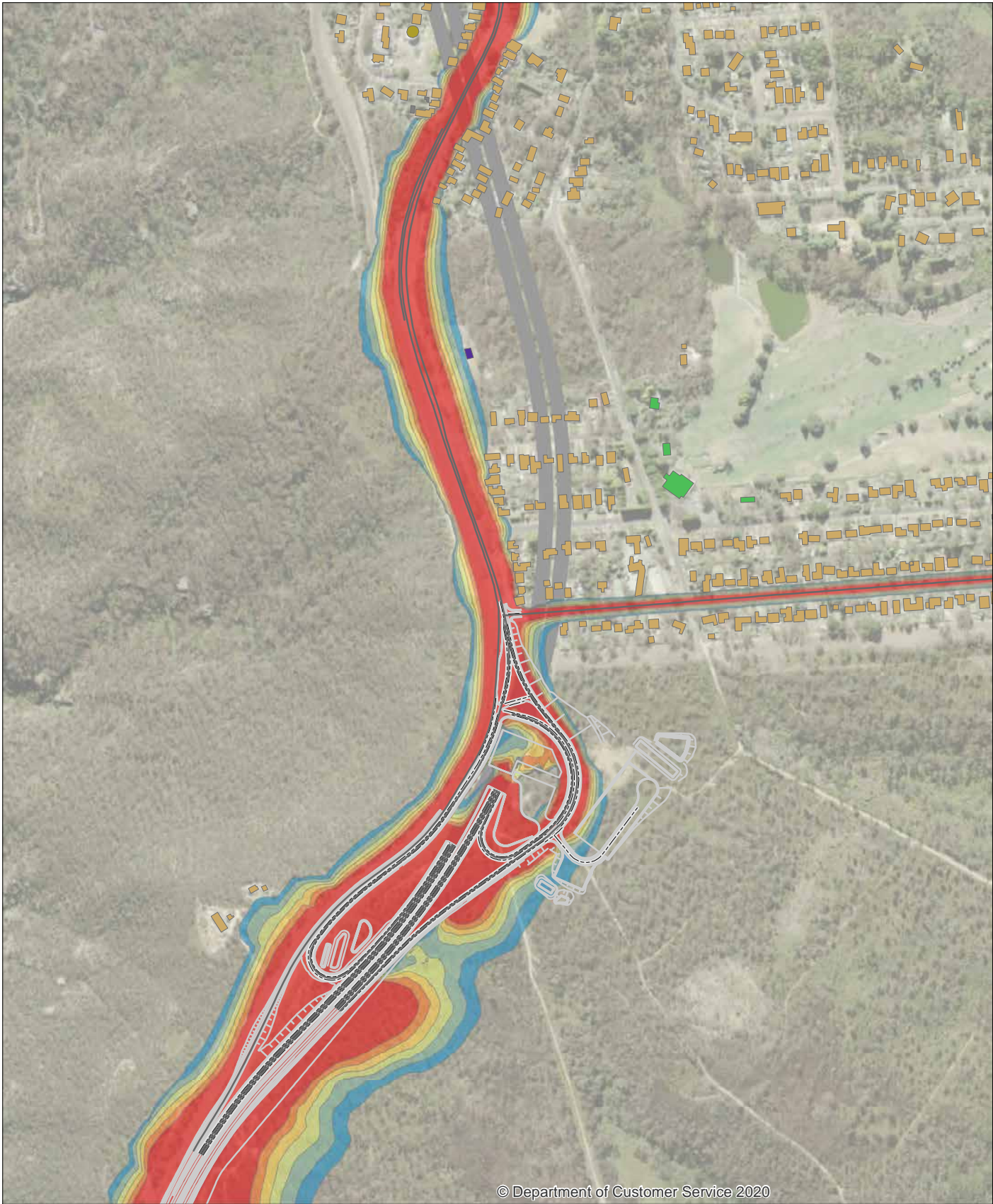


Appendix G

Noise and vibration (part 2)

Annexure I

Operational road traffic
noise contours



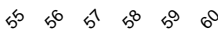
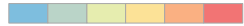
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Road Traffic Noise - Design Year 2040 - Day

Legend

- Active Recreation
- Commercial
- Community
- Education
- Hospital
- Industrial
- Office
- Place Of Worship
- Residential
- Buildings not assessed

Sound Pressure Level $L_{Aeq, 15hr}$ dB(A)



