

APPENDIX

INLAND
RAIL 

S

Construction Noise and Vibration and Operational Road Traffic Noise Technical Report

Part 3 of 4

INLAND RAIL—BORDER TO GOWRIE ENVIRONMENTAL IMPACT STATEMENT

APPENDIX

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Construction Noise and Vibration and Operational Road Traffic Noise Technical Report

Appendix E Construction Noise Contours

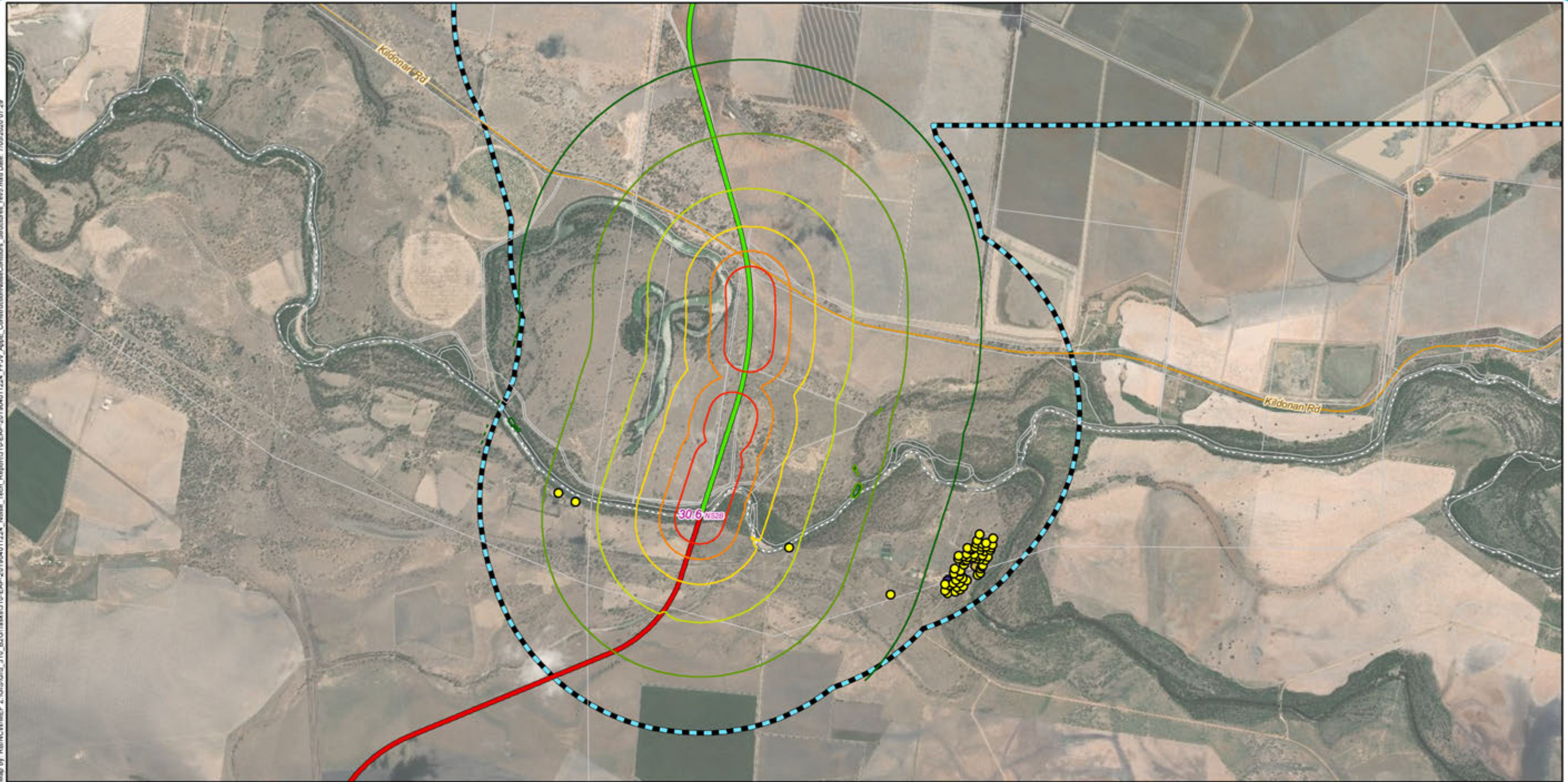
INLAND RAIL—BORDER TO GOWRIE ENVIRONMENTAL IMPACT STATEMENT

Appendix E

Construction noise contours

Part 1 of 2

Map by: REINOVMEP 2:GIS/GIS_310_B20/Traffic/310-EAP-201904011224_Noise_Tech_Report/310-EAP-201904011224_FFJV_AppE_ConstructionNoiseContours_Structures_rev5.mxd Date: 7/05/2020 07:29



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- North Star to NSW/QLD border alignment
- Minor roads
- NSW/QLD border
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
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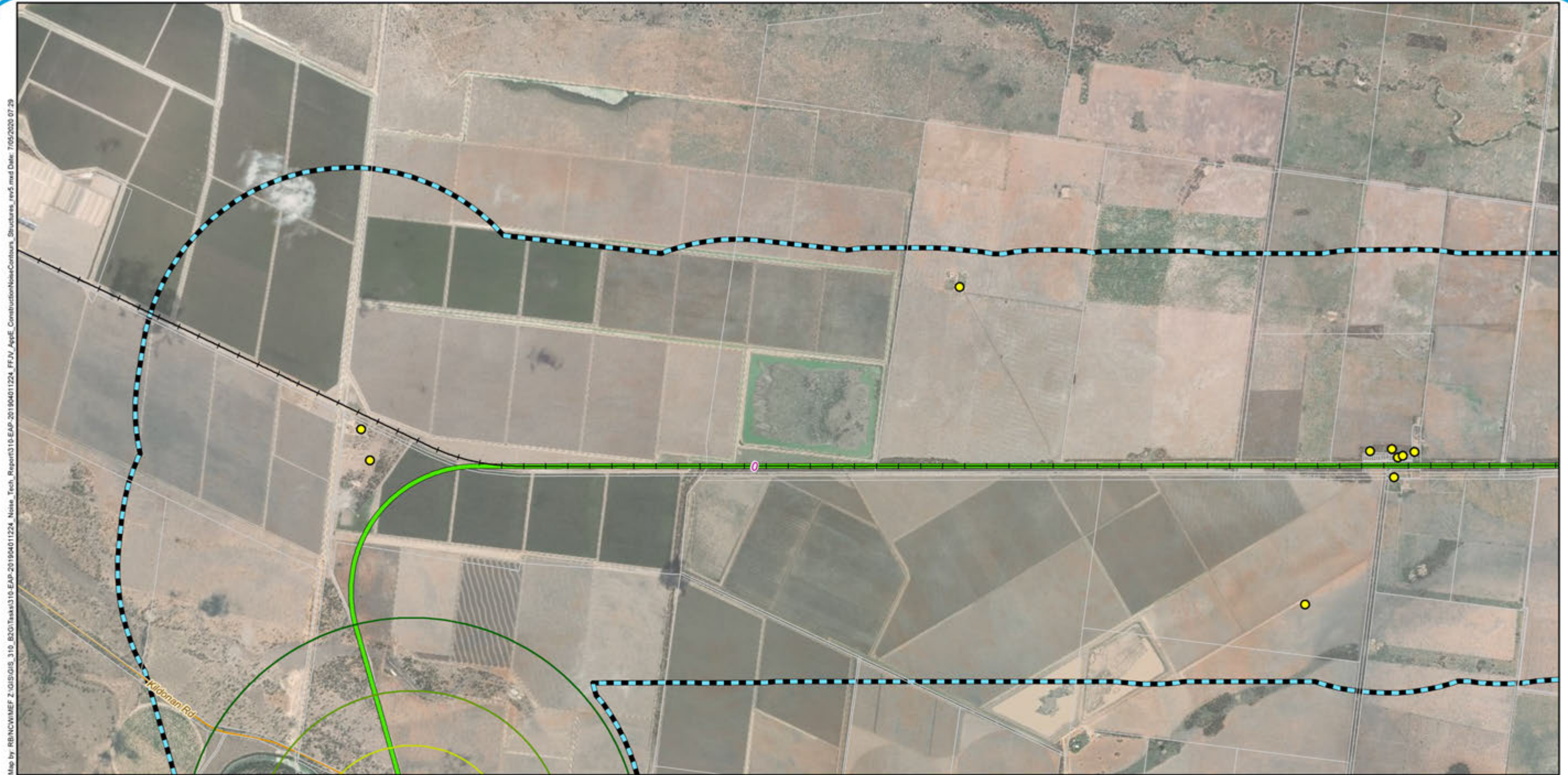
Sensitive Receptors

- Commercial Office
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- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km

Map by: REINOVMEF 2-IGIS/IGIS_310_E201Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FFJV_AppE_ConstructionNoiseContours_Structures_rev5.mxd Date: 7/05/2020 07:29



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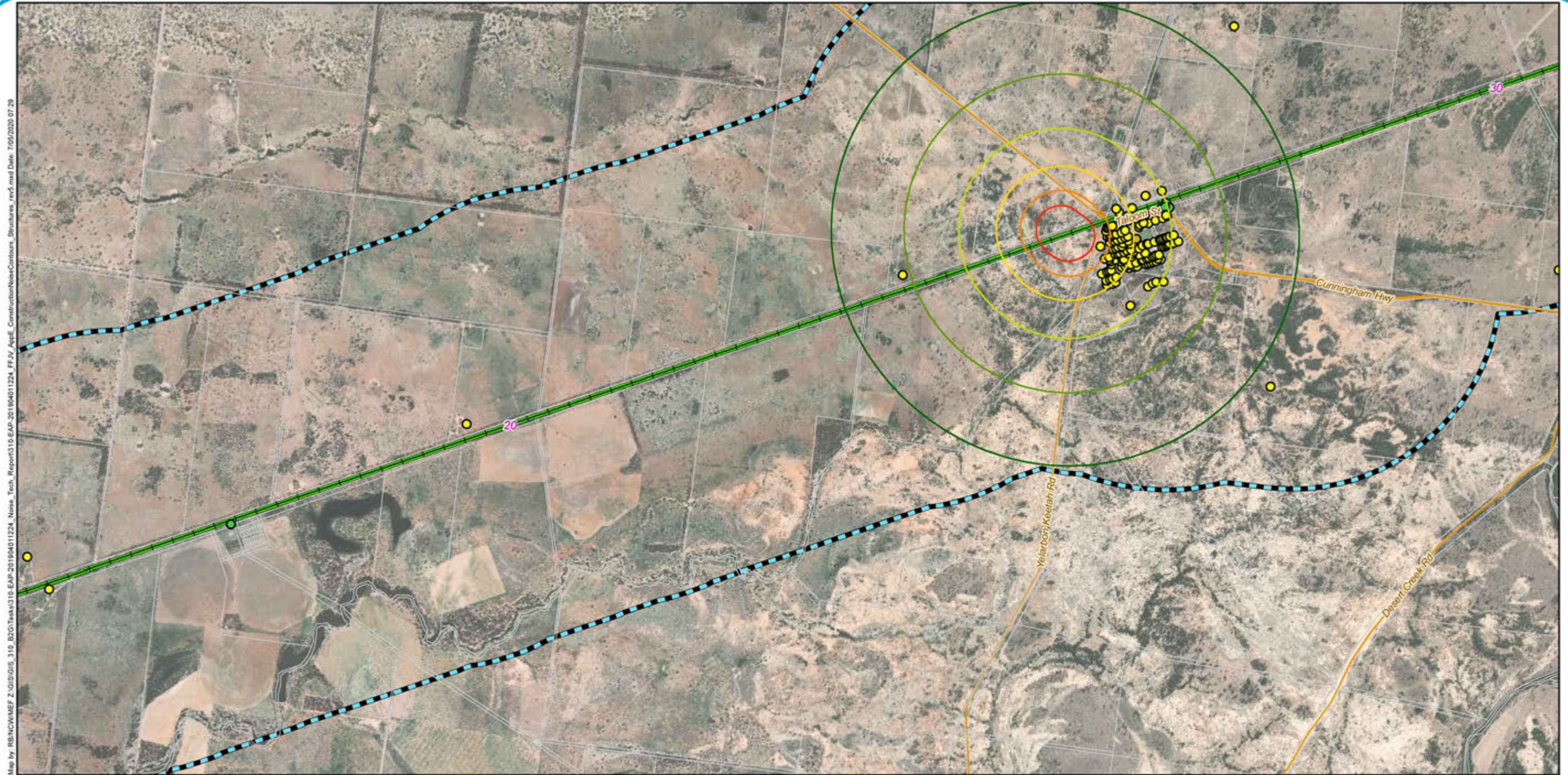
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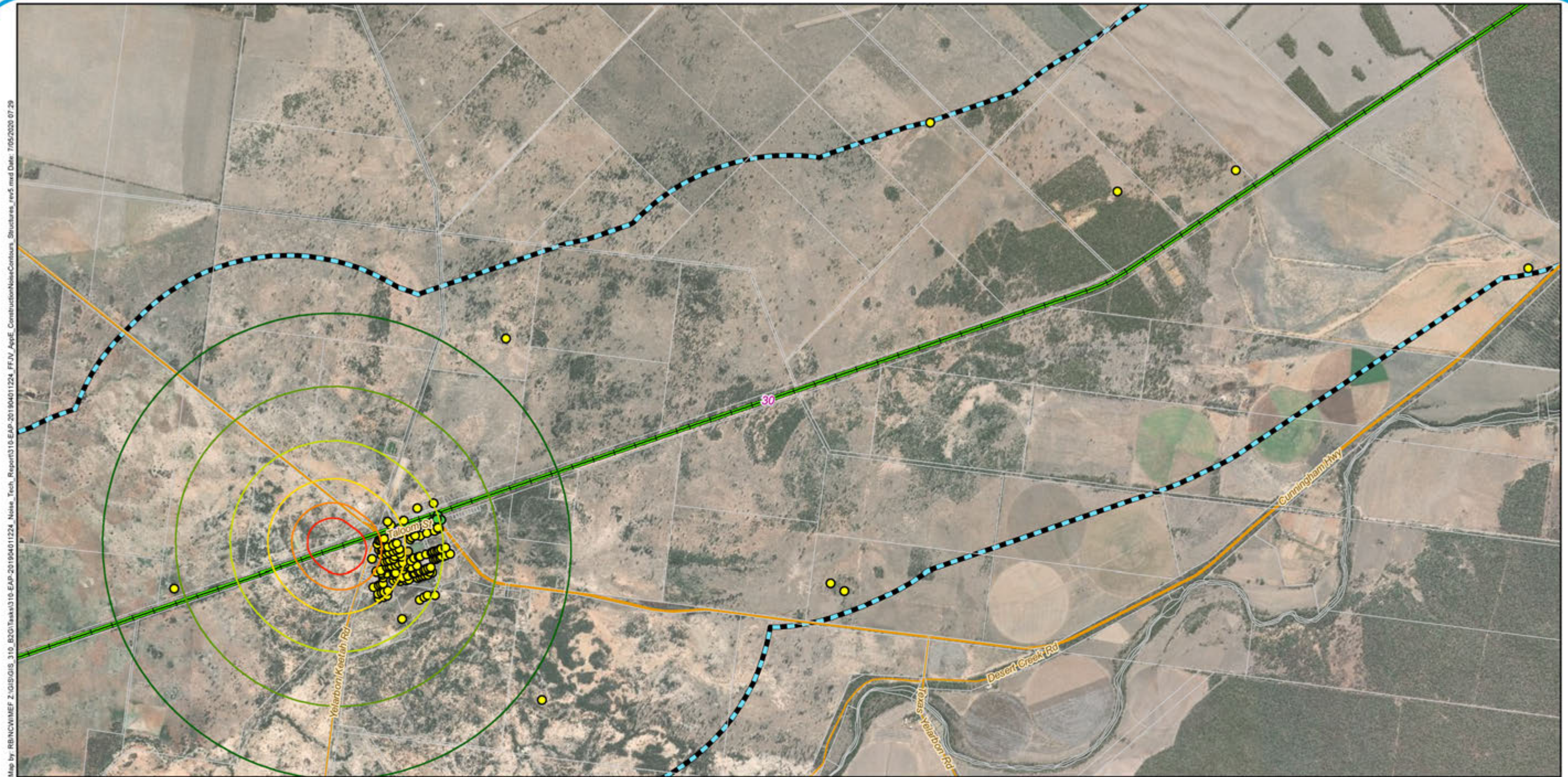
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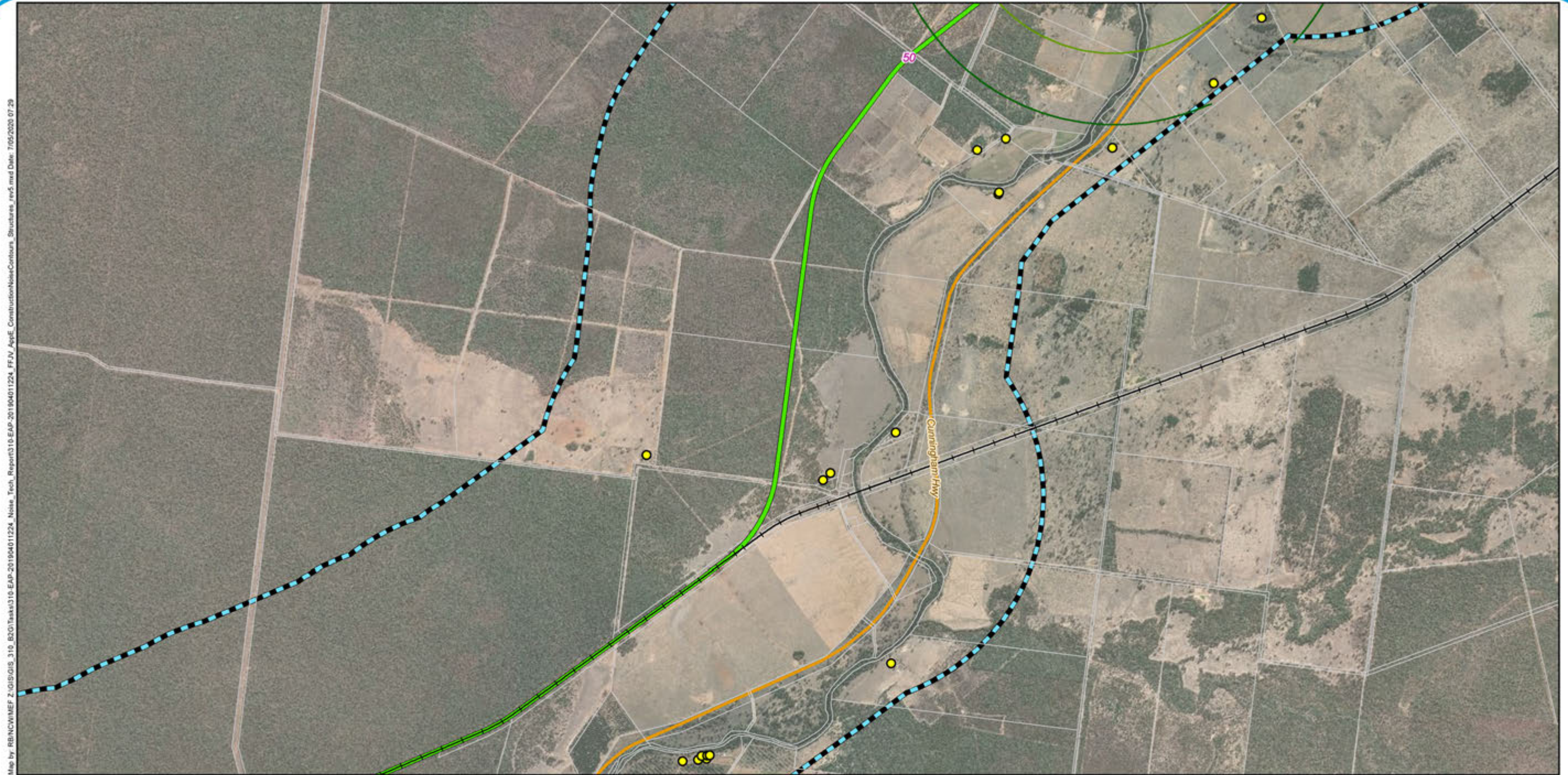
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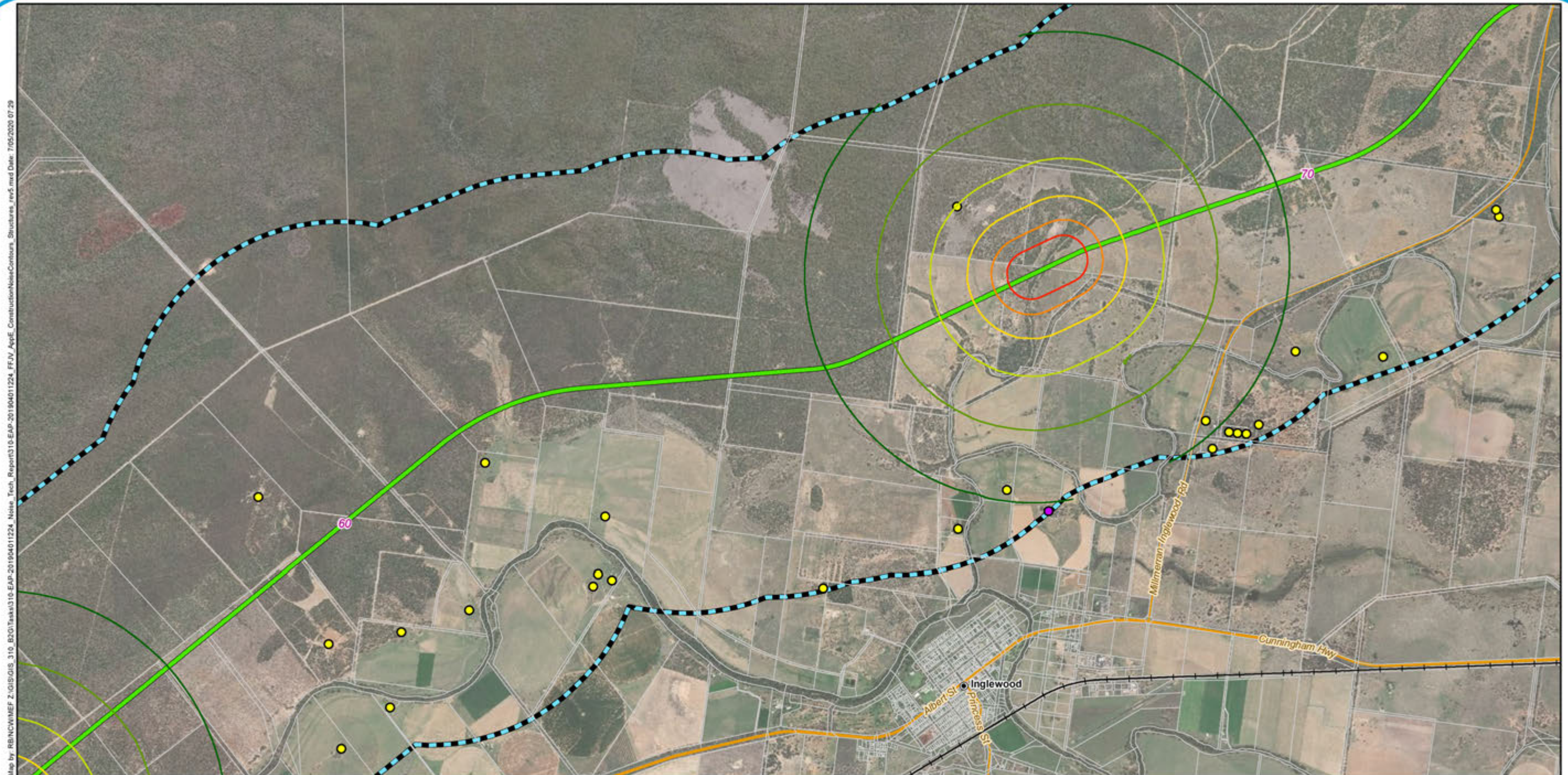
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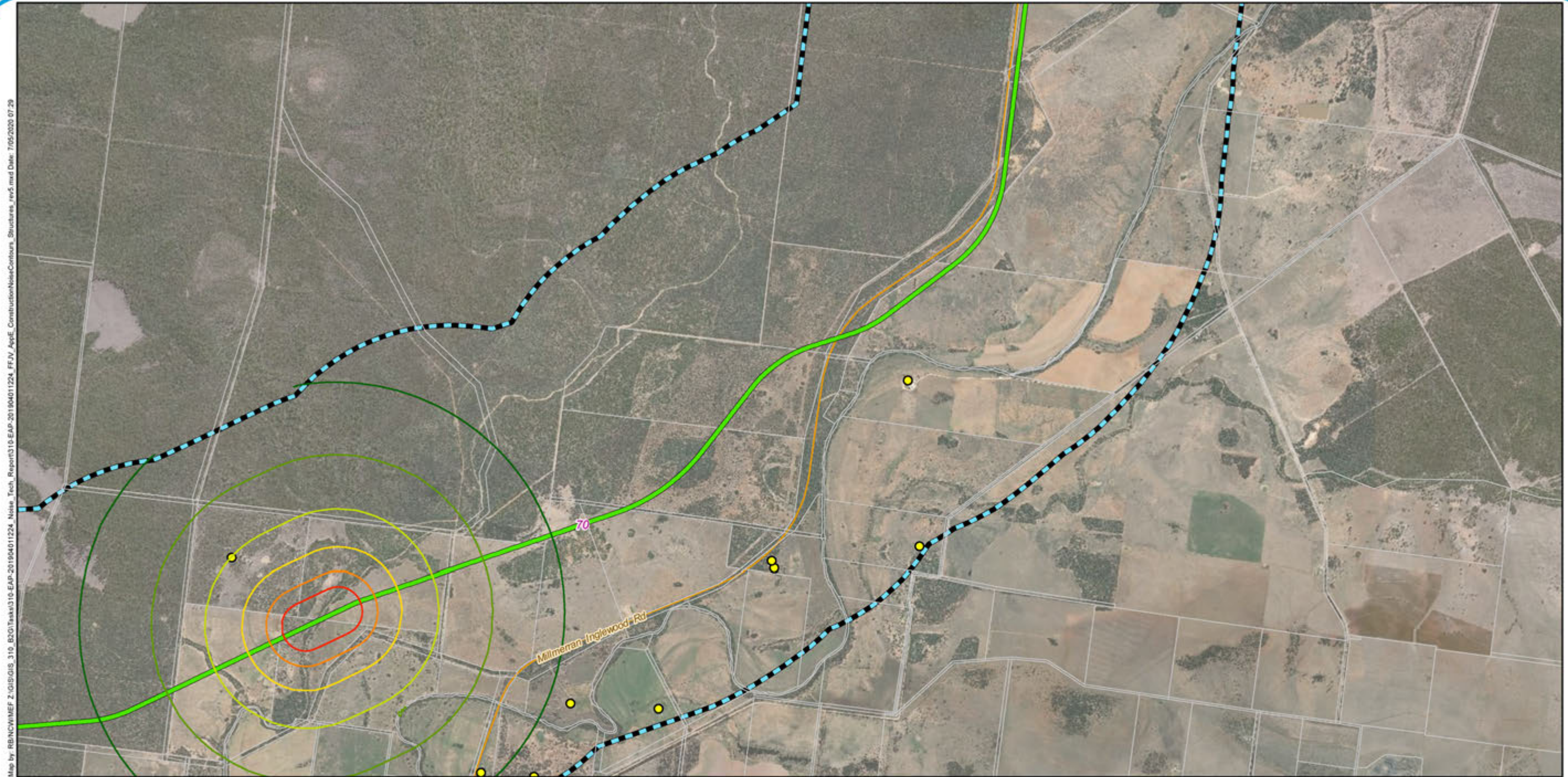
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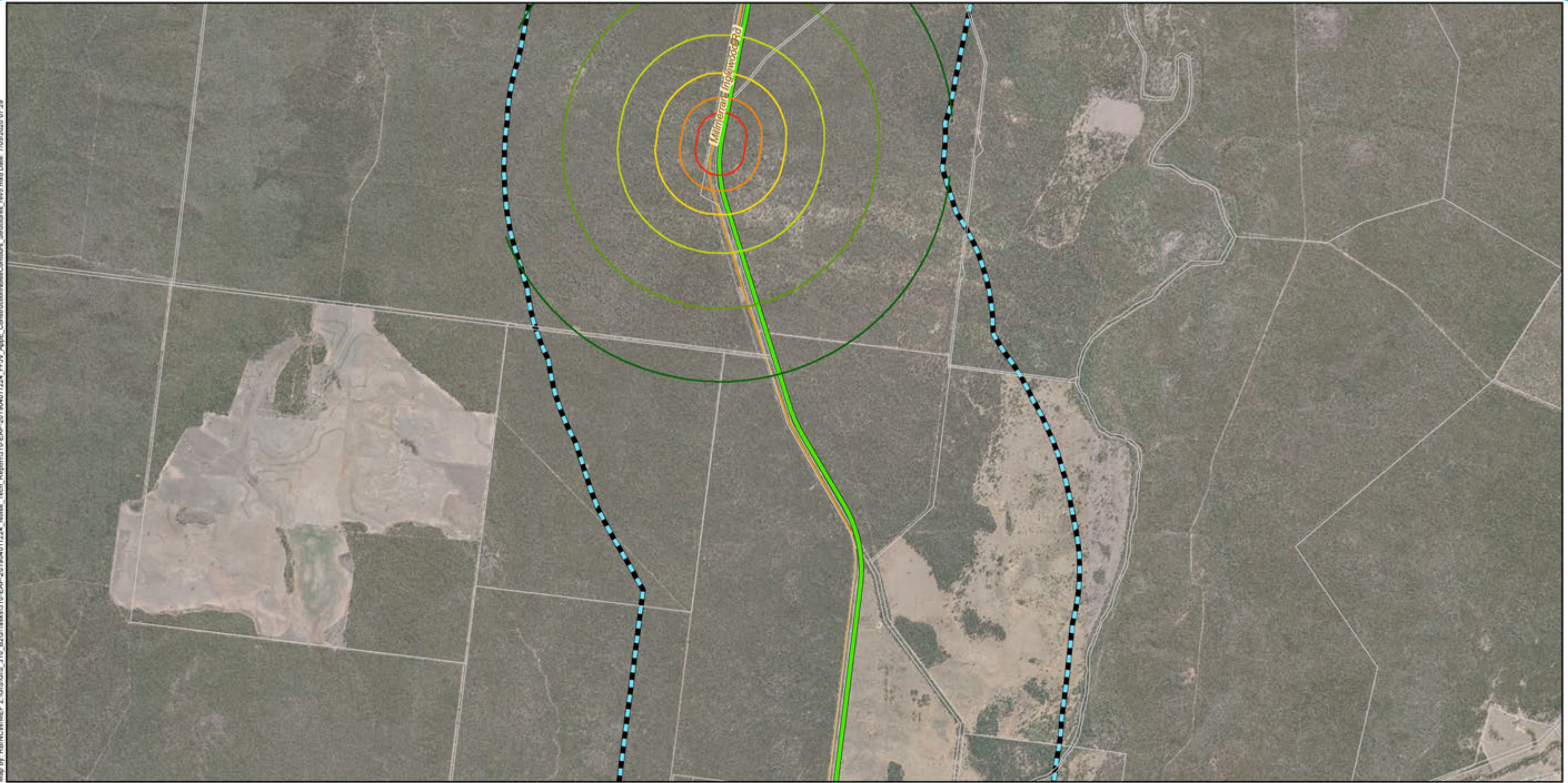
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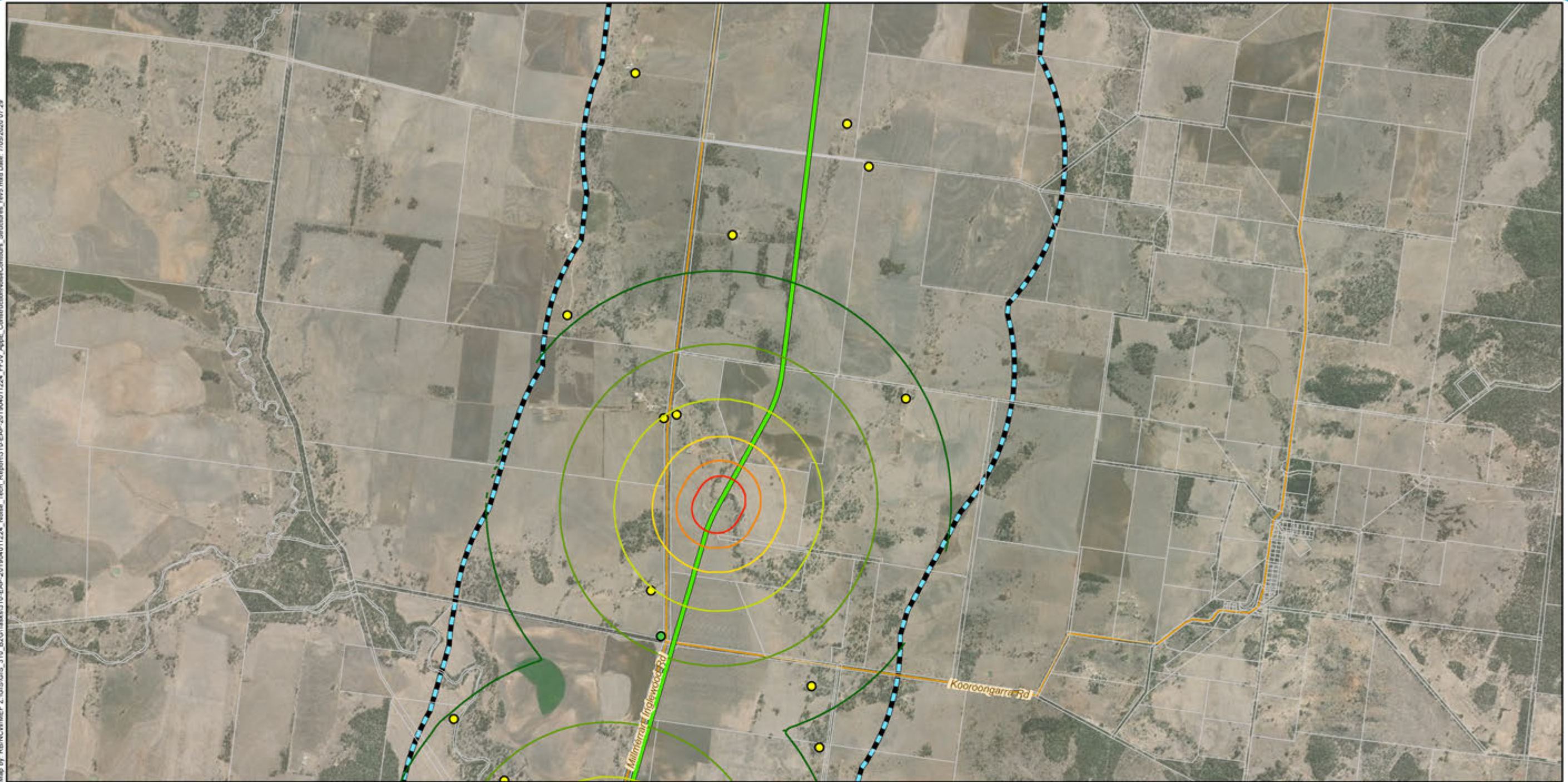
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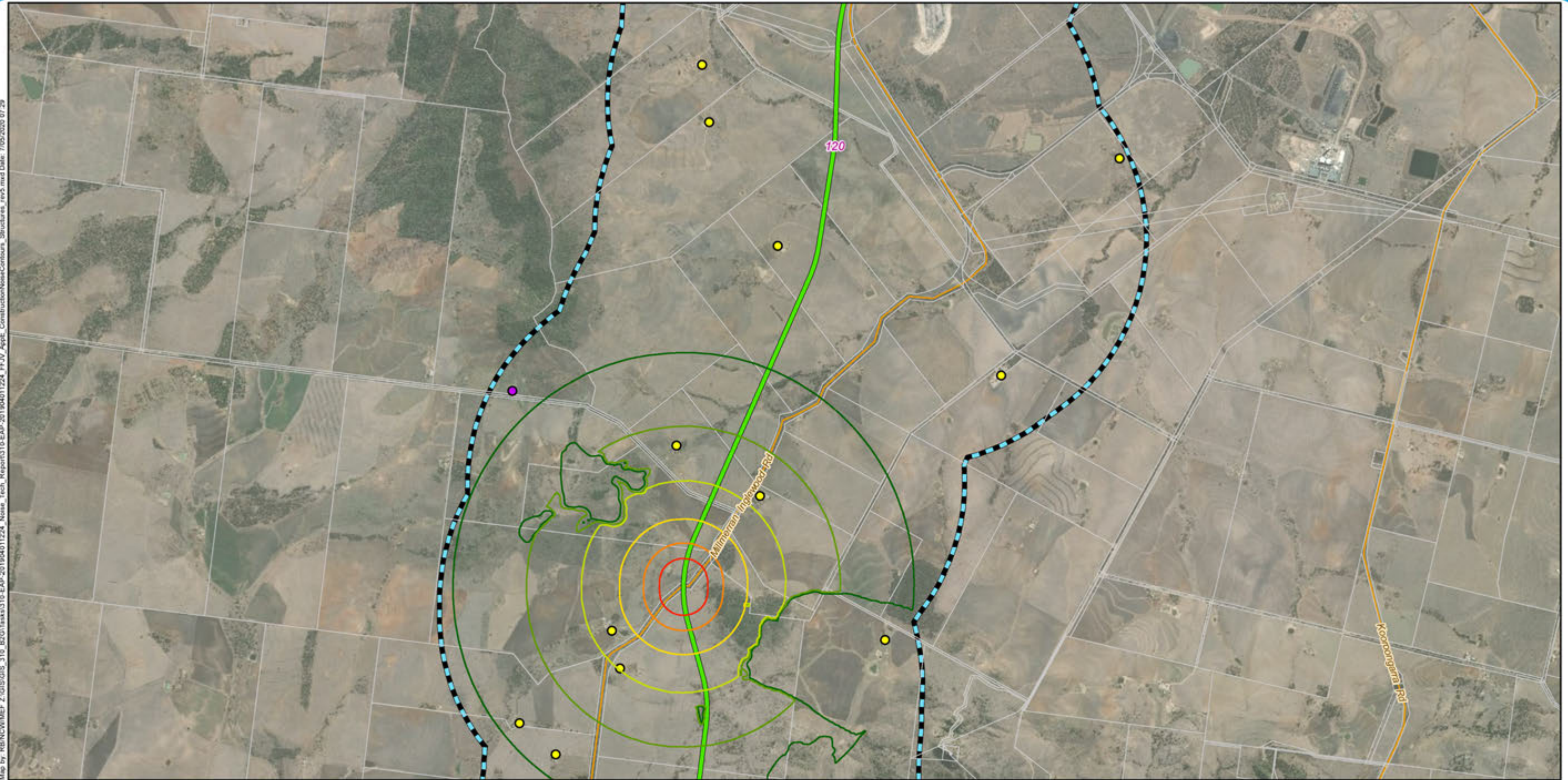
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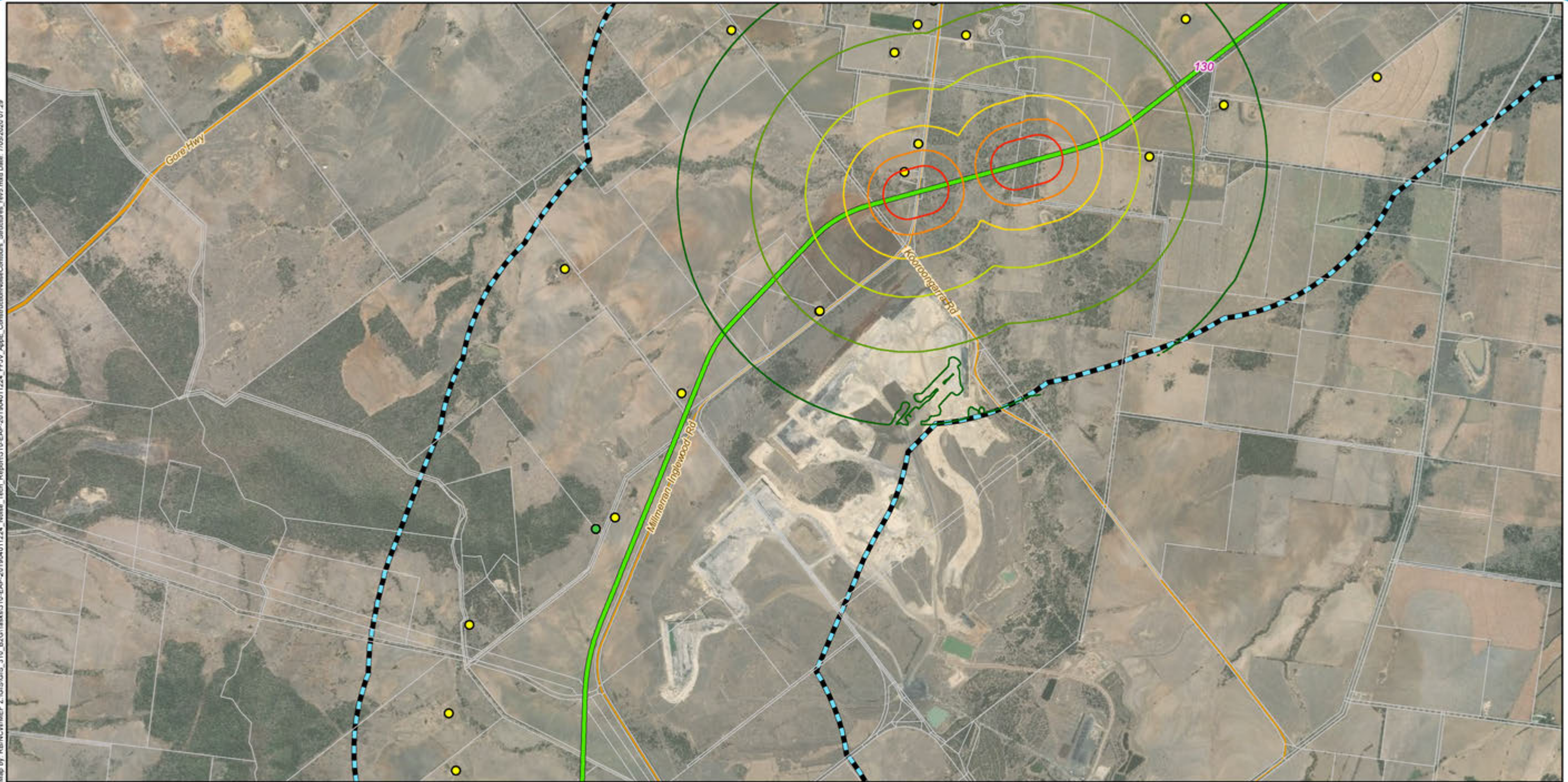
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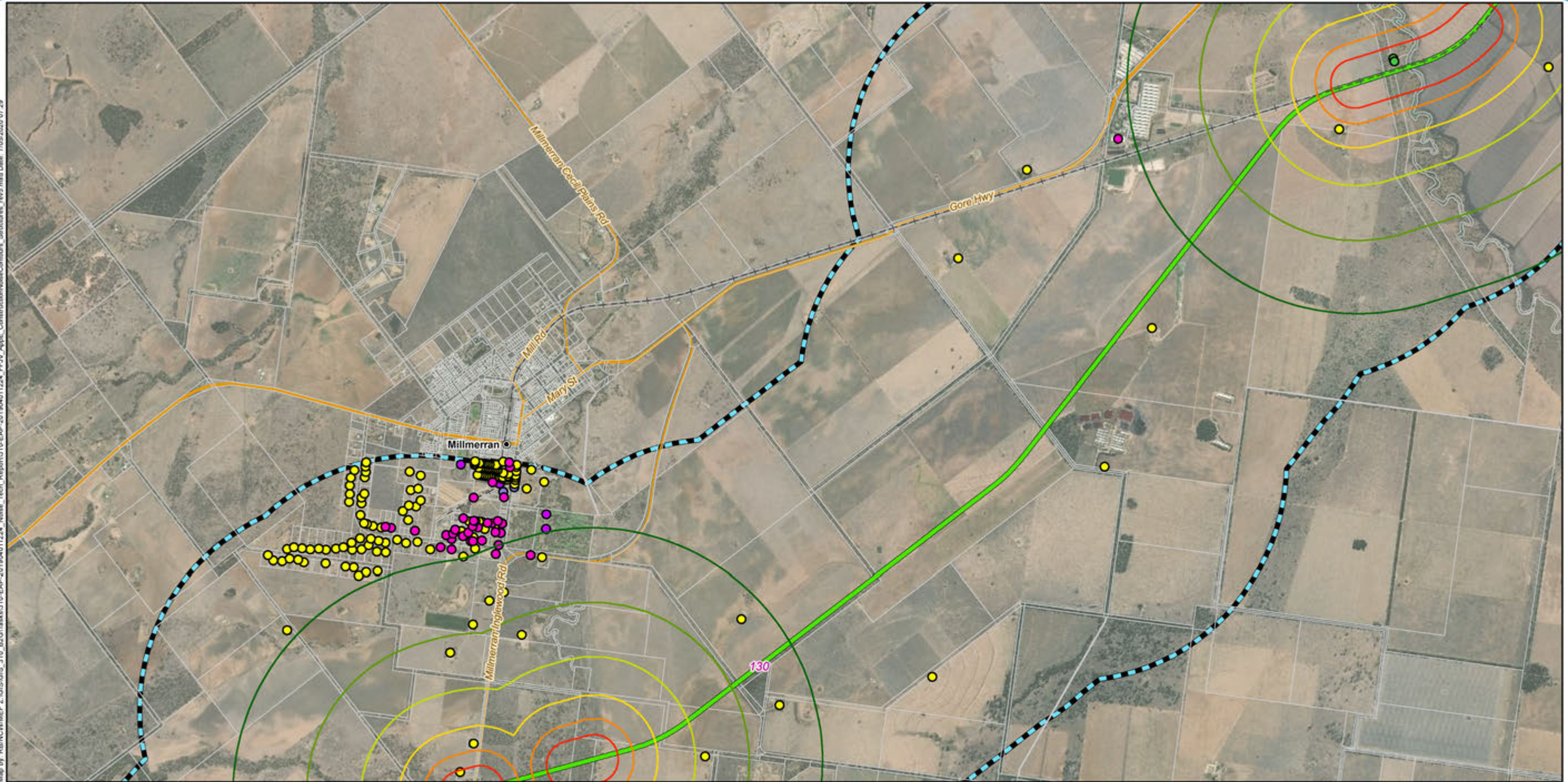
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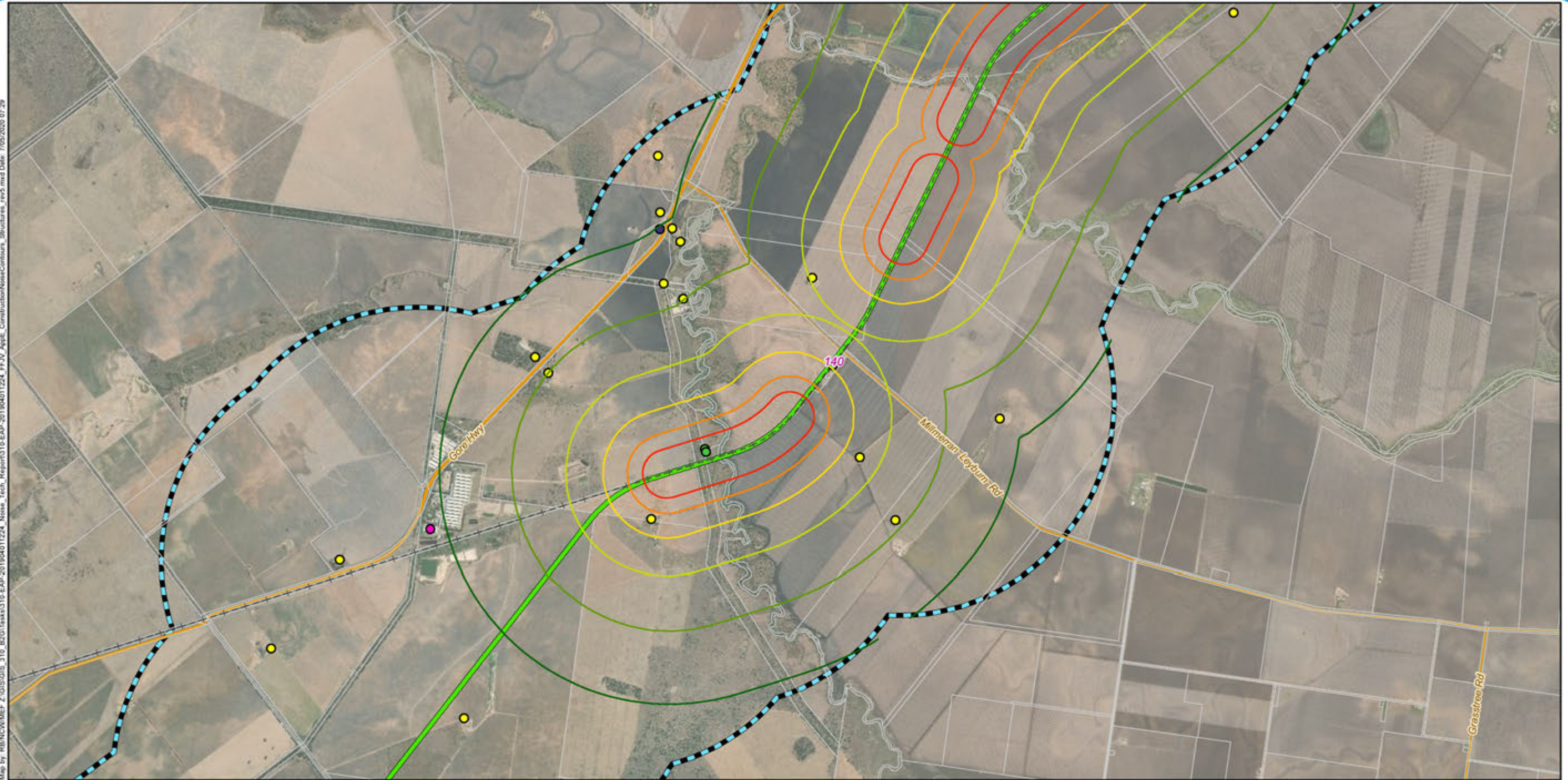
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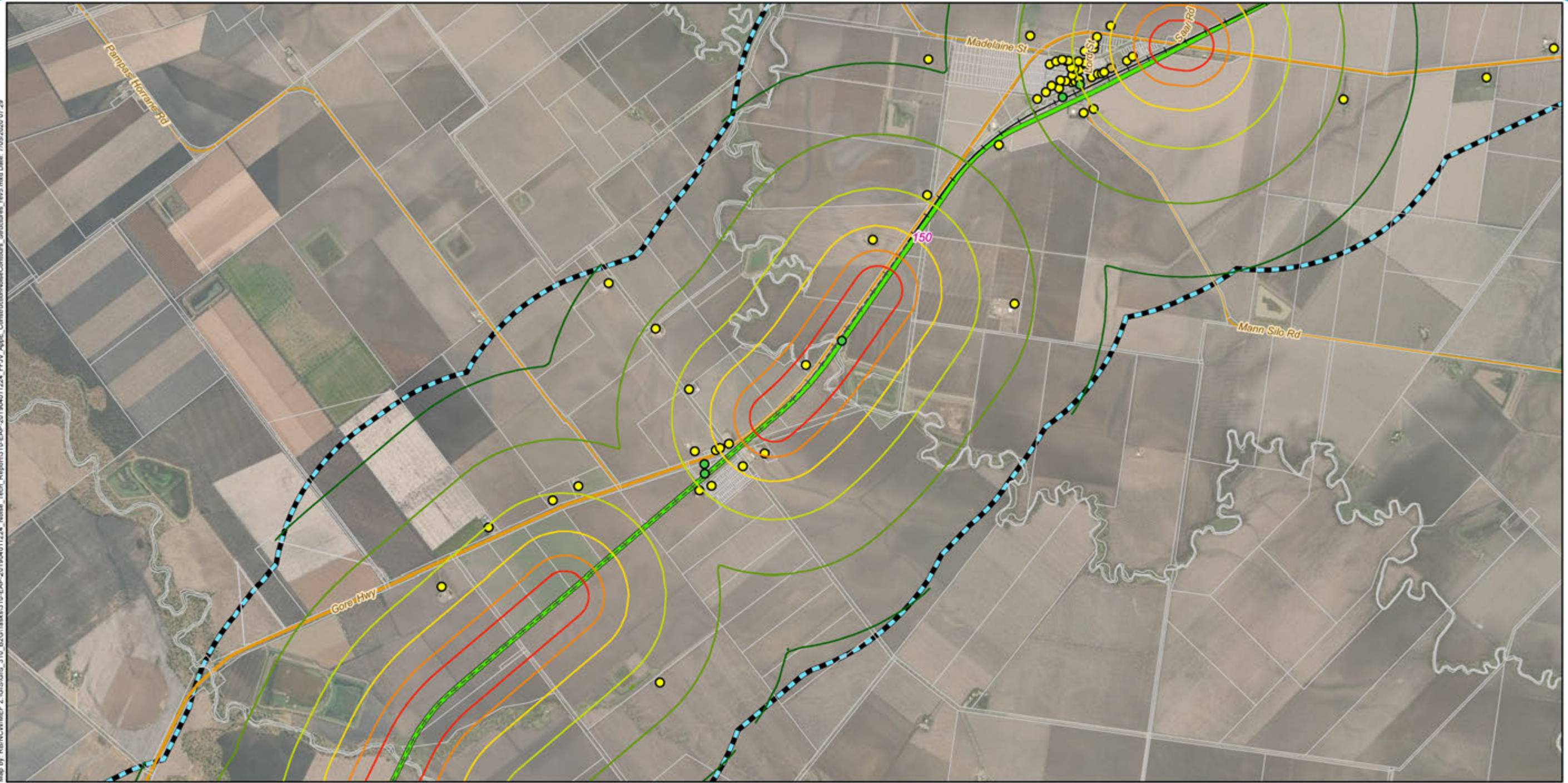
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Map by: REINOVIMEP 2-IGIS/IGIS_310_E207Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FFJV_AppE_ConstructionNoiseContours_Structures_rev5.mxd Date: 7/05/2020 07:29



