

Spunlock Pty Ltd

September 2023

# **Commercial Development 149 Canberra Avenue, Fyshwick ACT**

## Noise Management Plan

wsp



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Commercial Development  
149 Canberra Avenue, Fyshwick ACT  
Noise Management Plan

Spunlock Pty Ltd

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WSP acknowledges that every project we work on takes place on First Peoples lands.  
We recognise Aboriginal and Torres Strait Islander Peoples as the first scientists and engineers and pay our respects to Elders past and present.

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# Executive summary

WSP Australia Pty Ltd has been engaged by Spunlock Pty Ltd to provide a Noise Management Plan for inclusion in the Development Application to assess the potential noise impacts associated with the proposed development at Blocks 6 and 7 Section 7 Fyshwick ACT.

The project proposes:

- A purpose-built single storey building to be occupied by a KFC restaurant.
- A single storey building to be occupied by another restaurant tenancy.
- A single storey building to be occupied by three commercial tenancies.

The assessment has been prepared in reference to the planning requirements of the ACT Industrial Zones Development Code, Environment Protection Regulation (ACT) as well as noise assessment guidelines provided by the ACT Environment Protection Authority.

With regard to potential noise emission due to possible noisy uses within the proposed development, the ACT Environment Protection Authority guidance for internal music noise level for Restaurant use has been assumed. Any well sealed, closable, standard façade construction meeting  $\geq R_w 31$  is deemed to be suitable for the proposed KFC restaurant and restaurant tenancy. This is however subject to further assessment and optimisation during detailed design stage.

Noise associated with truck deliveries within proposed development are not expected to significantly change the existing acoustic character of the general area or cause significant noise disturbance.

Noise emissions from other potential noise sources associated with the drive through's Customer Ordering Devices and general on-site vehicle movements are also unlikely to cause significant noise disturbance.