Tunnel

Roads affected by Project

Assessed roads



AECOM

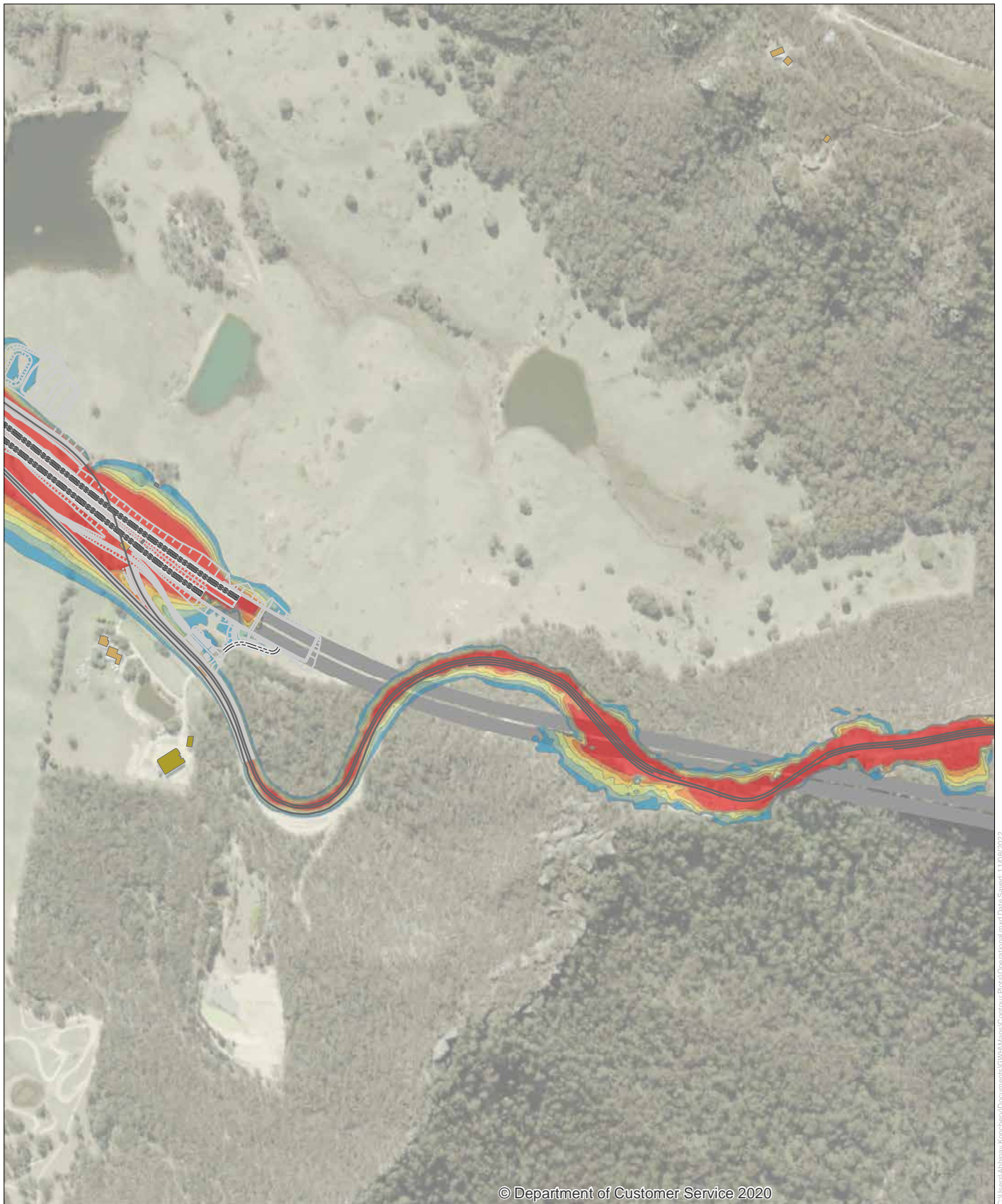
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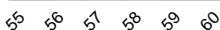
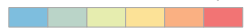


Road Traffic Noise - Design Year 2040 - Day

Legend

- Active Recreation
- Commercial
- Community
- Education
- Hospital
- Industrial
- Office
- Place Of Worship
- Residential
- Buildings not assessed

Sound Pressure Level $L_{Aeq, 15hr}$ dB(A)