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

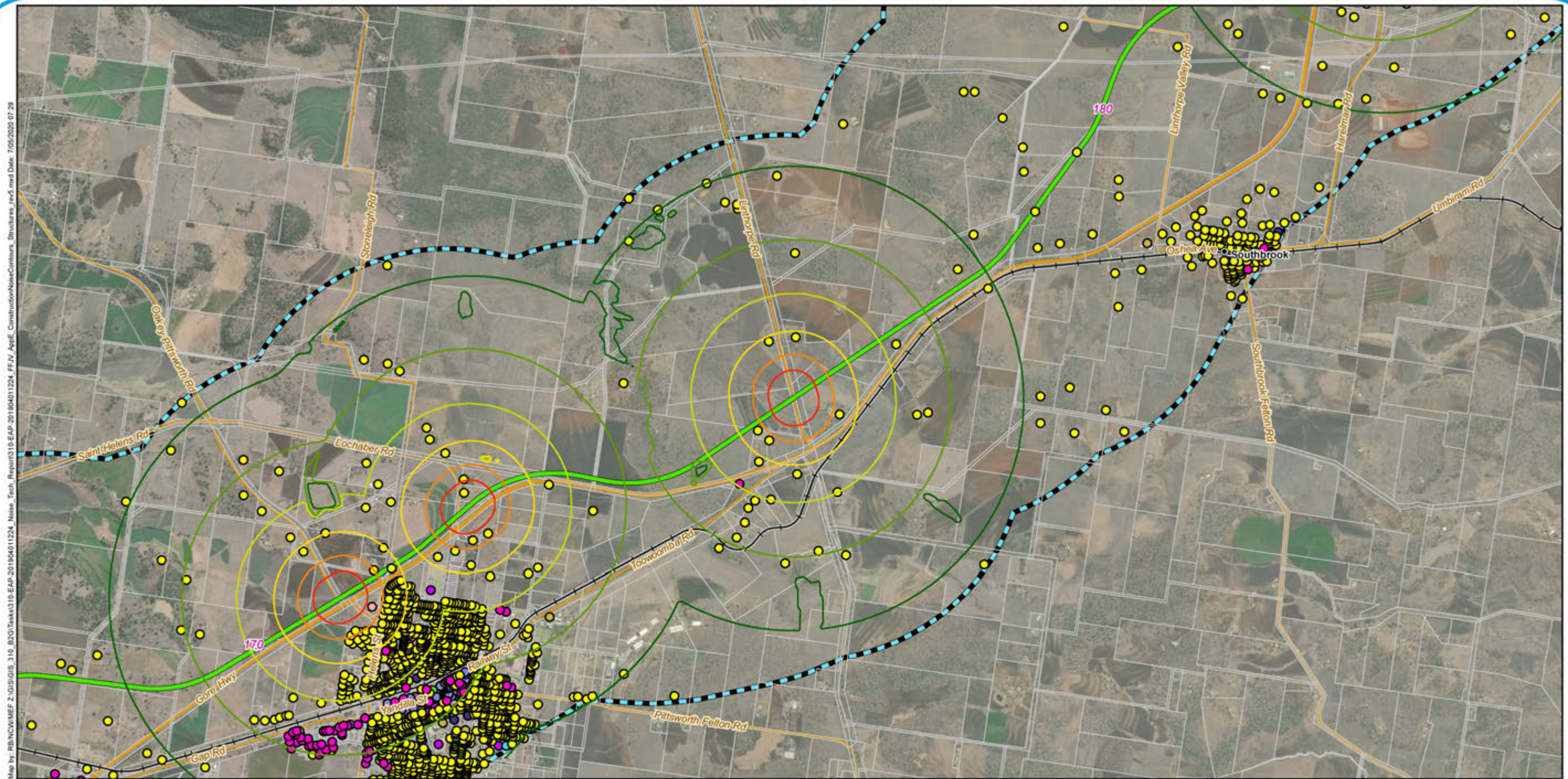
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Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
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- Industrial
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- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km



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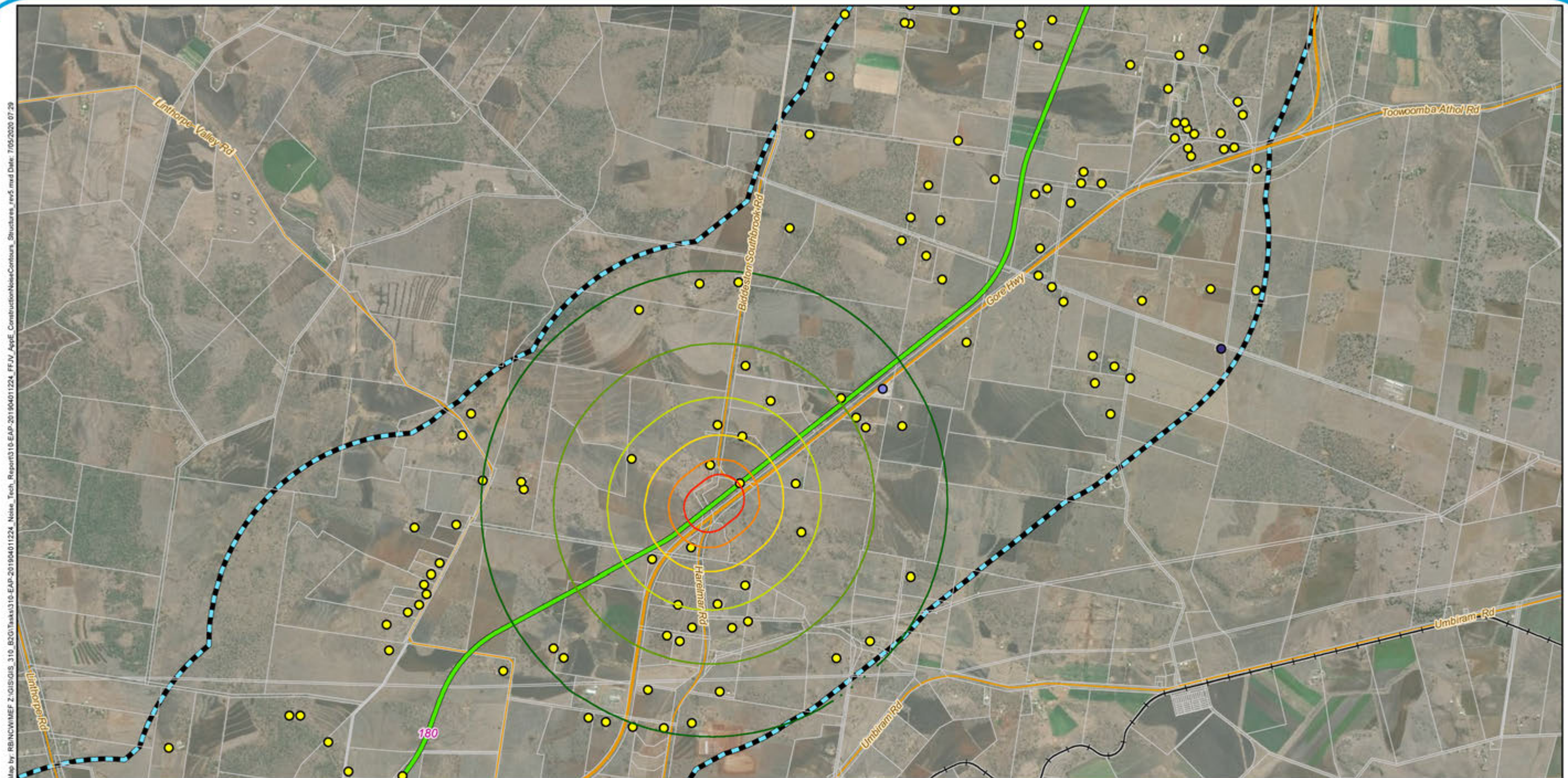


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Future Freight
Integrating Community, Environment and Engineering

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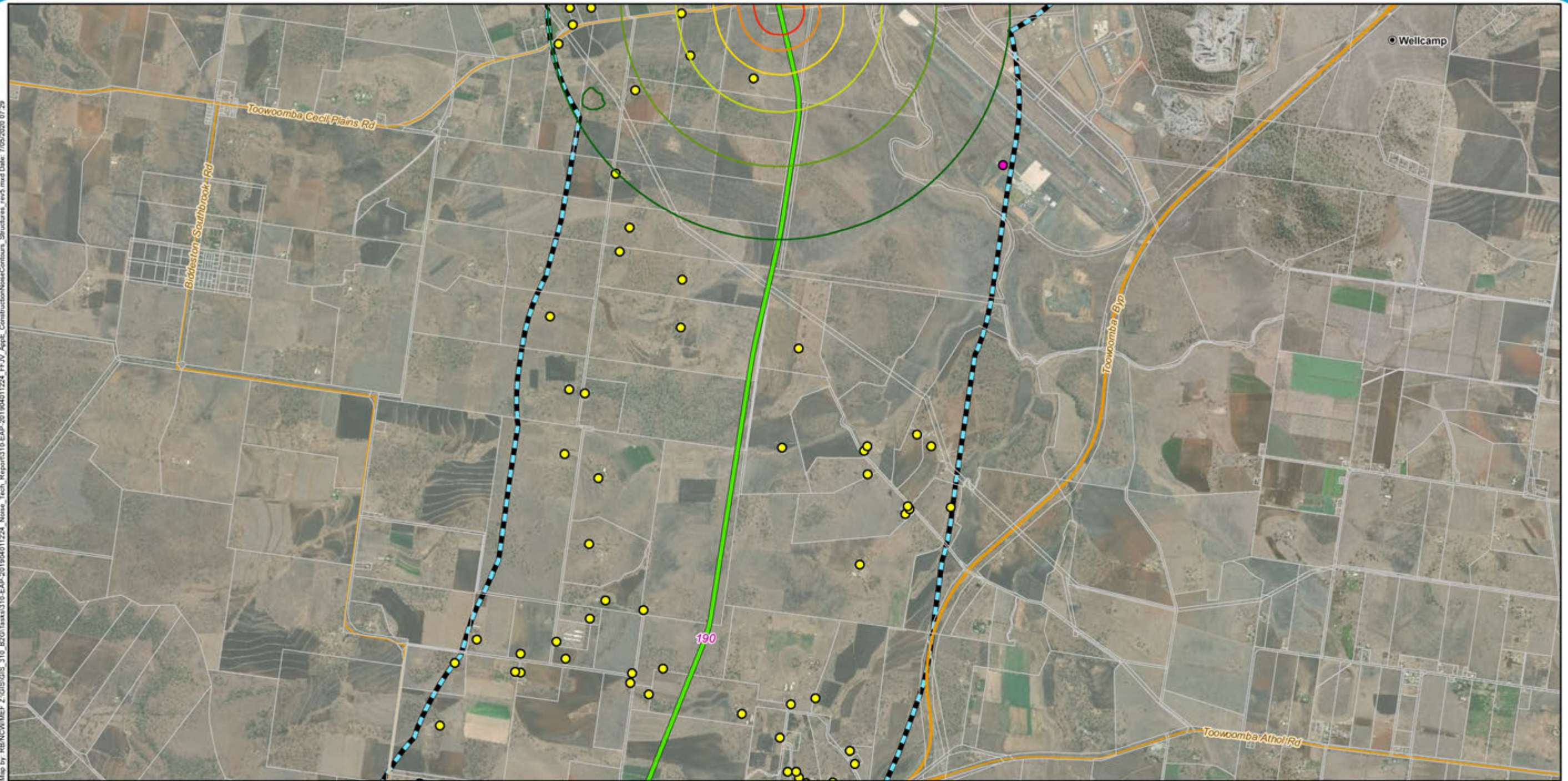
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Future Freight
 Integrating Community, Environment and Engineering

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Map by: RENOVIMET 2-IGIS/IGIS_310_E20/Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FFJV_AppE_ConstructionNoiseContours_Structures_rev5.mxd Date: 7/05/2020 07:29



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Methodology outlined in section 5.2

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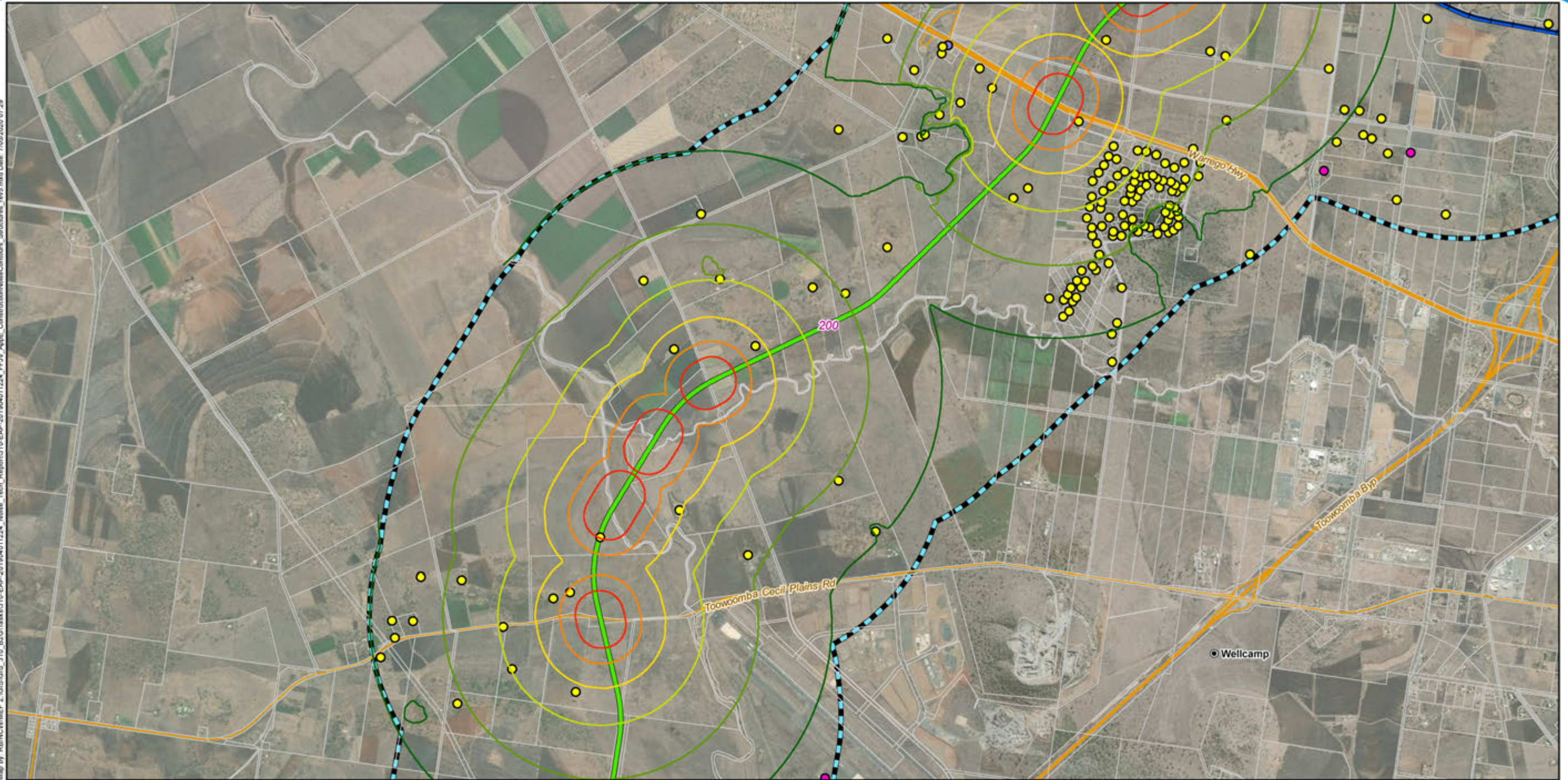
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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Gowrie to Helidon alignment
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Sound Pressure Level (L_{Aeq} , dB(A))