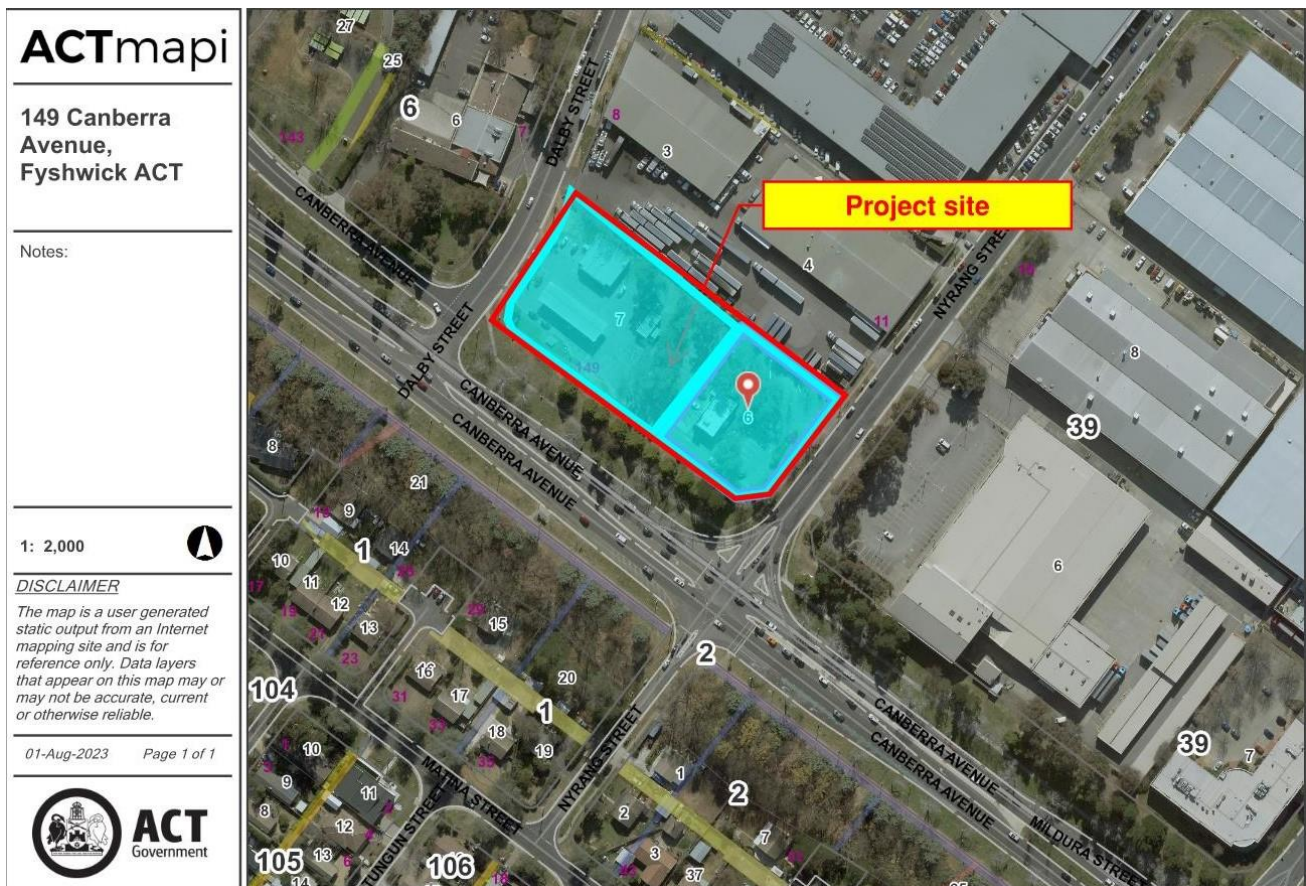


# 1 Project background

WSP Australia Pty Ltd (WSP) has been engaged by Spunlock Pty Ltd (the Client) to provide a Noise Management Plan (NMP) for inclusion in the Development Application (DA) to for the proposed commercial development at 149 Canberra Avenue, Fyshwick ACT.

## 1.1 Project Description

The commercial development is located adjacent to Canberra Avenue, Dalby Street and Nyrang Street situated within Block 6 and 7 Section 7 Fyshwick ACT, as shown in Figure 1.1.



Source: ACTmapi, accessed 30 August 2023

Figure 1.1 Aerial photograph indicating the approximate location of the project site

It is understood that the following land uses are located near the proposed development site:

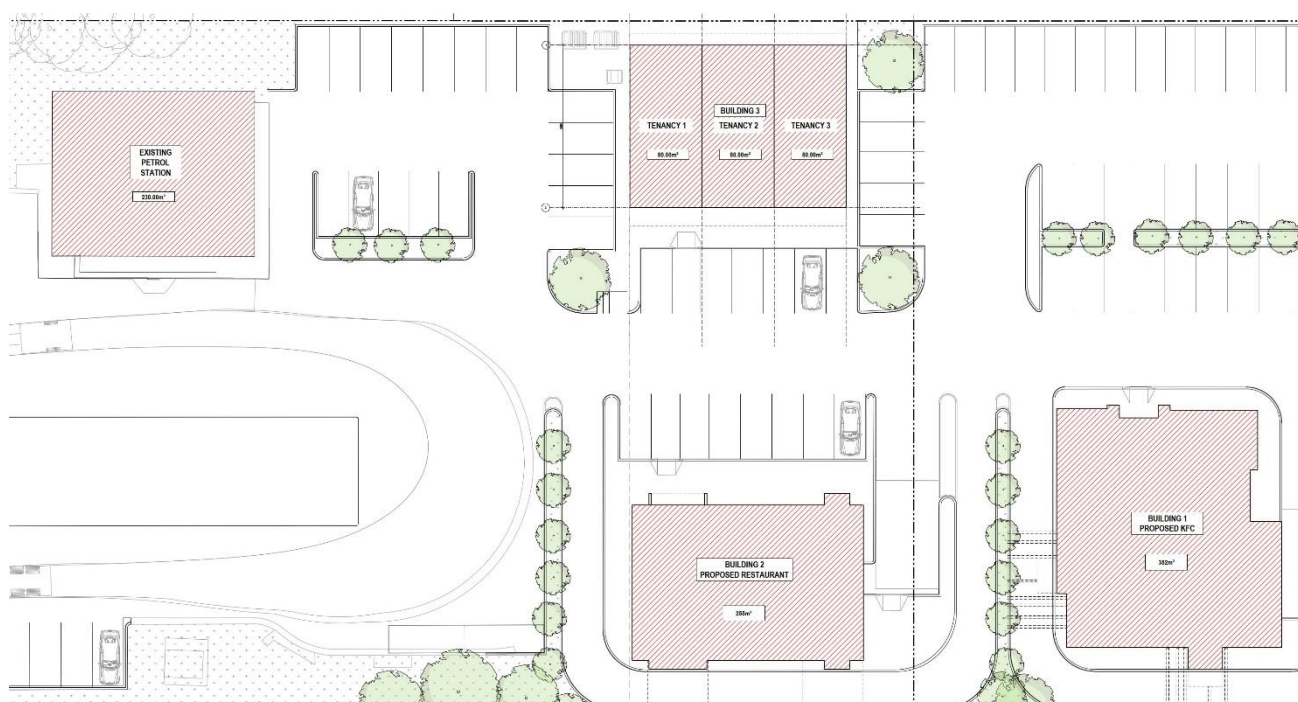
- Trucking company establishment to the north.
- Shipping and mailing establishment to the east.
- ACT Fire and Rescue and ACT Ambulance Service Station to the west.
- Residential dwellings to the south, on the opposite side of Canberra Avenue.