- Tunnel
- Roads affected by Project
- Assessed roads



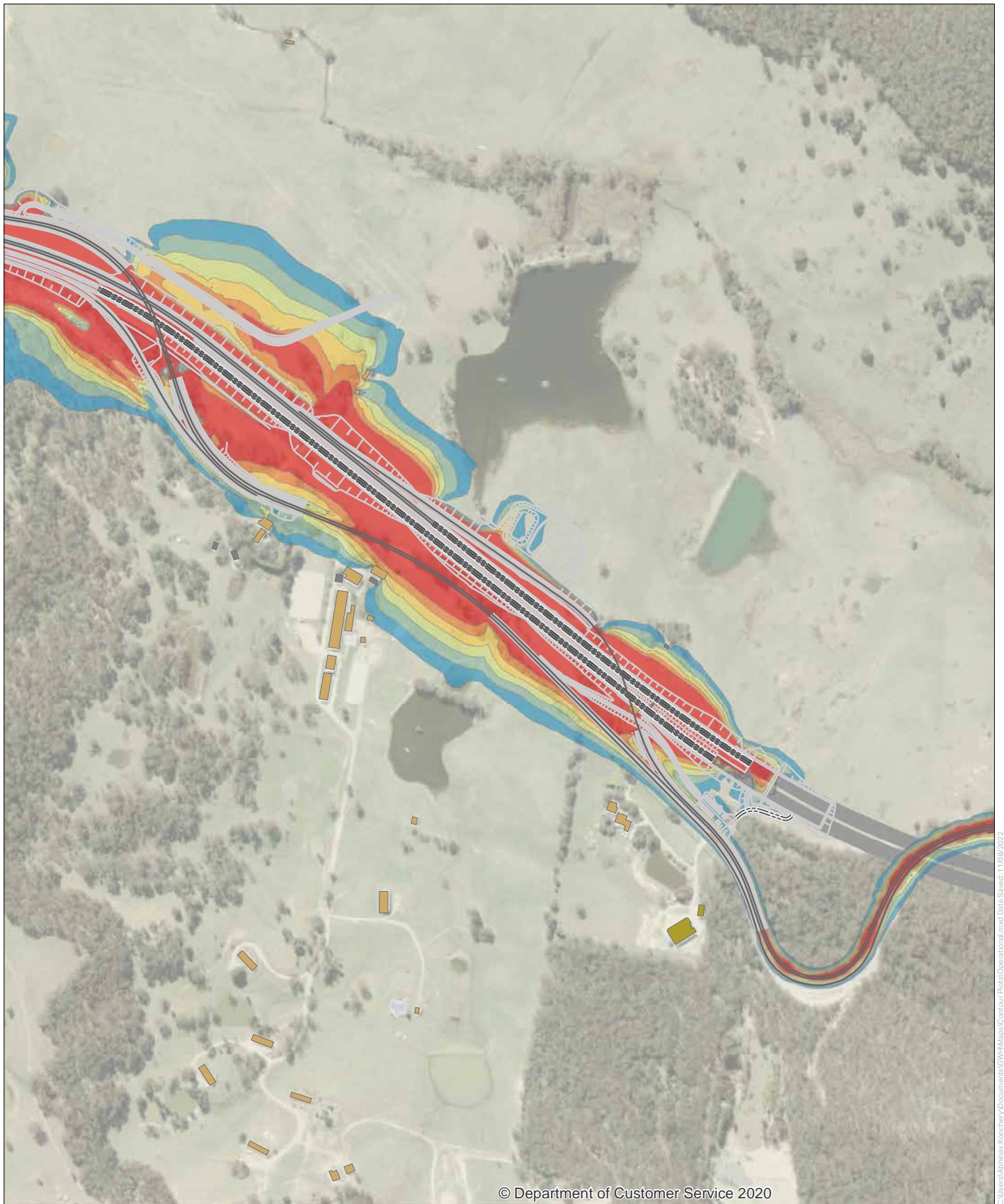
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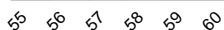
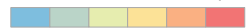
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Road Traffic Noise - Design Year 2040 - Day

Legend

- Active Recreation
- Commercial
- Community
- Education
- Hospital
- Industrial
- Office
- Place Of Worship
- Residential
- Buildings not assessed

Sound Pressure Level $L_{Aeq, 15hr}$ dB(A)