Methodology outlined in section 5.2

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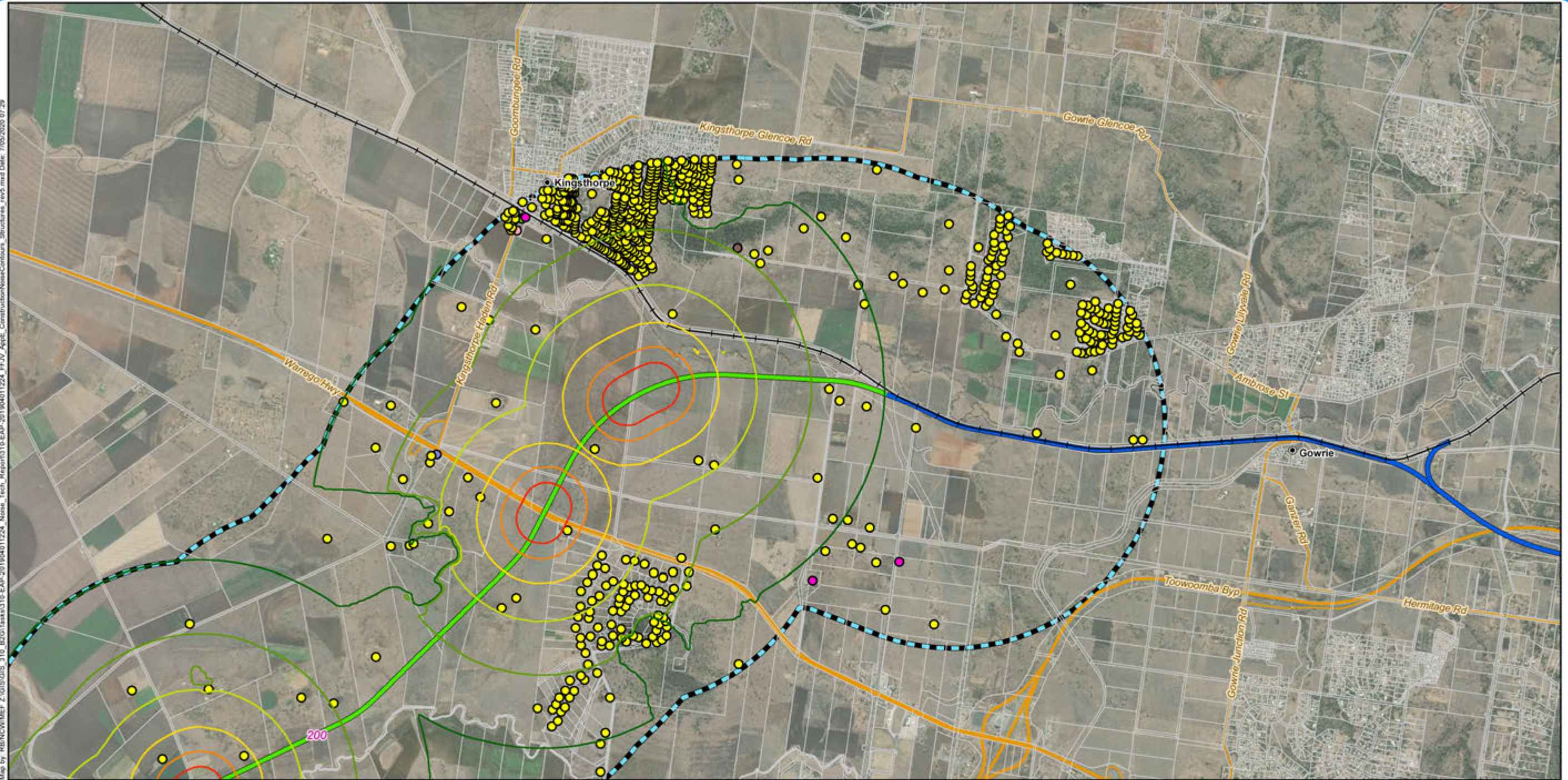
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Future Freight
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Issue date: 06/05/2020 Version: 5
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Map by: REINOVMEF 2-IGIS/IGIS 310, B20/Traffic/310-EAP-2019/04/11/224, Noise Tech, Report/310-EAP-2019/04/11/224, Noise Tech, Report/310-EAP-2019/04/11/224, FF JV AppE, Construction Noise Contours, Structures, rev5.mxd Date: 7/05/2020 07:29



Legend

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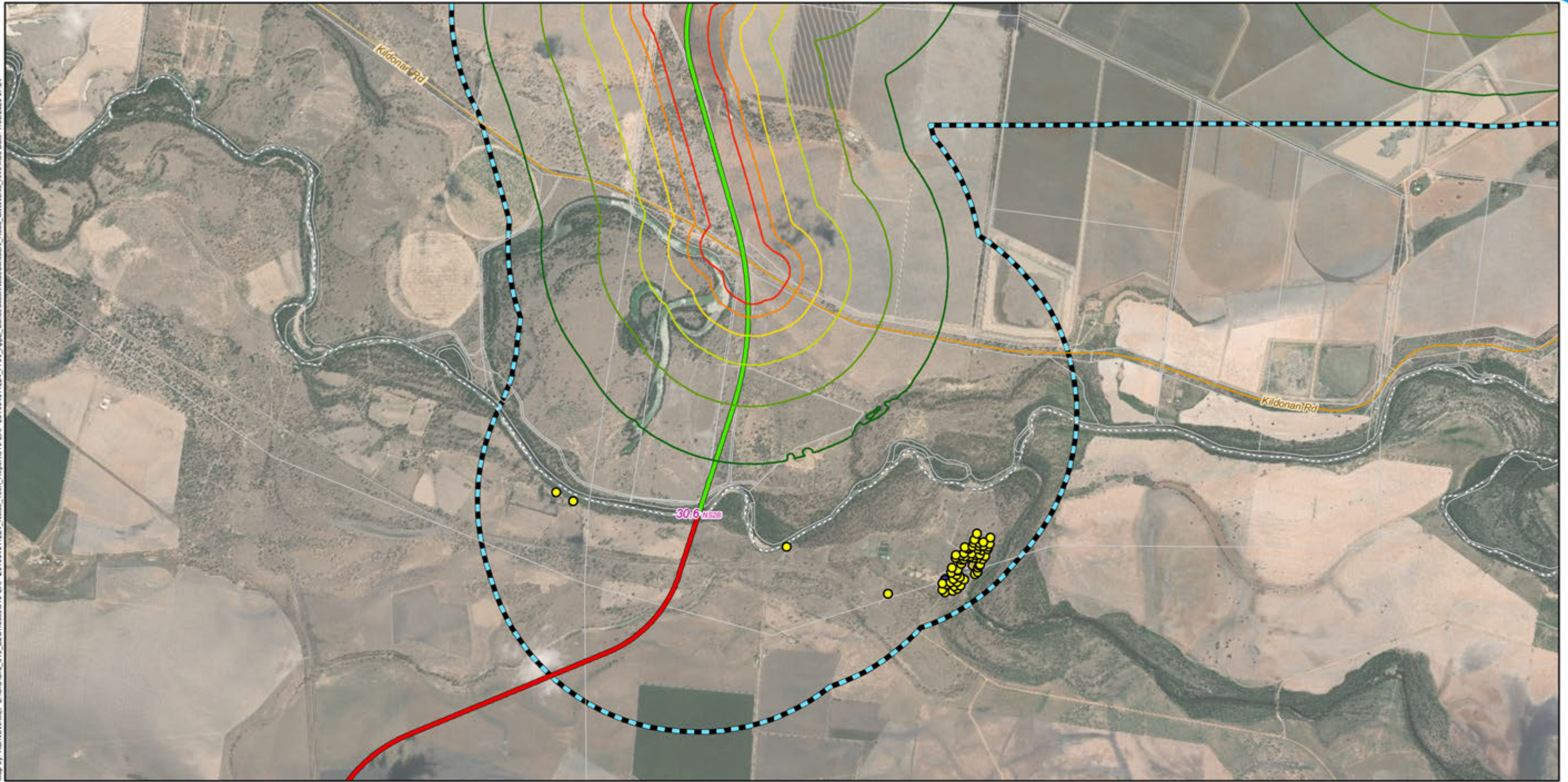


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Legend

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- Localities
- Border to Gowrie alignment
- North Star to NSW/QLD border alignment
- Minor roads
- NSW/QLD border
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Sound Pressure Level (L_{Aeq} , dB(A))

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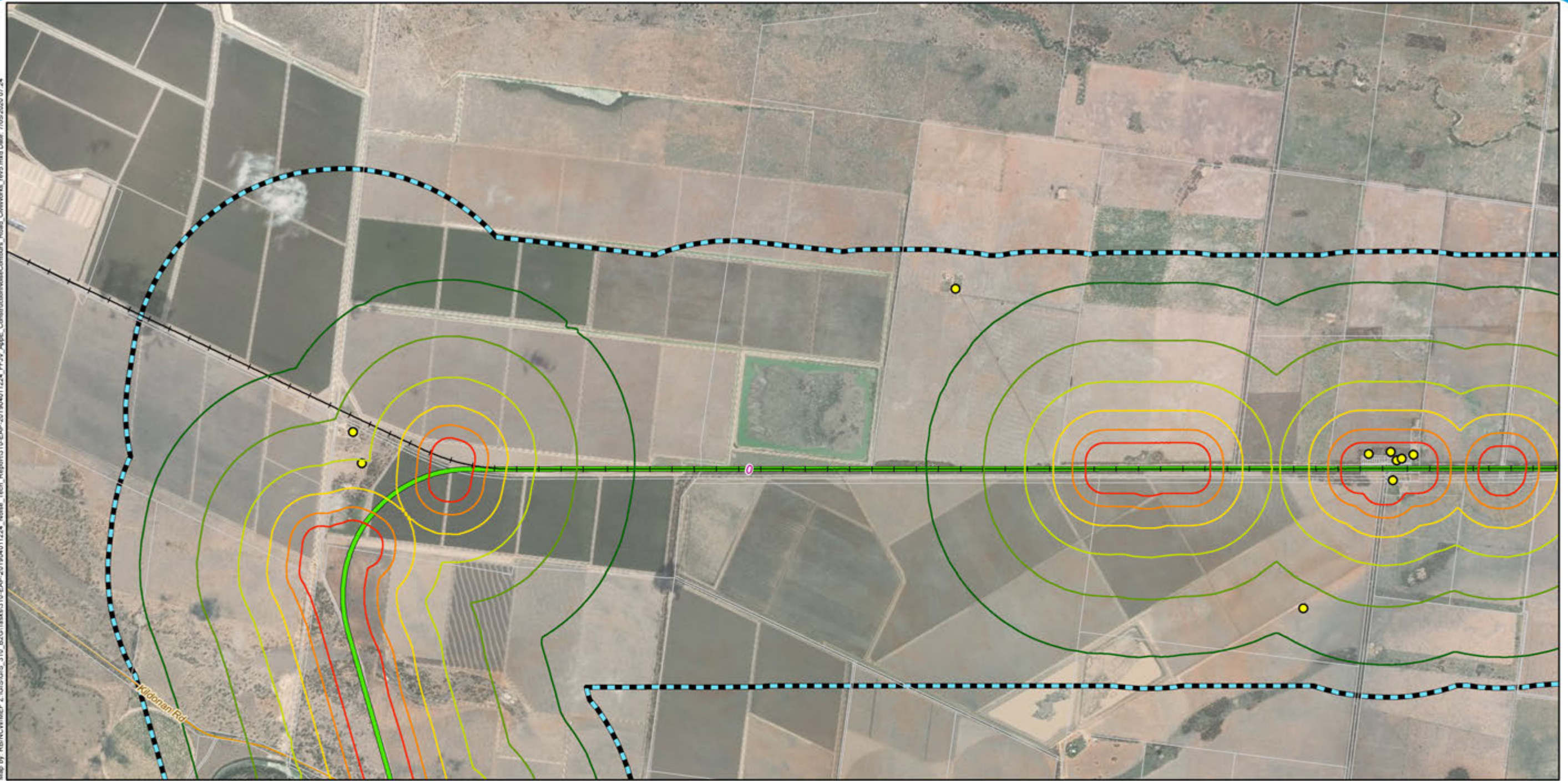
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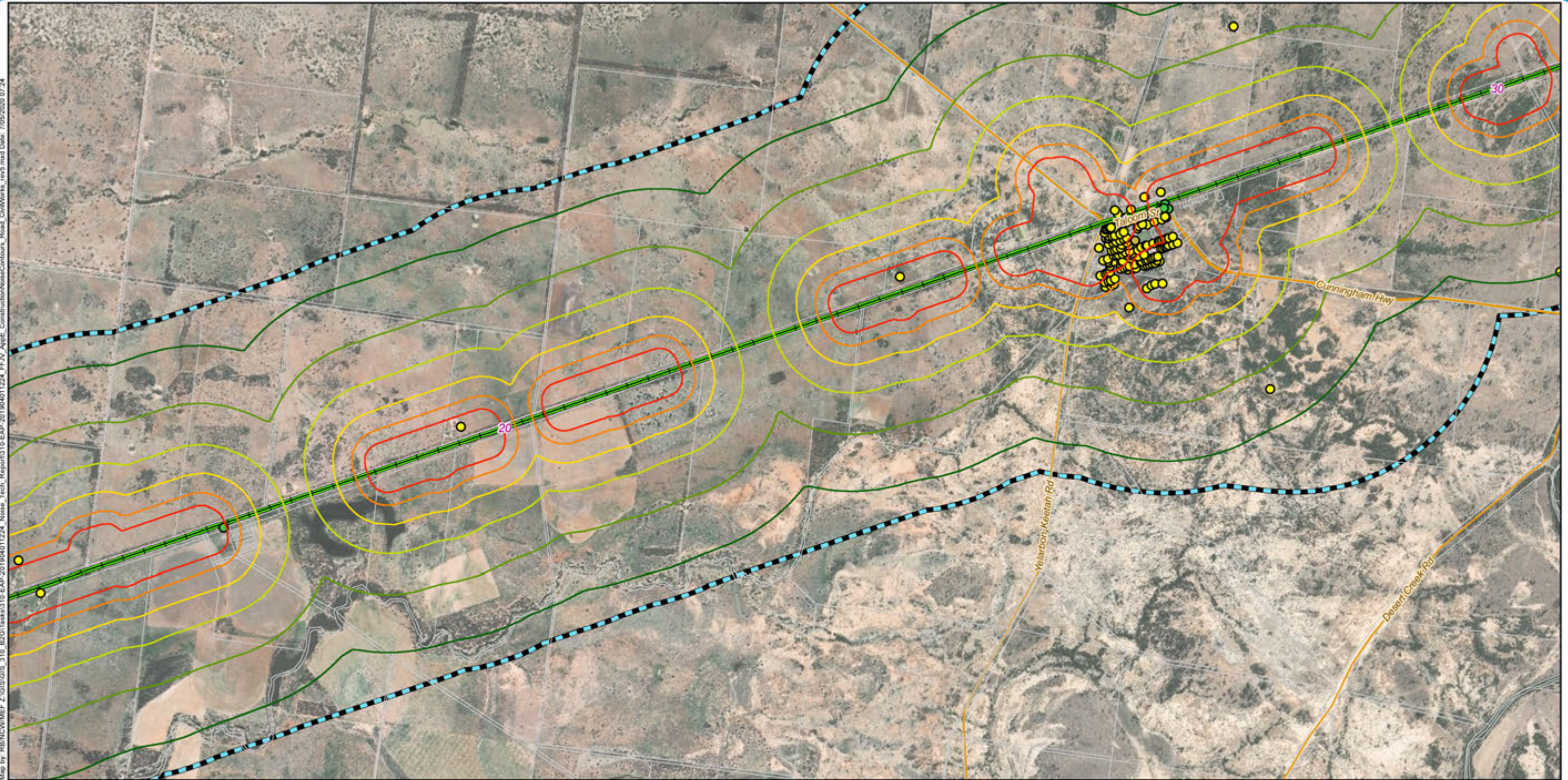
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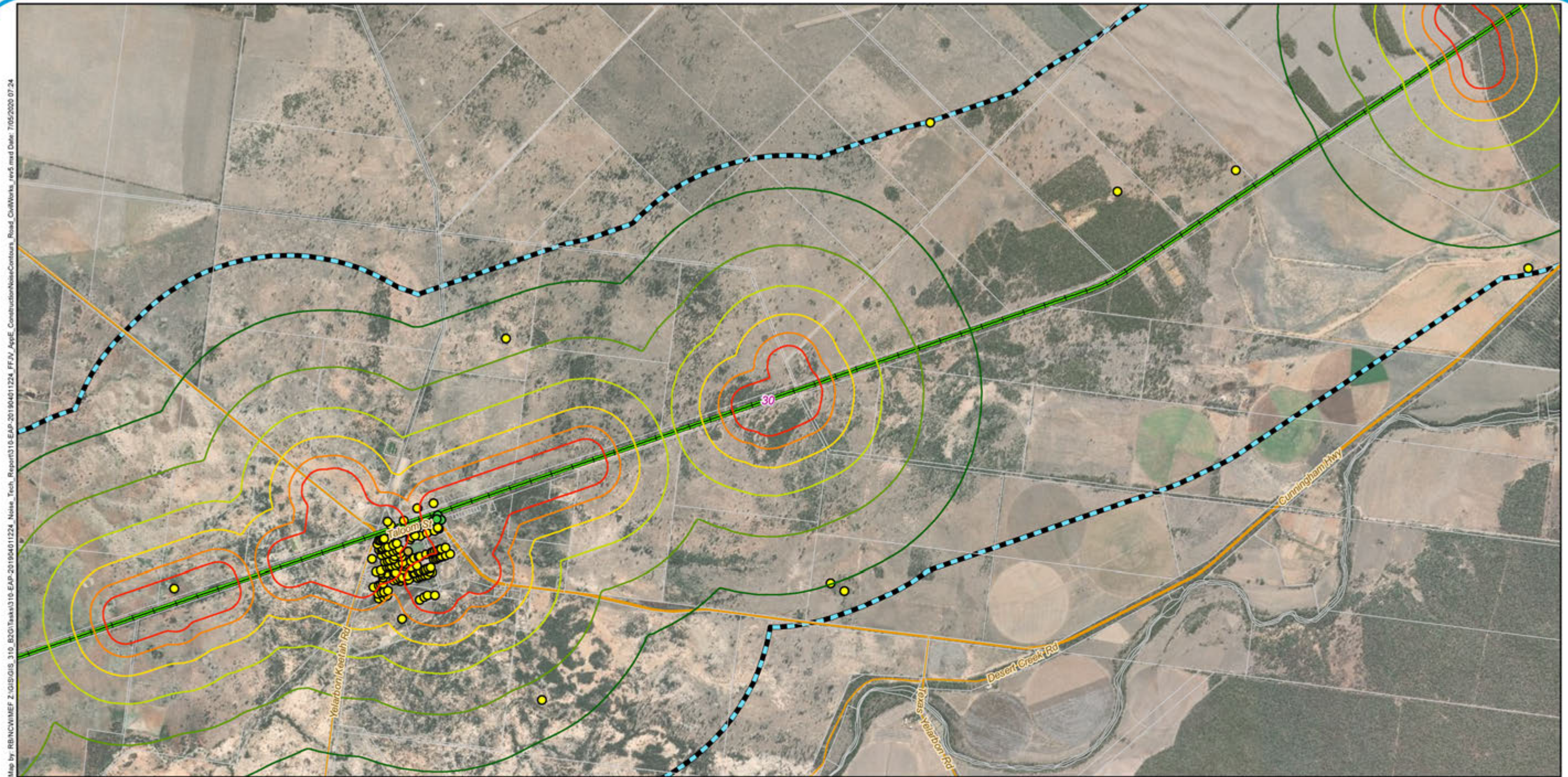
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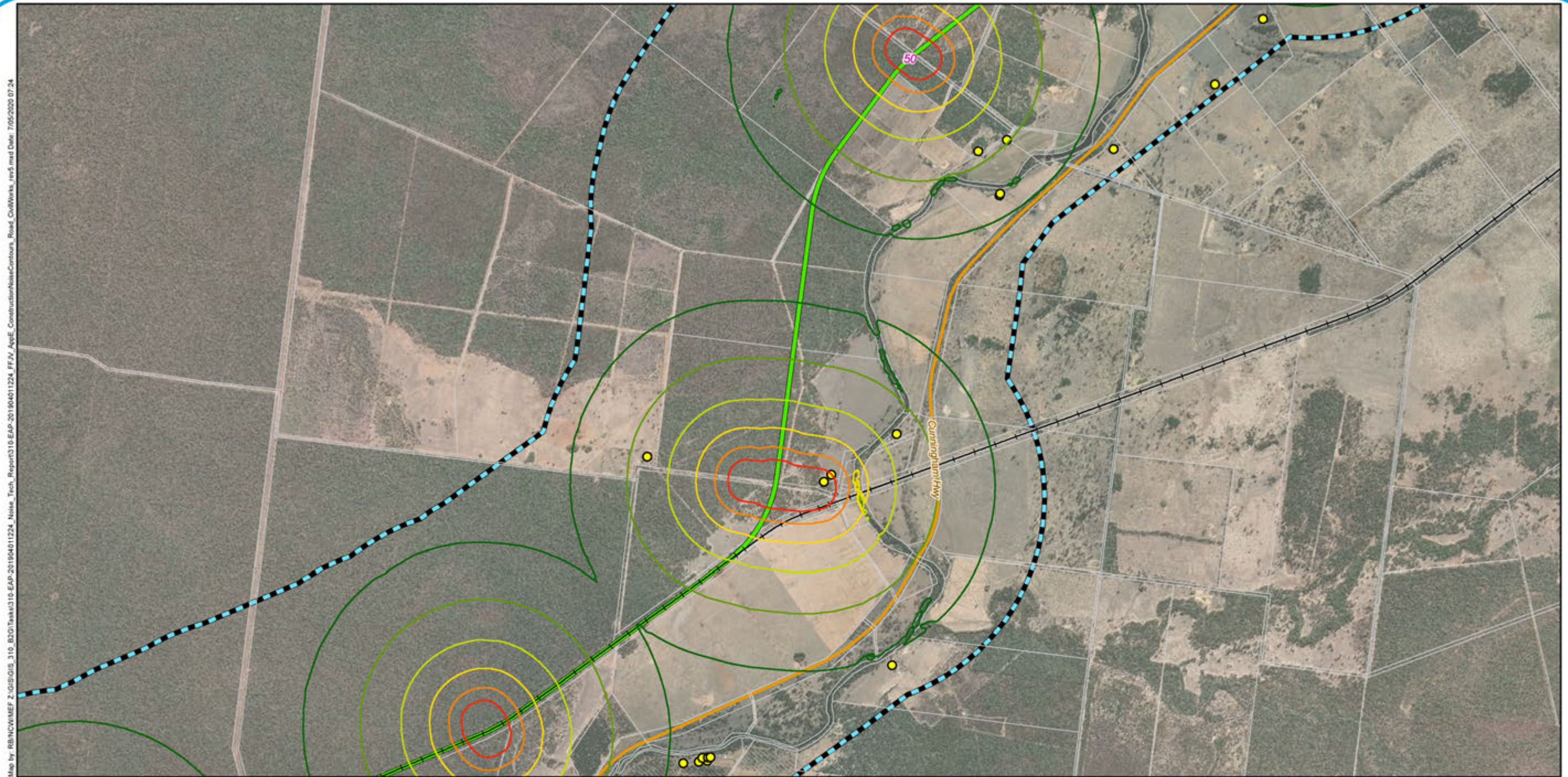
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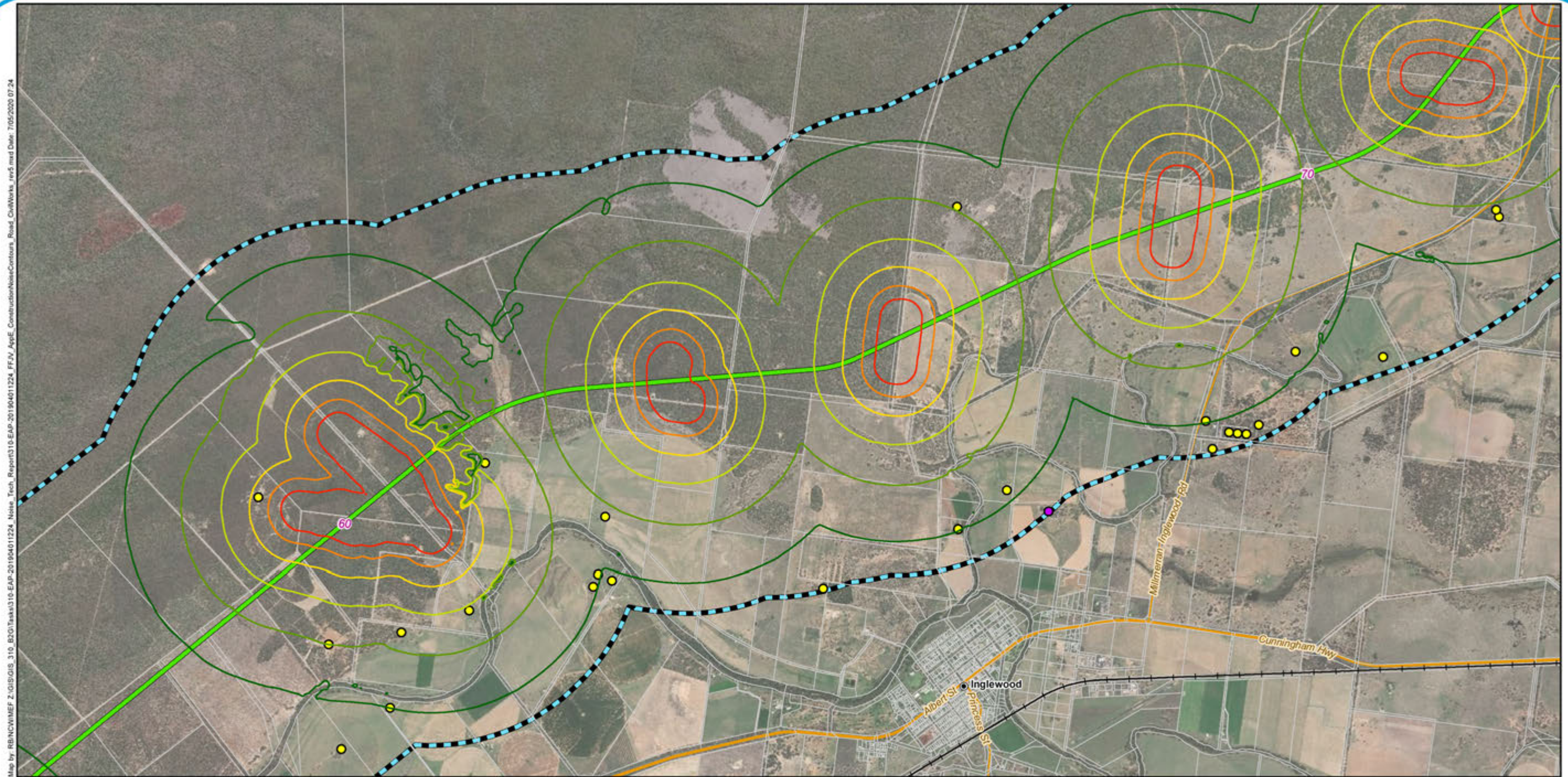
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Future Freight
Integrating Community, Environment and Engineering

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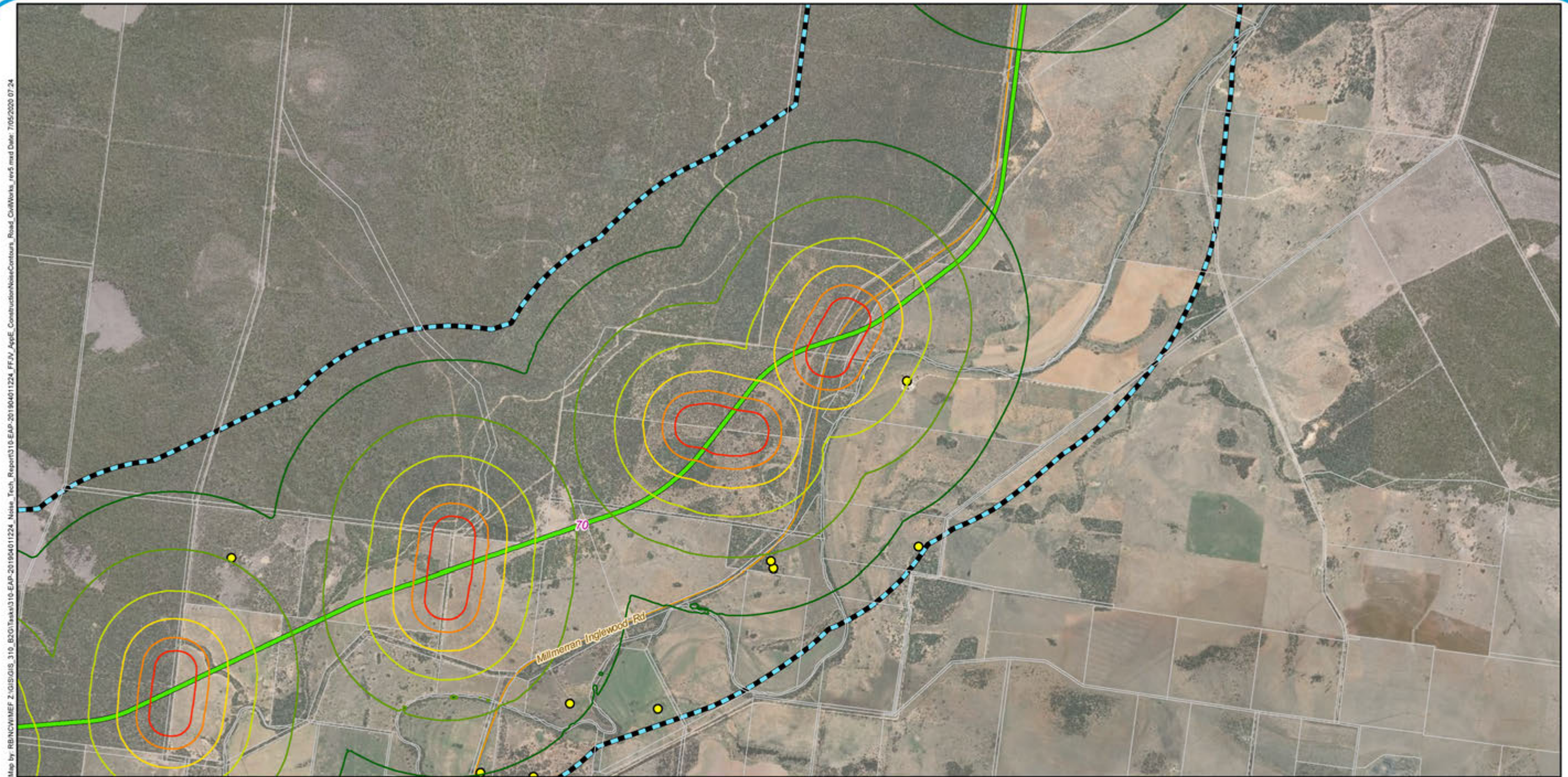
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Future Freight
Integrating Community, Environment and Engineering

