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PROJECT TECHNICAL MEMORANDUM

JOB TITLE : New Century, External Screen

REF : HT: 33130/PTM1

DATE : 21 May 2026

FROM : Will Robertson

ISSUED TO : New Century

RE: NEW CENTURY, EXTERNAL SCREEN CONDITION 3B DISCHARGE NOTE

This Technical Memorandum sets out Hann Tucker Associates' recent visit to the New Century site at Sadler's Yard to commission the noise levels as set in the noise impact assessment titled *"33130-RP1-Rev0-JH"*. The purpose is to confirm that the noise levels set within the noise impact assessment are compliant on site and discharge Condition 3 associated with Application 145317/FO/2026.

The wording of Condition 3 is as below:

"3) a) Prior to its first operation, the development hereby approved, shall be acoustically insulated/treated to limit the break out of noise in accordance with a noise study of the premises and a scheme of acoustic treatment, that has been submitted to and approved in writing by the City Council as local planning authority. The scheme shall be implemented in full before the use commences and be adhered to for the lifetime of the development.

b) Prior to the first use of the development, a verification report will be required to validate that the work undertaken throughout the development conforms to the recommendations and requirements in the approved acoustic consultant's report. The report shall also undertake post completion testing to confirm that acceptable criteria have been met. Any instances of non-conformity with the recommendations in the report shall be detailed along with any measures required to ensure compliance with the agreed noise criteria."

Hann Tucker Report "33130-RP1-Rev0-JH" should serve as evidence for Part a and this Technical Memorandum serves as evidence for Part B.

1.0 Proposed Criteria

The criteria for the external screen temporary installation are detailed in the following sections. The operation of the site should not extend past 23:00 or begin before 07:00 as agreed with MCC, as such this period has been omitted from further discussion.

1.1 Entertainment Noise

The suggested weekday day-time criteria to be achieved external to the offices during typical operations is set out below given as free-field noise levels:

Proposed Typical Daytime $L_{eq, 5min}$ (dB) Criteria (07:00 – 19:00) at 1-metre from the Noise Sensitive Façade in each Octave-Band Centre Frequency (Hz)								dBA
63	125	250	500	1000	2000	4000	8000	
62	59	53	53	52	46	39	30	56

During the evenings, weekends and night-time periods the offices are no longer noise sensitive and New Victoria becomes the most affected noise sensitive premises. As this is a residential dwelling which is unlikely to be already impacted by existing noise from Sadler's yard, the typical approach should be to limit the levels of noise egress to 5 dBA below the existing background noise level in-line with Manchester City Councils guidance.

Based on the above, the typical operational proposed limits for the evening and night-time operation of the development are as follows given as free-field levels:

Period	Proposed Sound Pressure Level Criteria at 1-metre from New Victoria Façade ($L_{eq,5min}$ dB) for Typical Activities								dBA
	63	125	250	500	1000	2000	4000	8000	
Weekend Day (07:00-19:00)	53	49	46	46	45	38	31	22	48
Evening (19:00-23:00)	53	49	46	46	45	38	31	22	48
Night (23:00-07:00	48	44	41	41	40	33	26	17	43

1.2 Plant Noise

It was previously understood that 2No generators were going to be utilised to power the screen and small speakers. However, upon arrival to the site, it was noted that the screen is powered via an extension cable connected to the mains of a nearby office. As there are no other items of plant associated with the external screen, an assessment of plant noise is not required.

2.0 Noise Survey

2.1 Procedure

Fully attended noise measurements were undertaken for the period of approximately 09:40 to 11:30 hours, during the set-up of the screen and speakers. Football highlights with commentary were played at a given volume whilst measurements were taken at selected locations to establish the internal limits that result in the criteria set out in Section 1.1 being achieved.

The purpose of using football highlights of previous matches to calibrate the speaker levels, was to ensure that a “worst-case” noise level from the game being shown is captured. This is because the commentators and crowd noise played will elevate when goals are scored. It is likely that the average noise level will be lower than that captured within this assessment when the external screen is fully operational.

Measurements were taken continuously of the L_{eq} sound pressure levels over appropriate periods.

