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9/05/2022

Built Pty Ltd & Obayashi Corporation
Level 4
185 Clarence Street
SYDNEY NSW 2000

Attn: Tom Matthews

Atlassian Building Central, 8-10 Lee Street, Haymarket - Modification to Condition F8 Hours of Work

Acoustic Logic has been engaged by Built Obayashi Joint Venture (BOJV) to review the currently approved restricted construction hours of Condition F8 within development consent SSD 10405 in relation to the specific construction activities as detailed below:

'F8. Rock breaking, rock hammering, sheet piling, pile driving and similar activities may only be carried out between the following hours:

- (a) 9am to 12pm, Monday to Friday;*
- (b) 2pm to 5pm Monday to Friday; and*
- (c) 9am to 12pm, Saturday.'*

Given the necessity to undertake demolition, bulk excavation and piling activities at the project site, the use of the following equipment derived from construction activities nominated by Condition F8 is required:

- Excavator with hydraulic hammer attachment.
- CFA bore piling.

It is requested by Built Obayashi Joint Venture (BOJV) to increase the approved construction hours of Condition F8 to the revised hours summarised below:

- (a) ~~9am~~ 8am to 12pm, Monday to Friday;*
- (b) ~~2pm~~ 1pm to 5pm Monday to Friday;*
- (c) 9am to 12pm, Saturday; and*
- (d) 1pm to 3pm, Saturday.*

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Given the above, this office comments the following:

- In regard to the proposed CFA bore piling to be undertaken at the project site, this type of piling generates significantly less noise and vibration in comparison to sheet piling or driven piles as nominated within Condition F8. This is referred to in the worked example within the NSW EPA *'Interim Construction Noise Guideline' (ICNG)* in section 6 which states *'using a lower noise and vibration generating form of piling, such as bored piling for retaining walls, instead of impact piling'*. See Table 1 below for noise level predictions of CFA bore piling to the nearest surrounding receivers presented in Figure 1 against the corresponding noise limits of the City of Sydney Council *'Code of Practice for Construction Hours/Noise within the Central Business District 1992'*.

The closest affected sensitive receivers within the vicinity of the site are as follows:

- **Receiver 1:** 'Adina Hotel' located at 2 Lee Street, Haymarket to the west. The commercial receiver is multi-storey and has windows which overlook the proposed construction site.
- **Receiver 2:** Central Station 'Platform 1' to the north-east of the proposed construction site.
- **Receiver 3:** Devonshire Street pedestrian tunnel to the south of the proposed construction site.
- **Receiver 4:** Commercial receiver located at 12-30 Lee Street, Haymarket. The commercial receiver is multi-storey and has windows which overlook the proposed construction site.
- **Receiver 5:** Sydney water pipelines located to the south of the proposed construction site, beneath the Devonshire Street tunnel.
- **Receiver 6:** 'Wake Up' commercial receiver located at 509 Pitt Street, Haymarket. Commercial receiver is multi-storey and has windows which overlook the proposed construction site.
- **Receiver 7:** Commercial receiver located at 815 – 825 George Street, Haymarket. Commercial receiver is multi-storey and has windows which overlook the proposed construction site.
- **Receiver 8:** Residential receiver located at 107-121 Quay Street, Haymarket. Residential receiver is multi-storey and has windows which overlook the proposed construction site.
- **Receiver 9:** Existing heritage structures and assets surrounding the proposed construction site.

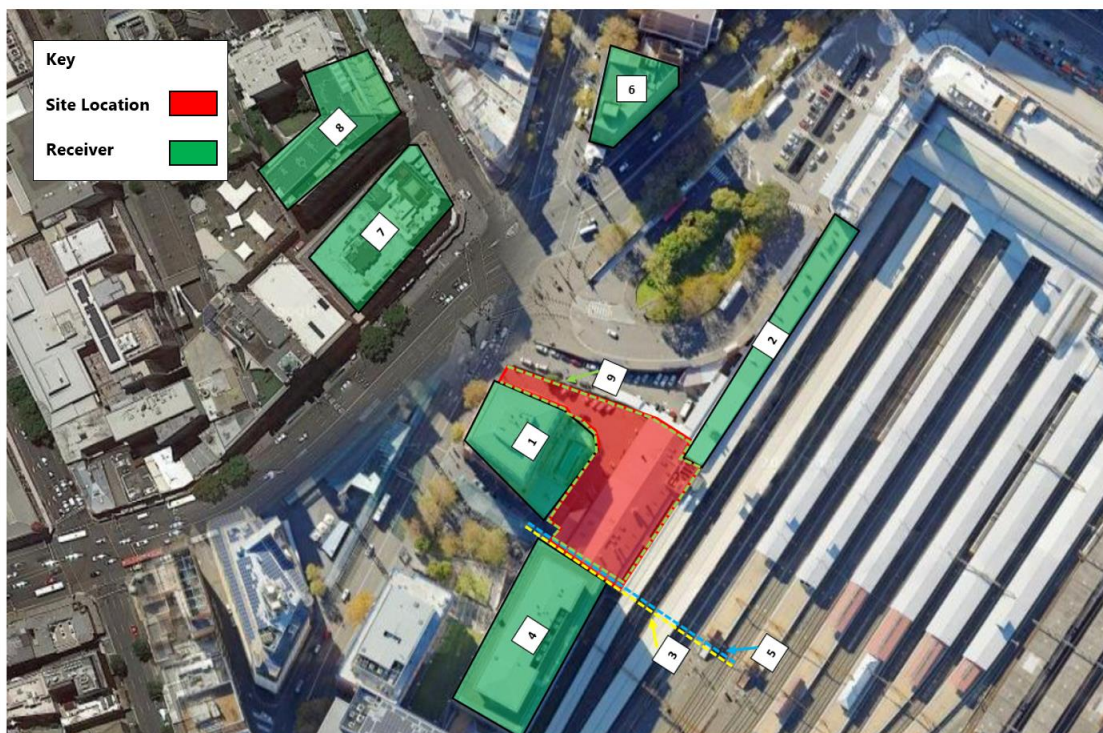


Figure 1: Nearest Sensitive Receivers

Table 1 – CFA Bore Piling Predicted Noise Levels to Nearest Surrounding Receivers