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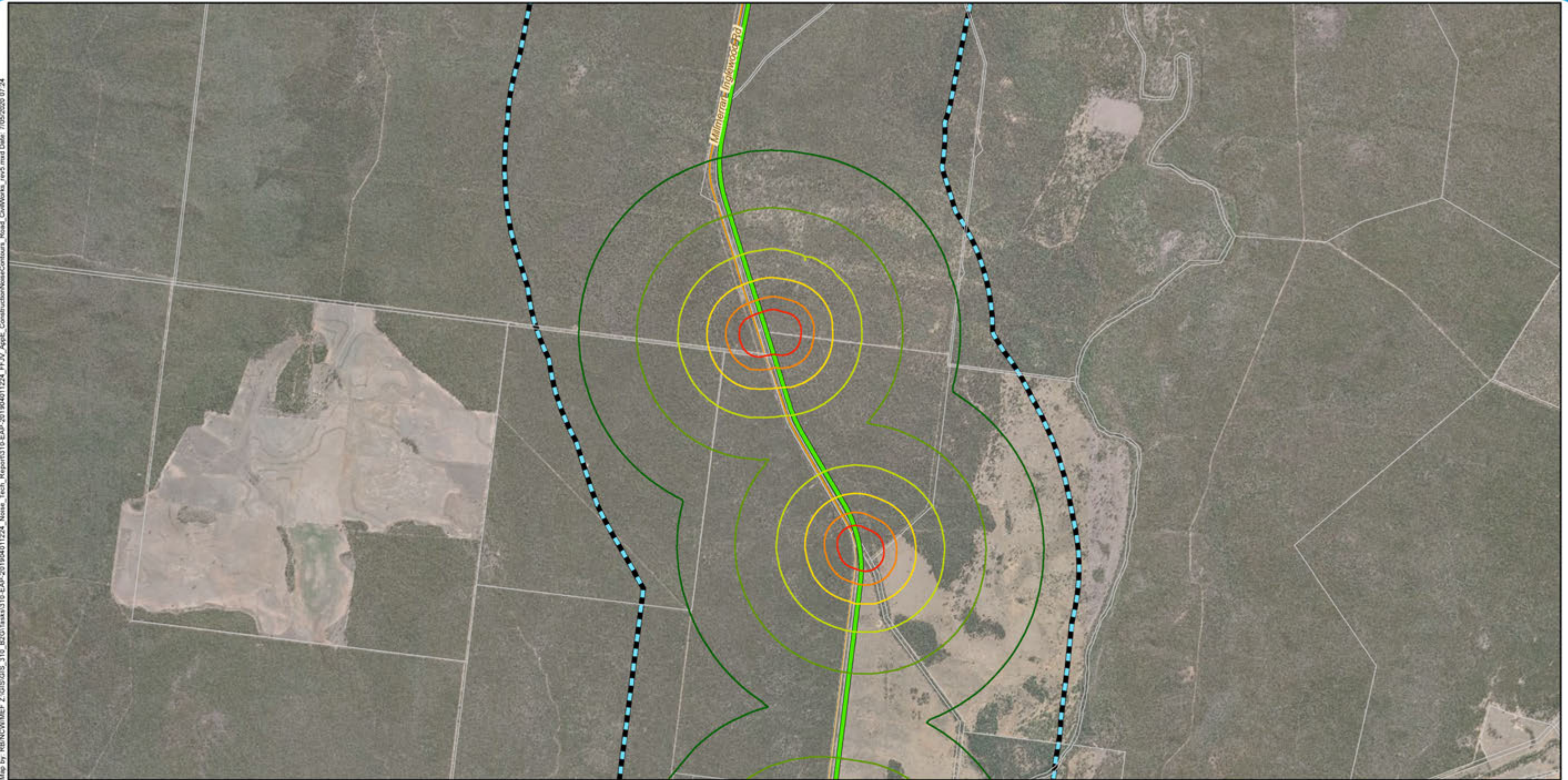
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Future Freight
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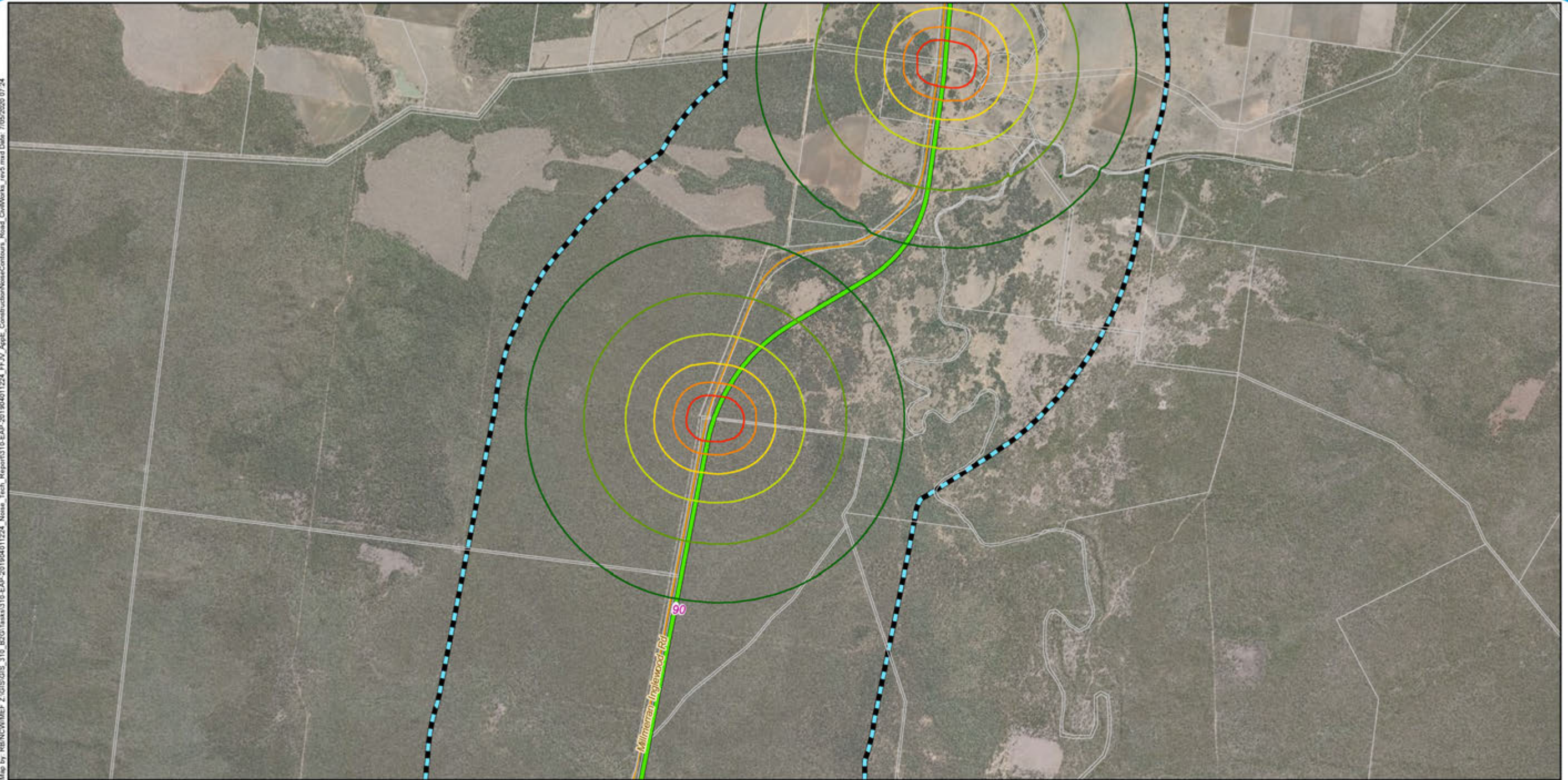
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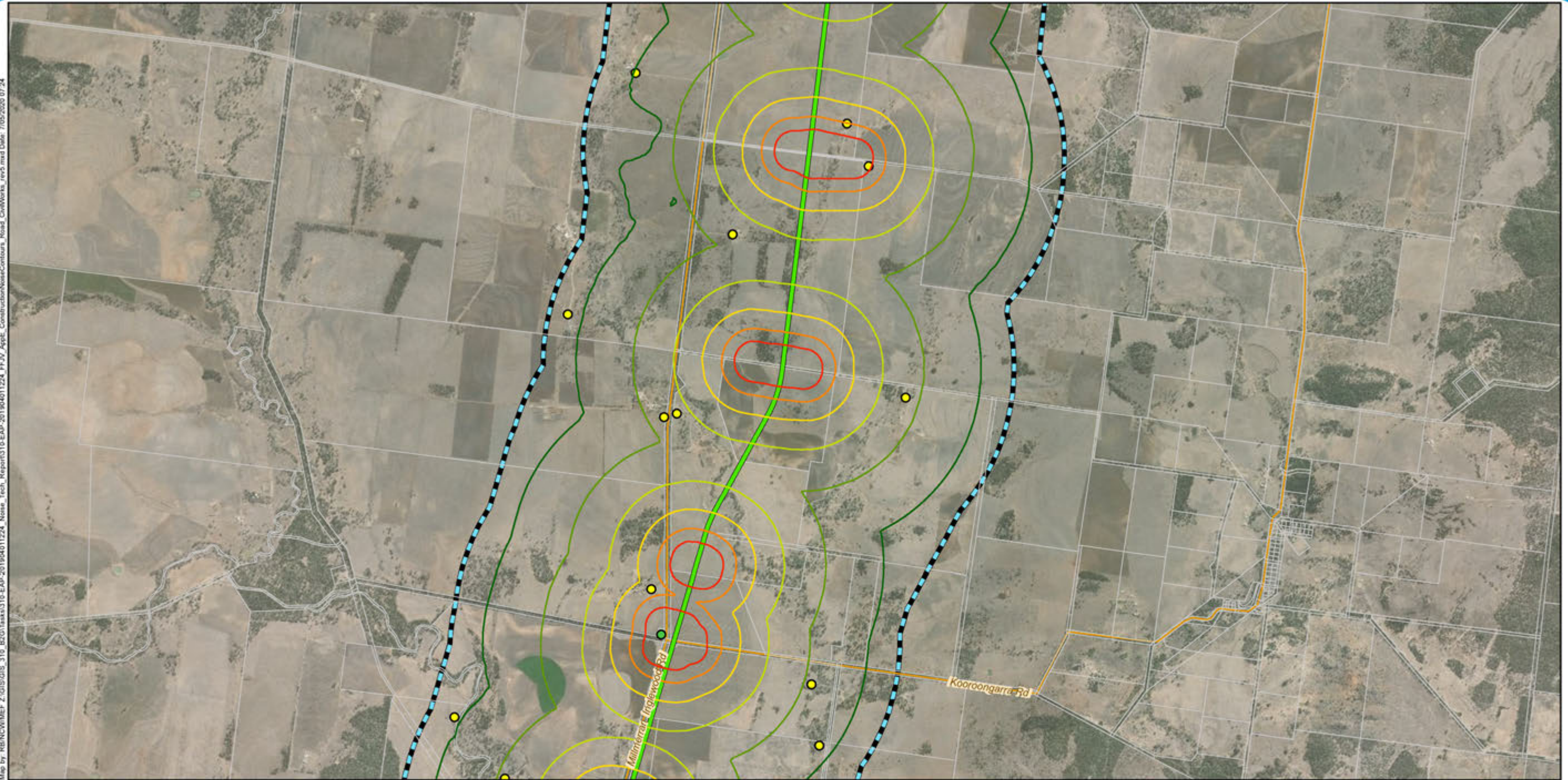
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Future Freight
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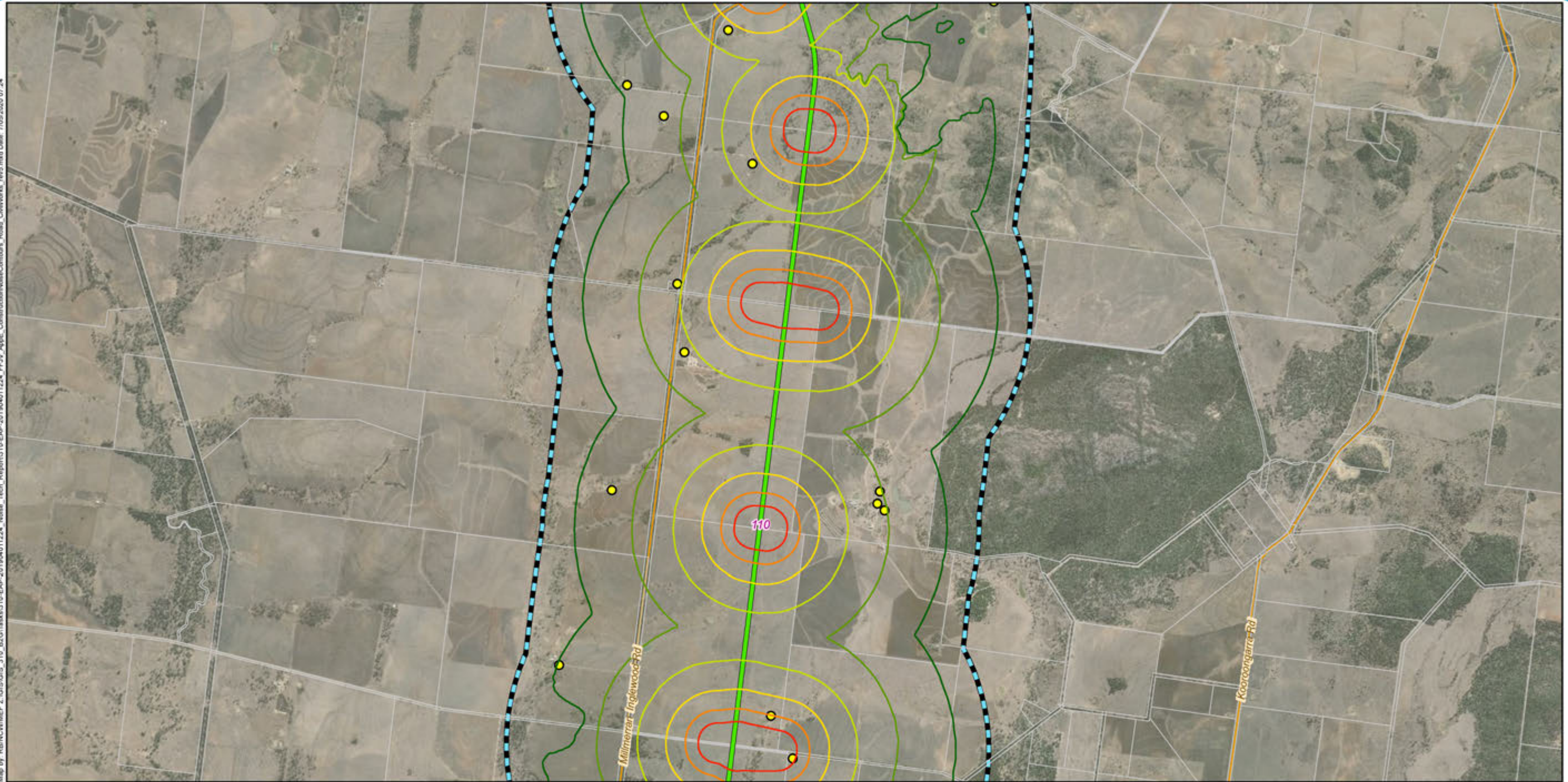
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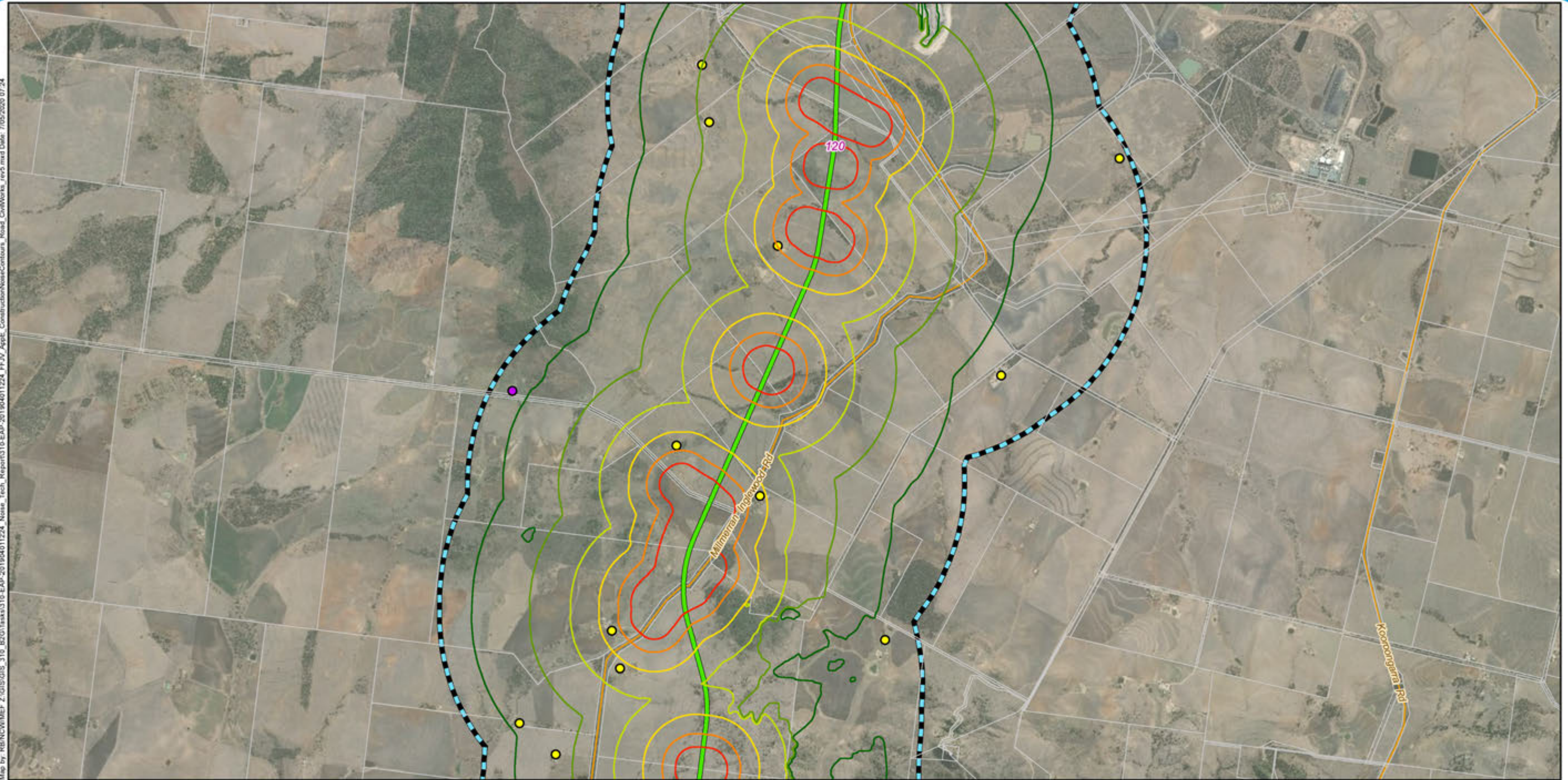
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- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



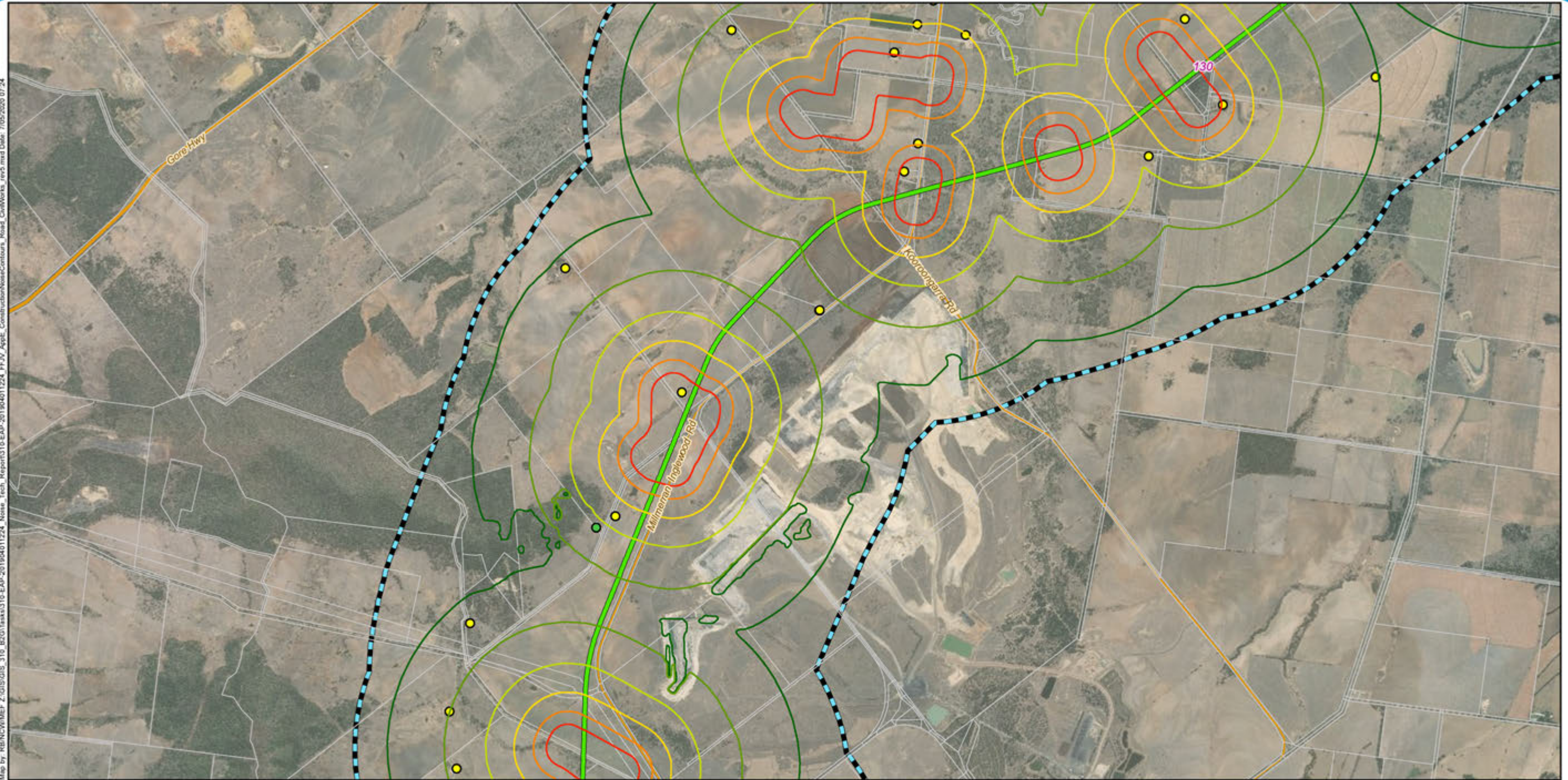
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Future Freight
 Integrating Community, Environment and Engineering

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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

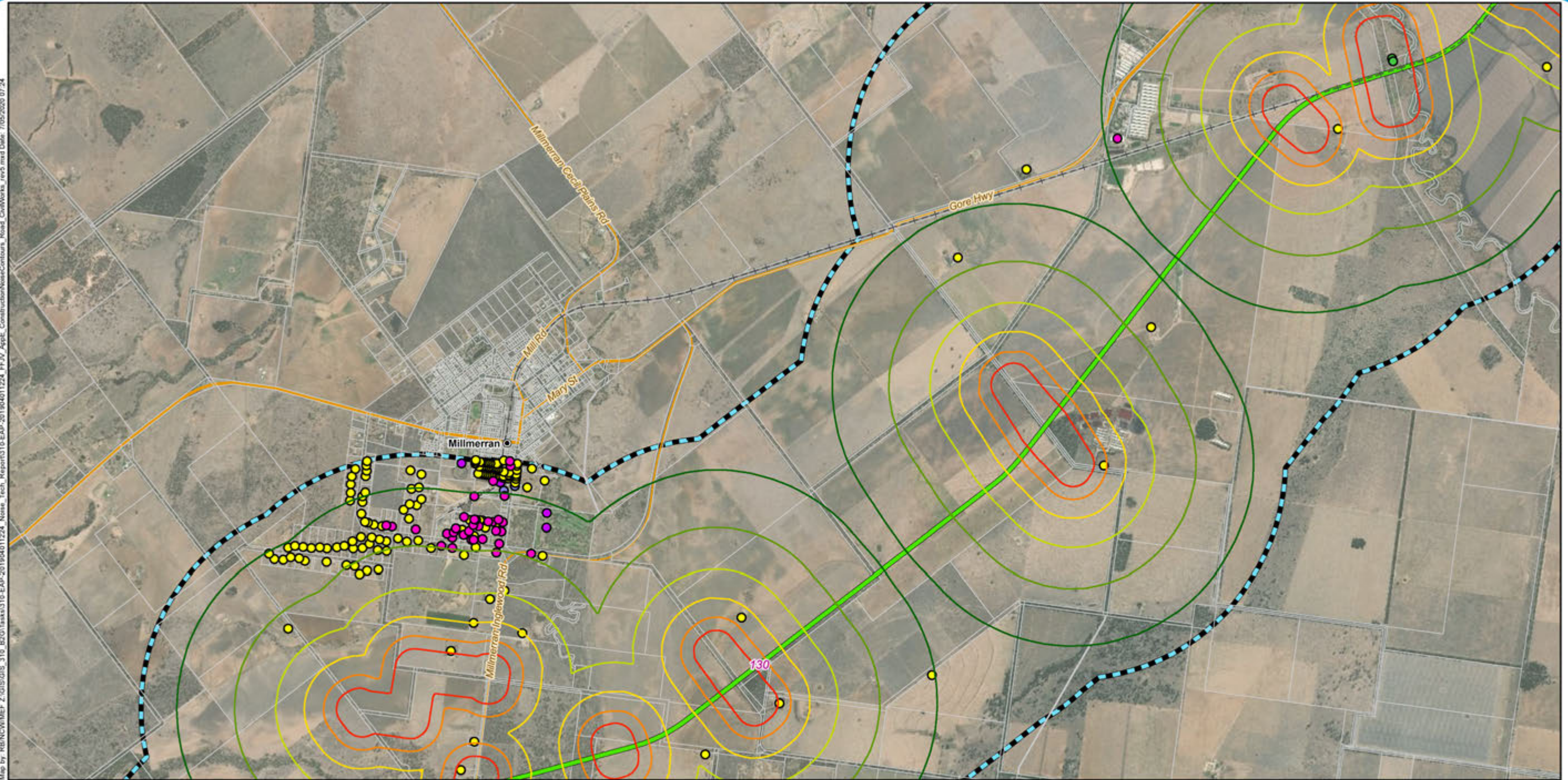
- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Existing rail (non-operational)
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
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- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Existing rail (non-operational)
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

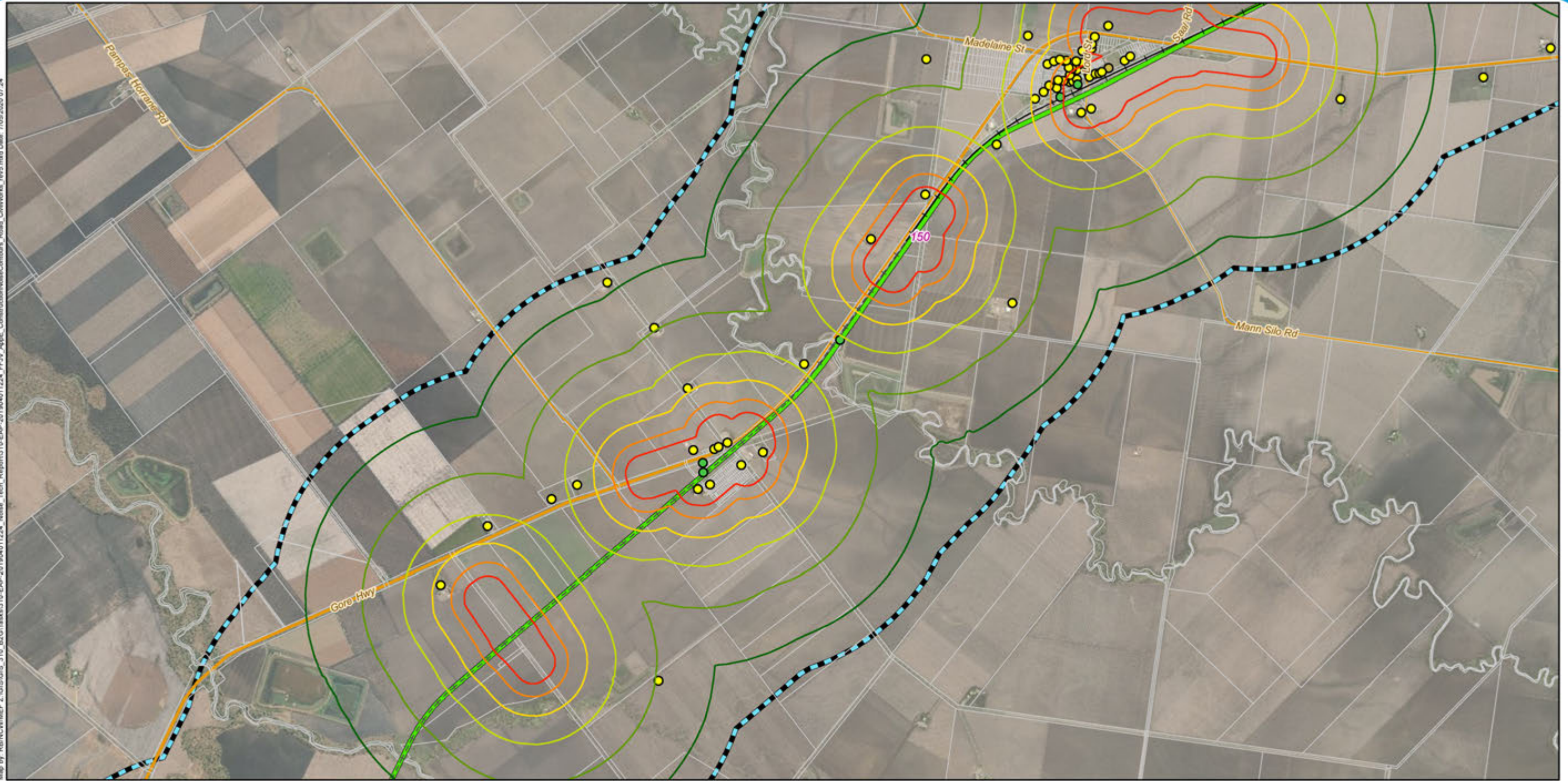
Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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Map by: REINOVMEF 2-IGIS/IGIS_310_E2017Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_ApE_ConstructionNoiseContours_Road_CivilWorks_mv5.mxd Date: 7/05/2020 07:24



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Existing rail (operational)
- Existing rail (non-operational)
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



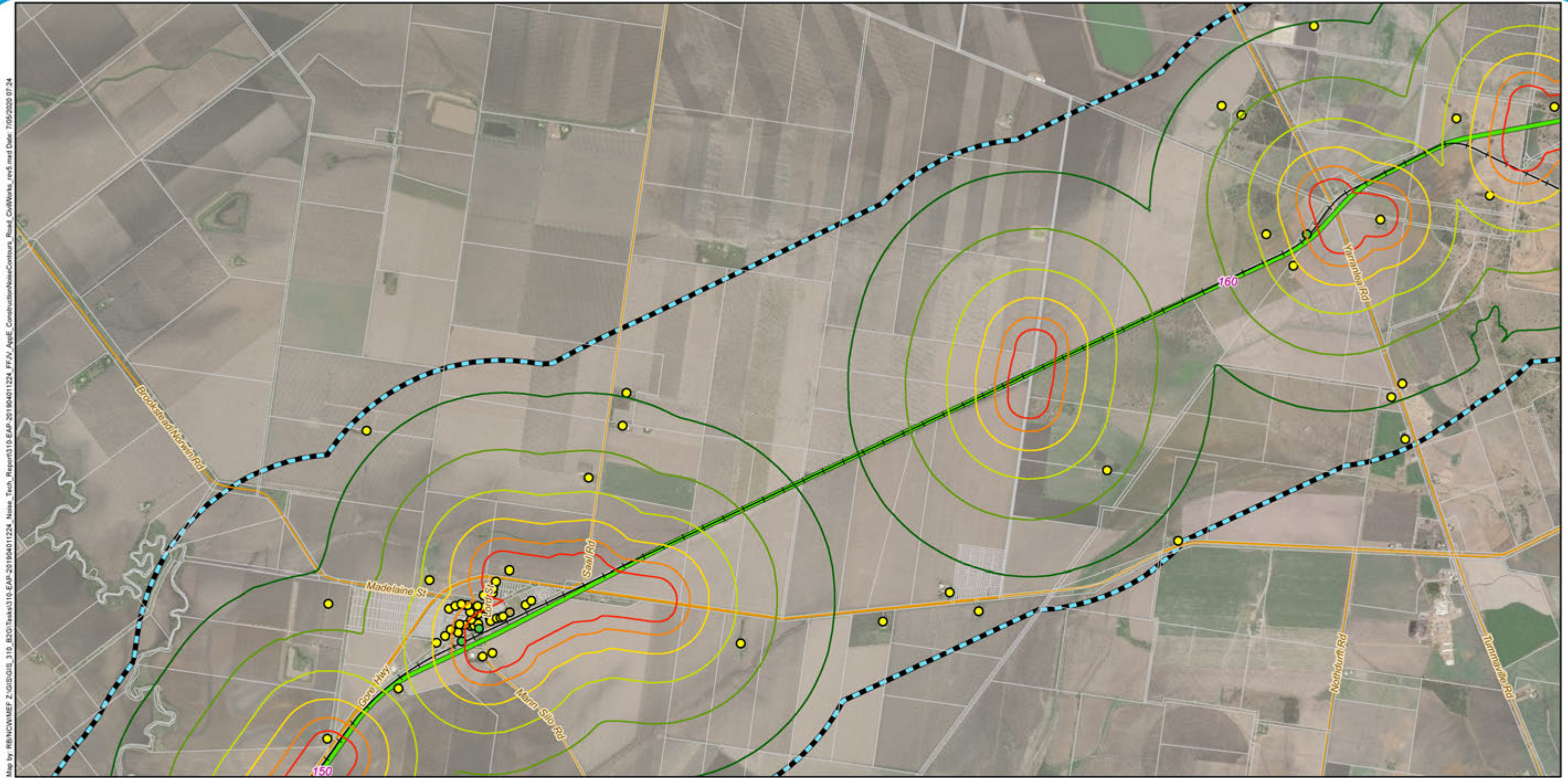
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Future Freight
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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Existing rail (operational)
- Cadastre
- ▨ Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