Tunnel

Roads affected by Project

Assessed roads



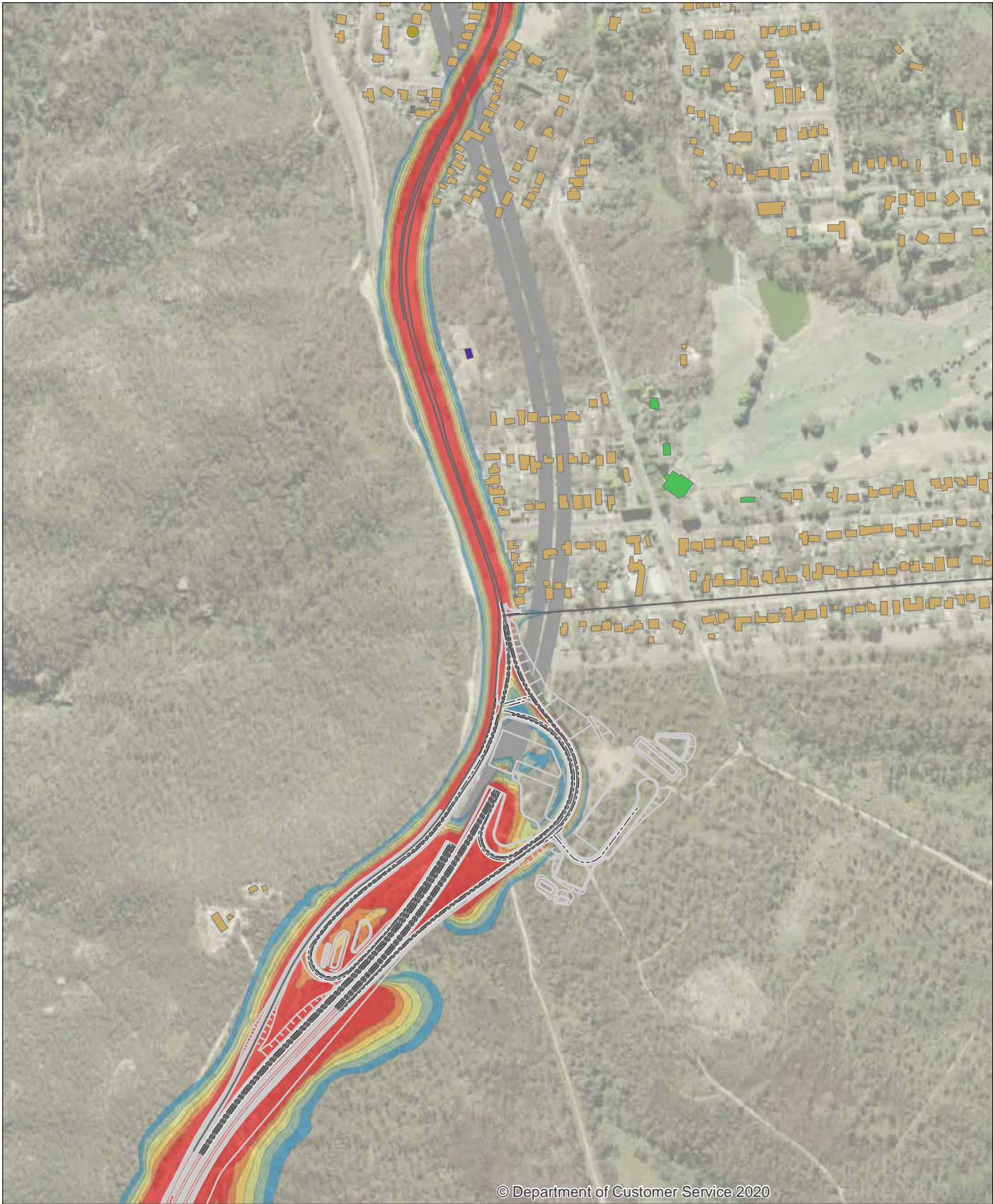
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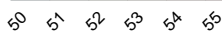
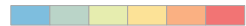


Road Traffic Noise - Design Year 2040 - Night

Legend

- Active Recreation
- Commercial
- Community
- Education
- Hospital
- Industrial
- Office
- Place Of Worship
- Residential
- Buildings not assessed

Sound Pressure Level $L_{Aeq, 9hr}$ dB(A)



- Tunnel
- Roads affected by Project
- Assessed roads



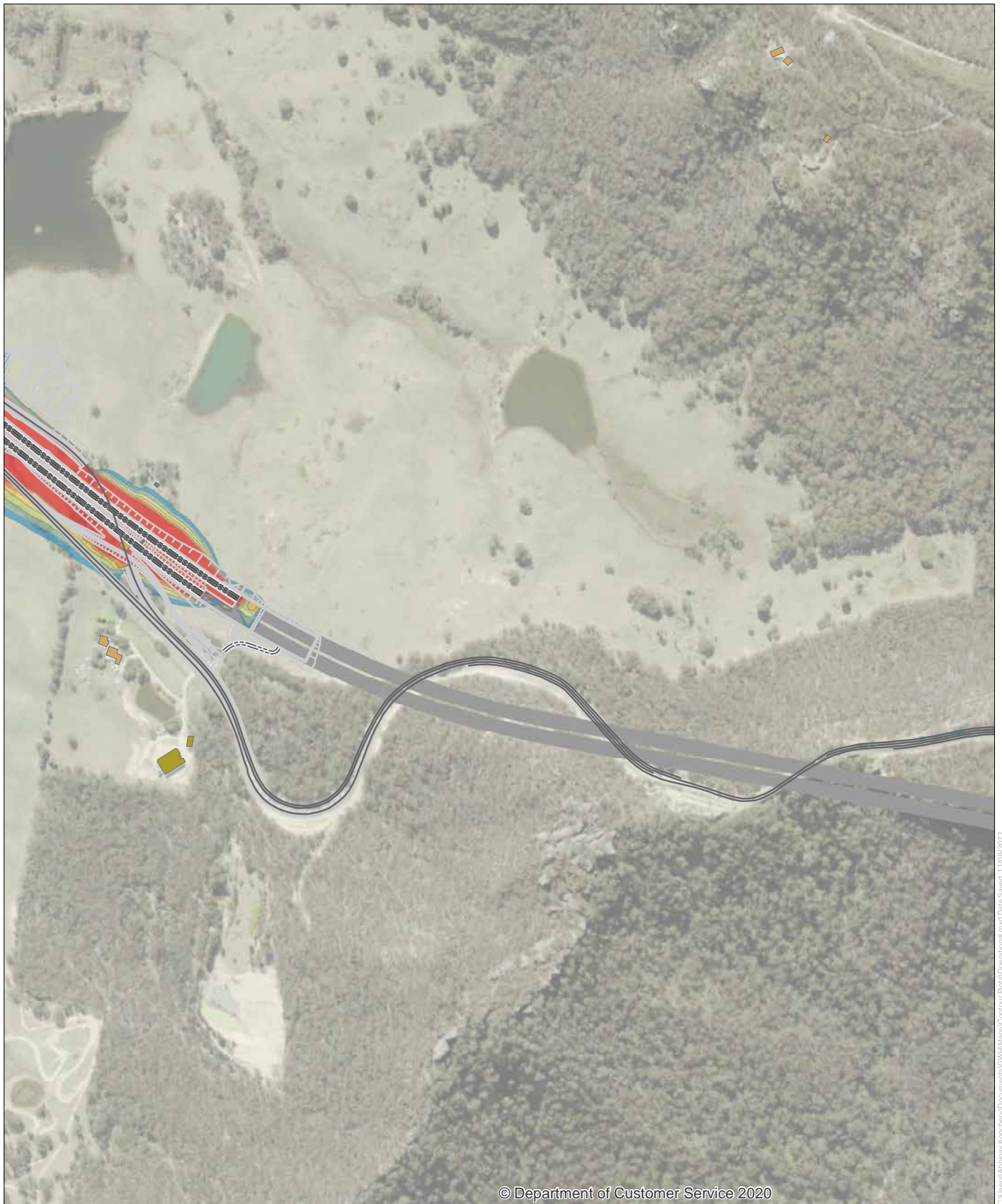
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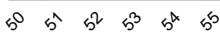
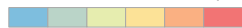
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Road Traffic Noise - Design Year 2040 - Night

