



NOISE IMPACT REPORT REVISED UPDATE ASSESSMENT

Quay Club, Victoria Parade, Torquay TQ1 2BD

Undertaken by

Future Technical Solutions Ltd





Work undertaken to reduce Noise Emissions December 2020

These details and results should be produced with the original report by FTS dated 12th August 2020.

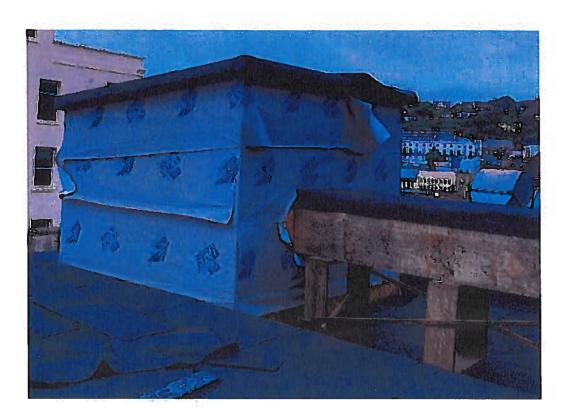
Main Extract

This has now had a new structure built over the extract system along with a baffled ducting. The structure has been built as a timber frame with two layers of acoustic plasterboard protected by a layer of marine plywood.











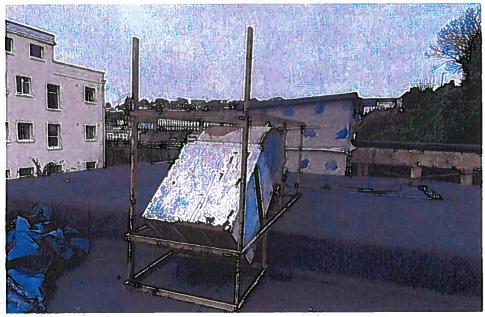




Intake System

There are two intake fan systems, there will be a bespoke housing fixed around the intake system to reduce noise breaking out of the ducting structure. The existing structure does not measure to be an issue, but it was felt best to include this into the current works to remove the risk.





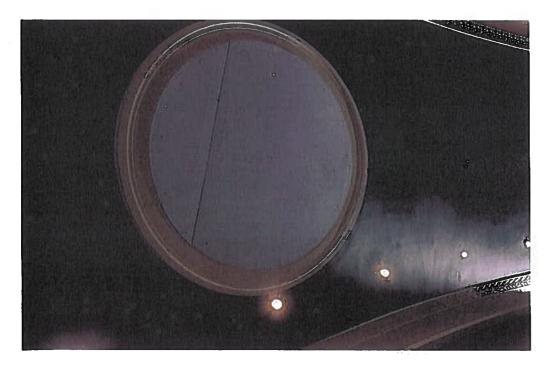


Torre Station Newton Road Torquay TQ2 5DD Tel:

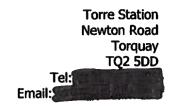
Original Intake Grills

There were two large grills which were fed from the two intake fans on the roof. These have now been diverted and the original grills removed and filled in with three layers of acoustic plasterboard.





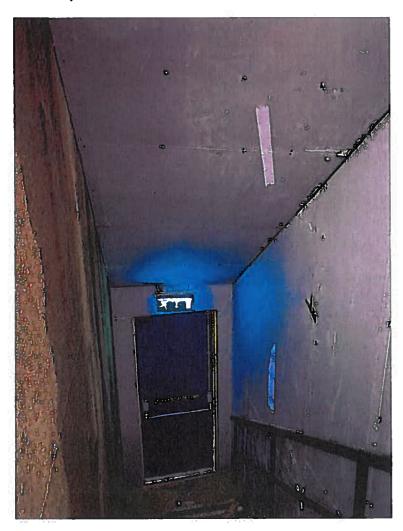




One of the intake systems is ducted to the ground floor via the main bar facilities drop with the second unit supplying fresh air to the first-floor mezzanine floor via the office.

Fire Exit 7

This historically has had issues as previously mentioned. The fire exit has now been re lined with two layers of plasterboard along with a new top step area. The bottom and top fire doors have also been backed with acoustic plasterboard.



