

## Appendix 5 – Summary observational analysis of construction and street works sites 2018

Date	Site	Location of monitoring	Time	Noise Data	Comments
24th March 2018	Compass / ISG Walsingham House - Crutched Friars	outside 39 Crutched Friars	07:55	59.2dB 1min *LAeq	taken before noisy works started on Crutched Friars, fan noise from Hilton dominant
			08:07	77.1dB 8min LAeq	noise of only the lorry being used taken
			08:17	73.6dB 10min LAeq	lorry switched on and off, no noise from ISG at the time
24th March 2018	35 Vine Street	outside 3 America square	08:27	72.8dB 15min LAeq	at least 2 breakers being utilised for breaking on Crosswall element of site, taxi and vans kept parking in front of me
24th March 2018	10 Fenchurch Avenue / 80 Fenchurch Street	outside East India Arms	09:12	66.7dB 3min LAeq	longer monitoring not possible as Lloyds Register were testing their fire alarm system
24th March 2018	22 Bishopsgate	St Michaels alley	09:32	62.4dB 10 LAeq	monitoring not representative of this location - there were filming activities being set up in this area, there were many more people than I would normally expect in this location
24th March 2018	BSCU - Cannon Street / King William Street	1 Abchurch Yard	09:54	63.9dB 20min LAeq	concrete lorry onsite
24th March 2018	Rhatigan's - 111 Cannon Street	The Bell, Bush Lane	10:40	66.2dB 5min LAeq	dominant noise from the traffic on Cannon Street and delivery vehicles on Bush Lane
24th March 2018	Queens Bridge House	Queens Quay	10:49	73.2dB 5min LAeq	traffic noise from Upper Thames Street was the dominant source, very little activity taking place on Queenhithe side of the street
24th March 2018	Thames Tideway Tunnel	Temple House Apartments - Tallis street	11:14	70.8dB 10min LAeq	pile driving activities very audible from the River
24th March 2018	Knight Harwood - 90 Fetter Lane	95 Fetter Lane	11:34	62.6dB 10min LAeq	mobile crane working in Fetter Lane at the time
24th March 2018	24-30 West Smithfield	32 Cock Lane	11:54	65.4db 10Min LAeq	concrete works taking place on site.
24th March 2018	55 Gresham Street	Guildhall West Wing Reception	12:19	58.8dB 5min LAeq	no noisy works audible from site - dominant noise source was traffic
24th March 2018	52 Lime Street	Crechurch Lane / Leadenhall Street	12:33	67.5dB 5 min LAeq	dominant noise from the traffic on Leadenhall Street
14 April 2018	Crossrail / 100 Liverpool Street	The Railway Tavern / Old Broad Street	08:00	65.4dB 10 min LAeq	dominant noise source is drilling into concrete and cutting which was from Finsbury Circus. Station announcements also very audible.
14 April 2018	21 Moorfields	Willoughby House Highwalk	09:15	54.3dB 10 min LAeq	Traffic noise was the most dominant noise in this area, as well as scaffolding activities in Fore Street