Legend

- Active Recreation
- Commercial
- Community
- Education
- Hospital
- Industrial
- Office
- Place Of Worship
- Residential
- Buildings not assessed

Sound Pressure Level $L_{Aeq, 9hr}$ dB(A)



Tunnel

Roads affected by Project

Assessed roads



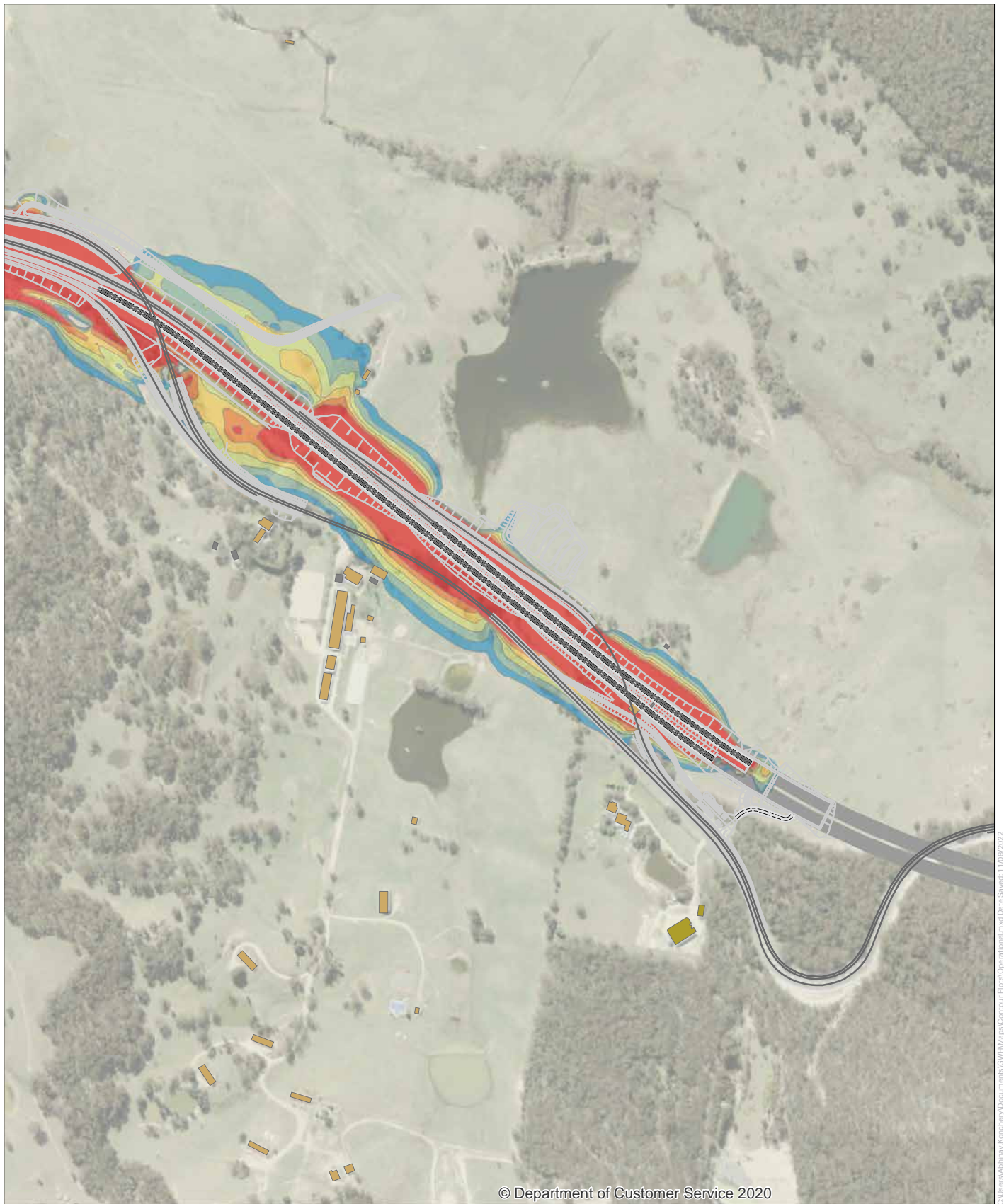
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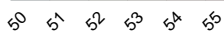
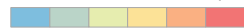