2.2 Equipment

The following equipment was utilised for the environmental noise monitoring:

Description	Manufacturer	Type	Serial Number	Last Calibration
Sound Level Meter	Larson Davis	LxT	5111	24/12/2025
Preamp	PCB	PRML x TL1	55823	24/12/2025
Microphone	PCB	377B02	330047	24/12/2025
Type 1 Calibrator	Larson Davis	Cal200	3083	04/03/2026

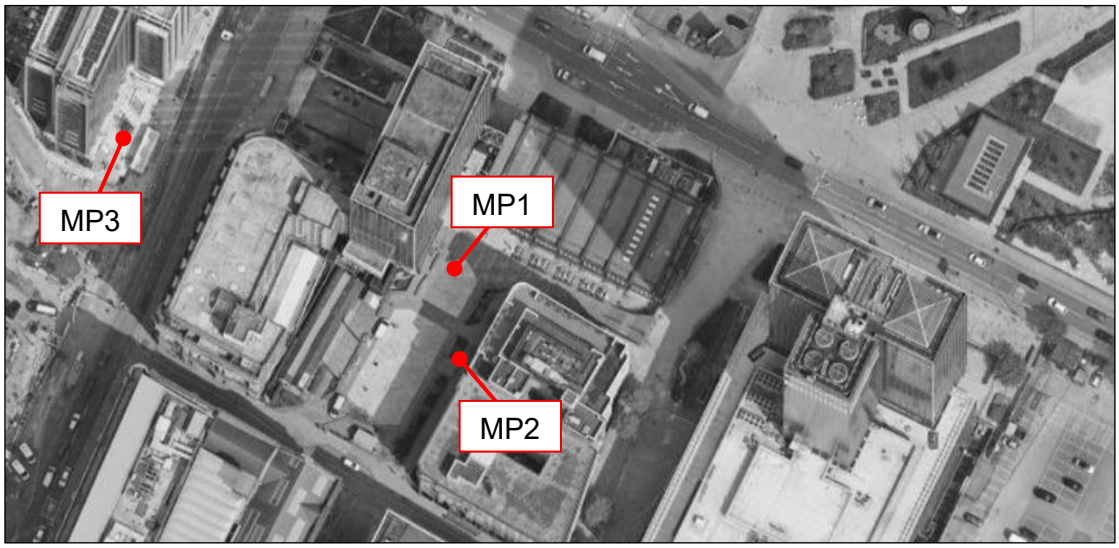
2.3 Measurement Positions

The noise level measurements were undertaken at 3No positions as described in the table below.

Position	Description
1	To the centre of the site, approximately 1-metre from the screen used to calibrate the levels. Microphone in free-field conditions approx. 1.5m above ground.
2	To the centre of the site, approximately 2-metres from the front of the probation service offices. Microphone in free-field conditions approx. 1.5m above ground.

Position	Description
3	Located to the northwest of the site at the boundary of the New Victoria residential building, approx. 5m from the nearside edge of Hanover Street. Microphone in free-field conditions approx. 1.5m above ground.

The markup below details the measurement positions of the attended survey.



Site Plan (Imagery ©2024 Airbus, Maxar Technologies, Map data ©2026)

3.0 Survey Results

3.1 Typical Daytime Levels

Initially, the noise levels of the screen were calibrated to the proposed criteria within the *"33130-RP1-Rev0-JH"* noise impact assessment. Calculations indicated that the following noise levels should comply with a view to achieving the suggested noise egress criteria. For brevity, this level is displayed in the table below.

Period	Maximum Sound Pressure Level at 1m from Screen (dBA)
Weekday (10:00 – 19:00)	76

The following noise levels were measured at 1-metre from the screen and 2-metres from the façade of the probation services respectively:

Scenario	Period	Sound Pressure Level (L_{eq} dB)								
		63	125	250	500	1000	2000	4000	8000	dBA
Measured Level at 1-metre from the screen	Typical Daytime	64	67	66	73	70	70	64	64	**76**
Measured Level with Screen operating at 2-metres from the offices		63	56	56	61	56	58	49	42	**63**

As detailed in the table above, the measured levels were above the criterion set for the office receptor. As such the levels were rebalanced and achieved the following level at 1-metre from the screen. The resultant noise level at 1m from the screen was as follows:

Sound Pressure Level (L_{eq} dB) at 1-metre from screen								
63	125	250	500	1000	2000	4000	8000	dBA
64	63	61	69	62	60	51	45	**69**

It should be noted that the above levels are approximately 7 dB lower than were initially calculated in Hann Tucker Report *"33130-RP1-Rev0-JH"*.