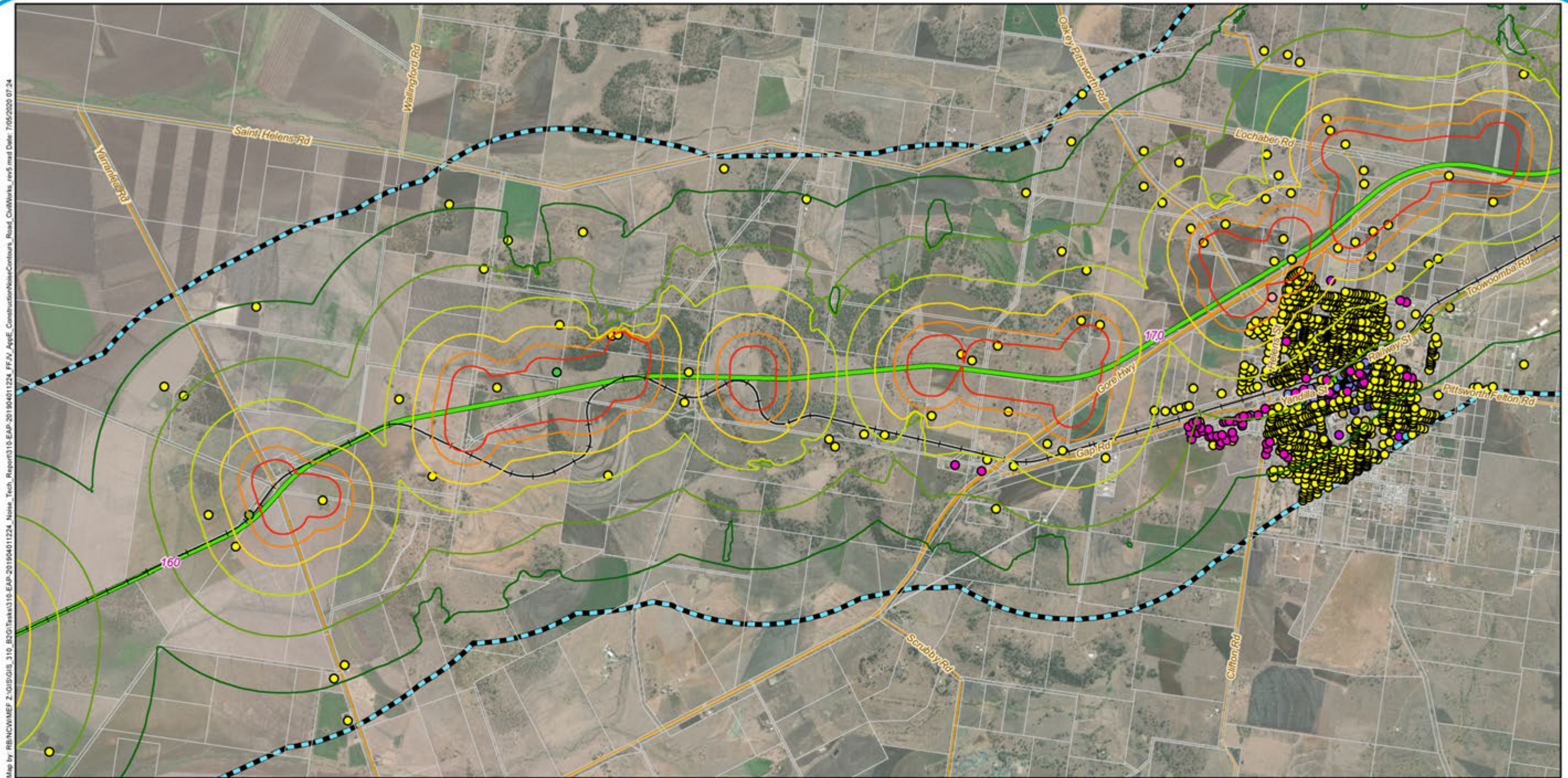
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Future Freight
Integrating Community, Environment and Engineering

Issue date: 06/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

Map by: REINOVMEF 2-IGIS/IGIS_310_E207Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Road_CivilWorks_mv5.mxd Date: 7/05/2020 07:24



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Existing rail (operational)
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

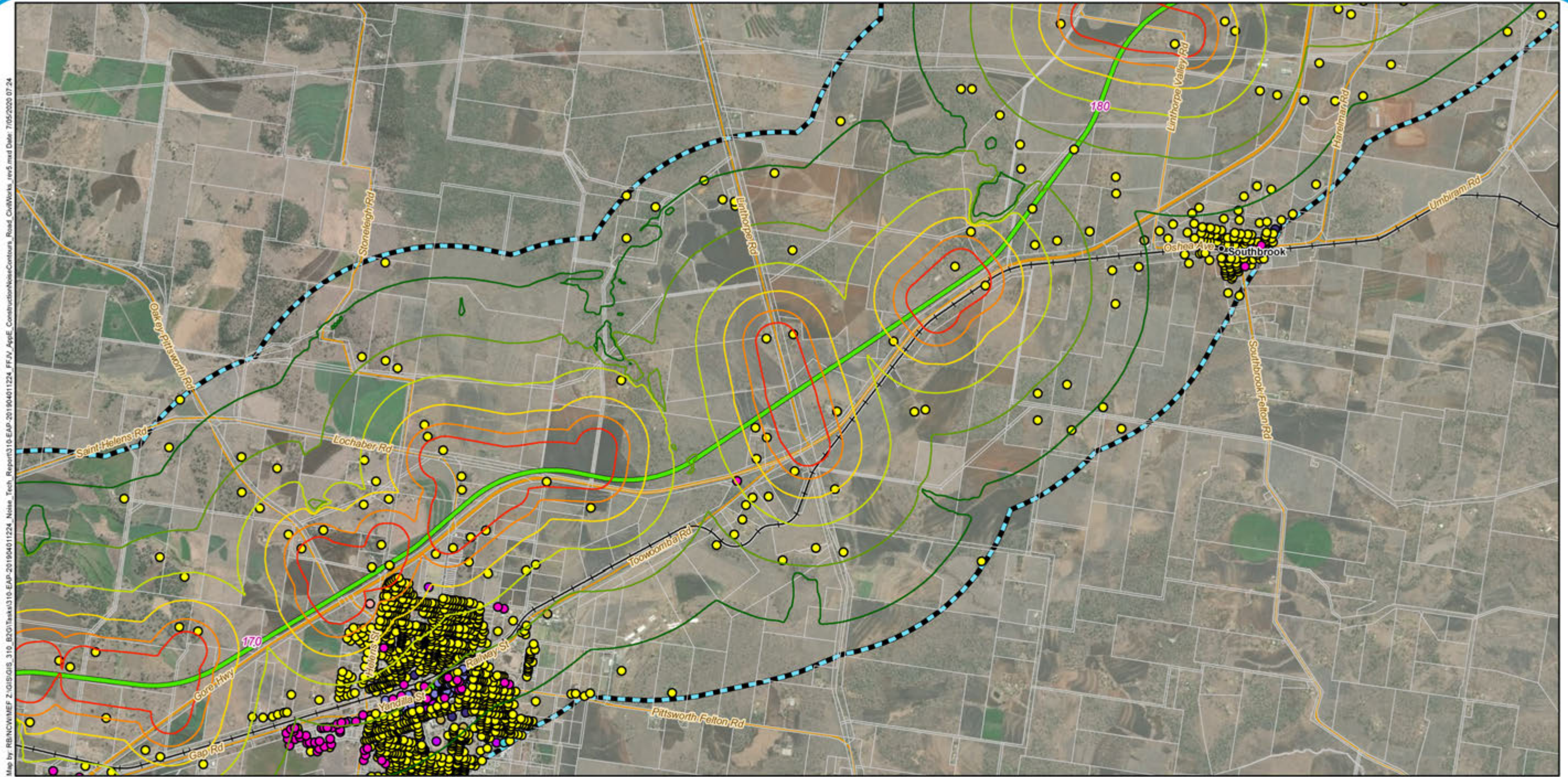
Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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Map by: RENOVIMET 2-IGIS/IGIS 310, B20/TASK/310-EAP-201904011224, Noise Tech, Report 310-EAP-201904011224, FF JV, AppE, Construction Noise Contours, Road, Civil Works, rev5.mxd Date: 7/05/2020 07:24



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Existing rail (operational)
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



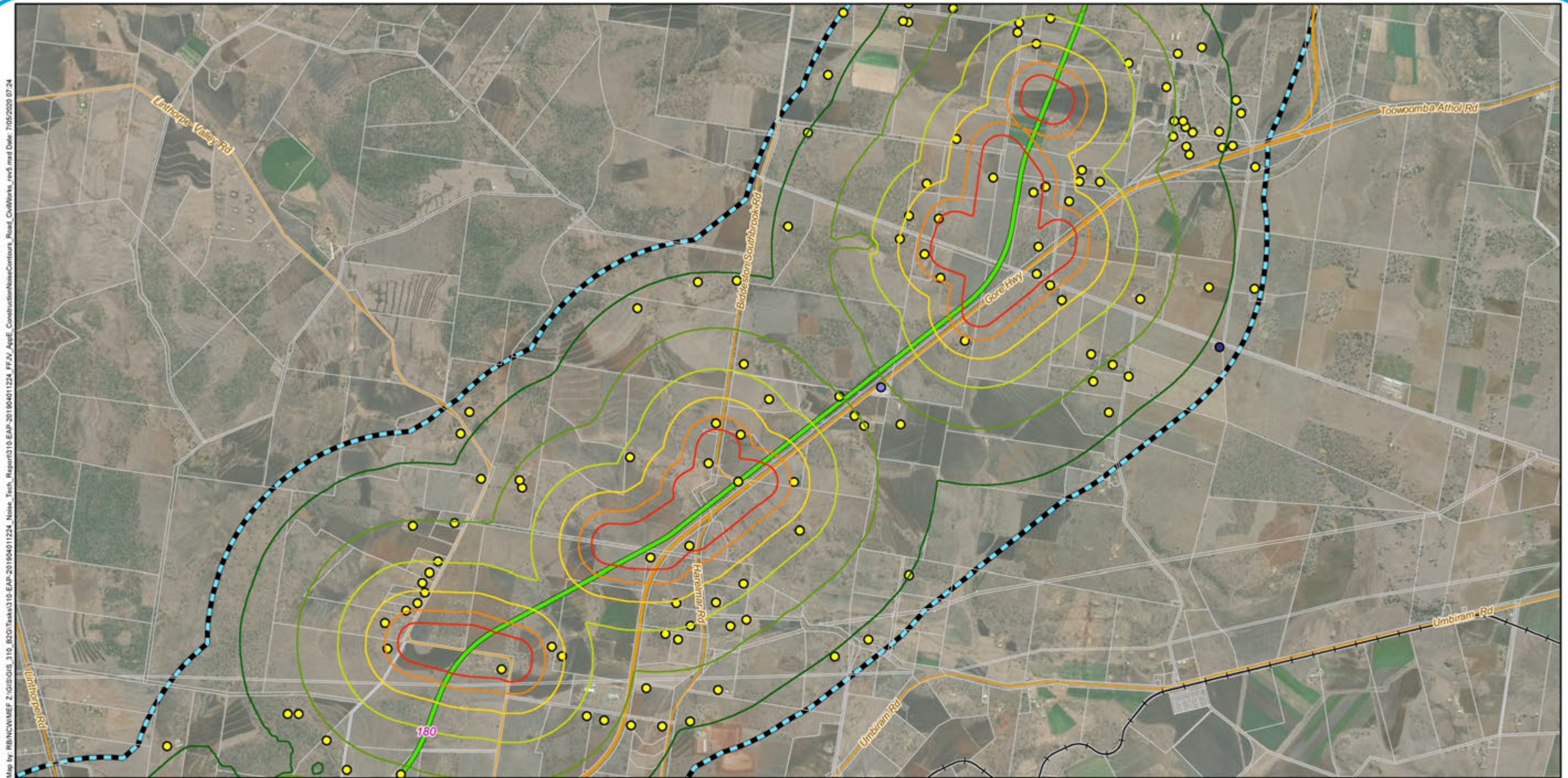
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Future Freight
Integrating Community, Environment and Engineering

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Map by: RENOVIMET 2-IGS/IGS 310 BTO/Traffic/310-EAP-201904011224_Noise_Tech_Report/310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Road_CivilWorks_rev5.mxd Date: 7/05/2020 07:24



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Existing rail (operational)
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

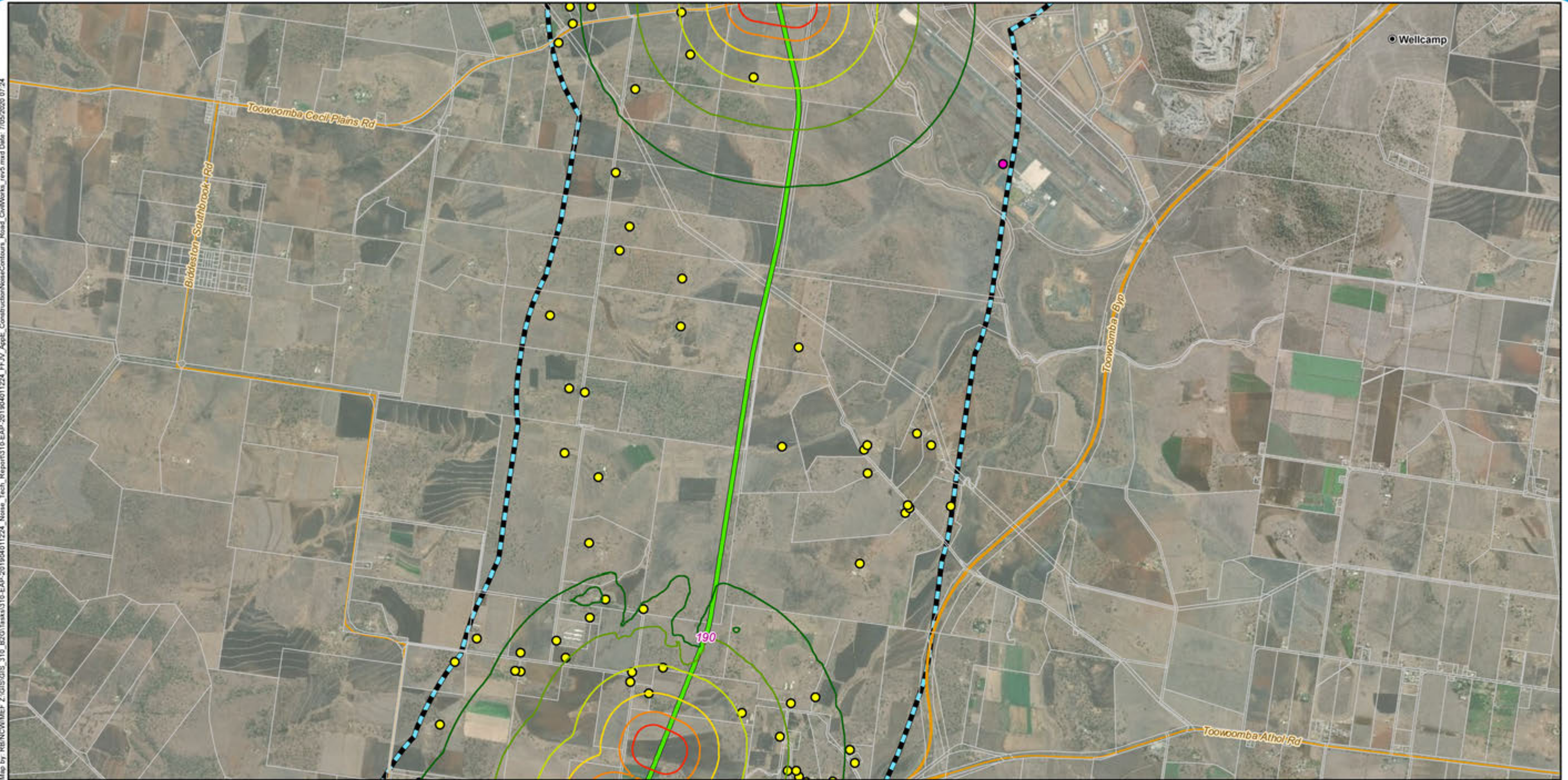
Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Cadastre
- ▤ Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



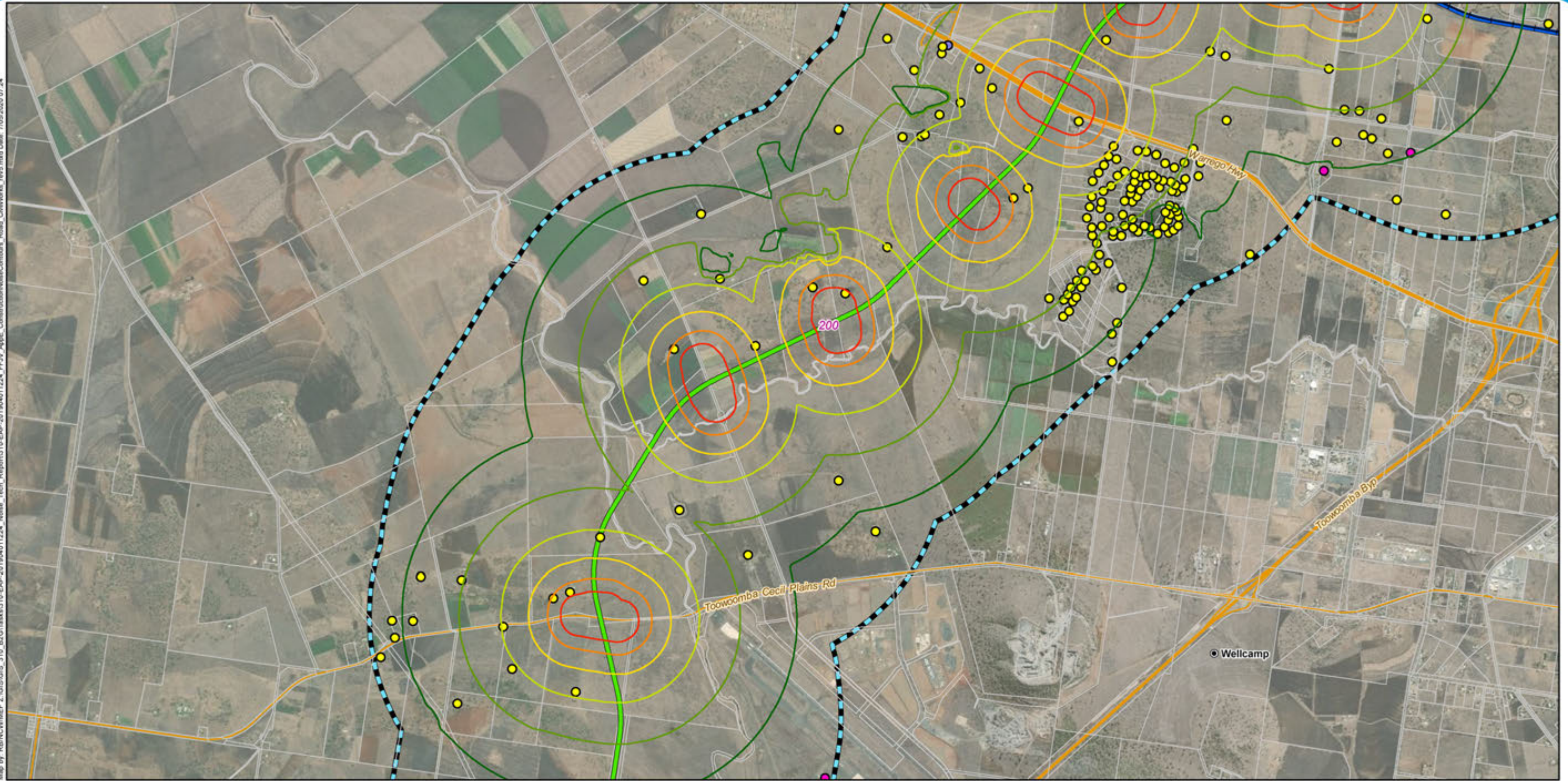
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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Gowrie to Helidon alignment
- Major roads
- Minor roads
- Existing rail (operational)
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



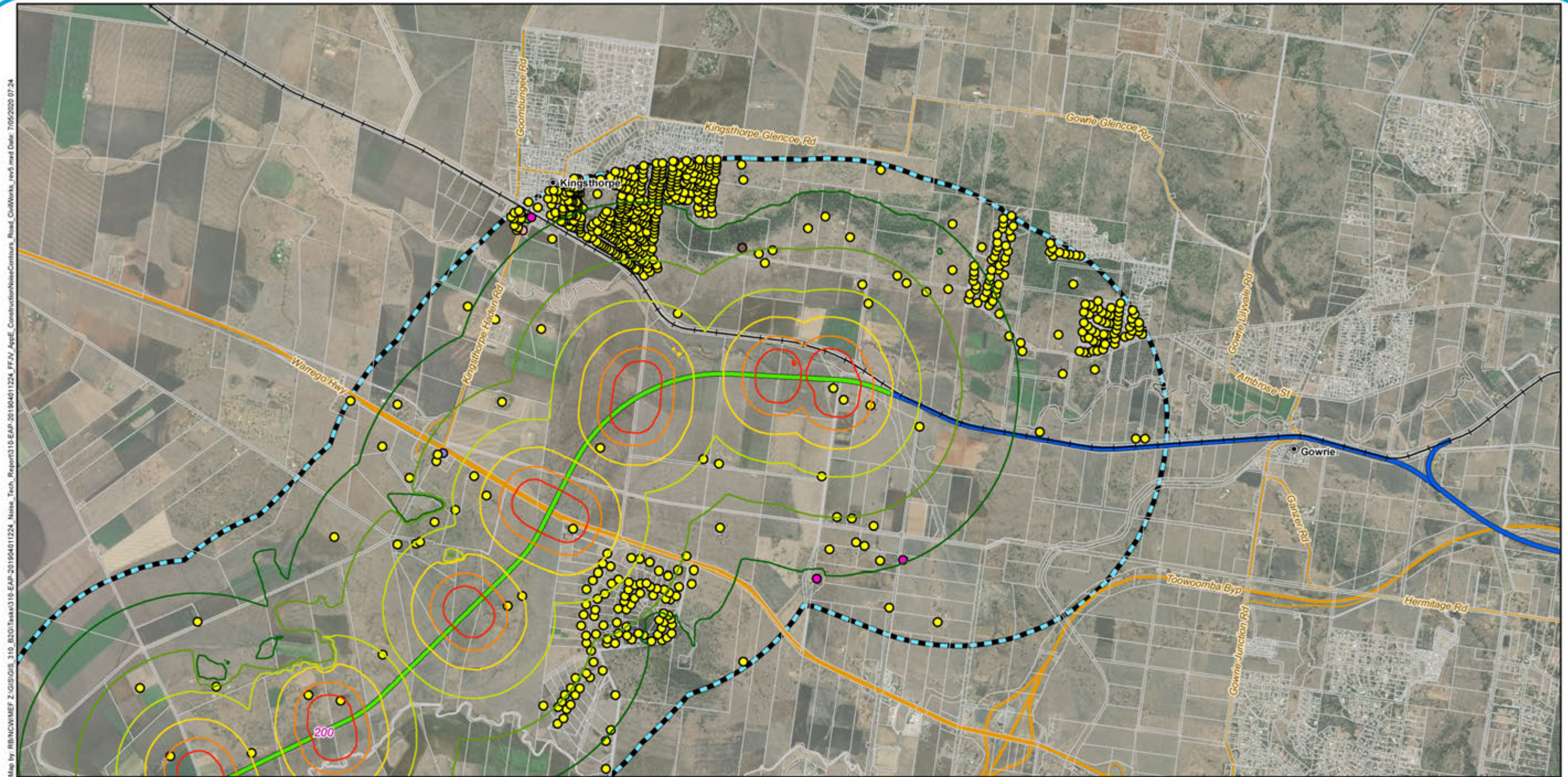
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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Gowrie to Helidon alignment
- Major roads
- Minor roads
- Existing rail (operational)
- Cadastre
- ▨ Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



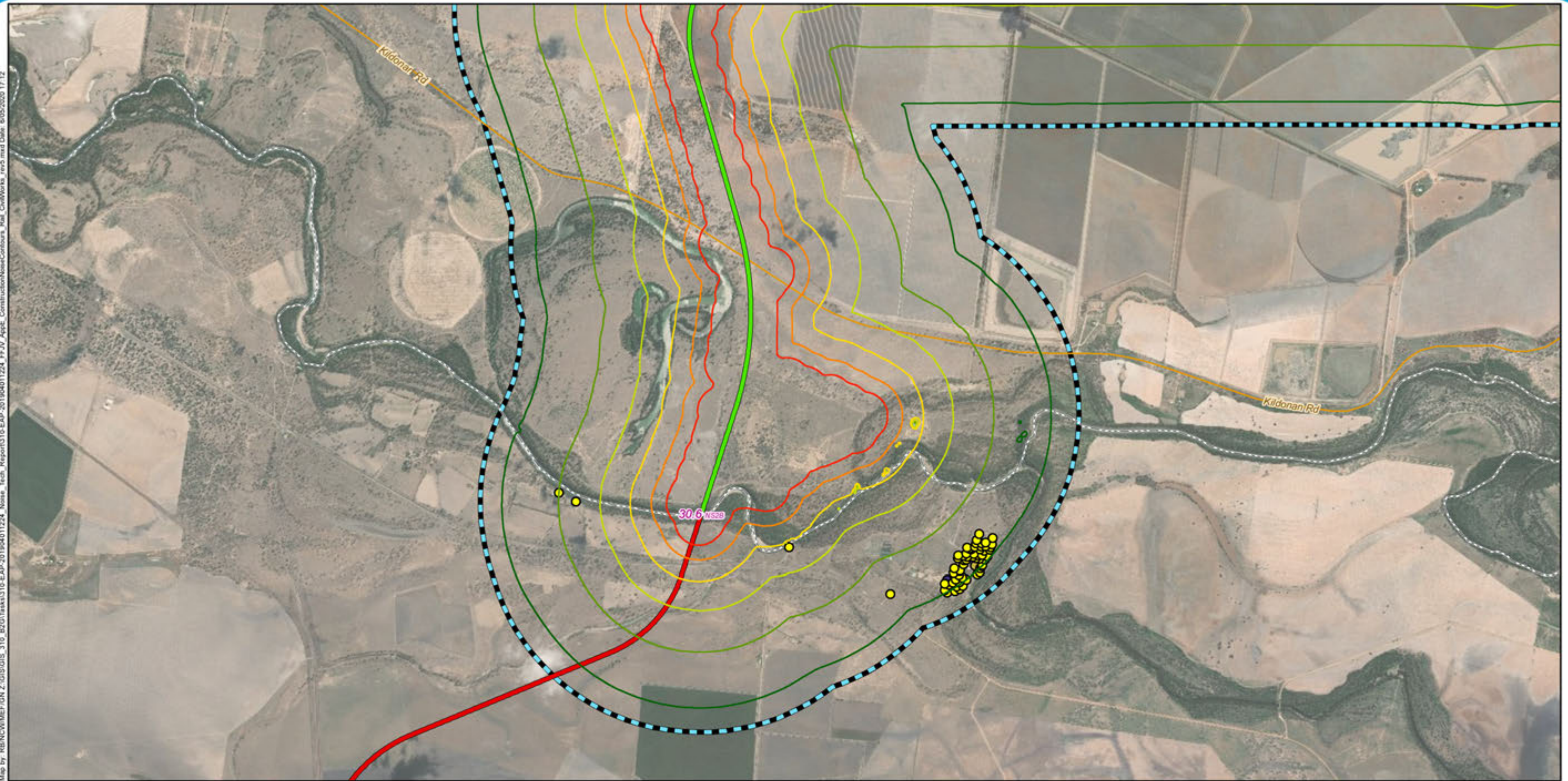
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Integrating Community, Environment and Engineering

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Map by: REINOVME/ION 2:00GIS 310 B20/Tasks/310-EAP-201904011224 Noise Tech_Report/310-EAP-201904011224_FF_IV_AppE_ConstructionNoiseContours_Rail_CivilWorks_rev5.mxd Date: 6/05/2020 17:12



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- North Star to NSW/QLD border alignment
- NSW/QLD border
- Minor roads
- ▤ Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))**
 Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

- Sensitive Receptors**
- Commercial Office
 - Commercial Retail
 - Community Building
 - Educational Building
 - Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



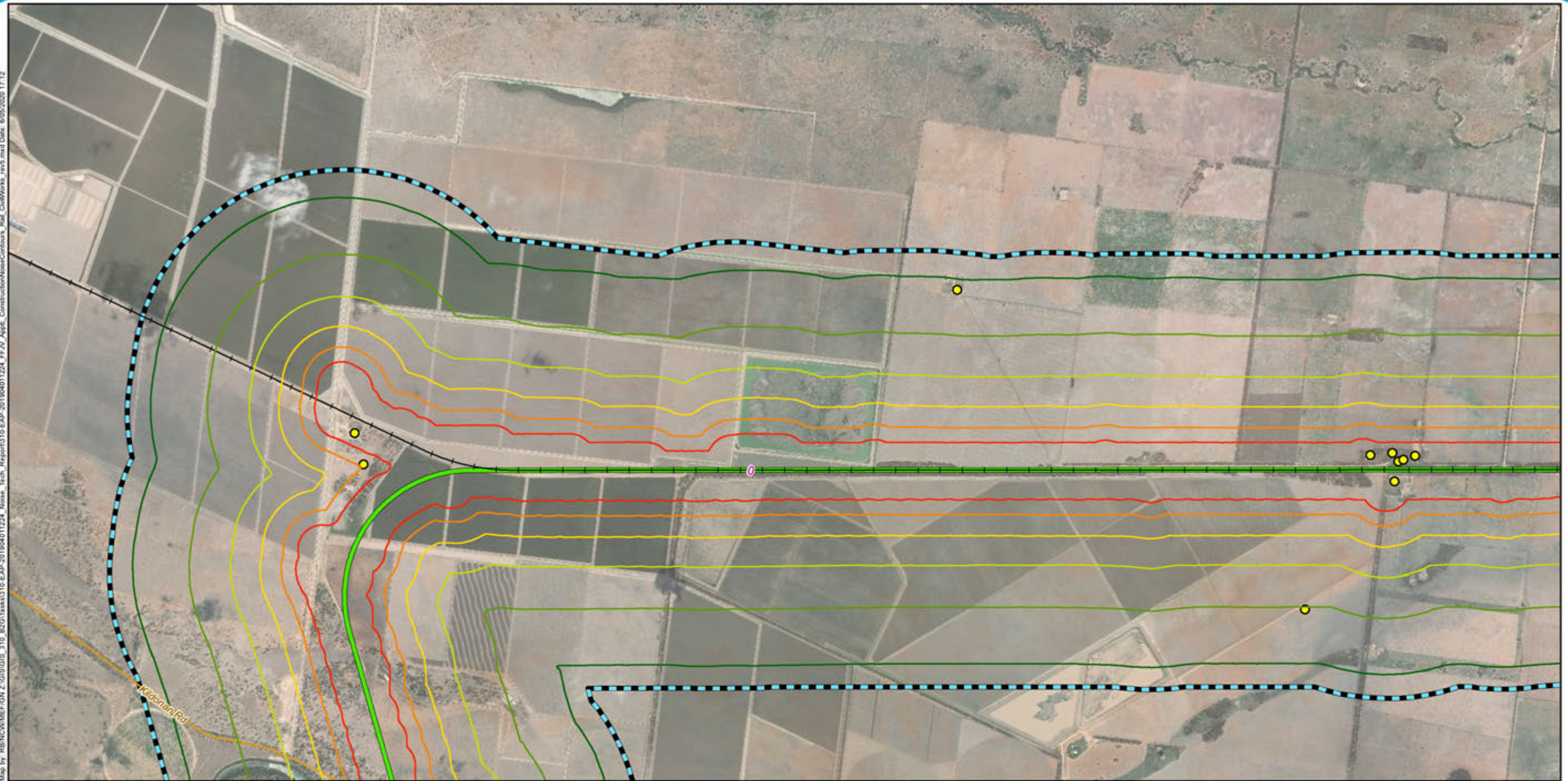
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 Integrating Community, Environment and Engineering

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Map by: REINVENTION 2:019101310-B201904011224-Noise_Tech_Report310-EAP-201904011224_FF_IV_AppE_ConstructionNoiseContours_Rail_CivilWorks_rev5.mxd Date: 05/05/2020 17:12



Legend

- 5 Chainage (km)
- Localities
- Existing rail (operational)
- Border to Gowrie alignment
- Minor roads
- Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))**
 Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

- Sensitive Receptors**
- Commercial Office
 - Commercial Retail
 - Community Building
 - Educational Building
 - Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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- 5 Chainage (km)
- Localities
- Existing rail (operational)
- Border to Gowrie alignment
- Minor roads
- Noise and vibration impact assessment area

— 45
— 50
— 55
— 60
— 65
— 70

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000

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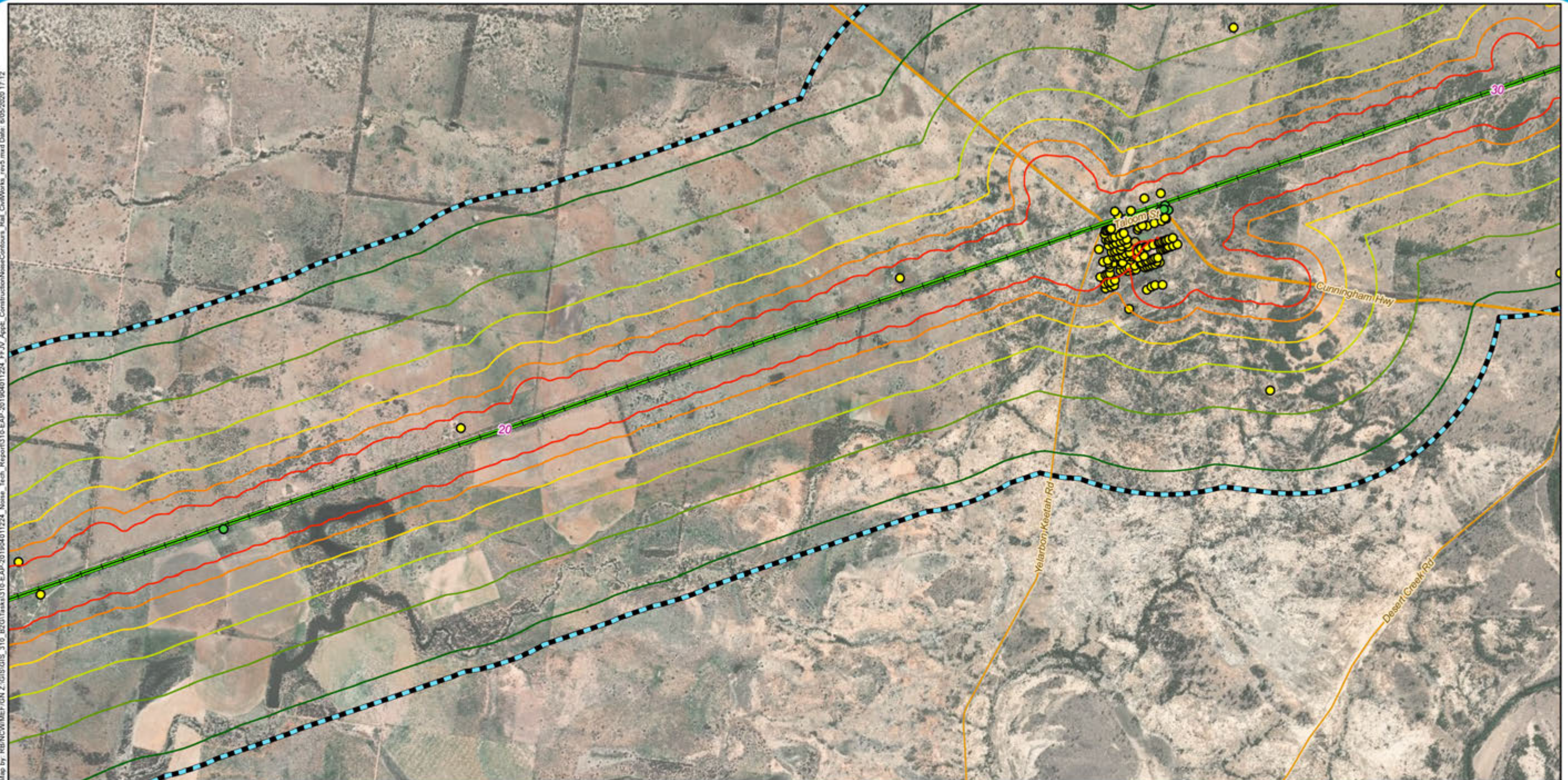