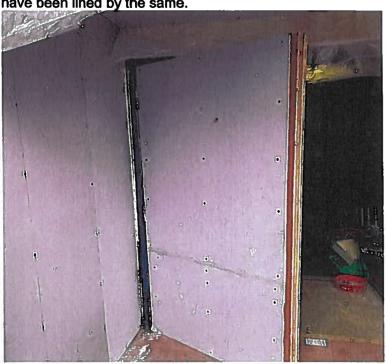




Fire Exit 8

This exit leads on to the roof area and was originally identified as a problem area. The exit has now been extended with an additional door. The lobby has been double lined with acoustic plasterboard and both doors

have been lined by the same.



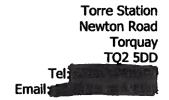












Office Vent

This was not originally found to be an issue but after carrying out the roof works this position of weakness showed. The access from the roof has been bricked in and two layers of plasterboard fitted internally.

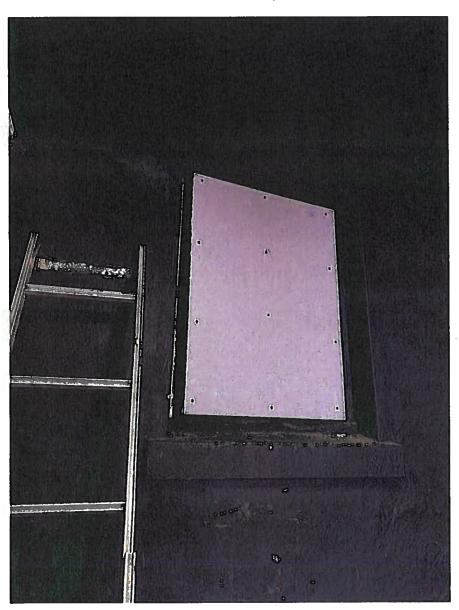






Roof Void Entrance Door

This door is now locked shut when not required, with the door fitted with an additional layer of plasterboard.







Test Results

After these works had been completed, we carried out some new test with different results and conclusions.

Location	Full Range	Band Frequency									
	(A)	32	63	96	125	250	500	1K	2K	4K	16K
Centre of Dancefloor	110	102	104	104	106	107	106	102	104	104	102
Position One	52	39	45	43	40	43	41	38	39	38	39
Position Two	49	40	42	42	40	39	32	32	32	30	28
Position Three	66	53	55	52	51	49	46	46	45	45	41
Position Four	51	45	46	42	40	43	43	43	42	41	41
Position Five	54	42	45	45	42	42	41	38	38	39	38

80's Club

Separate sound tests were carried to the adjacent property "the 80's Club". The results here were greatly reduce from the previous test but to achieve the best results it is felt the bass levels from 125Hz downwards might need to be reduced further.

Sound System

The sound system is a Martin Audio Wavefront system. A professional point source system with front loaded bass units. This type of system reduces unwanted bass resonance and mid high levels will travel with the inverse law theory and reduce levels in distance. The system is protected and processed via a BSS London Blu sound processor giving us, the installer, all the tools required to set the system for optimum performance as well as full limiting facilities on all frequency bandwidths. The processor can only be "connected to" via a direct IP address and the original software setup. Without this access it is impossible to change any of the settings on the system as there is no manual control on the system. This will remove any chance of external interference or accidental abuse of the system.

The system is currently setup to perform as well as allowed by the restrictions of the mechanics of the building. It has been explained to the operators that the limiters will be required to be "set" by Torbay EHO officers. The final levels will then be agreed as is standard practice and locked off.





Noise Monitoring System

There has been a new noise monitoring system installed on the new smoking terrace. This system gives the operator a visual display of levels on the smoking terrace.

Green - low levels up to 10db above ambient.

Orange – medium levels going over 10db over ambient – this should be addressed by staff in the venue. Red – high levels – the smoking terrace should be closed.

These levels are currently set at an agreed setting but can be changed by FTS operatives either on site or remotely if required to do so by EHO officers.

The system also records 28 days of data and has a remote login facility giving the EHO department access at anytime to observe trading levels as well as response to any possible problems.

Below is the link to the system:

Quay Club Noise Monitor FTS

Conclusion

While the results are very promising, we feel there is still a need to address the main system especially bass levels. This would then reduce external levels to almost inaudible.

It is also felt that it must be stressed that the in-house system is the only system to be used in the premises with the digital processor as setup.