The following table details the measured levels at 2-metres from office receptor façade with the adjusted "Typical Daytime Levels" volume playing. The measured residual level with no entertainment noise playing is also displayed.

Scenario	Period	Sound Pressure Level (L_{eq} dB)							
		63	125	250	500	1000	2000	4000	8000
Measured Residual Level	Typical Daytime	58	55	54	51	49	46	42	36
Measured Level with Screen operating (Ambient Level)		59	55	52	55	51	51	43	34

The measured level corrected for the residual noise level can be seen in the table overleaf in comparison to the proposed criteria.

Scenario	Period	Sound Pressure Level (L_{eq} dB)								
		63	125	250	500	1000	2000	4000	8000	dBA
Corrected Level for Residual Noise	Typical Daytime	53	45	44	53	46	49	36	26	**54**
Criteria		62	59	53	53	52	46	39	30	**56**
Measured Level Exceedance		**-9**	**-14**	**-9**	**0**	**-6**	**3**	**-3**	**-4**	**-2**

As displayed in the table above, all of the external measured levels for the daytime limit comply with the exception of the 2000 Hz octave-band. The corrected level was obtained by using logarithmic subtraction, and due to the fluctuating nature of the residual level it is difficult to precisely calibrate each frequency band whilst on site. However, the overall dBA level is 2 dB below our proposed criteria and as such the typical daytime operational level should be suitable for its use case.

Furthermore, as stated in Section 2.1, these levels were measured during highlights of the loudest moments within a football match, and as such it is expected that the average noise level over a full 90-minute game will be at least 3 dB lower than 49 dB in the 2kHz octave-band.

3.2 Typical Evening and Weekend Levels

The noise levels of the screen were calibrated to the proposed criteria within the *"33130-RP1-Rev0-JH"* noise impact assessment. Calculations indicated that the following noise levels should comply with a view to achieving the suggested noise egress criteria. For brevity, this level is displayed in the table below.

Period	Maximum Sound Pressure Level at 1m from Screen (dBA)
Weekday (19:00 – 23:00) Weekend (10:00 – 23:00)	89

The spectrum in the table below shows an average noise level at the calibrated maximum permissible level during goals and highlights of a football match:

Sound Pressure Level (L_{eq} dB) at 1-metre from screen								
63	125	250	500	1000	2000	4000	8000	dBA
67	74	77	83	79	78	67	59	**84**

For robustness, further attended measurements were taken at the boundary of the residential building to assess the impact from the entertainment noise.

Scenario	Period	Sound Pressure Level (L_{eq} dB)							
		63	125	250	500	1000	2000	4000	8000
Measured Residual Level	Typical Evening and Weekend	74	71	63	60	61	57	50	49
Measured Level with Screen in operation		70	64	63	59	60	55	48	41

As can be seen in the table above, the measured residual levels are higher or equal to those measured with the screen in operation. It is determined that there should be no impact on the residents of the New Victoria residential building due to the screening and directionality of the noise generated within Sadler's Yard.

Subjectively, the noise generated from the screen was inaudible during HTA's time on site.

The noise levels measured at 1-metre from the screen were below the maximum permissible level calculated within the noise impact assessment and as such should be compliant at the residential receptors.

3.3 Typical Night-time Levels

The noise levels of the screen were calibrated to the proposed criteria within the *"33130-RP1-Rev0-JH"* noise impact assessment. Calculations indicated that the following noise levels should comply with a view to achieving the suggested noise egress criteria. For brevity, this level is displayed in the table below.