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## 1.2 Project proposal

Figure 1.2 shows the preliminary site plan of the proposed development, which is understood to be a commercial development consisting of:

- A purpose-built single storey building to be occupied by a KFC restaurant (Building 1).
- A single storey building to be occupied by a restaurant tenancy (Building 2).
- A single storey building to be occupied by three commercial tenancies (Building 3).
- “Drive through” lanes including associated ordering systems for the proposed restaurants.
- Car parking for the proposed restaurants and commercial tenancies
- A designated communal loading bays providing deliveries and garbage collection by trucks for the proposed restaurants.



Source: DA Documentation Area Plan Drawing A103 Rev A, dated 1 September 2023

Figure 1.2 Preliminary site plan of the proposed development

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## 1.3 Site Zoning

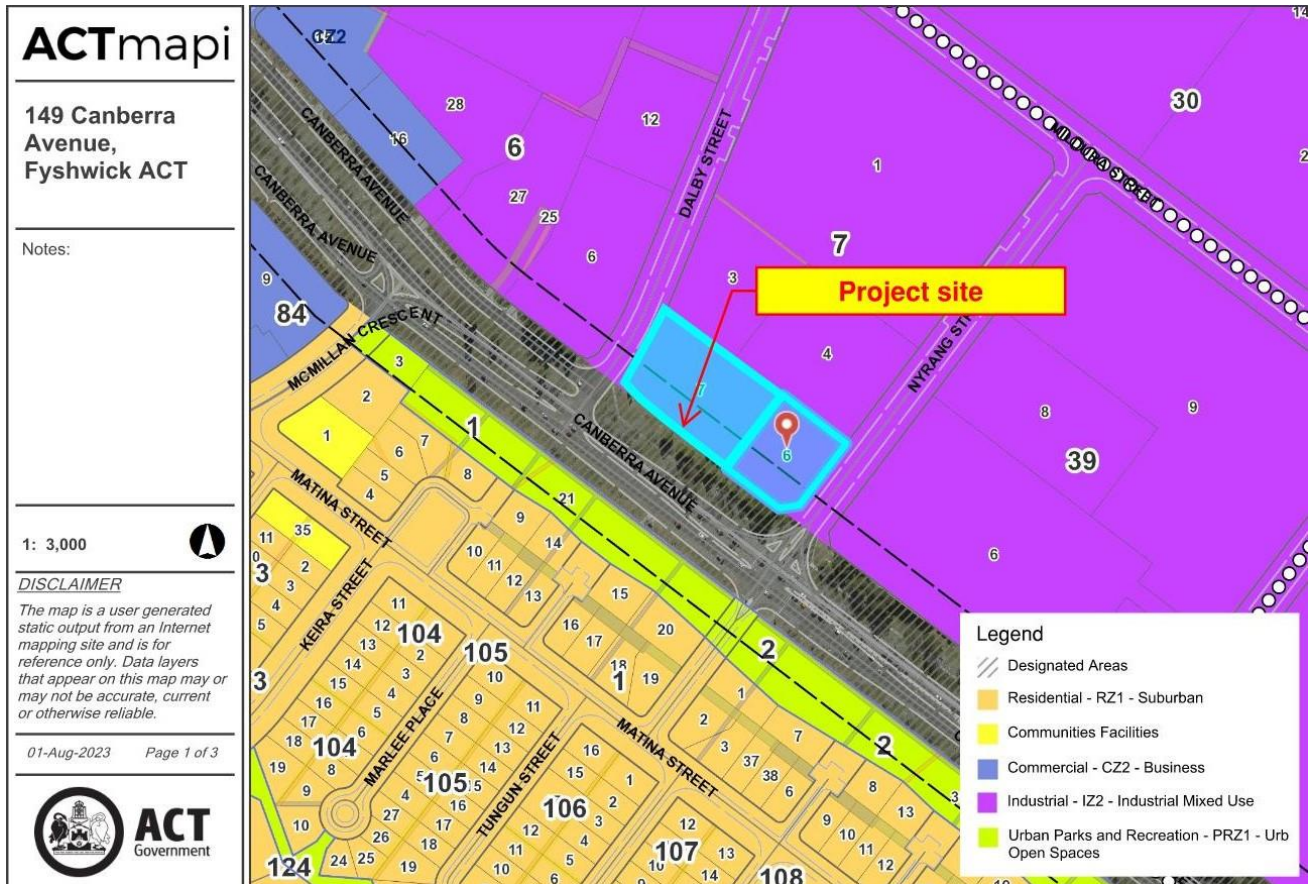
Based on the ACT Territory Plan, accessed from ACTmapi and reproduced in Figure 1.3, the proposed development is zoned as Industrial (IZ) 2: Industrial Mixed Use.