Receiver Location	CFA Bore Piling Predicted External Noise Level dB(A) L₁₀(15 min)	City of Sydney Construction Noise Level Limit dB(A)L₁₀ (15min)
R1	68*	Monday – Friday (7.00am – 8.00am) = 57
		Monday – Friday (8.00am – 7.00pm) = 62
		Saturday (7.00am – 8.00am) = 57
		Saturday (8.00am – 3.00pm) = 62
R2	60	Monday – Friday (7.00am – 8.00am) = 62
		Monday – Friday (8.00am – 7.00pm) = 67
		Saturday (7.00am – 8.00am) = 62
		Saturday (8.00am – 3.00pm) = 67
R4	48*	Monday – Friday (7.00am – 8.00am) = 61
		Monday – Friday (8.00am – 7.00pm) = 66
		Saturday (7.00am – 8.00am) = 61
		Saturday (8.00am – 3.00pm) = 66
R6	54	Monday – Friday (7.00am – 8.00am) = 64
		Monday – Friday (8.00am – 7.00pm) = 69
		Saturday (7.00am – 8.00am) = 64
		Saturday (8.00am – 3.00pm) = 69
R7	56	Monday – Friday (7.00am – 8.00am) = 66
		Monday – Friday (8.00am – 7.00pm) = 71
		Saturday (7.00am – 8.00am) = 66
		Saturday (8.00am – 3.00pm) = 71
R8	51	Monday – Friday (7.00am – 8.00am) = 65
		Monday – Friday (8.00am – 7.00pm) = 70
		Saturday (7.00am – 8.00am) = 65
		Saturday (8.00am – 3.00pm) = 70

Note: Receivers 3, 5 and 9 as presented in Figure 1 above have not been included in the above table given that these receiving locations are vibration sensitive structures only. See below for a detailed receiver description.

- **Receiver 3:** Devonshire Street pedestrian tunnel to the south of the proposed construction site.
- **Receiver 5:** Sydney water pipelines located to the south of the proposed construction site, beneath the Devonshire Street tunnel.
- **Receiver 9:** Existing heritage structures and assets surrounding the proposed construction site.

* It is noted based on discussions with Built Obayashi Joint Venture (BOJV) that the Adina Hotel being Receiver 1 and the CPS commercial office building being Receiver 4 in Figure 1 of this letter is to be unoccupied during the time period the construction works are to be undertaken. Therefore, noise impacts to occupants of receiver 1 and 4 are considered inconsequential.

- In addition, it is this office's opinion that CFA bore piling would not typically generate any higher noise or vibration levels than typical excavation activities which is not restricted by the hours of Condition F8. On this basis, CFA bore piling should not be restricted by the approved hours of Condition F8 and the construction hours of Condition F5 should be the only hours applied to this construction activity.
- The requested increase in the approved construction hours of Condition F8 is considered reasonable as the 8am to 12pm and 1pm to 5pm (Monday to Friday) and 9am to 3pm (Saturday) construction periods remain to be within category 1 of the City of Sydney Council '*Code of Practice for Construction Hours/Noise within the Central Business District 1992*' being a noise limit of BG +10dB(A).

A breakdown of the nominated restricted construction hours of Condition F8 against the requested increase of Condition F8 construction hours are presented in Table 2 below:

Table 2 – Condition F8 Approved Construction Hours against Requested Increase

Day/Time Period	Number of Approved Condition F8 Construction Hours	Number of Requested Condition F8 Construction Hours	Per Day Increase
Monday to Friday	6 hours per day	8 hours per day	33%
Saturday	3 hours per day	6 hours per day	100%

Based on the requested increase of the approved Condition F8 construction hours, see Table 3 below for the duration of hydraulic hammering and rock breaking construction activities based on Built Obayashi Joint Venture's (BOJV) current milestone program.

Table 3 – Reduction of Disruptive Works based on Increased Hours

Phase	Duration of work based on current Condition F8 approved hours	Duration of work based on requested increase of Condition F8 hours	Reduction
Demolition	36 weeks	22 weeks	-14 weeks
Piling	24 weeks	14 weeks	-10 weeks
Excavation	24 weeks	14 weeks	-10 weeks

Based on the above requested increase in daily construction hours for hydraulic hammering and rock breaking activities, this increase in daily hours will inherently decrease the overall hydraulic hammering and rock breaking period for the project and will reduce the prolonged noise exposure of potential disruptive works on surrounding receivers.

We trust this information is satisfactory. Please contact us should you have any further queries.

Yours faithfully,

A handwritten signature in black ink, appearing to read "S. Nichols". The signature is written in a cursive, slightly slanted style.

Acoustic Logic Pty Ltd
Shane Nichols