Period	Maximum Sound Pressure Level at 1m from Screen (dBA)
Night-time (23:00 – 07:00)	84

The spectrum in the table below shows an average noise level at the calibrated maximum permissible level during goals and highlights of a football match for the above scenario:

Sound Pressure Level (L_{eq} dB) at 1-metre from screen								
63	125	250	500	1000	2000	4000	8000	dBA
63	67	68	77	72	68	58	51	**77**

For robustness, further attended measurements were taken at the boundary of the residential building to assess the impact from the entertainment noise.

Scenario	Period	Sound Pressure Level (L_{eq} dB)							
		63	125	250	500	1000	2000	4000	8000
Measured Residual level	Typical Night-time	74	71	63	60	61	57	50	49
Measured Level with Screen in operation		77	67	63	61	61	56	49	41

The elevated low-frequency noise captured in the verifying measurement was due to heightened bus activity when compared with the initial residual measurement. As with the measurement at elevated levels commissioned for the weekend period, the entertainment noise from the screen was subjectively inaudible.

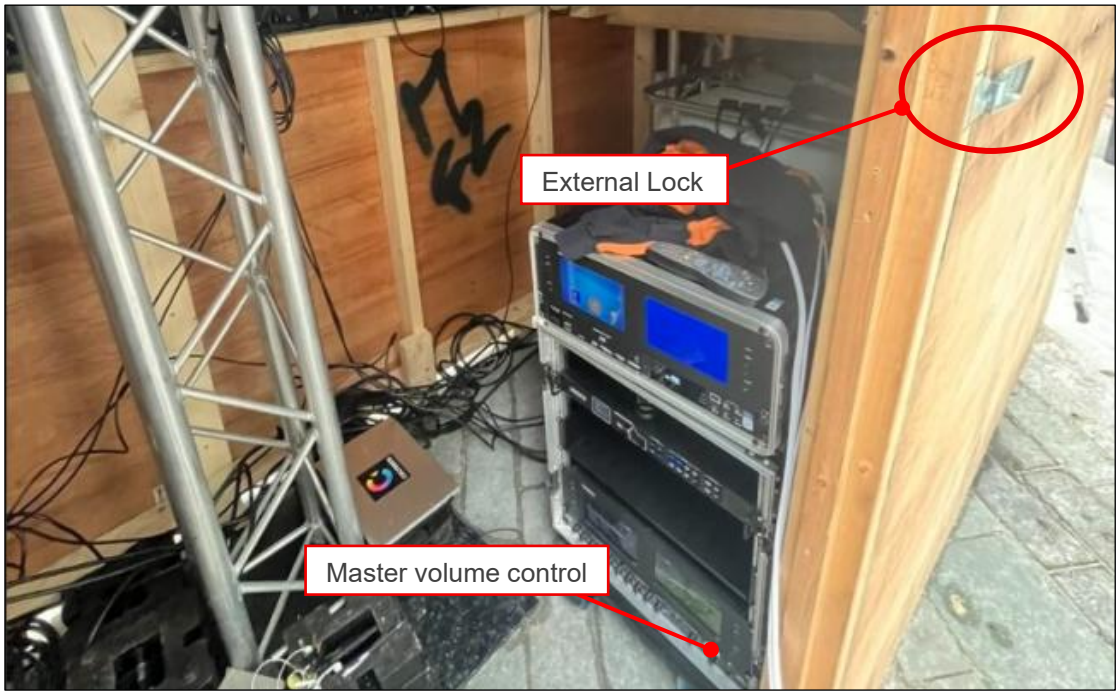
The noise levels measured at 1-metre from the screen were below the maximum permissible level calculated within the noise impact assessment and as such should be compliant at the residential receptors.

4.0 Discussion

Noise levels were calibrated and marked throughout the surveying period. The master mix control will only be accessible to the managers at New Century who will have a key to access the control room to the rear of the screen. The below image details the maximum position that the mix control can be set for the day, night, and weekend periods.



The image below evidences the lock to the rear door of the mix control room so that no persons except managers can access the above volume fader.



Further to the above, the system also operates through an electronic noise limiter and as such, the volume fader positions will achieve consistent noise levels with the commissioned noise levels discussed throughout this report.

Each of the commissioned levels complied with the proposed noise limits and as such the noise level at each of the receptors is compliant with the conditions imposed by the Local Authority.

[redacted]