Surrounding land uses include:

- Other blocks zoned as IZ2
- Land designated as being in the Central National Area (Parliamentary Zone and other areas)
- Residential (RZ) 1: Suburban
- Community Facilities Zone (CFZ)



- Parks and Recreation (PRZ) 1: Urban Open Space
- Commercial Zone (CZ) 2: Business Zone



Source: ACTmapi, accessed 30 August 2023

Figure 1.3 ACT Territory plan excerpt indicating site location and surrounding land uses

## 2 Planning requirements

The relevant criteria applicable to the project site have been established in accordance with the following documents:

- Industrial Zones Development Code (ACT)
- Environment Protection Regulation (ACT)
- Noise Environment Protection Policy (ACT)
- ACT Territory Plan
- ACT Environment Protection Authority Guidelines for the Preparation of Noise Management Plans for Development Applications (March 2021)

### 2.1 ACT Industrial Zones Development Code

This NMP has also been prepared in accordance with the ACT EPA Guidelines for the Preparation of Noise Management Plans for Development Applications (March 2021) which states that:

*The NMP must address noise from all permitted uses identified as being noisy, regardless of whether the permitted use is utilised. If a noisy use is permitted by the Crown lease, the noise must be attenuated at the building design stage or by measures that allow the attenuation to be incorporated in the future should a permitted use be activated.*

The proposed development will be required to meet the provisions of the Industrial Zones Development Code, ACT (IZDC). IZDC Rule 34 requires the preparation of an NMP for certain potentially noisy land uses. These uses are shown in Table 2.1 and compared to the permitted uses for this development, where the specific uses that trigger the requirement for a noise assessment are emboldened.

Table 2.1 IZDC potentially noise uses, compared with the Crown Lease permitted uses for this development

Potentially noisy uses within an Industrial Zone for which an NMP is required by the IZDC		Permitted uses in the Application to Vary a Crown Lease	
— Club	— Industry (except light industry)	— Ancillary use	— Non-retail commercial use RESTRICTED To office
— Drink establishment	— Indoor entertainment facility	— Community use	— Produce market
— Hotel	— <b>Restaurant</b>	— Defence installation	— <b>Restaurant</b>
		— Emergency services facility	— Service Station
		— Freight transport	— Shop
		— Indoor recreation facility	— Warehouse
		— Light industry	

IZDC Rule 34 also states that the NMP should be prepared by an accredited acoustic specialist who is a member of the Australian Acoustical Society (AAS). All WSP staff involved with the preparation of this report have AAS membership and are based in locations that hold membership of the Association of Australian Acoustical Consultants (AAAC).

These personnel have completed a wide range of Noise Management Plans and undertaken associated activities that have been endorsed previously by the ACT Environment Protection Authority (EPA).



## 2.2 ACT noise zone limits

The Environment Protection Regulation (ACT) 2005 (EPR) prescribes requirements designed to control or govern conduct regarding how the environment is impacted from activities and developments. Table 2.1 and Table 2.2 from Schedule 2 of the EPR define noise zones and their associated noise standards, as summarised in Table 2.2. The noise standards applicable to this project are highlighted for clarity (Zone A).

Once a noise zone has been identified according to the ACT Territory Plan, the Noise Standard for that zone is applicable as an upper limit. Section 8.2 of the Noise Environmental Protection Policy, ACT (NEPP) states that the limits shown in Table 2.2 are to be measured as  $L_{A10} T$ , where 'T' is not less than 5 minutes or greater than 15 minutes. In assessing the noise impact at sensitive receivers, the EPR describes the compliance point as any point as near as practicable to the property boundary.

