLOR.
AREAS INDICATED ARE APPROXIMATE GROSS INTERNAL AND NET INTERNAL AREAS. THEY RELATE TO THE LIKELY AREAS OF THE BUILDING AT THE CURRENT STAGE OF DESIGN. ANY DECISIONS TO BE MADE ON THE BASIS OF THESE PREDICTIONS, WHETHER AS TO PROJECT VIABILITY, PRE-LETTING, LEASE AGREEMENTS, OR THE LIKE, SHOULD INCLUDE DUE ALLOWANCE FOR THE INCREASES AND DECREASES INHERENT IN THE DESIGN DEVELOPMENT AND BUILDING PROCESS.

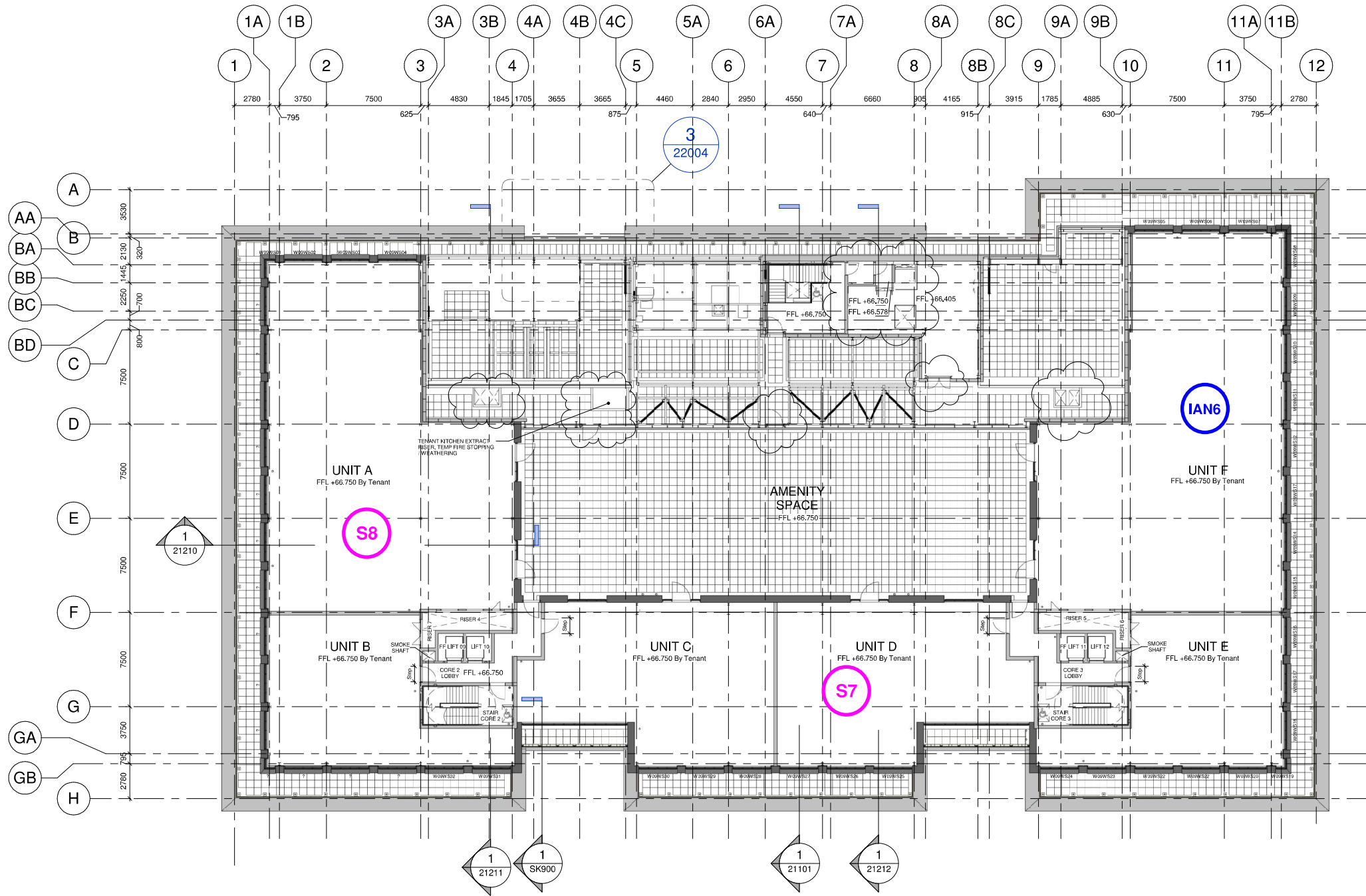
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REV	DATE	BY	DESCRIPTION	CHK'D	REV	DATE	BY	DESCRIPTION	CHK'D
C01	08.10.19	NP	- Agreed to coordinate with updated GA Setting Out Plans (refer to revision 0001)	MD	T01	18.06.19	NP	- Lobby areas added to zone 1	MD
C02	21.02.20	AE	ISSUE FOR CONSTRUCTION INTENT	MD	T06	24.05.19	NP	- Genies added in external plant areas	MD
C11	06.06.19	NP	ISSUE FOR CONSTRUCTION INTENT	MD	T05	02.05.19	NP	- Genies added in external plant areas	MD
T11	08.06.19	NP	- Issue 1: Lobby restricted change	MD	T04	25.03.19	AE/ RV	- Approved RAMP layout	MD
T13	04.07.19	AE	- Blockwork walls created on wall type legend	MD	T03	12.03.19	RV/ AE	- Approved RAMP layout	MD
T39	03.07.19	AE	- Added walls to rooms	MD	T02	13.12.18	AE	- Approved RAMP layout	MD
T38	15.06.19	NP	- Further Structural Coordination	MD	T01	09.11.18	AE	- Approved RAMP layout	MD
			- Dry risers updated @ core 213 & Terrace doors using inwards						