Future Freight
Integrating Community, Environment and Engineering

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Coordinate System: GDA 1994 MGA Zone 56

Appendix E3: Construction noise contours rail civil works

Map by: RENOVATION 2.0/IGIS 310-B20/Tasks/310-EAP-2019/04/01/224_Noise_Tech_Report/310-EAP-2019/04/01/224_FF_IV_AppE_ConstructionNoiseContours_Rail_CivilWorks_rev5.mxd Date: 6/05/2020 17:12



Legend

- 5 Chainage (km)
- Localities
- Existing rail (operational)
- Border to Gowrie alignment
- Major roads
- Minor roads
- Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))**
Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility

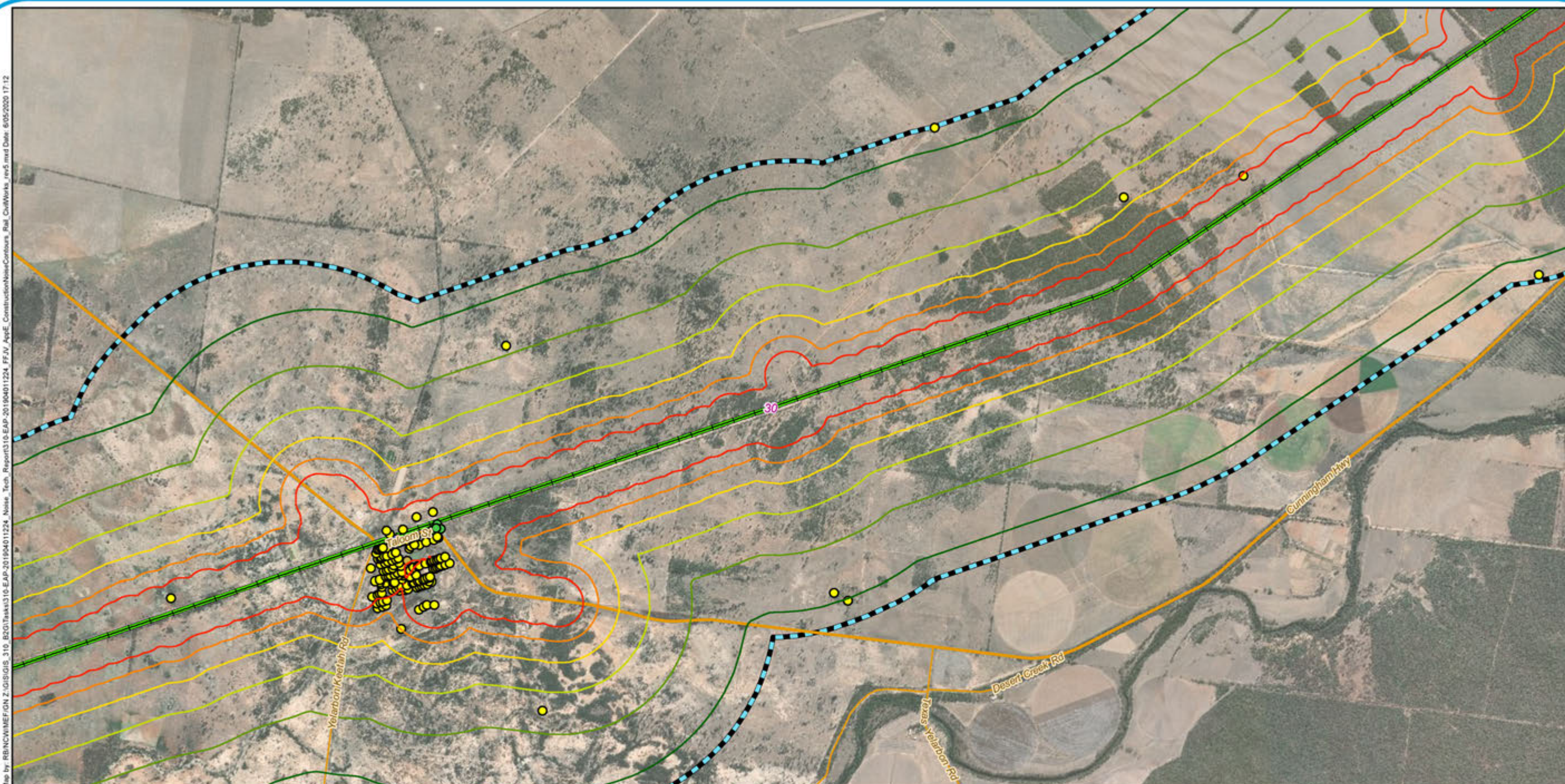


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Future Freight
Integrating Community, Environment and Engineering

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Coordinate System: GDA 1994 MGA Zone 56



- 5 Chainage (km)
- Localities
- + Existing rail (operational)
- █ Border to Gowrie alignment
- Major roads
- Minor roads
- ▣ Noise and vibration impact assessment area

— 45
— 50
— 55
— 60
— 65
— 70

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



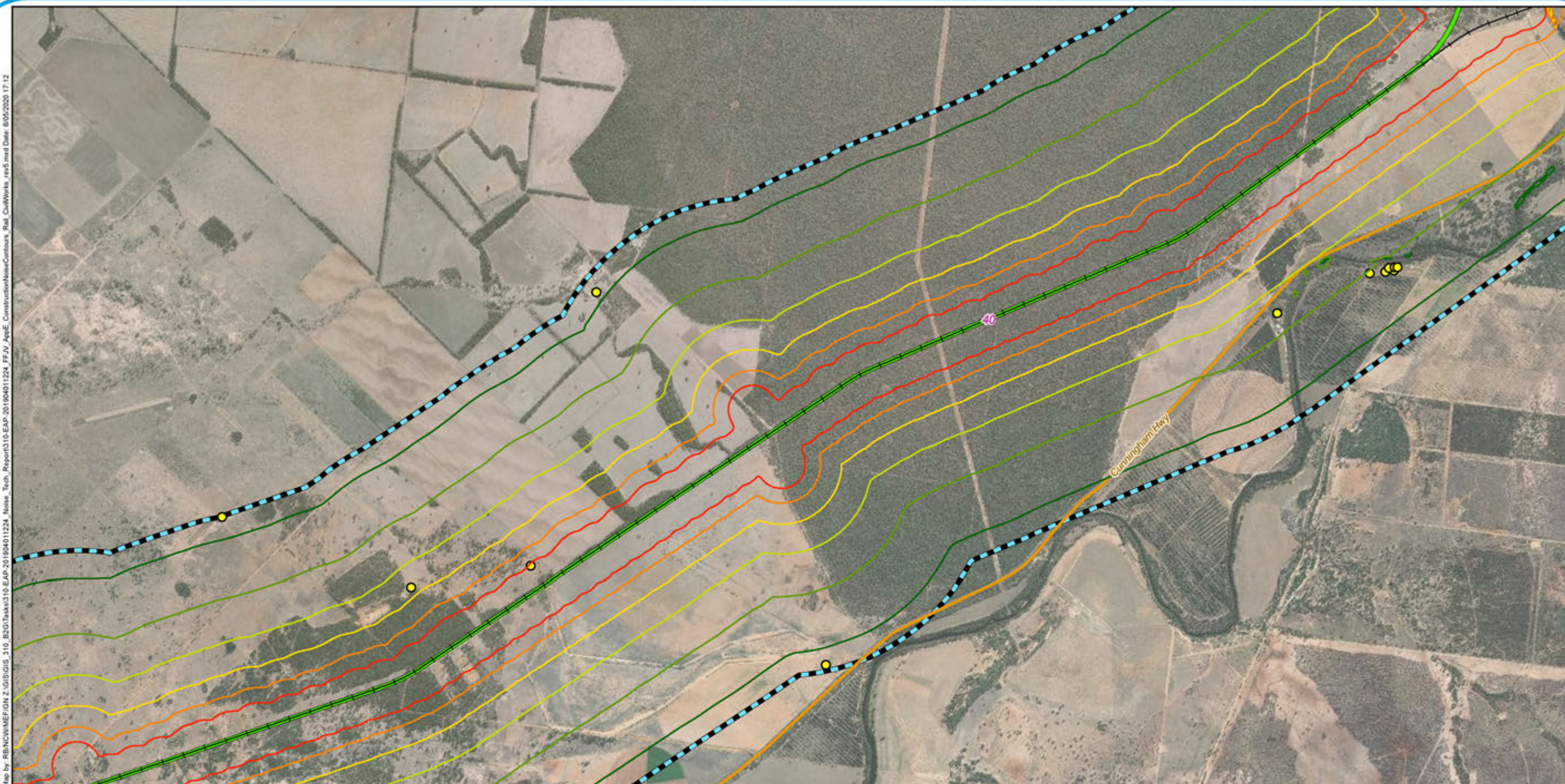
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Issue date: 06/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

Appendix E5: Construction noise contours rail civil works



- 5 Chainage (km)
- Localities
- Existing rail (operational)
- Border to Gowrie alignment
- Major roads
- Noise and vibration impact assessment area

— 45
— 50
— 55
— 60
— 65
— 70

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000

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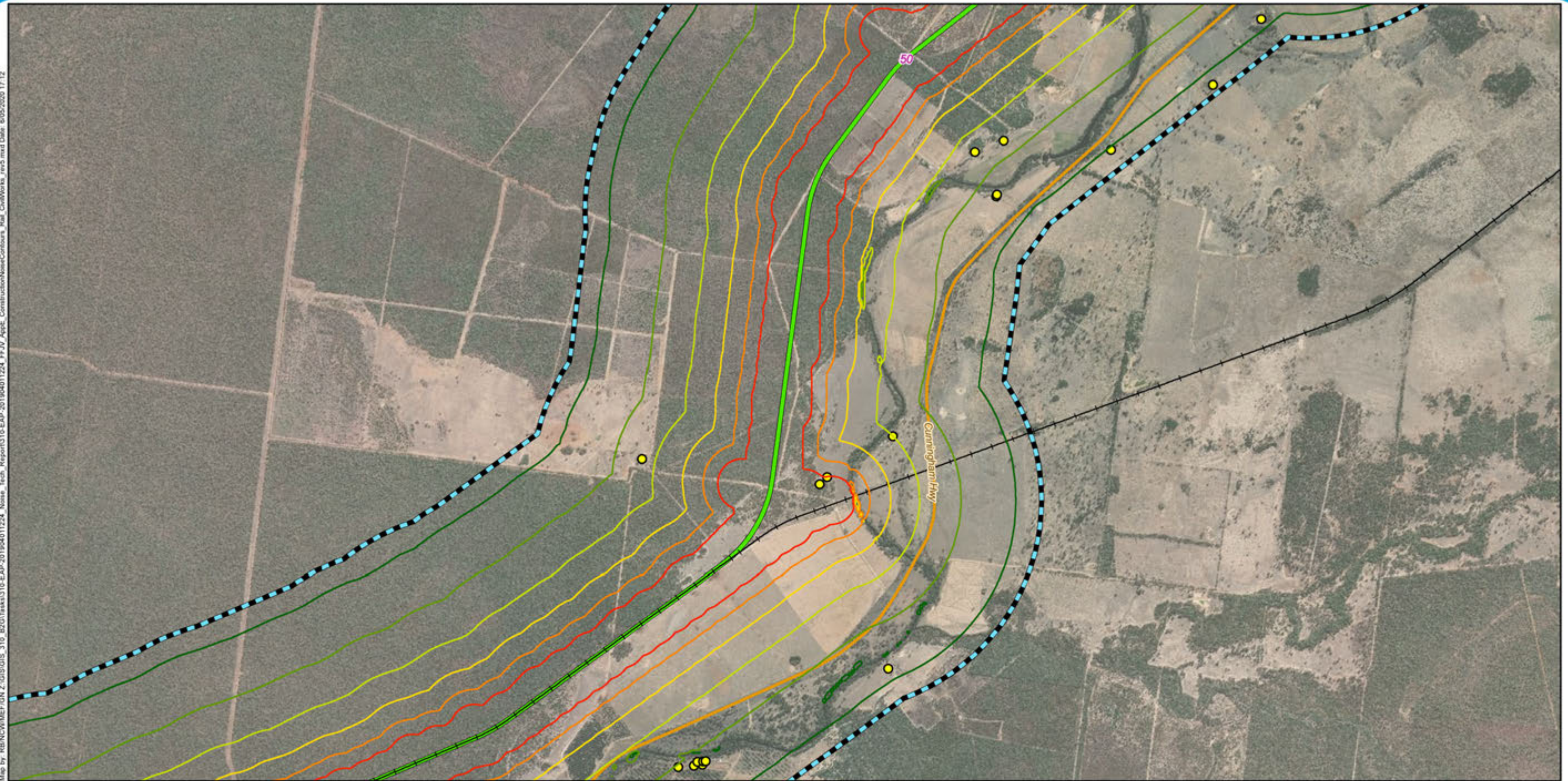


Future Freight
Integrating Community, Environment and Engineering

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Coordinate System: GDA 1994 MGA Zone 56

Appendix E6: Construction noise contours rail civil works

Map by: RBN/CVME/FON 2:00/GIS 310-B20/Tasks/310-EAP-2019/04/01/224_Noise_Tech_Report/310-EAP-2019/04/01/224_FF_IV_AppE_ConstructionNoiseContours_Rail_CivilWorks_rev5.mxd Date: 6/05/2020 17:12



Legend

- 5 Chainage (km)
- Localities
- Existing rail (operational)
- Border to Gowrie alignment
- Major roads
- Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))**
Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

- Sensitive Receptors**
- Commercial Office
 - Commercial Retail
 - Community Building
 - Educational Building
 - Heritage
 - Hotel/Motel
 - Industrial
 - Medical Building
 - Outdoor Recreation
 - Residential
 - Sporting Facility

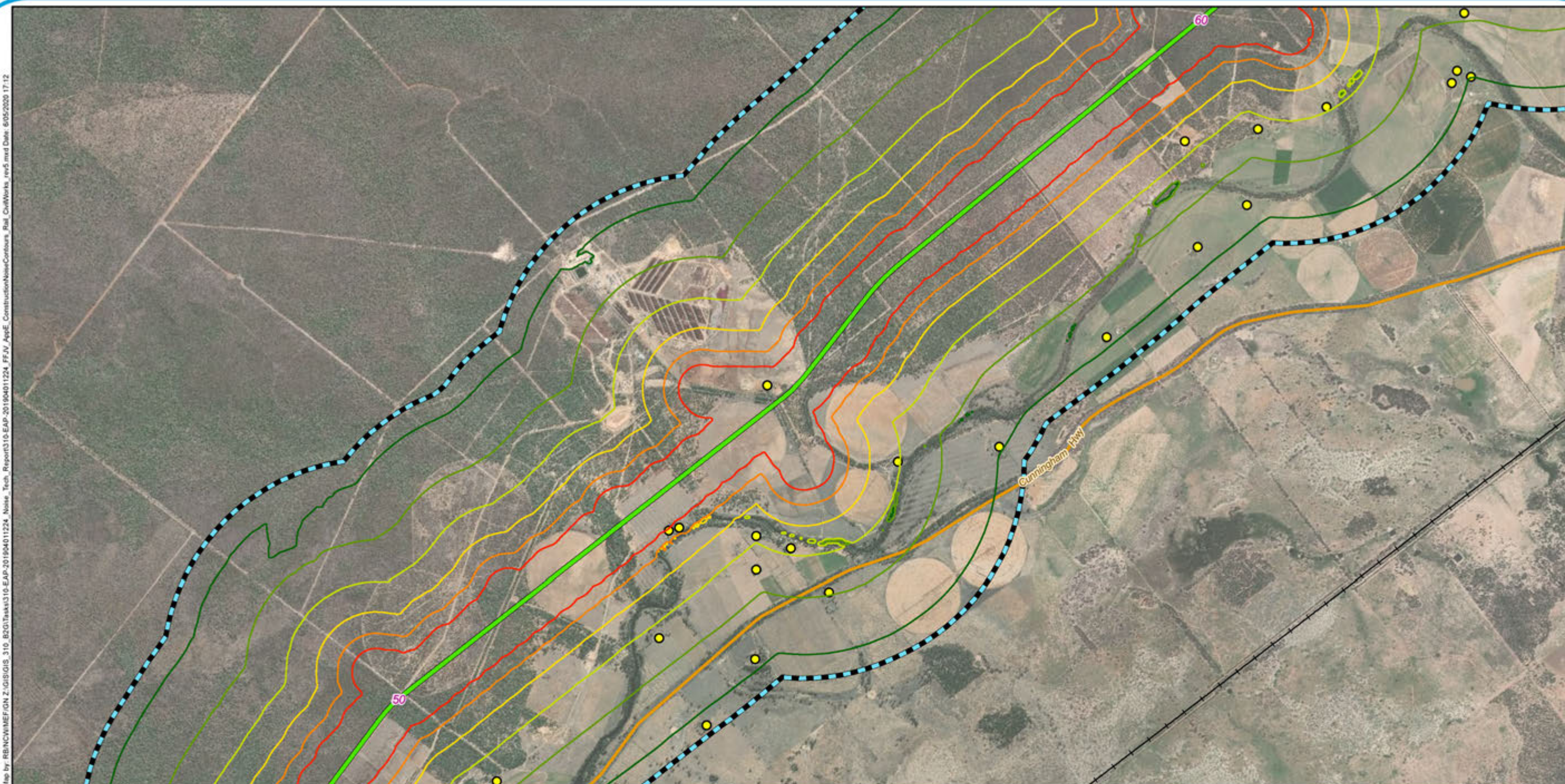


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Coordinate System: GDA 1994 MGA Zone 56



- 5 Chainage (km)
- Localities
- Existing rail (operational)
- Border to Gowrie alignment
- Major roads
- Noise and vibration impact assessment area

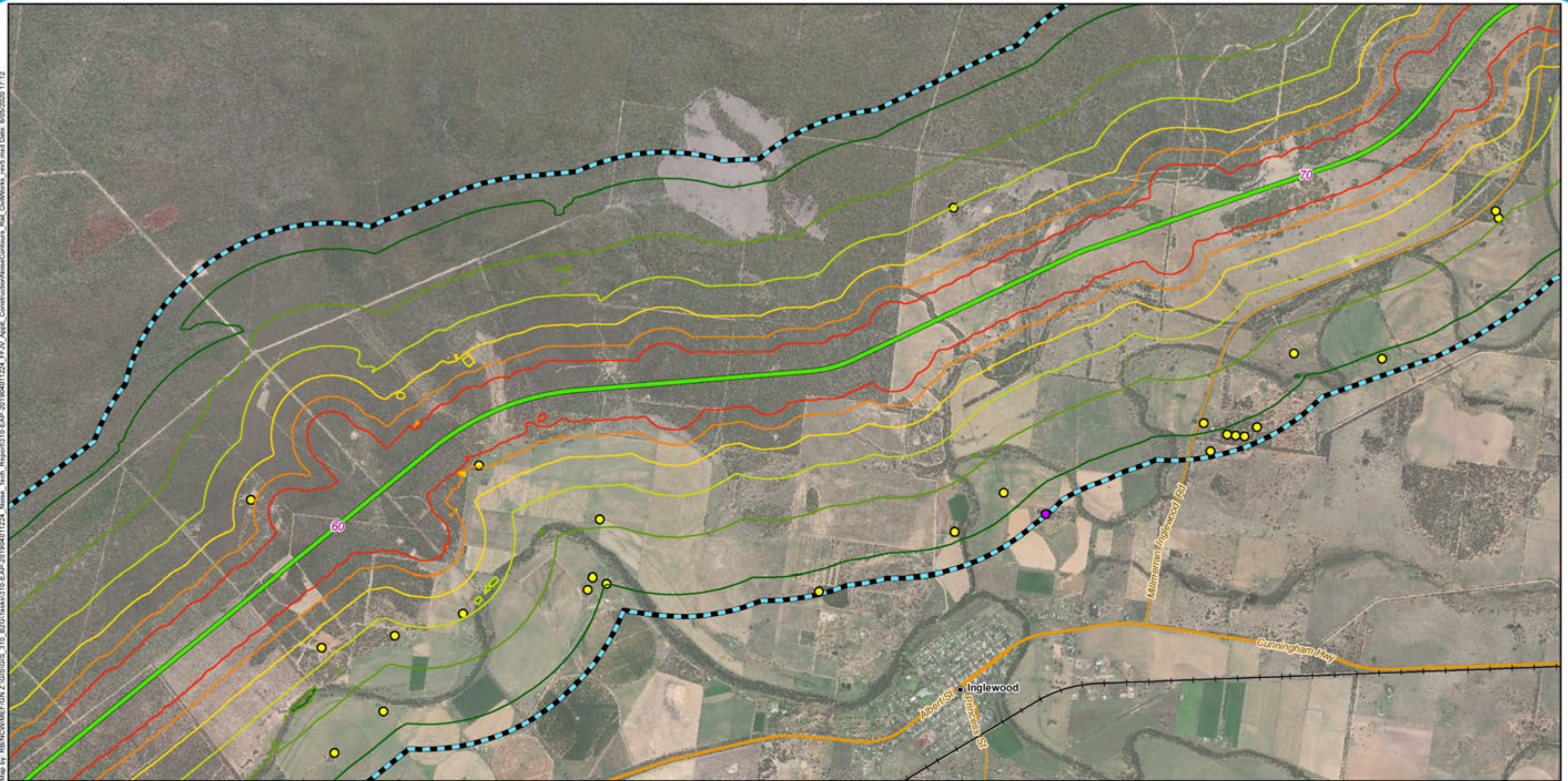
— 45
— 50
— 55
— 60
— 65
— 70

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



Map by: RENOVATION 2:0191604011224 Noise Tech Report 310-EAP-201904011224_FF_IV_AppE_ConstructionNoiseContours_Rail_CivilWorks_rev5.mxd Date: 05/05/2020 17:12



Legend

- 5 Chainage (km)
- Localities
- Existing rail (operational)
- Border to Gowrie alignment
- Major roads
- Minor roads
- Noise and vibration impact assessment area

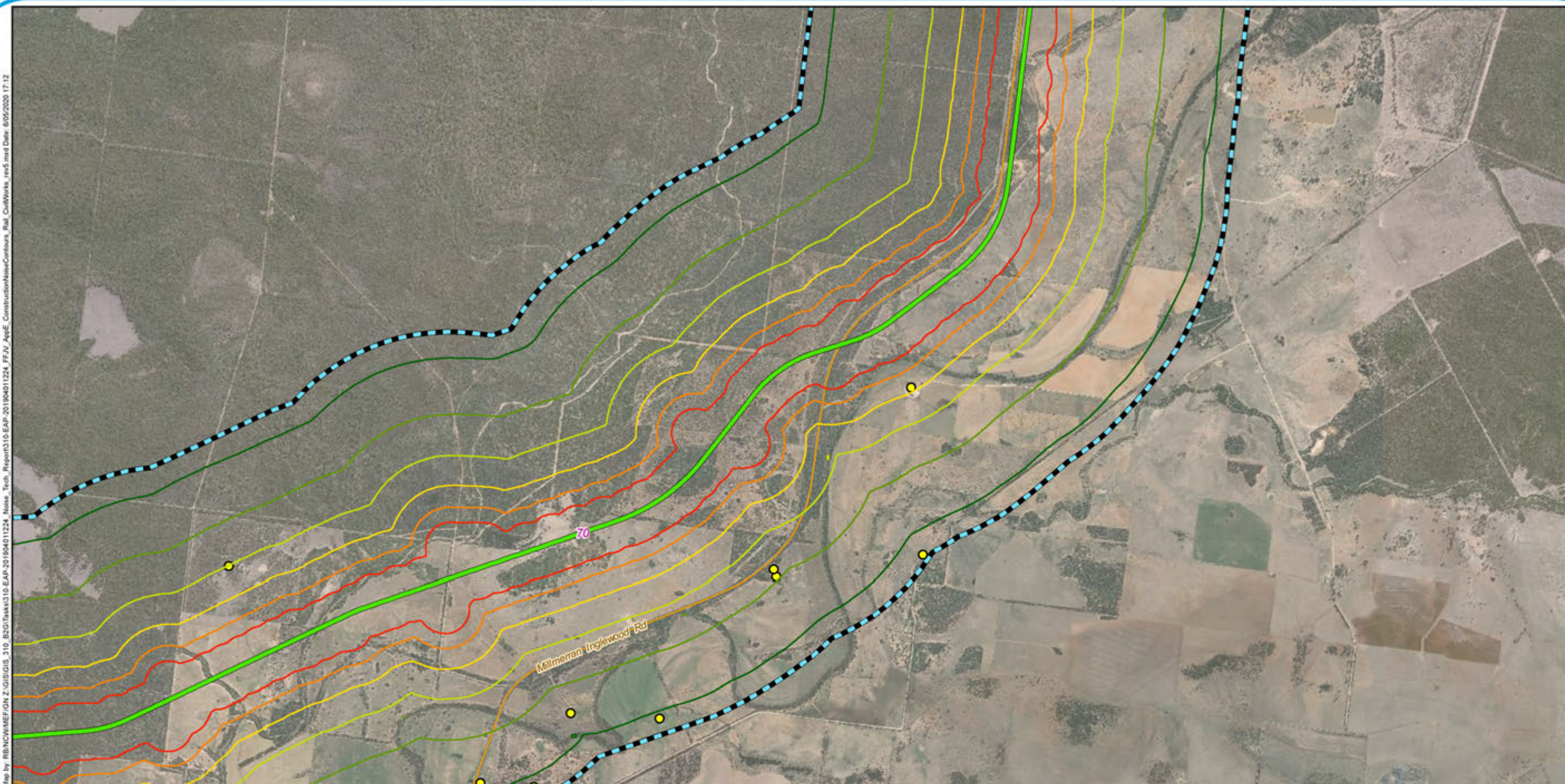
- Sound Pressure Level (L_{Aeq} , dB(A))**
Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Noise and vibration impact assessment area

— 45
— 50
— 55
— 60
— 65
— 70

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000

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Future Freight
Integrating Community, Environment and Engineering

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Coordinate System: GDA 1994 MGA Zone 56

Appendix E10: Construction noise contours rail civil works



- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Noise and vibration impact assessment area

— 45
— 50
— 55
— 60
— 65
— 70

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



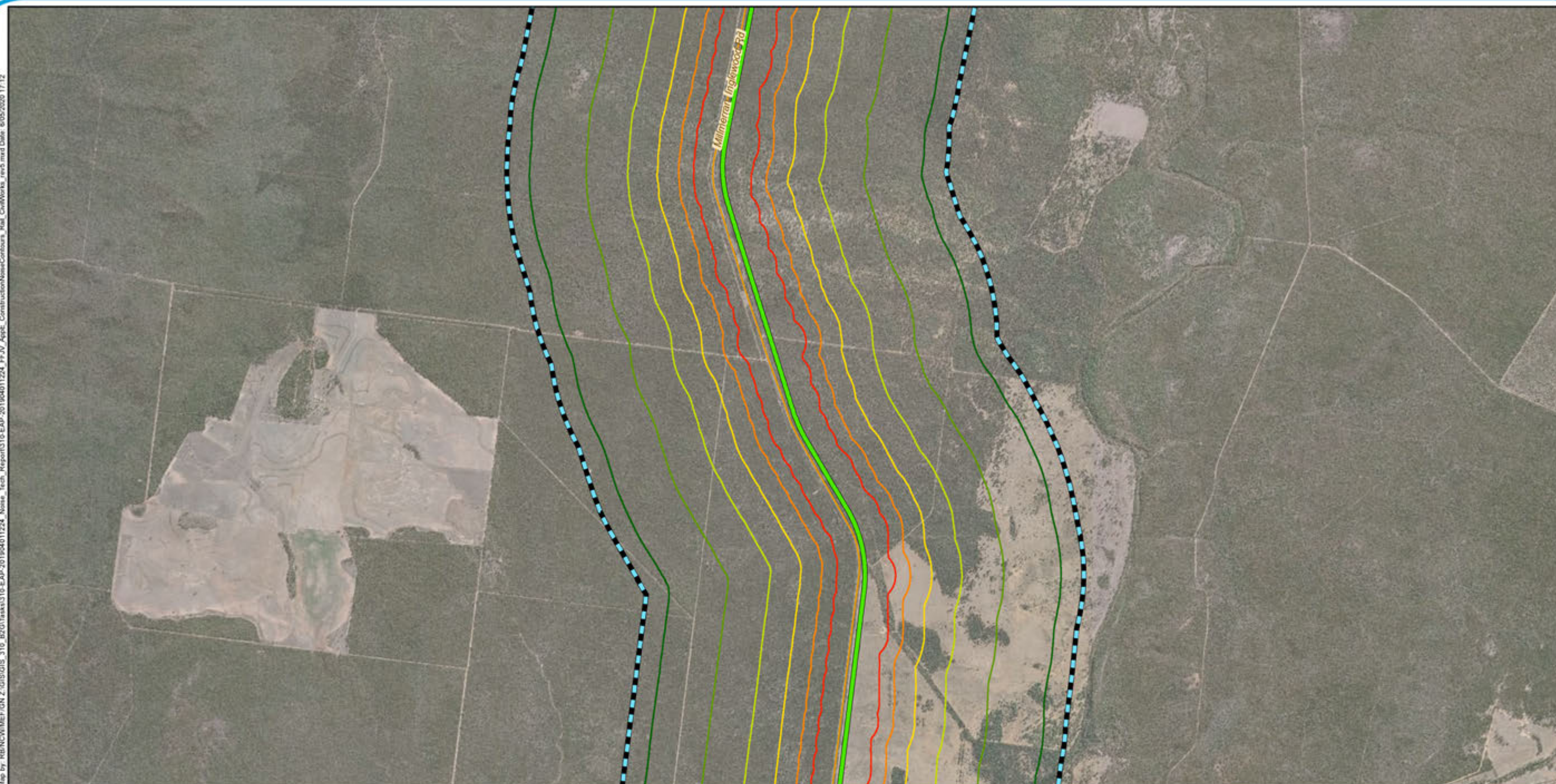
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Issue date: 06/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie
Appendix E11: Construction noise contours
rail civil works



- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Noise and vibration impact assessment area

— 45
— 50
— 55
— 60
— 65
— 70

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



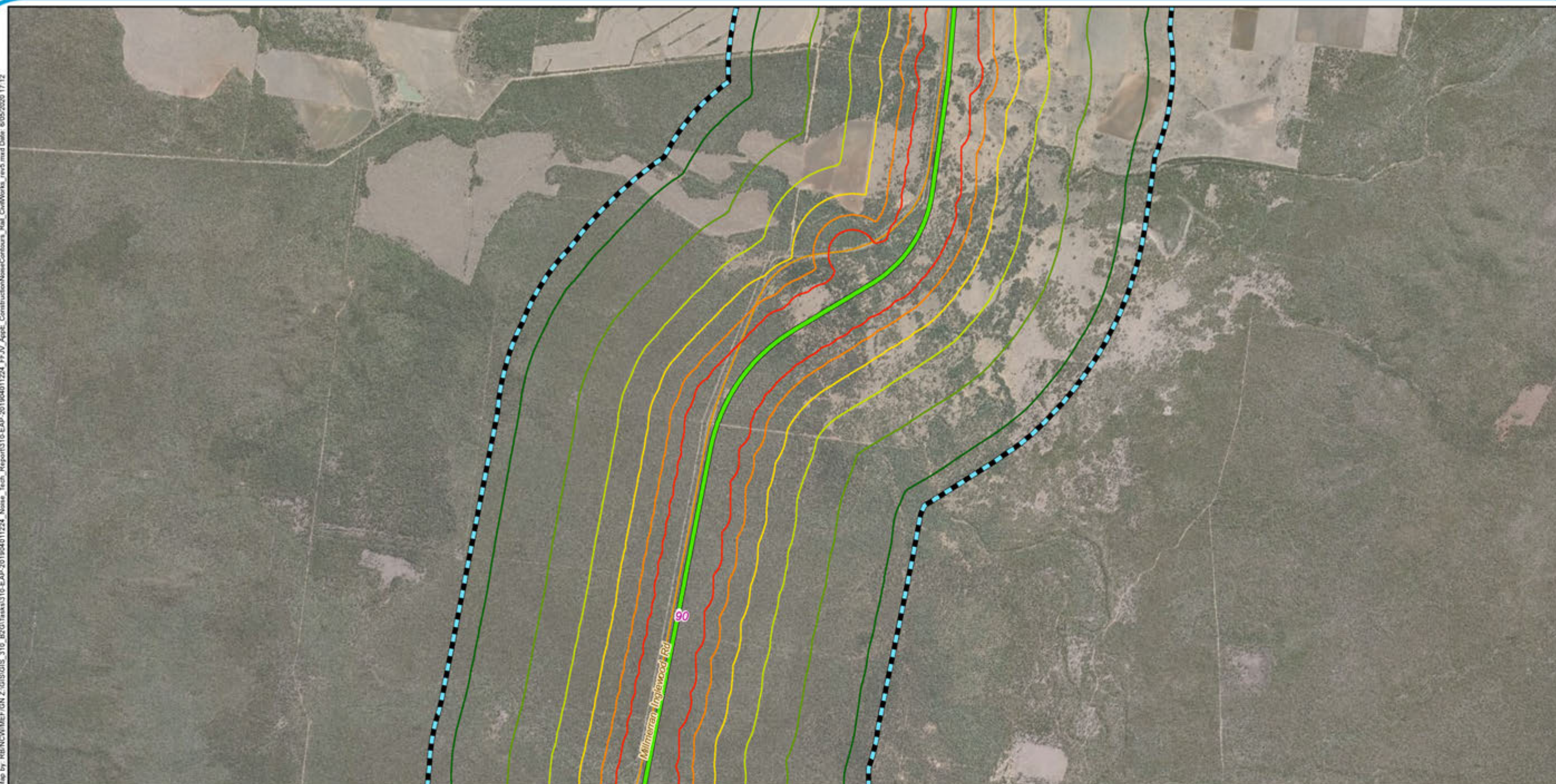
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Issue date: 06/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie
Appendix E12: Construction noise contours
rail civil works



- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Noise and vibration impact assessment area

— 45
— 50
— 55
— 60
— 65
— 70

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000



0 0.3 0.6 0.9 1.2 1.5 km



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Appendix E13: Construction noise contours rail civil works



- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Noise and vibration impact assessment area

— 45
— 50
— 55
— 60
— 65
— 70

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000

0 0.3 0.6 0.9 1.2 1.5km

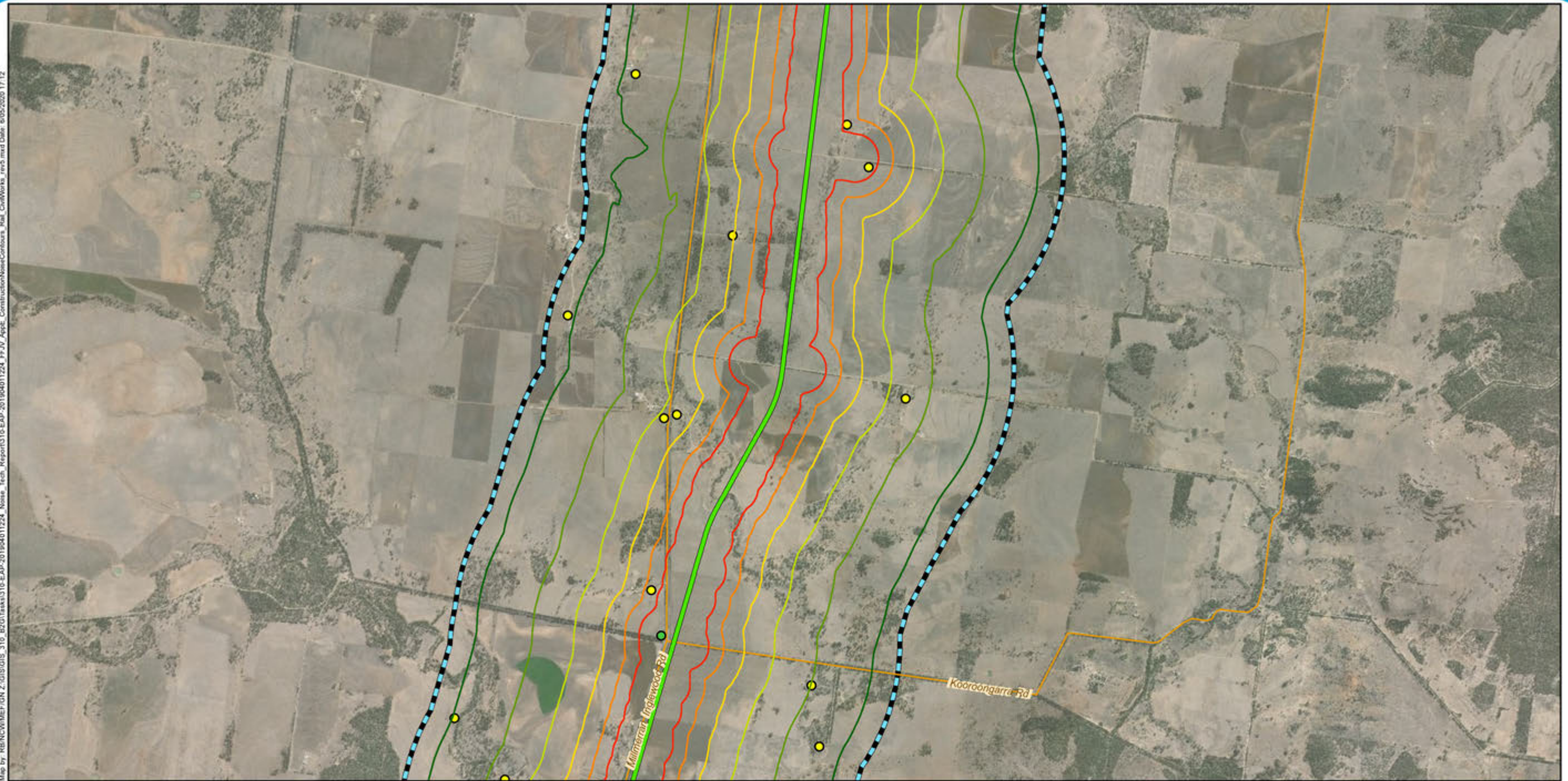


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Border to Gowrie
Appendix E14: Construction noise contours
rail civil works

Map by: REINOVMEFION 2:00181818 310: B201Task310-EAP-201904011224 Noise Tech_Report310-EAP-201904011224_FF_IV AppE_ConstructionNoiseContours_Rail_CivilWorks_rev5.mxd Date: 6/05/2020 17:12



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- ▭ Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))**
 Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

- Sensitive Receptors**
- Commercial Office
 - Commercial Retail
 - Community Building
 - Educational Building
 - Heritage
 - Hotel/Motel
 - Industrial
 - Medical Building
 - Outdoor Recreation
 - Residential
 - Sporting Facility



A3 scale: 1:40,000
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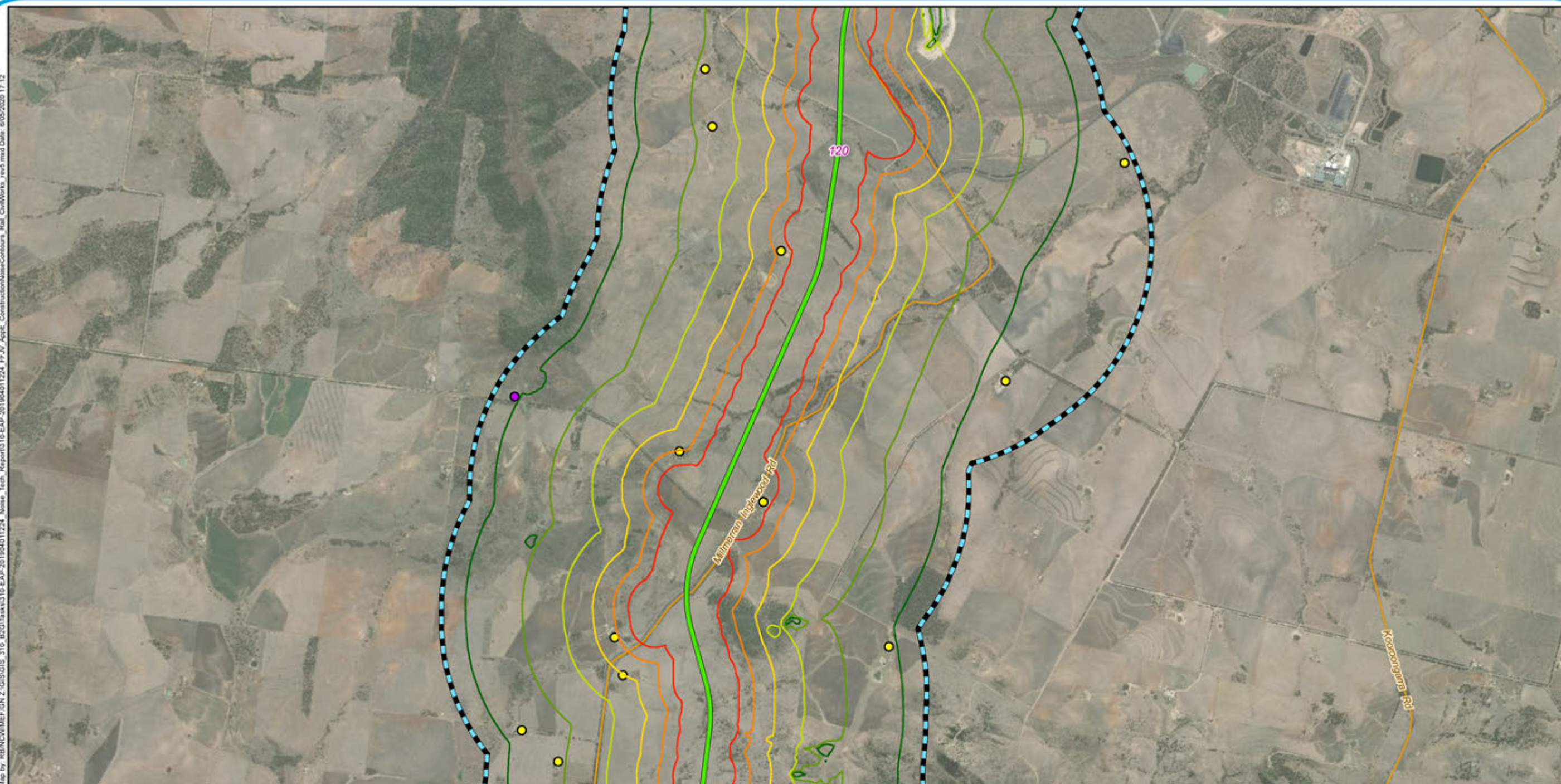


- Sound Pressure Level (L_{Aeq} , dB(A))
Methodology outlined in section 5.2



- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility





- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Noise and vibration impact assessment area

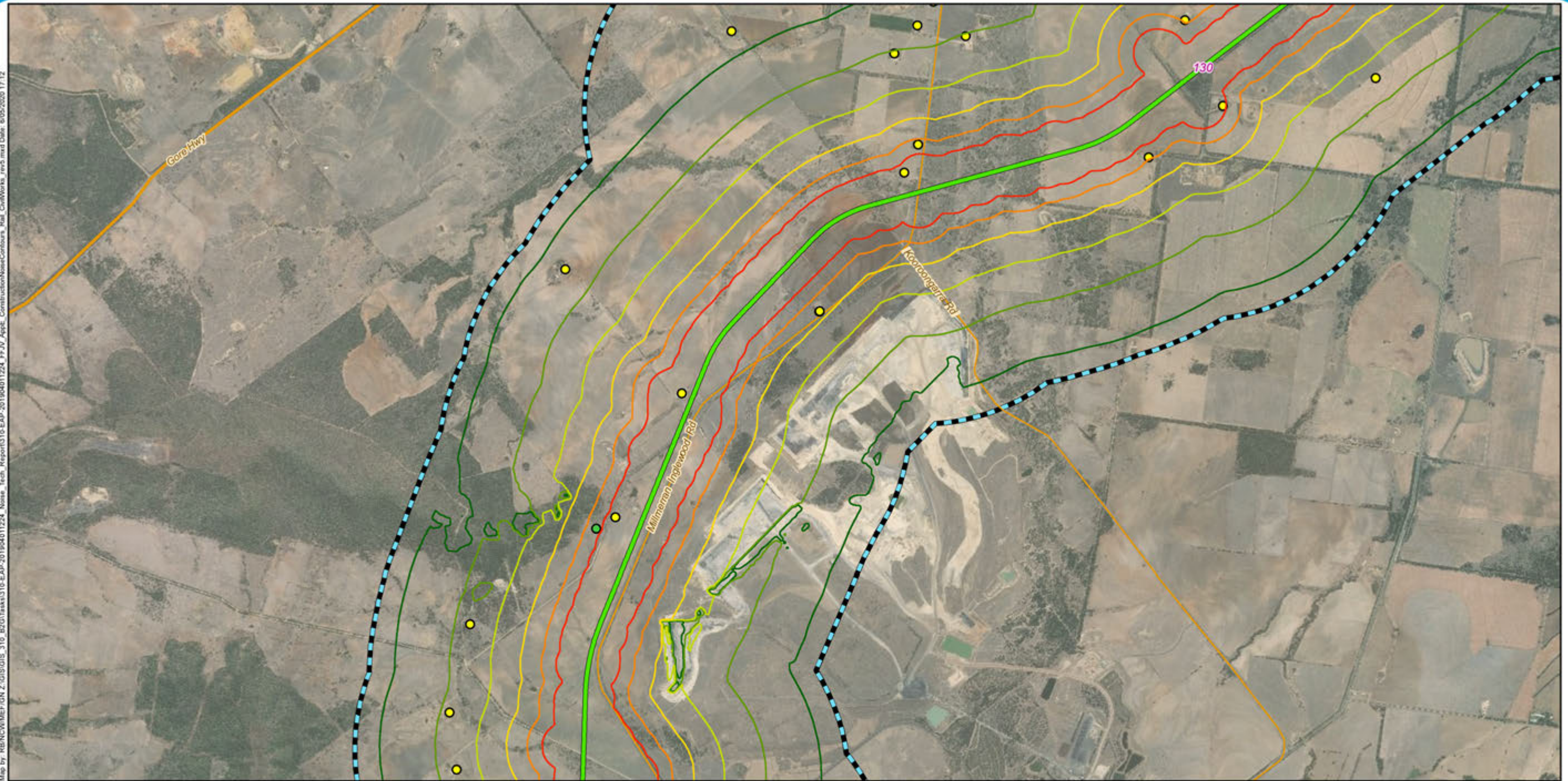
— 45
— 50
— 55
— 60
— 65
— 70

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



Map by: RENOVATION 2.0\GIS\310-B20\Task\310-EAP-201904011224_Noise_Tech_Report\310-EAP-201904011224_FF_IV_AppE_ConstructionNoiseContours_Rail_CivilWorks_rev5.mxd Date: 05/05/2020 17:12



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))**
 Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

- Sensitive Receptors**
- Commercial Office
 - Commercial Retail
 - Community Building
 - Educational Building
 - Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility

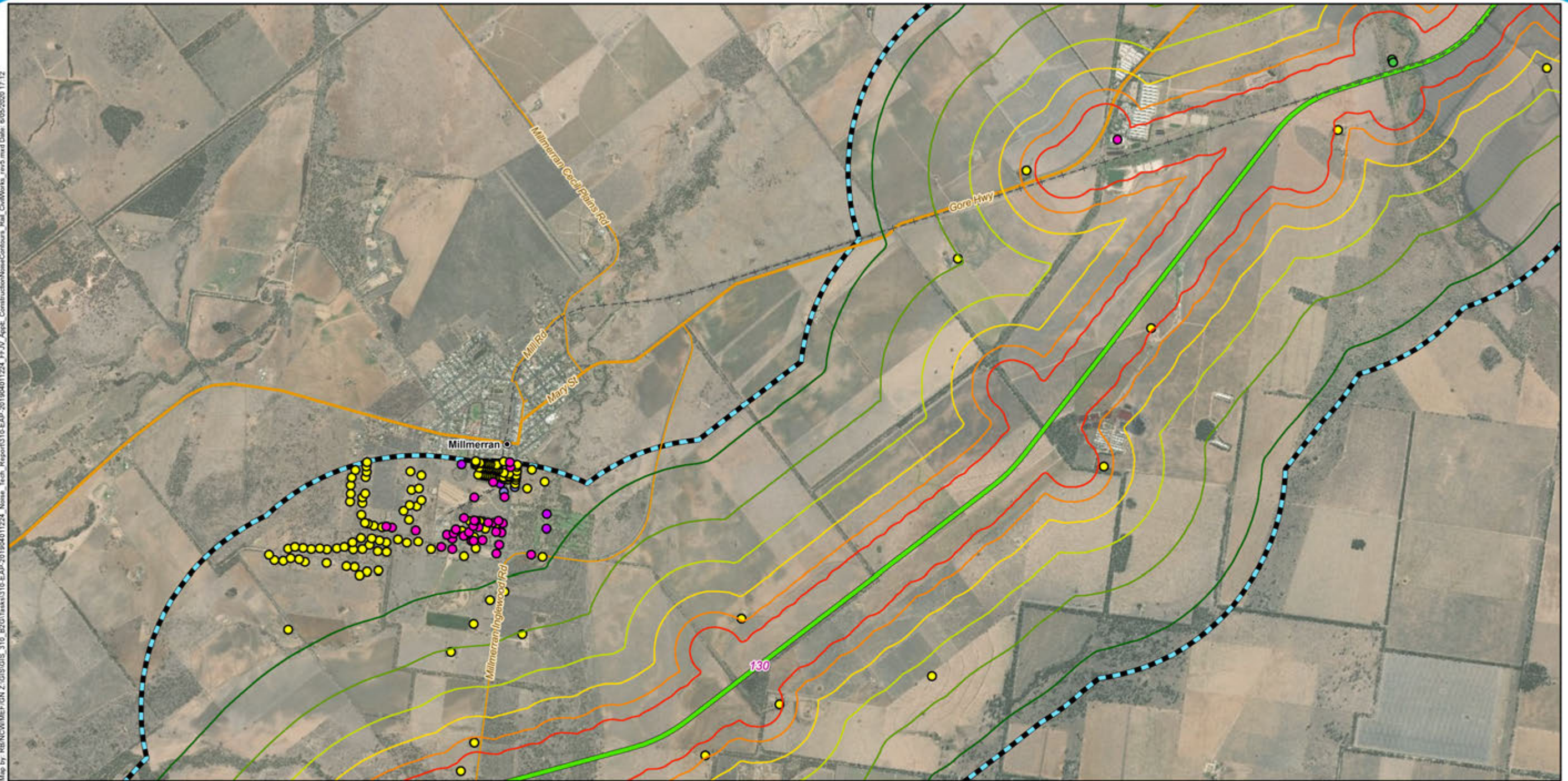


A3 scale: 1:40,000
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Legend

- 5 Chainage (km)
- Localities
- - - Existing rail (non-operational)
- Border to Gowrie alignment
- Major roads
- Minor roads
- ▨ Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq}, dB(A))**
Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



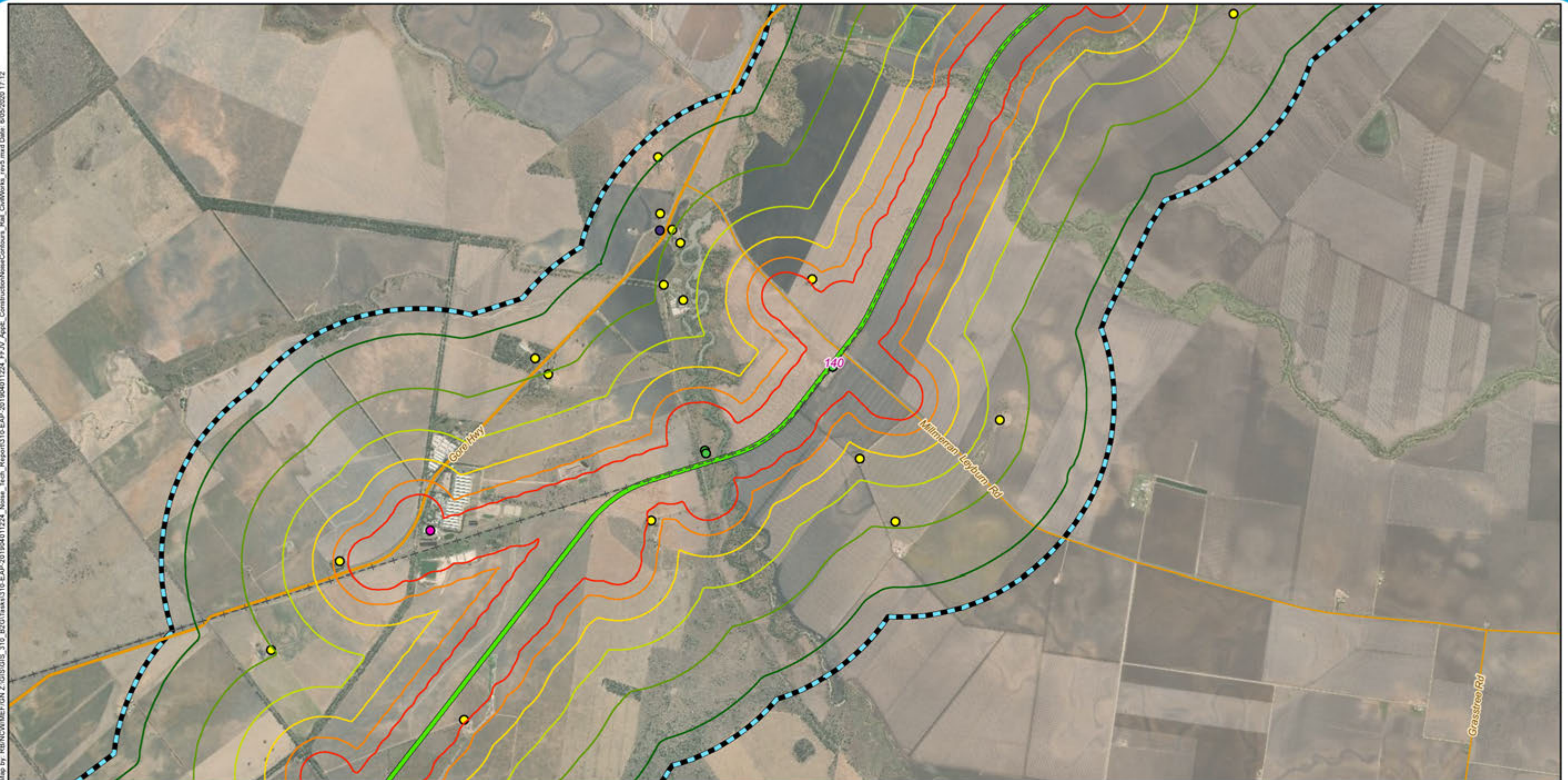
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Map by: REINOVME/ION 2:00GIS 310-B201Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF_IV_AppE_ConstructionNoiseContours_Rail_CivilWorks_rev5.mxd Date: 6/05/2020 17:12



Legend

- 5 Chainage (km)
- Localities
- - - Existing rail (non-operational)
- Border to Gowrie alignment
- Major roads
- Minor roads
- ▤ Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))**
Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



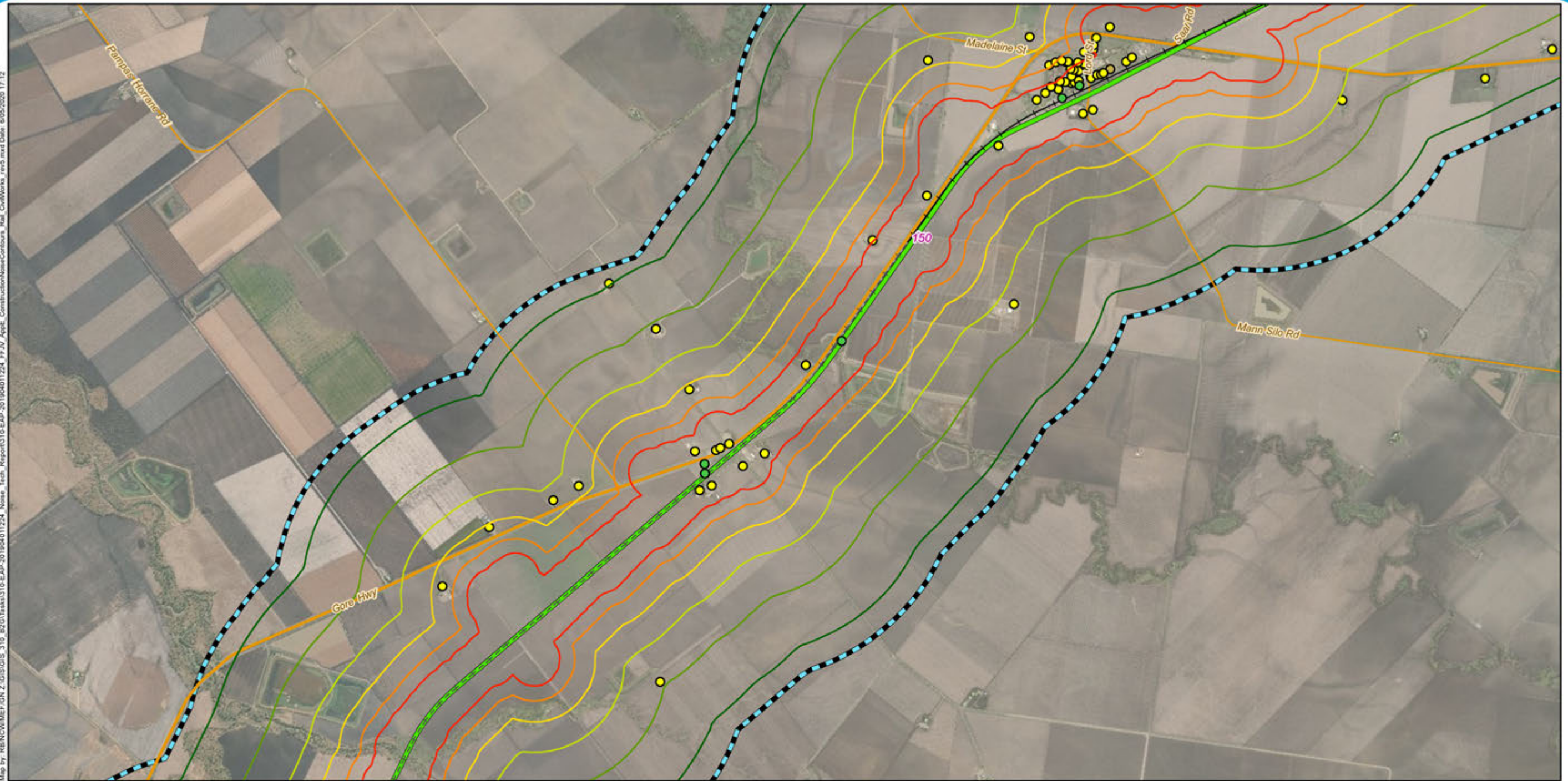
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Integrating Community, Environment and Engineering

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Coordinate System: GDA 1994 MGA Zone 56

Map by: RENOVATION 2.0/IGIS 310_B20/Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF_IV_AppE_ConstructionNoiseContours_Rail_CivilWorks_rev5.mxd Date: 05/05/2020 17:12



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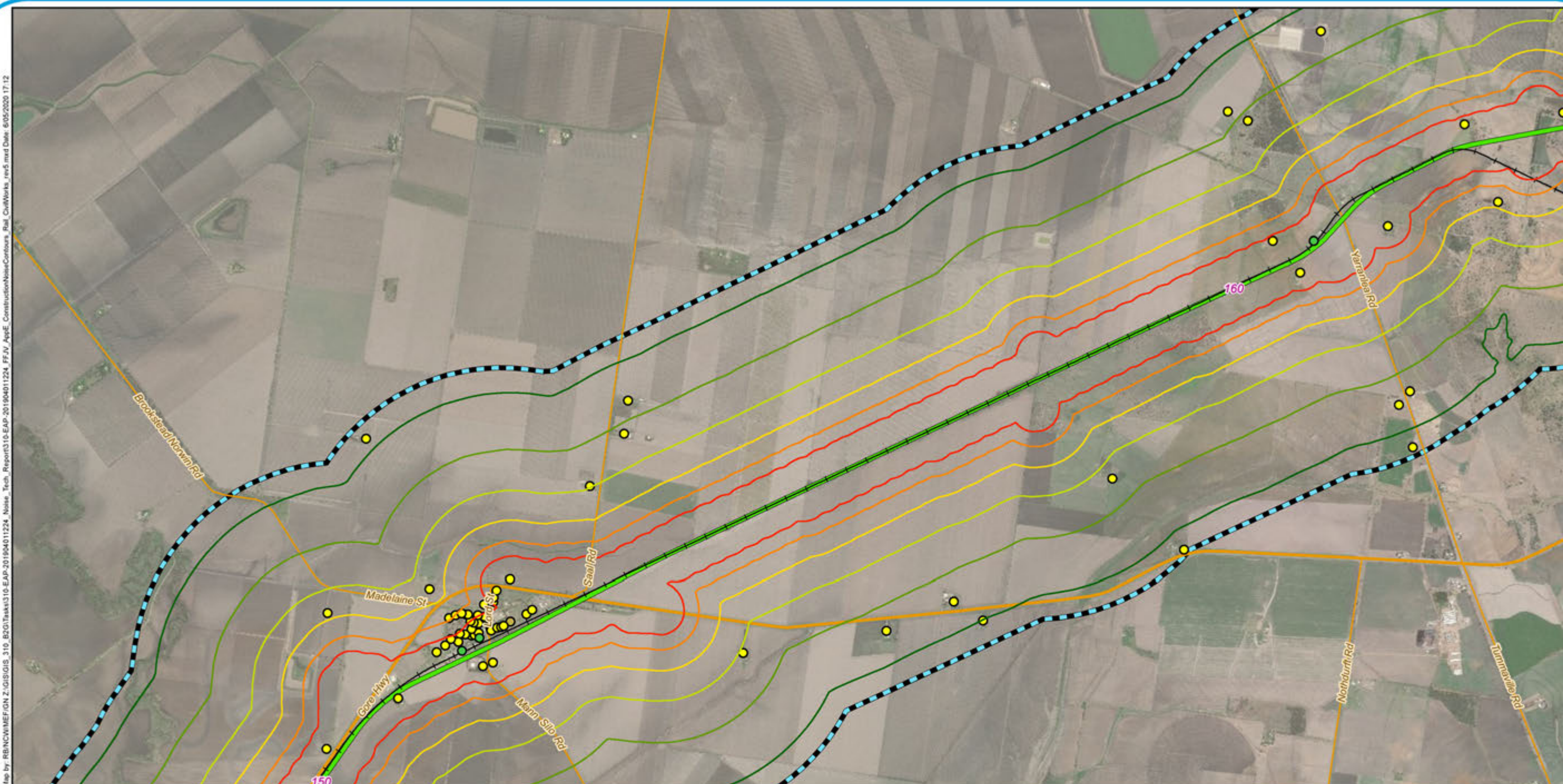
- 5 Chainage (km)
- Localities
- Existing rail (operational)
- - - Existing rail (non-operational)
- Border to Gowrie alignment
- Major roads
- Minor roads
- Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq}, dB(A))**
Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

- Sensitive Receptors**
- Commercial Office
 - Commercial Retail
 - Community Building
 - Educational Building
 - Heritage
 - Hotel/Motel
 - Industrial
 - Medical Building
 - Outdoor Recreation
 - Residential
 - Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km



- 5 Chainage (km)
- Localities
- Existing rail (operational)
- Border to Gowrie alignment
- Major roads
- Minor roads
- Noise and vibration impact assessment area

— 45
— 50
— 55
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— 65
— 70

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000

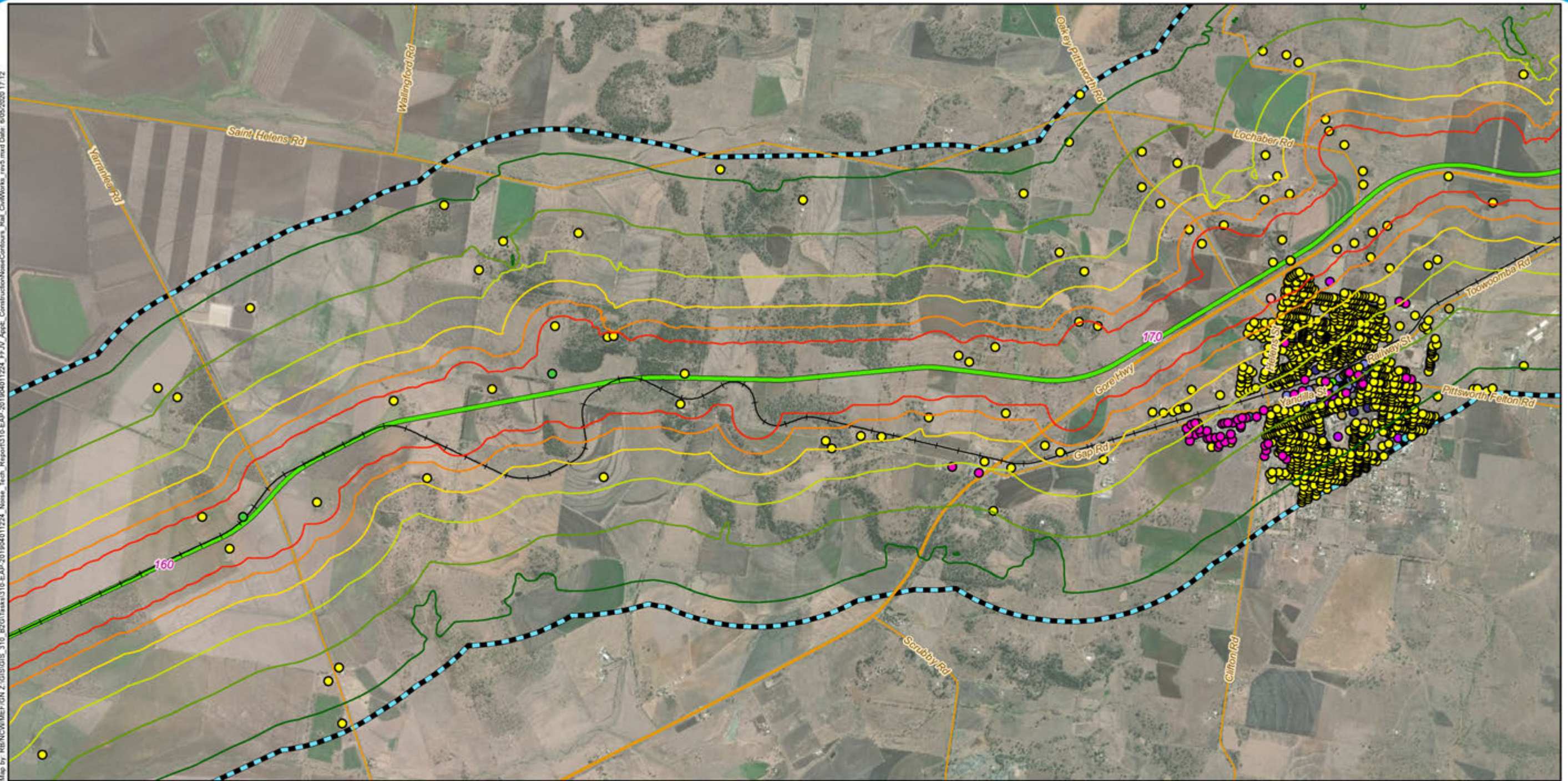
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Issue date: 06/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