Table 2.2 ACT Environment Protection Regulation (2005) Schedule 2 Noise Zones and Standards

Noise zone	ACT land	Noise standards (dBA)	
		Day	Night
Zone A	Land in an industrial zone	65 <sup>(1)</sup>	55 <sup>(2)</sup>
Zone B1	Land in the city centre or a town centre	60 <sup>(3)</sup>	50 <sup>(4)</sup>
Zone B2	Land in the Central National Area (City Hill Precinct)	60 <sup>(1)</sup>	50 <sup>(2)</sup>
Zone C1	Land in a group centre	55 <sup>(5)</sup>	45 <sup>(6)</sup>
Zone C2	Land in a corridor site or an office site. Land in the Central National Area (Parliamentary Zone and Other Areas)	55 <sup>(1)</sup>	45 <sup>(2)</sup>
Zone D	Land (other than land in the city centre, town centres and group centres) in a commercial CZ4 zone	50 <sup>(1)</sup>	35 <sup>(2)</sup>
Zone E	Land (other than land in the city centre, town centres and group centres) in — — A restricted access recreation zone — A broadacre zone	50 <sup>(1)</sup>	40 <sup>(2)</sup>
Zone F	Land (other than land in the city centre, town centres and group centres) in — — A commercial CZ5 zone — A TSZ2 services zone — A community facility zone A leisure and accommodation zone	Same as noise standard for the adjoining noise zone with the loudest noise standard for the time period	
Zone G	All other land, including residential land (RZ1-5), hills, ridges, and buffers	45 <sup>(1)</sup>	35 <sup>(2)</sup>

- (1) Noise standard Monday to Friday: 7am - 10pm; Sunday and public holidays: 8am - 10pm
- (2) Noise standard Monday to Friday: 10pm – 7am; Sunday and public holidays: 10pm – 8am
- (3) Noise standard Monday to Thursday: 7am - 10pm; Friday and Saturday: 7am - 12am; Sunday and public holidays: 8am - 10pm
- (4) Noise standard Monday to Thursday: 10pm – 7am; Friday and Saturday: 12am - 7am; Sunday and public holidays: 10pm – 8am
- (5) Noise standard Monday to Thursday: 7am - 10pm; Friday and Saturday: 7am – 11pm; Sunday and public holidays: 8am - 10pm
- (6) Noise standard Monday to Thursday: 10pm – 7am; Friday and Saturday: 11pm - 7am; Sunday and public holidays: 10pm – 8am

## 2.3 Project-specific criteria

This section provides an overview of the noise limits applicable to the proposed development. Table 2.3 summarises the project-specific noise assessment criteria.

There is no units plan for Block 6 and 7 Section 7 Fyshwick, therefore Section 24(2) (a) of the EPR relating to noise transfer between units within the same unit plan, does not apply to this development.

Table 2.3 Project specific noise emission assessment criteria ( $L_{A10}$ )

Assessment scenario	Compliance location	Noise standard (dB)	
		Day <sup>(1)</sup>	Night <sup>(2)</sup>
Compliance points (north, east and west)			
Noise emission from the Project to subject block boundary	— Block 6 Section 7 Fyshwick	65 (external)	55 (external)
	— Block 7 Section 7 Fyshwick		
Compliance points (south)			
Noise emission from the Project to Parks and Recreation blocks zoned PRZ1	— Block 21 Section 1 Narrabundah	55 (external) <sup>(3)</sup>	45 (external) <sup>(3)</sup>

- (1) Noise standard Monday to Thursday: 7am - 10pm; Friday and Saturday: 7am – 11pm; Sunday and public holidays: 8am - 10pm
- (2) Noise standard Monday to Thursday: 10pm – 7am; Friday and Saturday: 11pm - 7am; Sunday and public holidays: 10pm – 8am
- (3) The noise standard on the boundary between 2 or more noise zones is the average of the noise standards for the noise zones for the time when the noise is emitted

## 3 Noise emission assessment

This section discusses the assessment conducted for the noise impact associated with the ‘potentially noisy uses’ that are listed or proposed on the Crown lease for the development, in accordance with the requirements of the relevant ACT planning guidelines.

### 3.1 Compatibility of land use

The proposed project site is located within the site of an existing KFC restaurant. Furthermore, the permitted uses in the Crown Lease are considered consistent and compatible with the surrounding land uses and is also considered to generally suit the IZ2 zone objectives.

### 3.2 Likely key noise sources

#### 3.2.1 Patron noise

Note 1 to Part 3 of the Regulation states that “*The environment Protection Act 1997 does not apply to noise made by {...} a person using his or her body*”. Therefore, noise generated by patrons within the proposed development does not require assessment here.

#### 3.2.2 Amplified music

One of the potentially noisy uses, as defined by the IZDC, form part of the list of permitted uses proposed for the development block, as presented in Table 2.1. Based on our experience with the preparation of noise assessments in the ACT, and understanding of the ACT Environment and Planning and Sustainable Development Directorate (EPSDD) and the ACT EPA’s current view on developments with similar permitted uses, amplified music noise is typically considered to be the primary source of concern.