Road Traffic Noise - Design Year 2040 - Night

Legend

- Active Recreation
- Commercial
- Community
- Education
- Hospital
- Industrial
- Office
- Place Of Worship
- Residential
- Buildings not assessed

Sound Pressure Level $L_{Aeq, 9hr}$ dB(A)



- Tunnel
- Roads affected by Project
- Assessed roads



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Annexure J

Receivers identified for
consideration of
additional mitigation





GWH - Buildings Eligible for Treatment



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Legend

-  Buildings
-  Eligible for treatment

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Annexure K

Receivers affected by
industrial noise



GWH - Operational noise from fixed facilities

Scenario 1 – portal ventilation



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Source: Nearmap 2022

 Receivers where noise is exceeding criteria



GWH - Operational noise from fixed facilities

Scenario 2 – portal ventilation



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Source: Nearmap 2022

 Receivers where noise is exceeding criteria



GWH - Operational noise from fixed facilities

Scenario 3 – portal ventilation



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Source: Neamap 2022

Receivers where noise is exceeding criteria



GWH - Operational noise from fixed facilities

Scenario 4 – ventilation outlet



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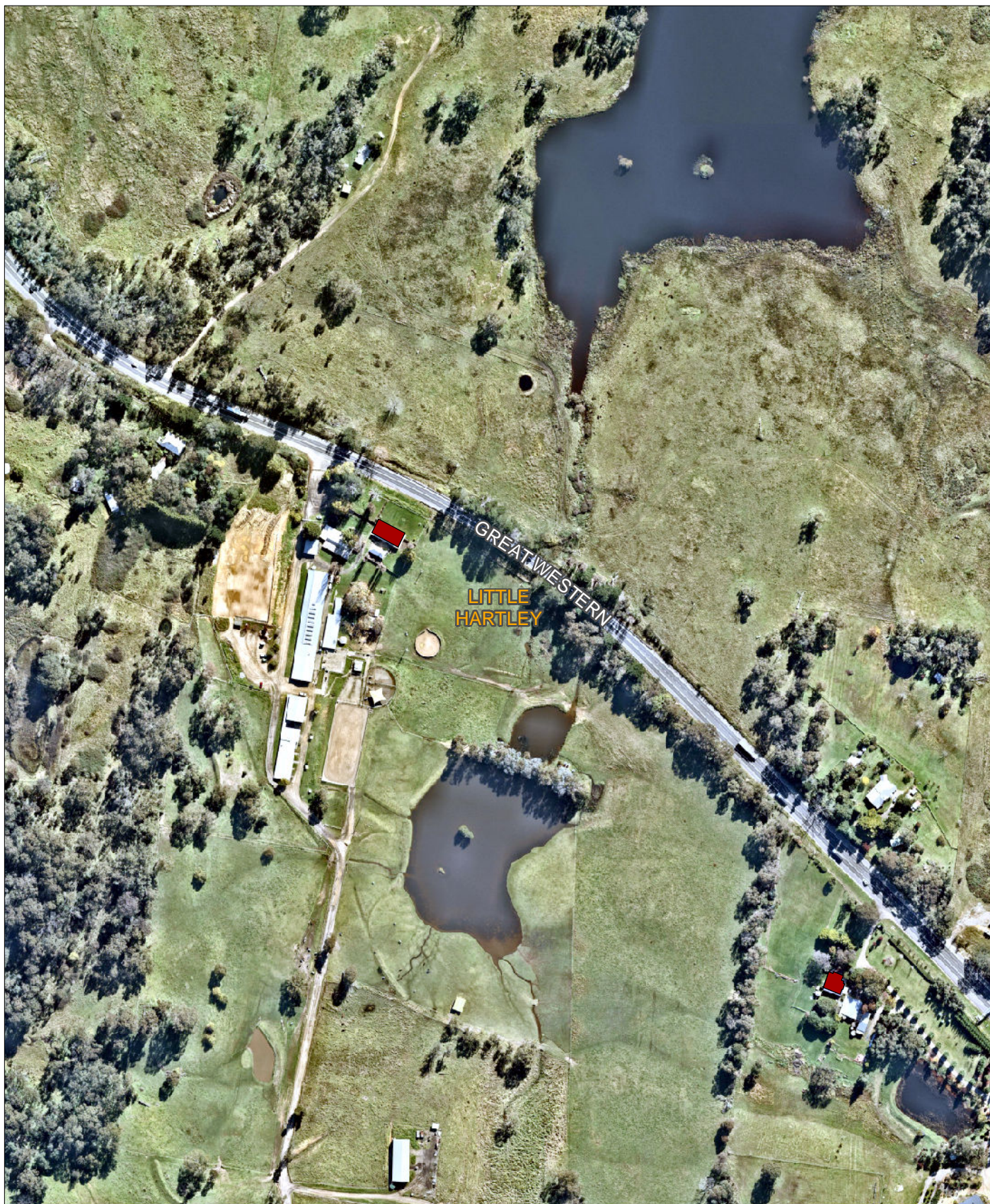
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Source: Nearmap 2022

