

15 December 2021

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Abergeldie Contractors Pty Ltd  
PO BOX 10  
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**Attention: Kelie Pittaway**

Dear Kelie

## Sydney International Speedway Operational Test Event Noise Assessment

### 1 Introduction

SLR Consulting Australia Pty Ltd (SLR) has been engaged by Abergeldie Complex Infrastructure (Abergeldie) to evaluate the potential noise levels and impacts from a test event occurring at the Sydney International Speedway on the 18 and 20 December 2021 at the same time as concurrent construction activities in Carpark A, Carpark D1 and in the grandstand area. The noise from all activities occurring on the project site is understood to be assessed as construction noise.

The proposed test event is understood to commence around 5.30pm and conclude around 9pm.

### 2 Predicted Noise Levels

#### 2.1 Operational Noise Levels

Representative noise levels for the test event have been taken from the Noise and Vibration Technical Paper prepared for the Sydney International Speedway Environment Impact Assessment (the NVTP) (refer to SLR report 610.18331-R04) dated 3 August 2020.

The NVTP details the expected worst-case predicted noise levels from sprint cars for each surrounding NCA and have been reproduced in **Table 1** for both neutral and adverse weather conditions. The noise levels have used the previously adopted assumptions summarised in Section 4.2.2 of the Noise and Vibration Technical Paper.

**Table 1 Operational Noise levels from Sprint cars (from NVTP)**

NCA	Predicted Noise Level $L_{Aeq(15\text{minute})}$ Noise Level (dBA)	Exceedance of Background Noise Levels (dB)
	Sprint cars	
NCA01	51 to 55	12 to 16
NCA02	46 to 50	7 to 11
NCA03	39 to 42	Up to 1
NCA04	42 to 46	-
NCA05	44 to 47	1 to 4
NCA06	43 to 45	8 to 10
NCA07	No Residential Receivers	

Note: The range of predicted noise represents neutral to adverse weather conditions.

The predicted noise levels from the NVTP indicate that the  $L_{Aeq(15\text{minute})}$  noise from the use of the speedway is predicted to be up to 51 dBA under neutral weather conditions and 55dBA under adverse weather conditions.

## 2.2 Construction Noise Levels

The construction noise levels from the work have been taken from the Construction Noise and Vibration Impact Statement (the CNVIS) prepared for the Sydney International Speedway on behalf of Abergeldie (refer to SLR report 610.30246-R01-V2.0) dated 23 December 2020.

The report details the Noise Management Levels (NMLs), the predicted construction noise levels and appropriate mitigation measures with reference to the *Sydney Metro Construction noise and Vibration Standard* (CNVS) for the various construction activities for the project.

The Stage 3 and Stage 4 daytime scenarios as assessed in the CNVIS are understood to best represent the construction work that would be completed during the test event.

The noise levels predicted for Stage 3 and Stage 4 works during the daytime period have been reproduced in **Table 2**.

**Table 2 Stage 3 and Stage 4 Construction Noise Levels (from CNVIS)**

NCA	Noise Management Levels (dBA)			Worst-Case Predicted $L_{Aeq(15\text{minute})}$ Noise Level (dBA)	
	Std Day	OOH Day	Evening	Stage 3	Stage 4
NCA01	49	44	44	43	44
NCA02	49	44	44	42	42
NCA03	51	46	46	33	34
NCA04	57	52	52	37	37
NCA05	53	48	48	33	34
NCA06	45	40	40	34	34
NCA07	45	40	40	No residential receivers	

The above table indicates that no exceedances of the construction NMLs from the construction activities were predicted in the CNVIS at any residential receiver surrounding the Sydney International Speedway.

### 3 Noise Assessment of Concurrent activities

#### 3.1 Predicted Noise Levels

The predicted noise level from the concurrent construction activities and the operational test event are shown in **Table 3**.

**Table 3 Simultaneous noise levels**

NCA	Noise Management Levels			Worst-Case Predicted $L_{Aeq(15\text{minute})}$ Noise Level (dBA)				Exceedance of NML (dB)
	Std Day	OOH Day	Evening	Construction Noise (from CNVIS)	Operational Test Event (from NVTP)	Concurrent Construction and Operational Test Event	Increase from CNVIS Prediction <sup>1</sup> (dB)	
NCA01	49	44	44	44	51 to 55	52 to 55	Up to 11	Up to 11
NCA02	49	44	44	42	46 to 50	47 to 51	Up to 9	Up to 7
NCA03	51	46	46	34	39 to 42	40 to 43	Up to 9	Nil
NCA04	57	52	52	37	42 to 46	43 to 47	Up to 10	Nil
NCA05	53	48	48	34	44 to 47	44 to 47	Up to 13	Nil
NCA06	45	40	40	34	43 to 45	44 to 45	Up to 11	Up to 5
NCA07	45	40	40	No residential receivers				