The ACT EPA has provided guidance on typical internal reverberant sound pressure levels associated with specific noisy uses that should be used when preparing a NMP and are summarised in Table 3.1.

Table 3.1 Permitted potentially noisy uses, and associated assumed internal sound pressure levels

Noisy uses listed in the IZDC that are permitted for this development	EPA assumed internal sound pressure levels, dB LA10(5-15min)
Restaurant	85

Based on our experience with similar venues, these internal reverberant noise levels are high, and would be expected to cause significant discomfort to the occupants of these spaces. Levels above 85 dBA  $L_{Aeq-8Hr}$  are currently considered to cause a risk of hearing damage. It is understood that the restaurant tenancies within the proposed development will play music through an internal commercial music streaming system only and will not broadcast any amplified music externally. Furthermore, amplified music provided internally will generally be background music only and is not an important feature or form an integral part of the restaurant’s operation.

However, to present a conservative assessment to quantify the acoustic risk, the ACT EPA guidance internal music noise level for restaurants will be assumed for the purpose of assessment. For assessment and planning purposes, the amplified music level is assumed to not exceed the levels set out in Table 3.2.

Table 3.2 Assumed amplified music levels, dB L<sub>10</sub> (5-15 min)

Amplified music, assumed internal reverberant sound pressure levels	Octave band centre frequency, Hz							dBA
	63	125	250	500	1k	2k	4k	
Restaurant	87	88	81	83	77	79	71	85

Using these assumed internal levels as the basis of the noise emission assessment, the predicted noise levels at the identified compliance locations are provided in Table 3.3 with details of façade constructions that are normally capable of achieving the noise assessment criteria. Compliance at these land parcels is expected to result in compliance at all other surrounding blocks, including Parks and Recreations and Residential blocks. It is recommended that further acoustic input is sought during detailed design stage.

Table 3.3 Predicted noise from proposed buildings to nearby receivers

Façade direction	Distance to compliance location <sup>(1)</sup>	Predicted external noise level at compliance location	Noise emission criterion	Necessary R <sub>w</sub> rating and typical construction normally capable of achieving this performance
Building 1 – Proposed KFC Restaurant				
North	~30 m	34 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	≥R <sub>w</sub> 31  Standard façade glazing (e.g. 6 mm float glass) with minimal doors or other openings, all fully sealed.  The ability to operate with all doors and windows closed when the highest levels of amplified music are employed. High degree of attention to surrounding flanking detailing is required.
East	~17 m	37 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	
West	~14 m	34 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	
South	~6 m	50 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	
Building 2 – Proposed Restaurant				
North	~40 m	32 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	≥R <sub>w</sub> 31  Standard façade glazing (e.g. 6 mm float glass) with minimal doors or other openings, all fully sealed.  The ability to operate with all doors and windows closed when the highest levels of amplified music are employed. High degree of attention to surrounding flanking detailing is required.
West	~15 m	35 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	
South	~4 m	42 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	
East	~15 m	32 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	≥R <sub>w</sub> 30  E.g. ≥45 mm (nominal) solid core timber door (≥25 kg/m <sup>2</sup> ) with appropriate acoustic seals



Façade direction	Distance to compliance location <sup>(1)</sup>	Predicted external noise level at compliance location	Noise emission criterion	Necessary R <sub>w</sub> rating and typical construction normally capable of achieving this performance
<b>Building 3 – Proposed Restaurant</b>				
North	~2 m	49 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	≥R <sub>w</sub> 30 E.g. ≥45 mm (nominal) solid core timber door (≥25 kg/m <sup>2</sup> ) with appropriate acoustic seals
West	~65 m	<30 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	≥R <sub>w</sub> 31 Standard façade glazing (e.g. 6 mm float glass) with minimal doors or other openings, all fully sealed. The ability to operate with all doors and windows closed when the highest levels of amplified music are employed. High degree of attention to surrounding flanking detailing is required.
East	~55 m	<30 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	
South	~42 m	<30 dBA L <sub>10</sub> (5-15 min)	<b>Daytime</b> <sup>(2)</sup> : 65 dBA L <sub>10</sub> <b>Night-time</b> <sup>(3)</sup> : 55 dBA L <sub>10</sub>	

(1) Subject block boundary Block 6 and 7 Section 7 Fyshwick

(2) Monday to Thursday: 7am - 10pm; Friday and Saturday: 7am - 11pm; Sunday and public holidays: 8am - 10pm

(3) Monday to Thursday: 10pm – 7am; Friday and Saturday: 11pm - 7am; Sunday and public holidays: 10pm – 8am

### 3.2.3 Amplified speech in drive through lane

The Client has informed WSP that HM Electronics (HME) standard speaker ordering system will be used as the Customer Ordering Device (COD) serving the proposed drive through lanes for Building 1 and Building 2. To assess noise from such system, WSP have measured the sound pressure levels (SPL) at an existing drive through CODs at similar restaurants, as presented in Table 3.4. It should be noted that the SPLs from such ordering systems are not guaranteed, as the COD speakers are typically set to an automatic volume control and adjusted to a level that is 14-15 dB above the ambient noise level at the drive through lane (HME Engineering Department White Paper, *Drive-Thru Sound Levels*, dated 31 July 2020).