PROJECT STATUS	CONSTRUCTION INTENT
CLIENT	ALLIED LONDON
PROJECT	MANCHESTER GOODS YARD
ARCHITECT	CHAPMAN TAYLOR

PROJECT	MANCHESTER GOODS YARD
ARCHITECT	CHAPMAN TAYLOR
PROJECT STATUS	CONSTRUCTION INTENT
CLIENT	ALLIED LONDON

DRAWING TITLE	GENERAL ARRANGEMENT PLAN - LEVEL 08 FLOOR PLAN
1 : 200 @ A1	
INTERNAL JOB NO	2
ISSUE DATE	10
DRAWN BY	MD
CHECKED BY	MD
PROGRAMME	261MGY
PROJECT NO	AUGUST 2018
ORIGINATOR	AE
VOLUME	MD
LEVEL	
TYPE	
ROLE	
NUMBER	
REVISION	
SJQ	600 CTA XX L08 DR A 20011 C03

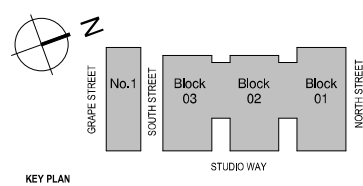


1 Level 09
1 : 200

NOTES:	
Title	Acoustic testing schedule
Project	Manchester Goods Yard
Project no.	18346
Version	B
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Date	21 April 2021

- Mark-up key
- IAN Internal ambient noise level measurements
 - P Plant noise level measurements
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C03	08.11.20	NP	Revised to coordinate with updated QA Setting Out Plans (refer to revision clouds)	MD	107	15.06.19	NP	Internal corridor @ core 2 & 3 updated. Store room omitted.	MD
C02	21.02.20	AE	ES&L FOR CONSTRUCTION INTENT	MD	T06	24.05.19	NP	Structural Coordination	MD
C01	06.05.19	NP	Revised to coordinate with updated QA Setting Out Plans (refer to revision clouds)	MD	T05	02.05.19	NP	Geophones added in external plant areas. Risers added to core 1	MD
T11	08.08.19	NP	Revised to coordinate with updated QA Setting Out Plans (refer to revision clouds)	MD	T04	25.03.19	AE/ RV	Core 1 & 2 revised structure coordination	MD
T10	04.07.19	AE	ES&L FOR CONSTRUCTION INTENT	MD	T03	11.03.19	RV/ AE	Core 1 & 2 revised structure coordination	MD
T09	02.07.19	AE	Revised to coordinate with updated QA Setting Out Plans (refer to revision clouds)	MD	T02	13.12.18	AE	Core 1 & 2 revised structure coordination	MD
T08	19.06.19	NP	Revised to coordinate with updated QA Setting Out Plans (refer to revision clouds)	MD	T01	09.11.18	AE	Core 1 & 2 revised structure coordination	MD
REV	DATE	BY	DESCRIPTION	CHK'D	REV	DATE	BY	DESCRIPTION	CHK'D