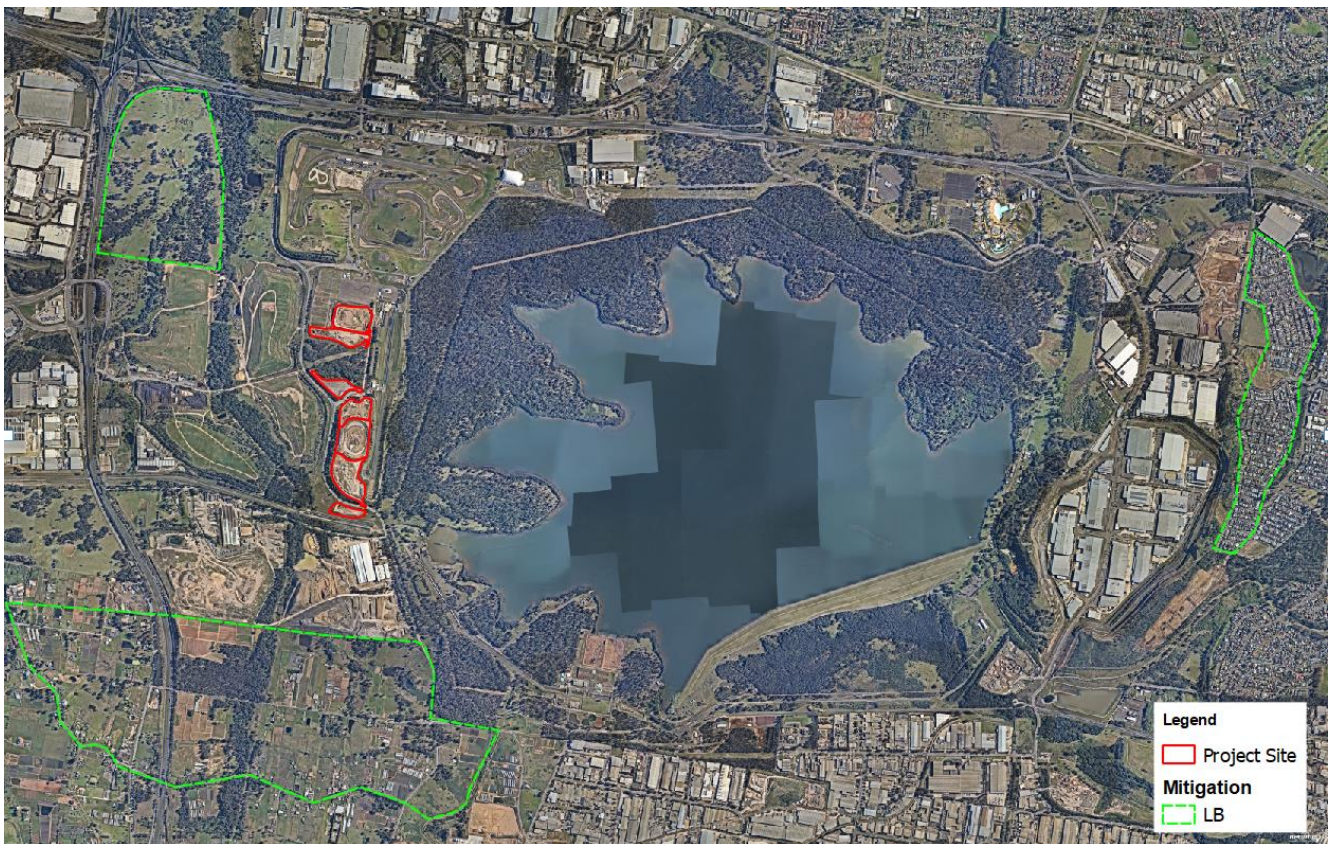
The above table indicates that noise impacts at the surrounding receivers during the concurrent construction work and operational test event are expected to generally be dominated by noise from the test event. Exceedances ranging from 5 dB to 11 dB are predicted at the closest residential receivers in NCA01, NCA02 and NCA06 under adverse weather conditions. Noise levels at receivers in NCA03 to NCA05 are predicted to comply the NMLs.

#### 3.2 Mitigation

Mitigation measures should be applied in accordance with the measures outlined in the CNVIS and Sydney Metro CNVS. The following additional mitigation measures are recommended:

- Letterbox drops at receivers in NCA01, NCA02 and NCA06 as indicated in **Figure 1**.
- Verification monitoring during the evening period at the most affected receivers in NCA01 along Chandos Road. It is however noted that operational acoustic treatments have been completed at various residential properties who accepted the offer along Chandos Road.

Figure 1 Additional Mitigation Measures



#### 4 Conclusion

SLR has undertaken a review of the potential noise impacts from concurrent construction activities and the operational test event proposed at the Sydney International Speedway. The assessment has identified the need for additional mitigation measures from the test event including letter box drop to receivers in NCA01, NCA02 and NCA06 and verification monitoring at the closest sensitive receivers in NCA01.

I trust the preceding meets your current requirements. If you have any questions or would like any further information, please do not hesitate to contact me on 94278 8100 or email [nvandenbergs@slrconsulting.com](mailto:nvandenbergs@slrconsulting.com).

Yours sincerely

NICHOLAS VANDENBERG  
Associate

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