

Ref: 034-D14 TNM Location

21 July 2021

Infrastructure Management
Department of Planning, Industry & Environment
4 Parramatta Square
12 Darcy Street,
PARRAMATTA NSW 2150

Attention: Lee McCourt

Dear Lee,

St Marys Intermodal (SSD-7308) – Condition D14 Location of Noise Monitor

I refer to your letter dated 21 July 2021 seeking additional information regarding the location of the train noise monitor (TNM) under Condition D14 in SSD-7308.

DPIE has requested further information on the following:

- *Further justification supporting the appropriateness of the location of the rail noise monitoring, including details of any alternative options, and the reasons why these were dismissed.*

The key objectives applied for determining a suitable location for the TNM included:

- To be within the St Marys Intermodal site.
- To be located outside the danger zone to eliminate being struck by trains and discourage persons near the tracks.
- To be located on the curve where highest levels of top-of-rail friction and rail noise occurs.
- To be close as possible to the nearest residential receivers.
- To provide safe access to the TNM hut.
- To meet the design specifications from Wabtec (builder of the TNM device).

Achieving the above objectives meant there were limited options for locating the TNM, and therefore, the potential options for the TNM location are generally in the same location. Five (5) potential options were identified, which are illustrated in Figure 1 in Attachment 1.

A site investigation attended by Gayle Greer (Aecom), David Djulbic (Pacific National), Christiaan Rheeder (McMahon Services Aust.) and myself to reviewed the five (5) options.

Option 5 was selected as it achieved the key objectives above as well as the following advantages:

- Easy and safe access to hut.
- Low impact on day-to-day terminal operations.
- Convenient access to utility telecommunication and electricity services.
- High level of security being on terminal side of rail siding.
- Necessary separation distances to existing infrastructure is achieved, including buffers to high voltage transmission lines and stormwater.

In addition, Option 5 is the only option that can be sited on the inside of the tracks where top-of-rail friction is greatest. The letter dated 12 July 2021 from Aecom also provides justification on the chosen location of the

TNM.

In regard to the other 4 Options, the following conclusions were made:

- Options 1 and 4 could not meet the necessary location specifications due to the shunters track and a drainage swale. The TNM equipment would also be located in a high activity area and have a high risk of damage and interference with day-to-day operations. Options 1 and 4 were dismissed.
- Option 2 could not meet the necessary location specifications due to the required clearances to a high voltage transmission line, and presence of a subsurface drain and a drainage swale. There were also issues with connections to telecommunication infrastructure. Option 2 was dismissed.
- Option 3 could not meet the necessary location specifications as there was inadequate land within the site. There were also issues with a drainage swale and ability to connect to telecommunication infrastructure. Option 3 was dismissed.

If you have any questions or wish to discuss this further, please contact me on 0477 474 091.

Yours faithfully

Urbanco Group Pty Ltd



Guy Evans
Director

Cc Leigh Cook Pacific National
David Djulbic Pacific National

Figure 1:

Potential Train Noise Monitor Locations