PROJECT STATUS	
CONSTRUCTION INTENT	
CLIENT	
ALLIED LONDON	
PROJECT	
MANCHESTER GOODS YARD	
ARCHITECT	
CHAPMAN TAYLOR	

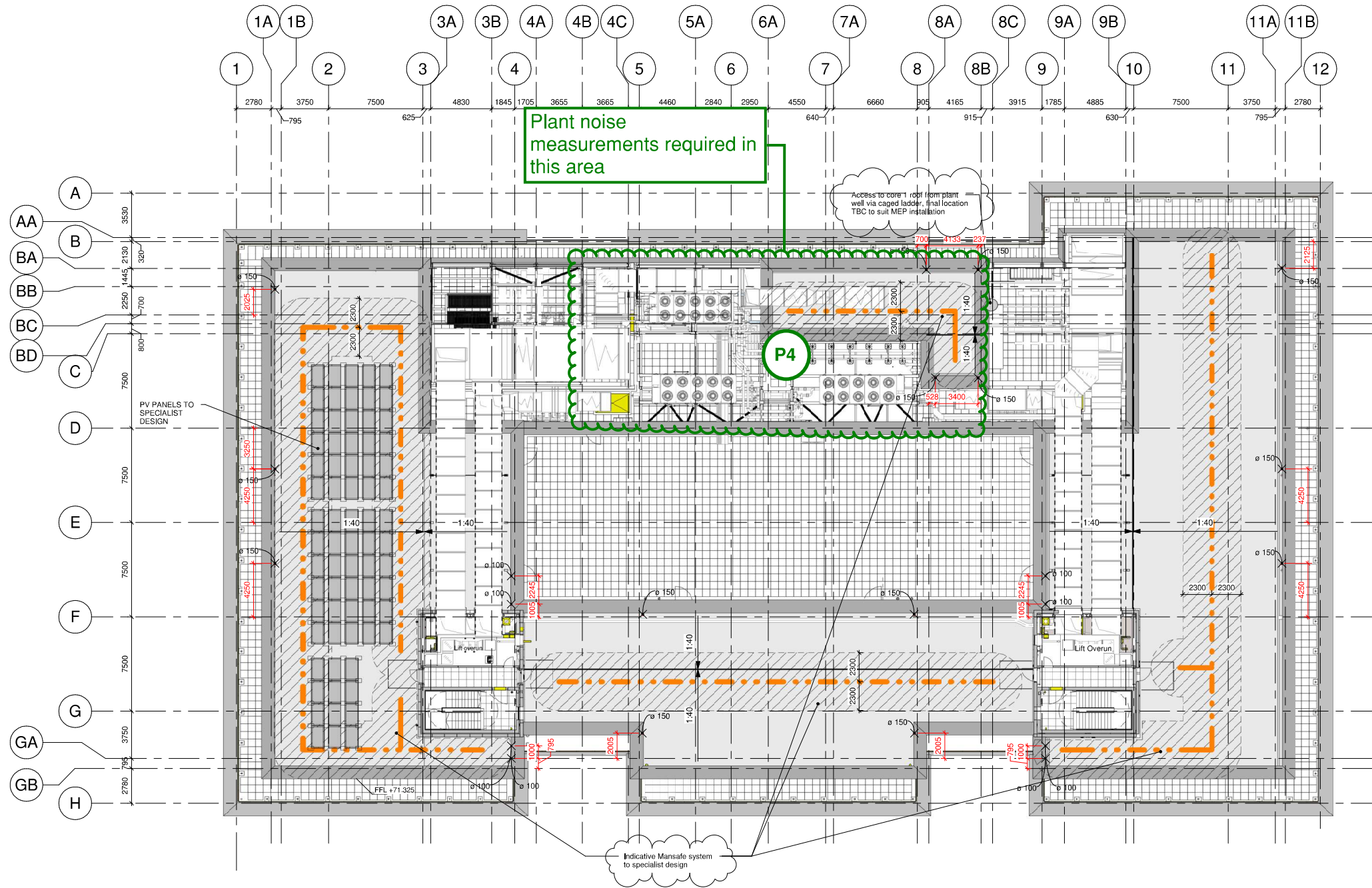
DRAWING TITLE	
GENERAL ARRANGEMENT PLAN - LEVEL 09 FLOOR PLAN	
1 : 200 @ A1	
INTERNAL JOB NO	2
ISSUE DATE	10
DRAWN BY	AE
CHECKED BY	MD
PROGRAMME ID	261MGY
PROJECT ID	AUGUST 2018
ORIGINATOR	AE
VOLUME	MD
LEVEL	AE
TYPE	MD
ROLE	AE
NUMBER	MD
REVISION	AE
SJK 600 CTA XX L09 DR A 20012 C03	