14 April 2018	Bart's Close	43 Bart's Close	09:38	55.1dB 6-minute LAeq	stopped monitoring due to phone call from highways - general site noise audible
14 April 2018	24-30 West Smithfield	12 Cock Lane	09:59	76.5dB 8:43 Minute LAeq	Concrete lorry in situ undertaking mass pour
14 April 2018	70 Farringdon Street	5-7 Andrew Street	10:20	59.9dB 10min LAeq	hoist most dominant noise in this area, along with traffic from Holborn circus.
14 April 2018	2-6 Cannon Street	Festival Gardens	10:57	60.7dB 10 min LAeq	traffic noise dominant noise source
14 April 2018	Rineys - Queen Street / Queen Victoria Street	Calico House, Watling Street	11:15	68.5dB 12.15 LAeq	generator from Rineys Site was the most dominant noise source along with the cutting of stone.
14 April 2018	Rattigan's / Bennetts	Travelodge St Swithins Lane	11:37	66dB 10.33 LAeq	low flying aircraft very loud, sanding and scaffolding activities dominant noise.
14 April 2018	32 Lombard Street	George & Vulture	11:53	59.3dB 10min LAeq	general traffic noise, voices from local area walking tour
14 April 2018	100 Bishopsgate	City Wall House, 10 Wormwood Street	12:11	72.8dB 4Min LAeq	site not audible over noise of the traffic on Wormwood Street
14 April 2018	150 Bishopsgate	Andaz, Liverpool Street	12:18	69.4dB 5 min LAeq	traffic and pedestrian noise is the dominant source in the area, breaking could be heard but could not determine origins.
28 April 2018	Queens Bridge house, Upper Thames Street	Outside Queen Quay	07:03		Vehicle movements, alarms sounding. Requested alarm turned off till after 08.00 - as per SHVR
28 April 2018	Thames Tideway Project	Corner of Temple Ave	07:57	65.3dB 10min LAeq	Vehicle movement, machine alarms. Traffic noise louder when moving
28 April 2018	Knight Harwood, 90 Fetter Lane	Corner of 95 Fetter Lane	08:23	63.0dB 10 min LAeq	Scaffolding being removed, people / work chatter.
28 April 2018	Site corner of Furnival St / Norwich St	op old pub Furnival ST	08:40	58.8dB 10 min LAeq	Jack hammering, cutting. Traffic noise loud when passing site
28 April 2018	Multiplex 70 Farringdon St	Holborn Viaduct	09:00		No noise from site. Noise from street works
28 April 2018	Gilbert Ash, Premier Inn, West Smithfield	outside 32 Cock lane	09:16	72.3dB 10 Min LAeq	Dropping / throwing scaffolding poles. Once was noticed on site, poles were being placed. Spoke to site manager about BPM
28 April 2018	Bart's area	corner of little Britain near pure gym	10:03	76.8dB 10 min LAeq	Lots of work in the area, road and building. Scaffolding going up by hospital
28 April 2018	Bart's Close Site	outside 43 Bart's Close	10:40	69.5dB 10 min LAeq	drilling jack hammering