Receivers where noise is exceeding criteria



GWH - Operational noise from fixed facilities

Scenario 4 – ventilation outlet



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Source: Nearnmap 2022

Receivers where noise is exceeding criteria



GWH - Operational noise from fixed facilities

Scenario 5 – ventilation outlet



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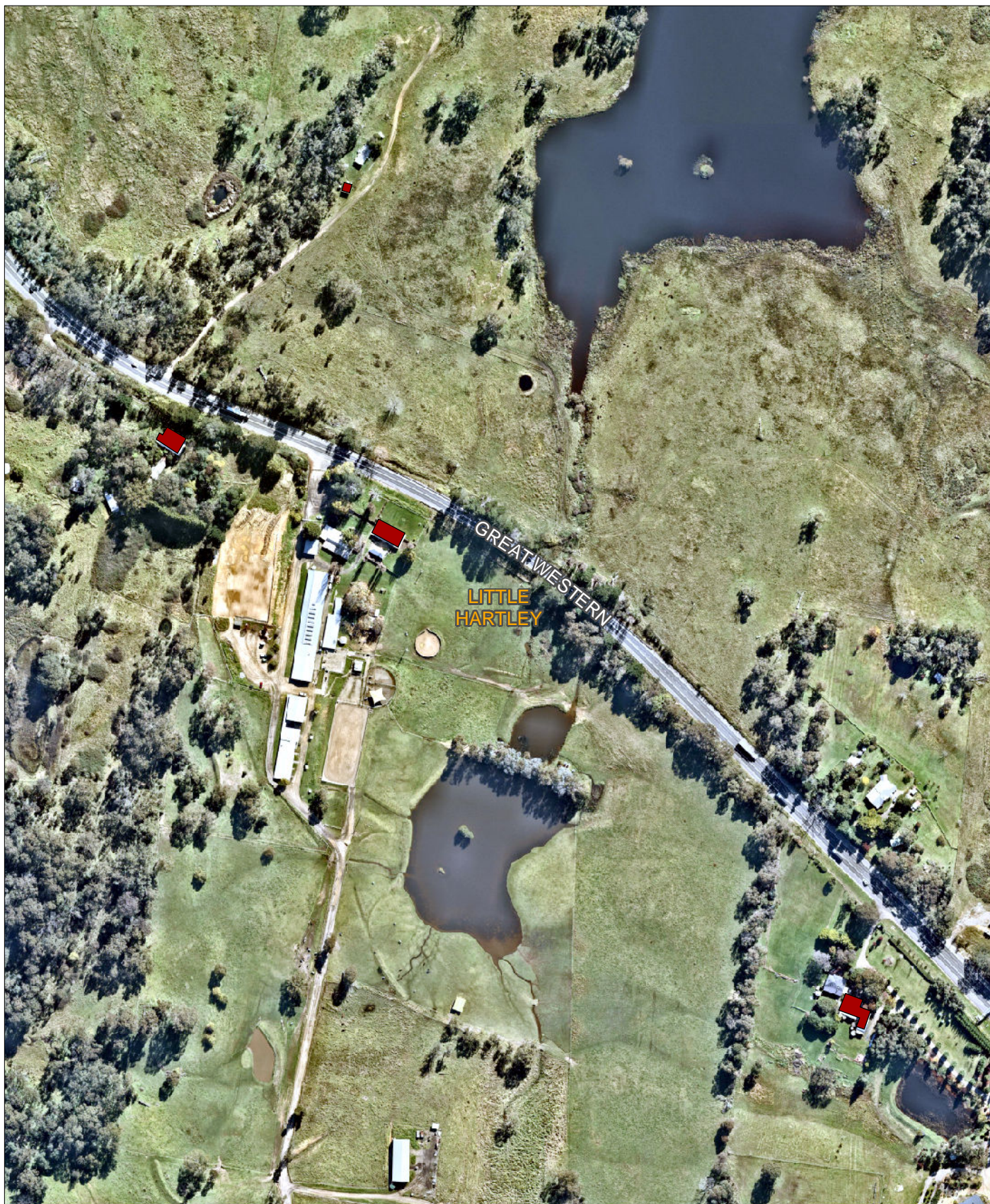
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Receivers where noise is exceeding criteria