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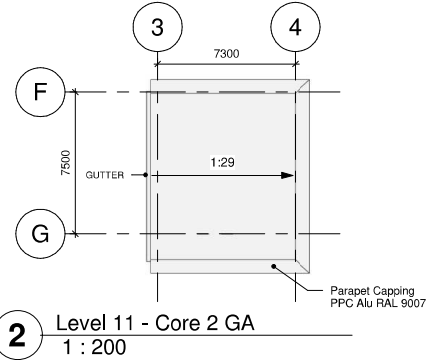
Mark-up key

- IAN** Internal ambient noise level measurements
- P** Plant noise level measurements
- S** Sample measurements

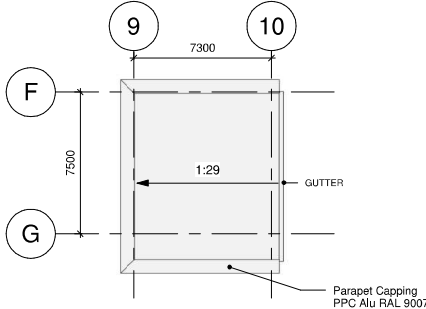
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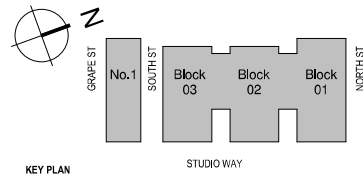
1 Level 10 Roof
1 : 200



2 Level 11 - Core 2 GA
1 : 200



3 Level 11 - Core 3 GA
1 : 200



NOTES

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C03	01.02.21	SCM	Updated in line with development design. PV panel array updated as per NGS and col. Mansafe intent updated.	MD
C02	21.09.20	AE	ISSUE FOR CONSTRUCTION INTENT	SM
C01	06.09.19	NP	ISSUE FOR CONSTRUCTION INTENT	MD
T12	08.08.19	NP	Blackwork walls limited on wall per legend	MD
T11	02.08.19	NP	ACV omitted from core 1. Wall & parapet coping adjusted to suit structure @ core 1. Ladders brought back to access	MD
T10	28.07.19	AE	High ACV steel wall later added to Core 2 and Core 3	MD
T09	04.07.19	AE	Wall added on GA. GA moved as per client instruction	MD
T08	05.07.19	AE	Parapet LUP added. Roof extent amended. Lift overrun	MD
T07	19.06.19	NP	Structural Coordination	MD
T06	18.06.19	NP	Structural Coordination	MD
T05	24.05.19	NP	Structural Coordination	MD
T04	08.05.19	NP	Structural Coordination	MD
T03	15.03.19	RV	STAGE 3 - ISSUE	MD
T02	13.12.18	AE	ISSUE FOR TENDER	MD
T01	09.11.18	AE	ISSUE FOR TENDER	MD

PROJECT STATUS	CONSTRUCTION INTENT
CLIENT	ALLIED LONDON
PROJECT	MANCHESTER GOODS YARD
ARCHITECT	CHAPMAN TAYLOR

PROGRAMME ID	PROJECT ID	ORIGINATOR	VOLUME	LEVEL	TYPE	ROLE	NUMBER	REVISION
261MGY	AUGUST 2018	AE	MD					
SJQ	600	CTA	XX	LRF	DR	A	2013	C03