28 April 2018	Bernard Morgan House, Golden Lane (closed)		11:00		
28 April 2018	21 Moorfields (Closed)		11:10		
28 April 2018	121 London Wall (no external works)		11:12		
28 April 2018	60 London Wall	opp. Salisbury house	11:25	71.2dB 10 min LAeq	machine noise heard, even over traffic noise
28 April 2018	100 Liverpool Street	Outside Railway Tavern	11:42	66.2dB 10 min LAeq	drilling / hammering heard, machinery alarms heard
28 April 2018	135 Bishopsgate		11:55		Minimal noise heard from site, traffic was louder
28 April 2018	100 Bishopsgate (rear of site)	63 St mary Axe	12:00		loud banging heard, removing a crane
28 April 2018	22 Lime Street (closed)		12:20		Not working Leadenhall was closed for filming
28 April 2018	Queen Bright House, Upper Thames Street	Outside Queen Quay	12:46	72.5dB 10 min LAeq	Hammering from within site
06 October 2018	Arthur Street	By the monument statue	08:05	LAeq 69.6dB, 5-minute monitoring	Predominant noise is the fan/machinery from the works. Other sounds include sirens, cars.
06 October 2018	Siteworks outside cannon street house / on the side of upper themes street and street works at the top of cousin Lane	Corner of dyers hall	08:30	LAeq 77.4, 6 minutes	Arrived on site to contractors using circular saws to cut into the street surface. Once the workers noticed me turn up they switched saws to one that sounded (to me) quieter.
06 October 2018	Street works on the corner of Dyers Hall	Outside innholders hall	08:40	LAeq 76dB, 10 minutes	As I was monitoring another site was set up right next to where I was standing. I then moved down the road to record the new site. The predominant sounds were cutting into the stone as well as some breaking. There was also rests in the noise between cuts etc.
06 October 2018	Hill House	Pemberton House	09:25	LAeq 70dB, 15 minutes	Steel Works drilling in the basement of Hill House, some other unrelated noise events happened too.
06 October 2018	Works at Lindsey Street	Corner of east market	10:30	LAeq 68.7dB, 10 minutes	Rain. There was one digger moving this around, there was also a team doing road resurfacing. Predominant noise was cars.
06 October 2018	21 Moorfields	Willoughby House Parking Garage	11:10	LAeq 59.7dB, 5 minutes	Rain, No Noisy works going on, stood by barbican site wall. Any spikes in noise were from sirens, cars, pedestrians
06 October 2018	41/42 London Wall	Other side if the road by Coco Di Mama	11:24	LAeq 72.2 dB, 3 Minutes.	Rain, some construction noise but not significant, 54-65 London wall development was also making noise. Most significant was car noise
06 October 2018	Liverpool Street, Crossrail	Outside the Railway Tavern	11:50	LAeq 70dB, 5 minutes	Rain, Drilling noise, pedestrians, whistle from site operator for traffic management reasons, Lorry.
06 October 2018	Skanska site, Fenchurch Street	outside 3 Tons	12:10	LAeq 66. dB, 5 minutes	Rain. Noise from breakout, and cars at top of the street.
13 October 2018	London Underground, Moorgate Station	Outside London met uni. X: 532739.1 y:181618.3	08:14	LAeq 67dB 5 min	Main noise is road. Other noise is high pitched safety beeps.
13 October 2018	45 London Wall	Co Co Di Mama	08:30	LAeq 77. 15 mins	Main sounds are traffic beeping. Some banging from site, car horns, site deliveries, Piling/drilling (I could feel vibration from across the road) Some high and low frequency sawing from another nearby site.
13 October 2018	Crossrail	Outside the railway tavern	09:00	LAeq 68.9dB 5 min	deliveries, whistles, beeps, clangs, constant background machine 'whir' pedestrians
13 October 2018	Broad Street Place Scaffolding	Other side of street	09:10	LAeq 70.7dB 10 minute	Some traffic, pedestrians and delivery. Scaffolding not very loud
13 October 2018	The Denizen	The corner of barbican estate 1st floor next to Breton house	09:40	LAeq 63.2dB 10-minute l	Sawing, banging. Nothing to significantly disruptive
13 October 2018	51 Moorgate / Coleman street	Outside Whitehorse yard	10:20	LAeq 66.4dB 10min	predominant noise is generator. Peaks are from metal struts being put down as activity is crane lifting struts to top of building. Nail gun for hoarding as well
13 October 2018	Leadenhall ST	Pedestrian area opposite	10:50	LAeq 66.4dB 3 min	Works mostly inside building. Predominant noise is traffic and pedestrians
13 October 2018	Gasworks outside 67 Fenchurch street	Side entrance of east India PH	11:00	LAeq 75.2dB 10min	Digger moving earth, dropping piping not placing observed. Engines, pedestrians, pipe sawing.

**\*Leq (or LAeq) is the Equivalent Continuous Sound Pressure Level**

Equivalent Continuous Sound Pressure Level, or Leq/LAeq, is the constant noise level that would result in the same total sound energy being produced over a given period. LAeq is a fundamental measurement parameter designed to represent a varying sound source over a given time as a single number. This number is a measure of the energy contained within the sound at the point of the receiver. This is useful in terms of the potential for sound to damage or disturb and is extensively used in environmental noise standards as well as many other regulations and documents.

Quick commentary: Observational analysis and noise monitoring was carried out across the City on Saturday mornings to better understand what activities are occurring and the noise impacts experienced from the nearest receptors. The observations show that the City is a noisy place and many activities are occurring unrelated to construction which are often the dominant noise sources e.g. traffic, filming and deliveries. The noise measurements taken should be considered in the context of the diagram below that shows the decibel levels for various sounds to give some context to the levels. The levels measured in the City during the Saturday mornings observed are representative of the prevailing background levels made up of all sources (people, traffic, deliveries, events and filming) that the City experiences.

Figure 1. Sound Level Decibel Loudness Comparison Chart.