GWH - Operational noise from fixed facilities

Scenario 5 – ventilation outlet



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Source: Nearnmap 2022

Receivers where noise is exceeding criteria



GWH - Operational noise from fixed facilities

Scenario 6 – ventilation outlet



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Receivers where noise is exceeding criteria



GWH - Operational noise from fixed facilities

Scenario 6 – ventilation outlet



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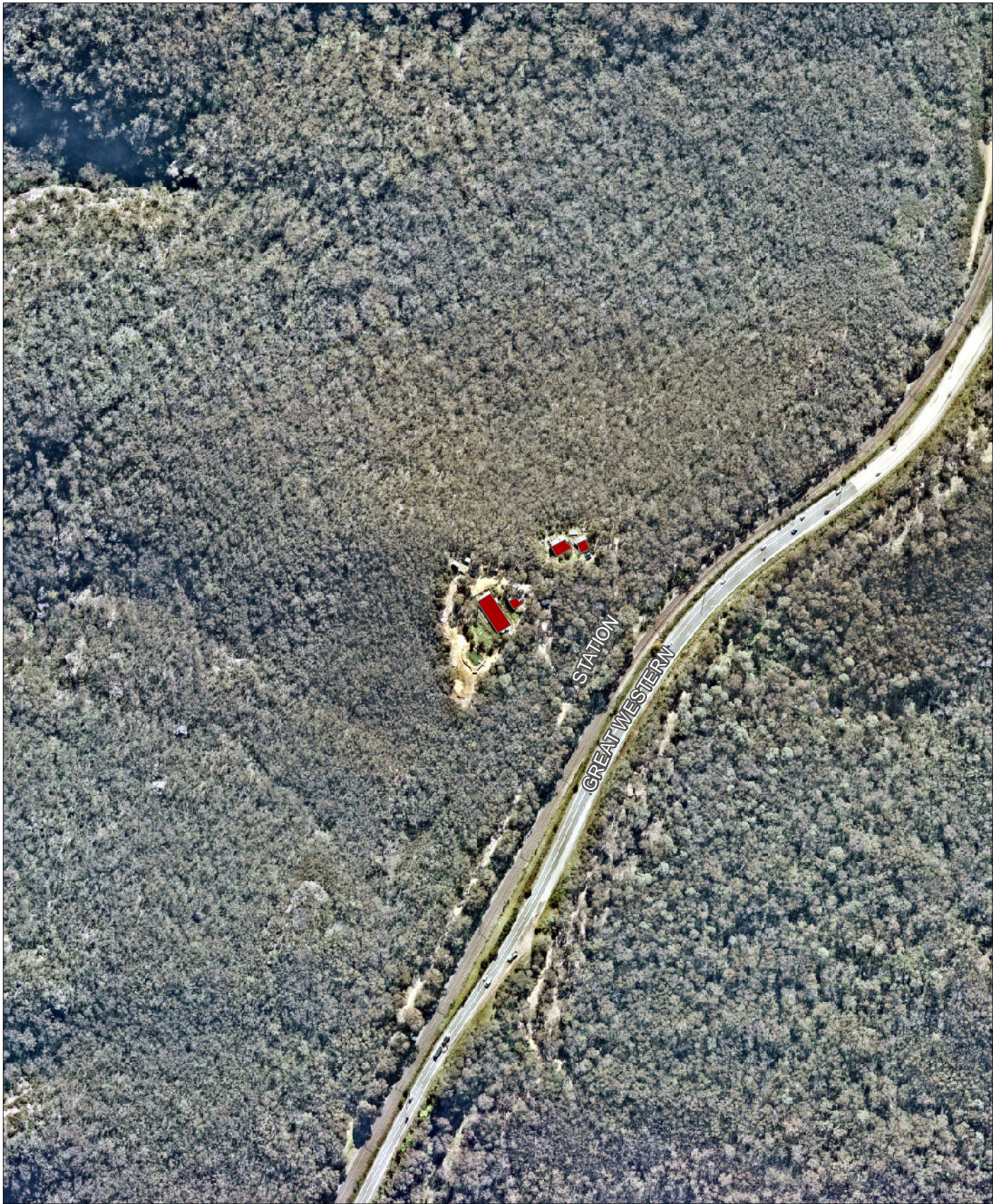
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Receivers where noise is exceeding criteria

Annexure L

Receivers potentially
affected by cumulative
impacts



GWH - Potential cumulative construction noise impacts



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Potential cumulative construction noise impacts



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Source: Nearmap 2022



GWH - Potential cumulative construction noise impacts



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Potential cumulative construction noise impacts



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Source: Nearmap 2022



GWH - Potential cumulative construction noise impacts



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Potential cumulative construction noise impacts



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Source: Nearnap 2022



GWH - Potential cumulative construction noise impacts



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Potential cumulative construction noise impacts



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