Table 3.4 Customer Ordering Device measured sound pressure levels, dB L<sub>eq,10s</sub>

Customer Ordering Device SPL at 1 m from speaker	Octave band centre frequency, Hz							dBA
	63	125	250	500	1k	2k	4k	
HME standard outbound speaker	70	65	63	60	63	49	37	65

It is assumed that proposed COD systems will be installed at the entrance of the drive through lanes, as illustrated in Figure 3.1, facing the eastern facades of Building 1 and Building 2.

Assuming the ambient sound pressure levels are similar to the EPR Noise Zone Standards for the subject block and the SPL of the CODs are adjusted to 15 dB above ambient, sound propagating from the order taker/greeter through the COD speakers to the block boundary of project site are predicted to be <65 dBA during the daytime and <55 dBA at night-time. Therefore, amplified speech through the CODs in the proposed drive through lanes are expected to meet the relevant zone noise limits given by the EPR.

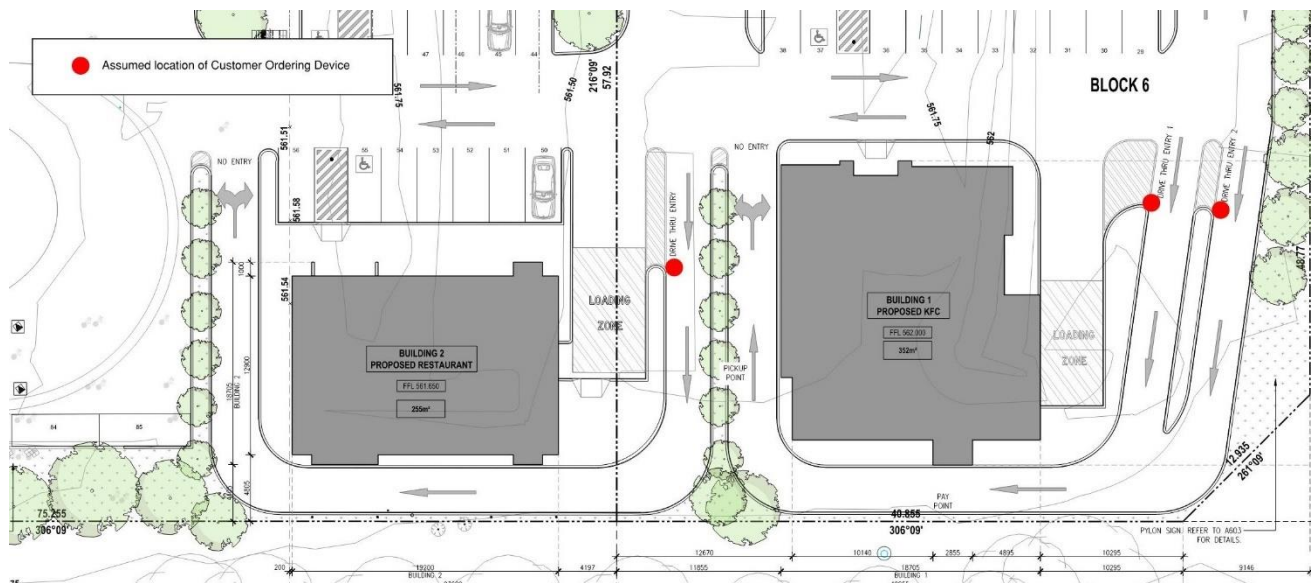


Figure 3.1 Site plan of proposed development indicating assumed location of the Customer Ordering Devices

### 3.2.4 Truck deliveries and vehicle movements

Truck movements form part of the operation of the industrial establishments within the surrounding land uses and shall remain key to maintaining ongoing operation of these premises and the wider Fyshwick industrial area. Furthermore, the location and the nature of the industrial land areas at Fyshwick ensure that majority of vehicle trips to industrial areas are made by private and commercial vehicles (*Planning and Vehicular Access General Code*, ACT Planning and Land Authority), with Canberra Avenue providing an authorised route for Performance Based Standards (PBS) approved heavy vehicles (ACT Government City Services).

The truck deliveries and general on-site vehicle movements from the proposed development are therefore not expected to significantly change the existing acoustic character of the general area or cause significant noise disturbance.

### 3.2.5 Waste Collection

Noise emitted during the collection of waste from commercial premises is not deemed to cause environmental harm according to the EPR, provided that the activities are in accordance with the Commercial Waste Industry Code of Practice (ACT), which is accredited under Table 2.3 Item 18 of the EPR, and under the Environment Protection Act 1997 (ACT; the Act). The code of practice allows for waste collection to occur any time in Zone A, also requiring:

- Any contractor who receives a complaint relating to the noise from its operations shall attempt to resolve the complaint to the complainant's satisfaction in accordance with the following procedures.
- Where possible, the business shall reschedule the collection or take other appropriate action to resolve the problem, taking into account:
  - the impact any rescheduling may have on other persons. In any rescheduling, priority should be given to minimising noise impacts on residential premises;
  - access problems which may prevent collection at other times; and
  - any other measures, such as relocating garbage hoppers, which may reduce noise impacts.

Noise associated with waste collection activities is not considered to be significant, as it occurs at a general frequency of three times per week and the duration of the noise impact is typically short.

### 3.2.6 *Mechanical services plant*

Noise from the proposed development will need to meet the relevant zone noise limits given by the EPR. In this case, the noise limits are the same as those summarised in Table 2.3. These criteria apply to noise from fixed sources associated with the building (i.e. local external air-conditioning units, major plant items or the like).

Detailed design information is not currently available for review at this stage. The zone noise limits set out in Table 2.2 would be met through judicious selection and siting (e.g. using fences or walls as localised barriers, and selection of equipment with low operating noise levels).

In this case, it is recommended that the final air-conditioning selections and any external mechanical services design be reviewed by an acoustic consultant at detailed design stage, to ensure that the applicable zone noise limits will be met.

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## 3.3 Assessment Summary

Based on the review and consultation as reported in the preceding subsections, it can be concluded the proposed KFC and mix-use buildings are unlikely to cause significant noise disturbance.

To ensure that the potential noise impact is generally minimised, the following measures are recommended:

- Provide a fully closable and acoustically sealable building envelope meeting  $\geq R_w 31$  and comprising of standard construction meeting standard thermal insulation requirements. The building shall be acoustically well sealed.
- Where feasible and reasonable, the volume setting of the Customer Ordering Systems should be optimised to minimise the overall acoustic risk.
- Any amplified music used should be restricted to the internal areas only and of “background music” in nature.
- Noise levels associated with truck deliveries at the site are not expected to significantly change the existing acoustic character of the general area or cause significant noise disturbance.
- For truck deliveries and general on-site vehicle movements, encourage the following behaviours:
  - Avoid driving behaviour and manoeuvres that generate avoidable noise events.
  - Avoid leaving engines on idle mode unnecessarily.
  - Switch off trailer refrigeration fan when the delivery truck is stationary
  - Where possible, reduce reversing movements and operate the truck in a forward direction.
  - Adopt best work practice when loading and unloading of goods to reduce avoidable noise events.

## 4 Conclusion

WSP has prepared a Noise Management Plan (NMP) for inclusion in the Development Application (DA) for the proposed development situated within in Block 6 and 7 Section 7 Fyshwick ACT.

The project proposes a commercial development consisting of:

- A purpose-built single storey building to be occupied by a KFC restaurant.
- A single storey building to occupied by a restaurant tenancy.
- A single storey building to occupied by three commercial tenancies.

The assessment has been prepared in reference to the planning requirements of the ACT *Industrial Zones Development Code, Environment Protection Regulation* (ACT) as well as noise assessment guidelines provided by the Environment Protection Authority (EPA).

For the identified likely noise sources associated with the proposed development, the following findings are made:

- The proposed KFC and restaurant tenancy building are unlikely to cause significant noise disturbance.
- Any well sealed, closable, standard façade construction meeting  $\geq R_w$  31 will be suitable for the proposed KFC and restaurant tenancy building.
- For conservative assessment purposes, the ACT EPA guidance internal music noise level for restaurants has been assumed.
- Noise associated with truck deliveries within proposed development are not expected to significantly change the existing acoustic character of the general area or cause significant noise disturbance.
- Noise emissions from other potential noise sources associated with the KFC and restaurant tenancy, such as the drive through's Customer Ordering Device and general on-site vehicle movements are unlikely to cause significant noise disturbance.