Appendix E22: Construction noise contours rail civil works

Map by: RENOVATION 2.0/IGIS 310_B2017/Task310-EAP-2019/04/01/224_Noise_Tech_Report/310-EAP-2019/04/01/224_FF_IV_AppE_ConstructionNoiseContours_Rail_CivilWorks_rev5.mxd Date: 05/05/2020 17:12



Legend

- 5 Chainage (km)
- Localities
- Existing rail (operational)
- Border to Gowrie alignment
- Major roads
- Minor roads
- Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))
 Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

- Sensitive Receptors
- Commercial Office
 - Commercial Retail
 - Community Building
 - Educational Building
 - Heritage
 - Hotel/Motel
 - Industrial
 - Medical Building
 - Outdoor Recreation
 - Residential
 - Sporting Facility



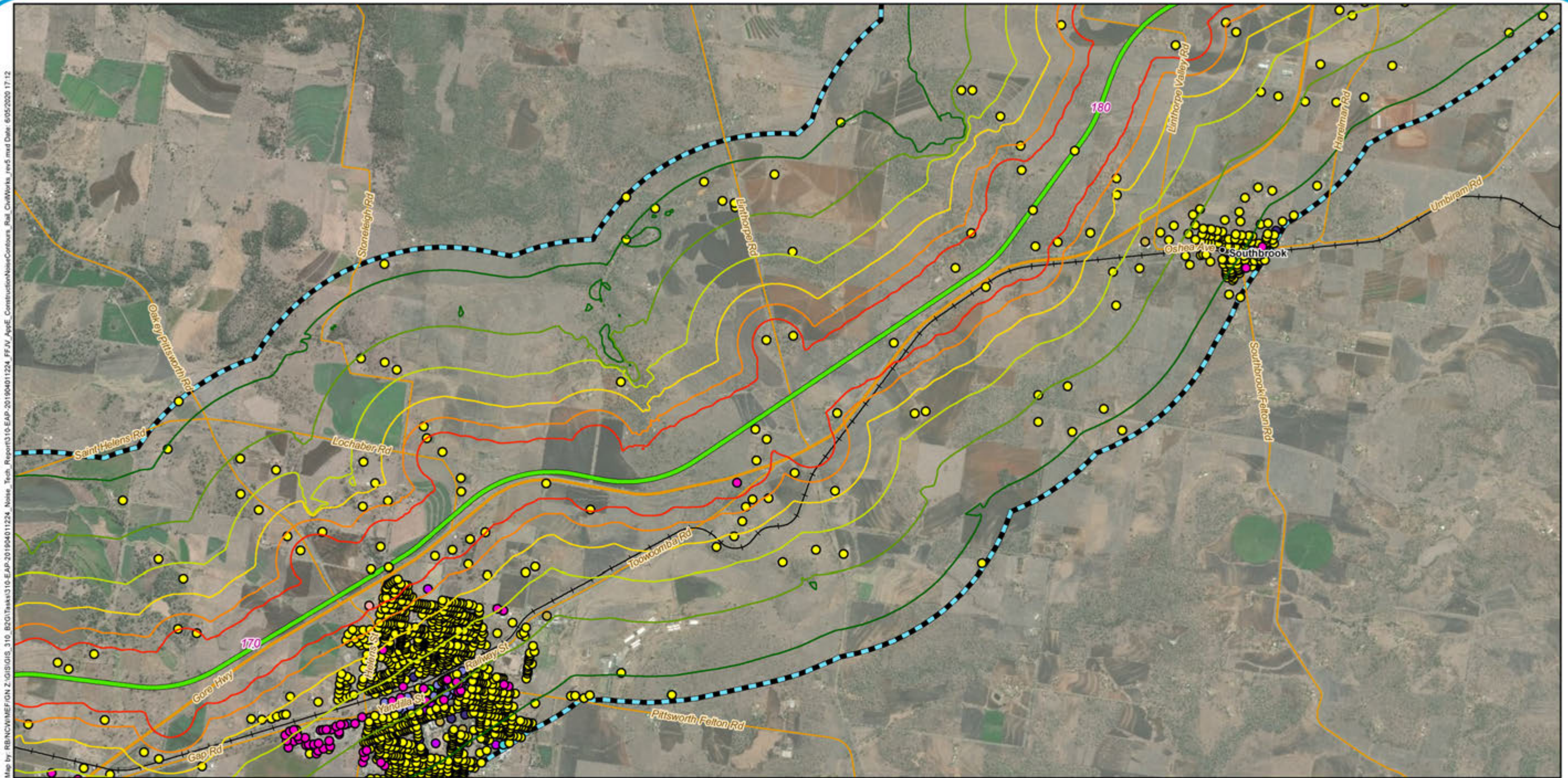
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Map by: RB\N\WME\G\N 2\GIS\GIS 310 - B20\Tasks\310-EAP-201904011224 - Noise Tech Report\310-EAP-201904011224_FF_IV_AppE_ConstructionNoiseContours_Rail_CivilWorks_rev5.mxd Date: 05/05/2020 17:12



Legend

- 5 Chainage (km)
- Localities
- Existing rail (operational)
- Border to Gowrie alignment
- Major roads
- Minor roads
- Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))
 Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



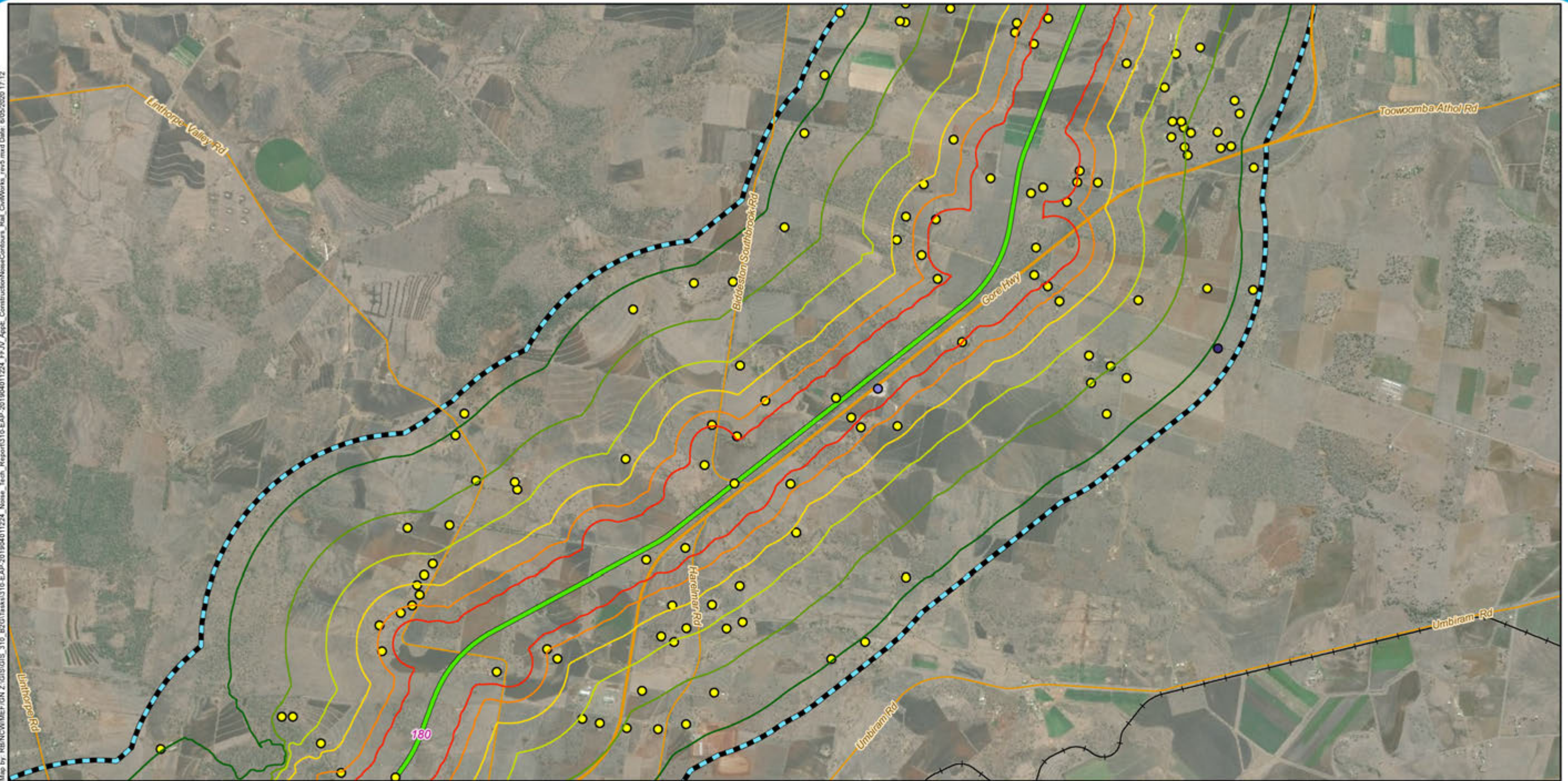
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 Integrating Community, Environment and Engineering

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Legend

- 5 Chainage (km)
- Localities
- Existing rail (operational)
- Border to Gowrie alignment
- Major roads
- Minor roads
- Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))
 Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility

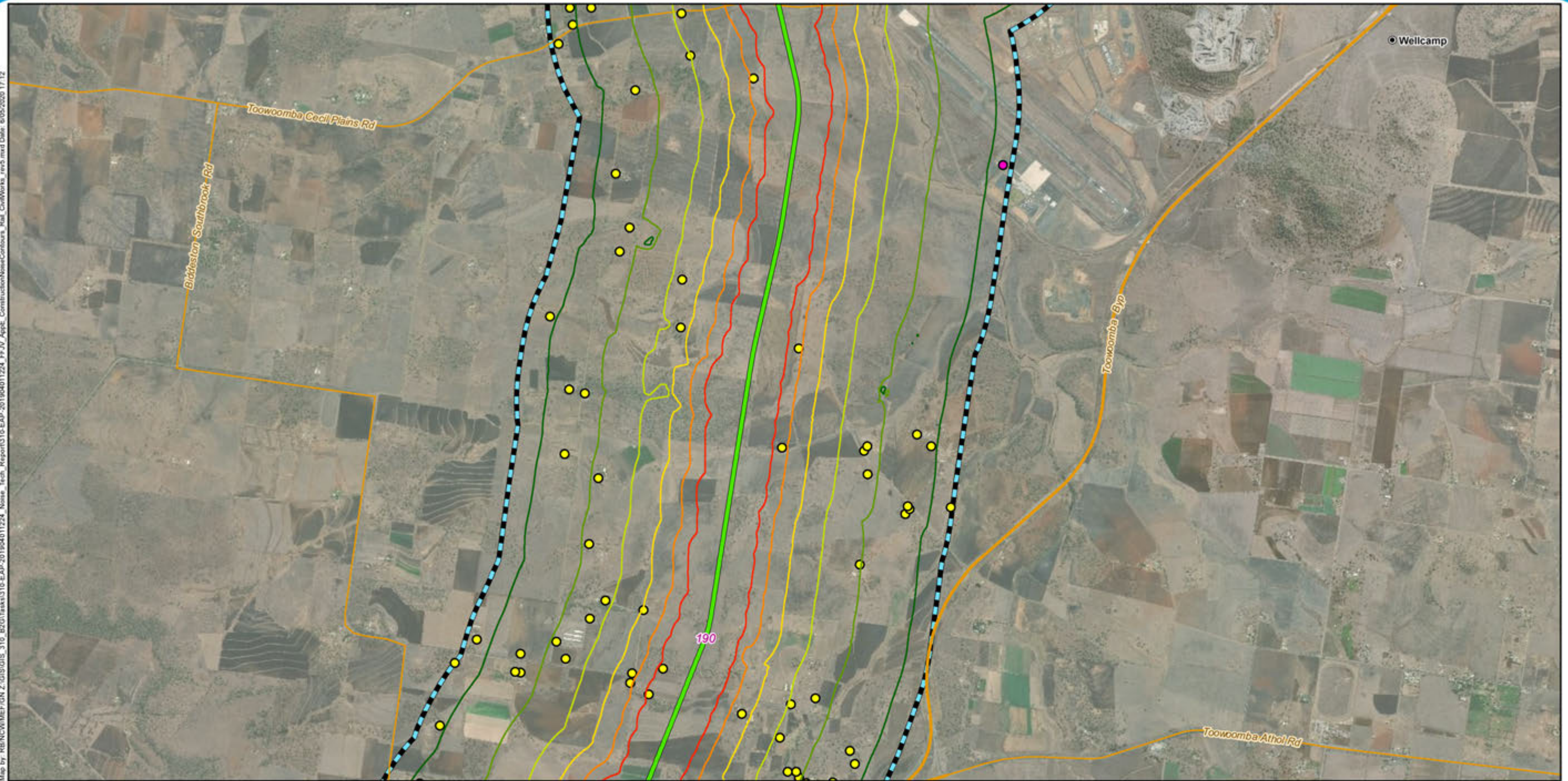


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Future Freight
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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))**
Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

- Sensitive Receptors**
- Commercial Office
 - Commercial Retail
 - Community Building
 - Educational Building
 - Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



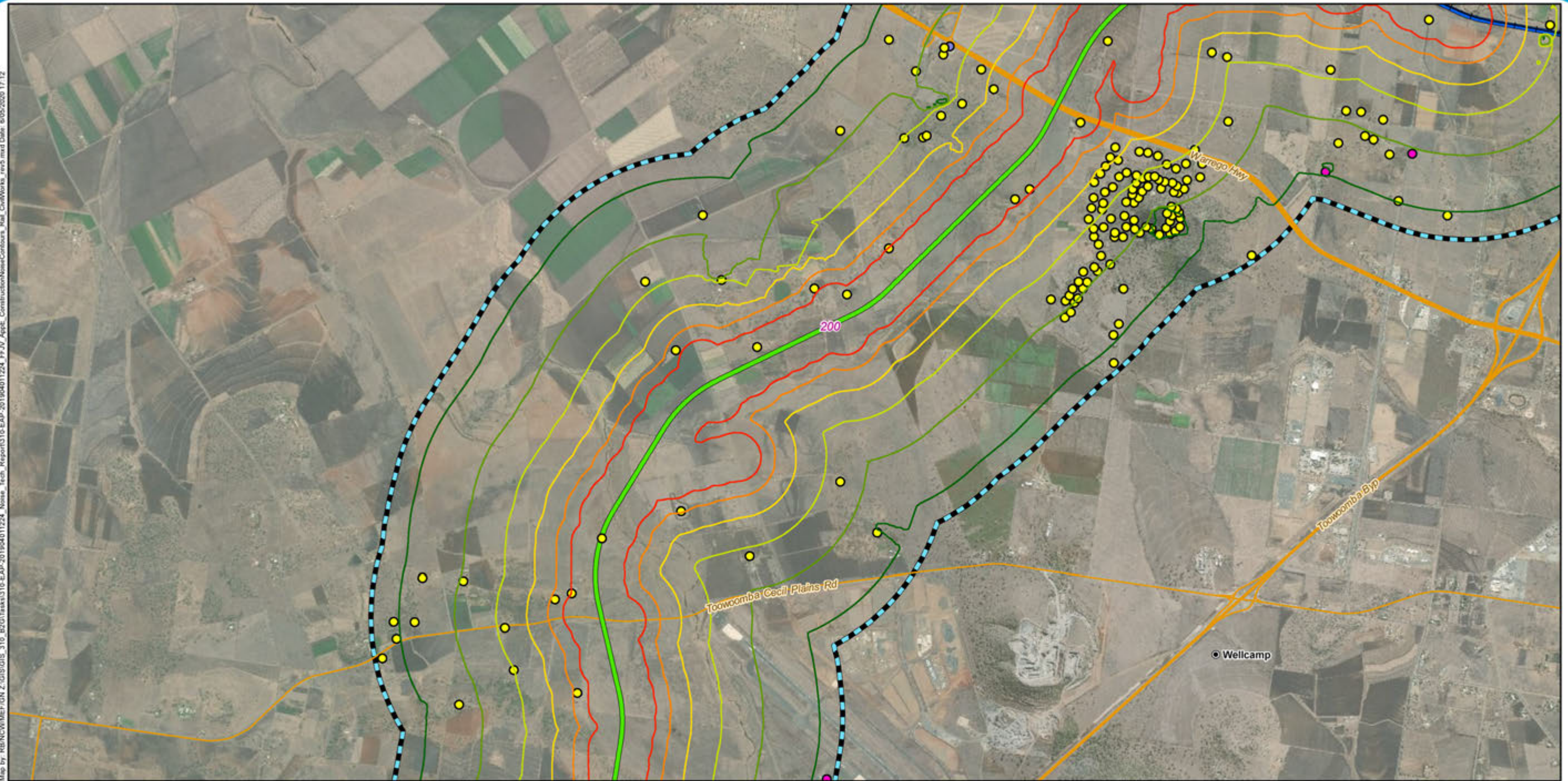
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Legend

- 5 Chainage (km)
- Localities
- Gowrie to Helidon alignment
- Existing rail (operational)
- Border to Gowrie alignment
- Major roads
- Minor roads
- ▭ Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))**
Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

- Sensitive Receptors**
- Commercial Office
 - Commercial Retail
 - Community Building
 - Educational Building
 - Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



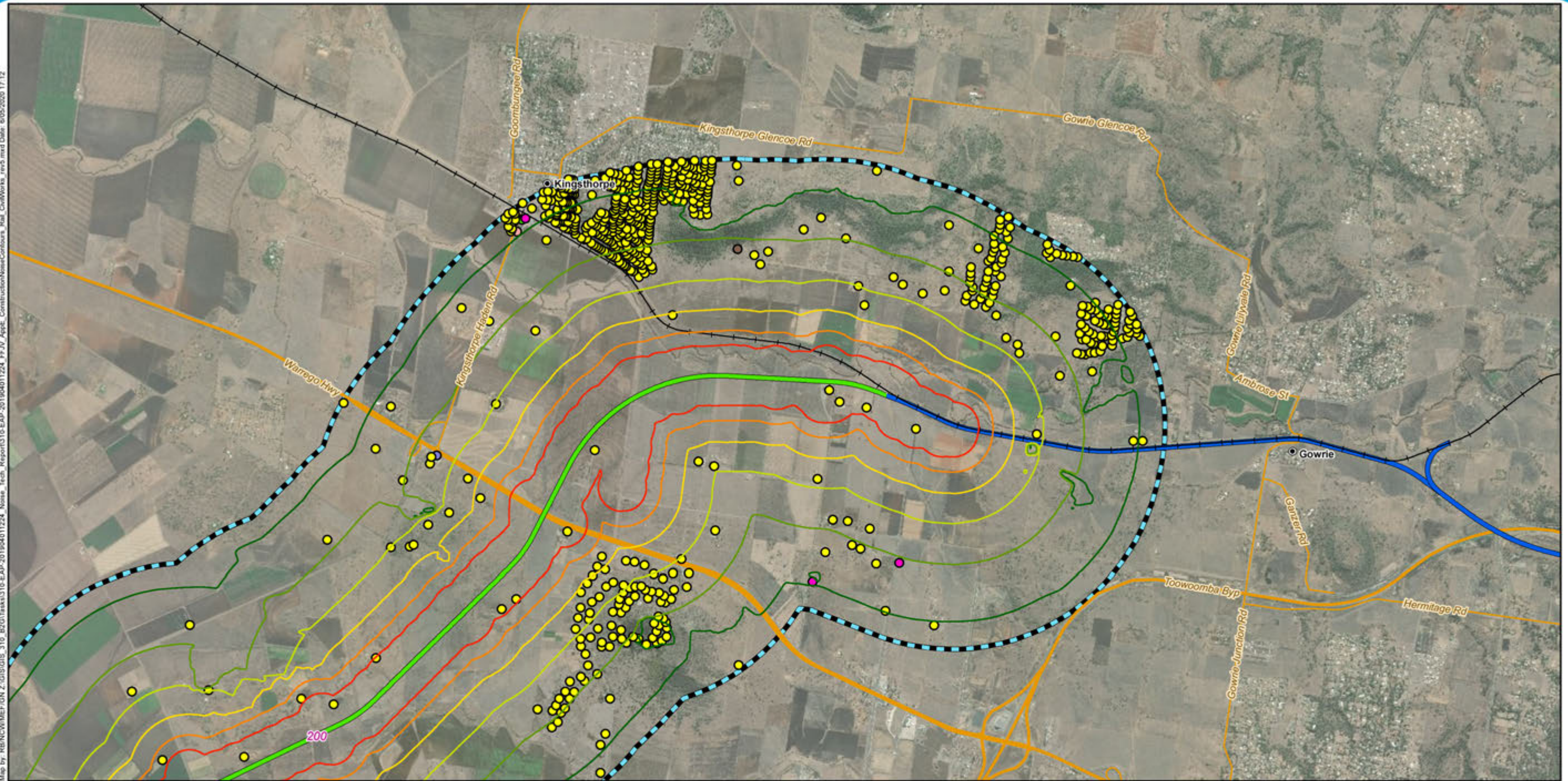
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Future Freight
Integrating Community, Environment and Engineering

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Legend

- 5 Chainage (km)
- Localities
- Gowrie to Helidon alignment
- Existing rail (operational)
- Border to Gowrie alignment
- Major roads
- Minor roads
- Noise and vibration impact assessment area

- Sound Pressure Level (L_{Aeq} , dB(A))
Methodology outlined in section 5.2
- 45
 - 50
 - 55
 - 60
 - 65
 - 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



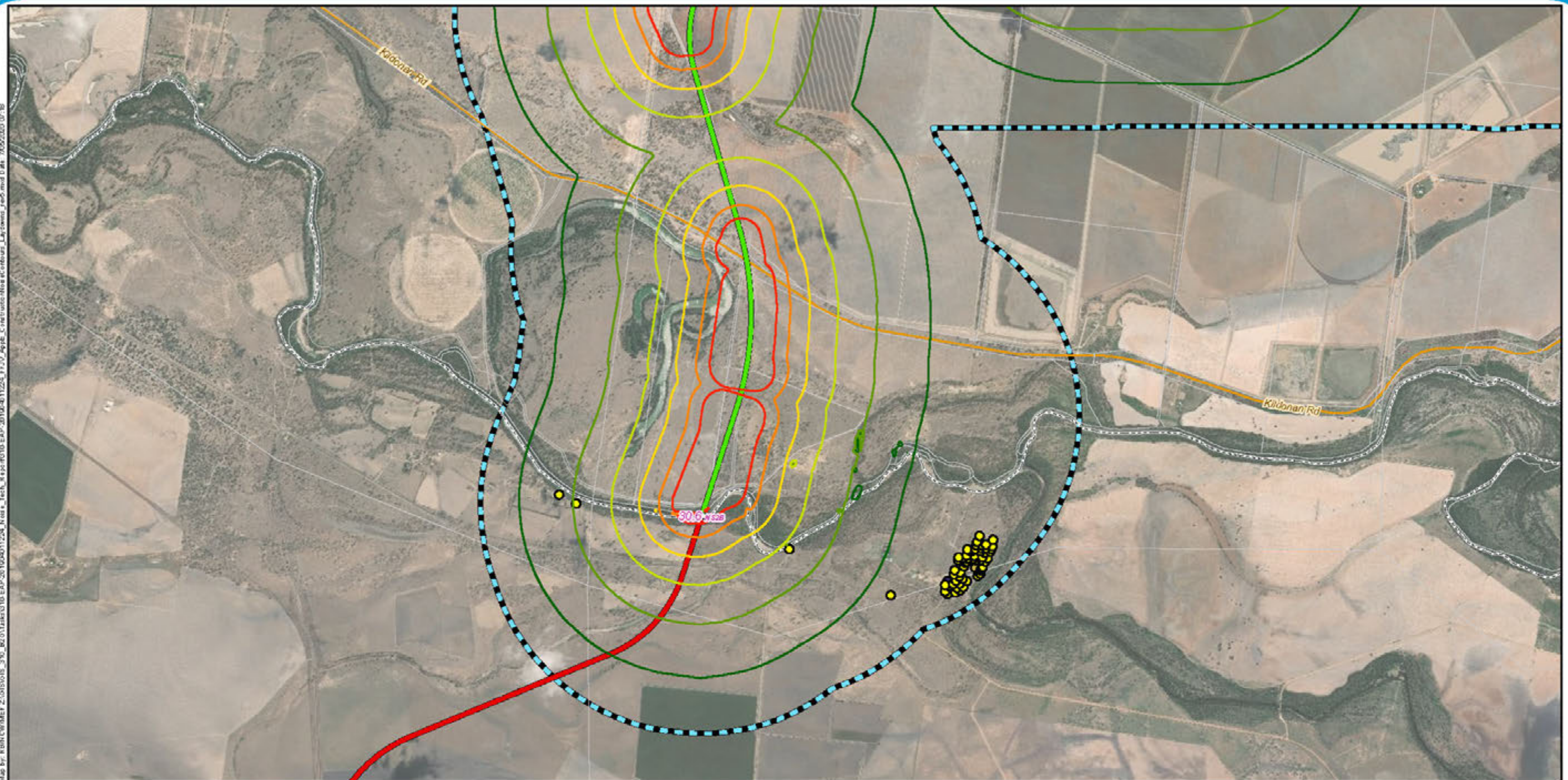
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Future Freight
Integrating Community, Environment and Engineering

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Coordinate System: GDA 1994 MGA Zone 56

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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- North Star to NSW/QLD border alignment
- Minor roads
- NSW/QLD border
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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Integrating Community, Environment and Engineering

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Map by: RBN/CW/MET 2/05/2018 310_B2017/Task/310_EAP-20190401/1224_Notes_Tech_Rpt/1010_EAP-20190401/1224_FF_V_ApplE_Contributions/Contours_Laydowns_yes.mxd Date: 7/05/2020 07:18



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Minor roads
- Cadastral
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility

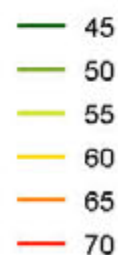


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- Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

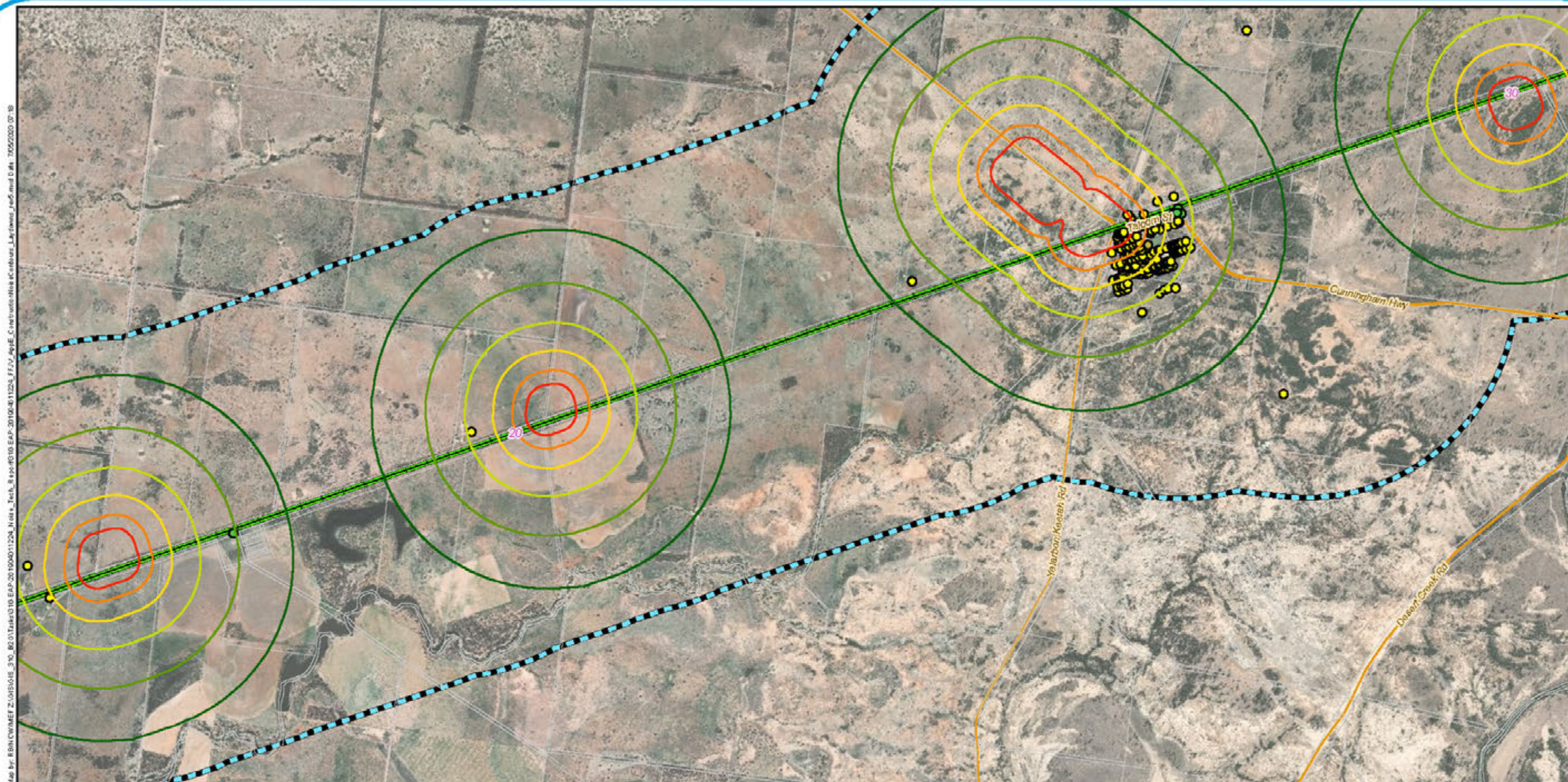
Methodology outlined in section 5.2



- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

-  Hotel/Motel
-  Industrial
-  Medical Building
-  Outdoor Recreation
-  Residential
-  Sporting Facility





Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility

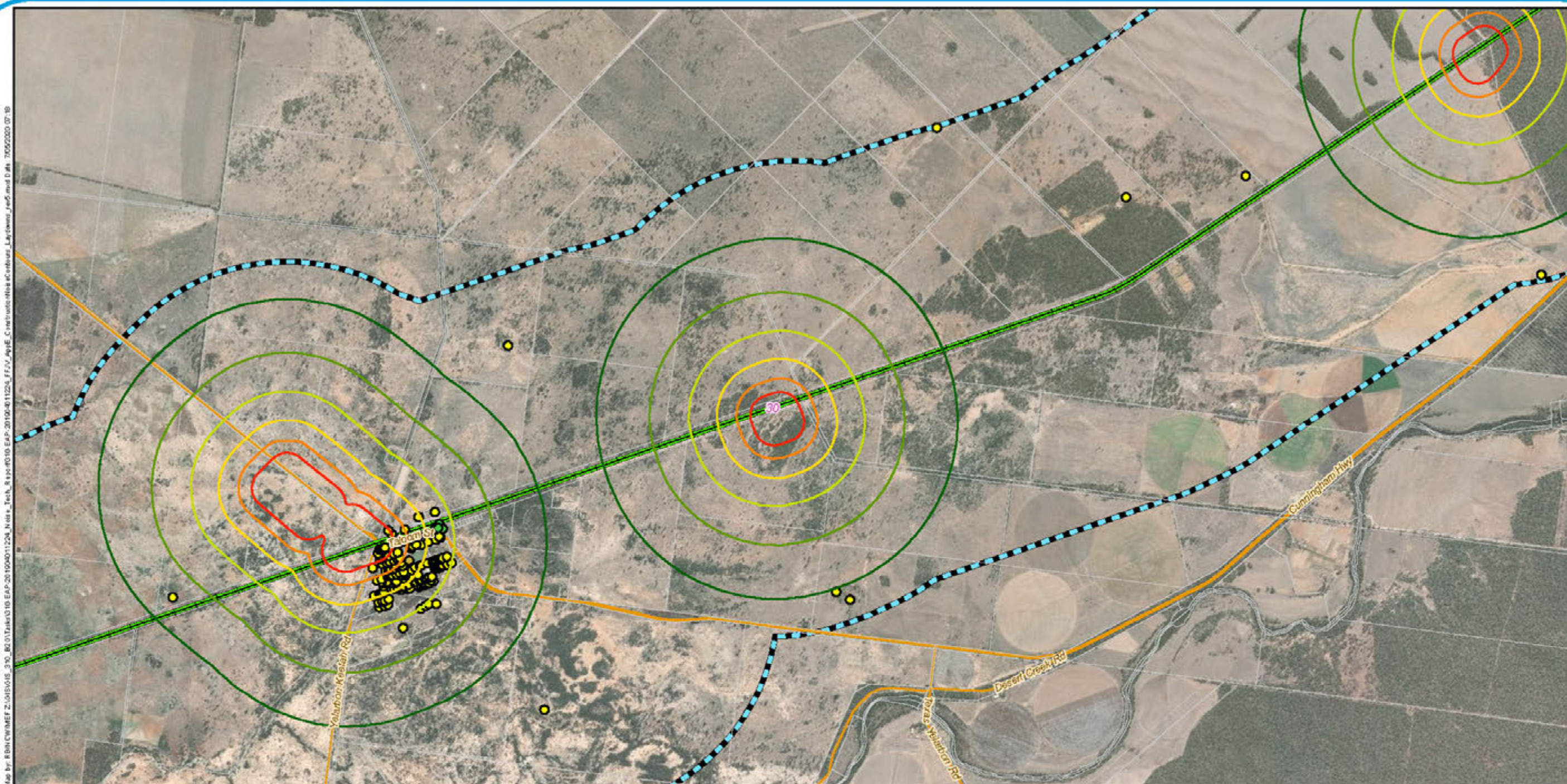


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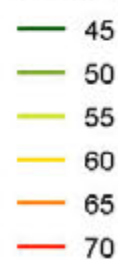
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 Coordinate System: GDA 1994 MGA Zone 56



- Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

Methodology outlined in section 5.2



- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

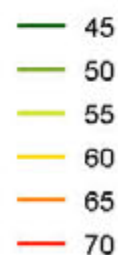
-  Hotel/Motel
-  Industrial
-  Medical Building
-  Outdoor Recreation
-  Residential
-  Sporting Facility





- Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Cadastre
- Noise and vibration impact assessment area

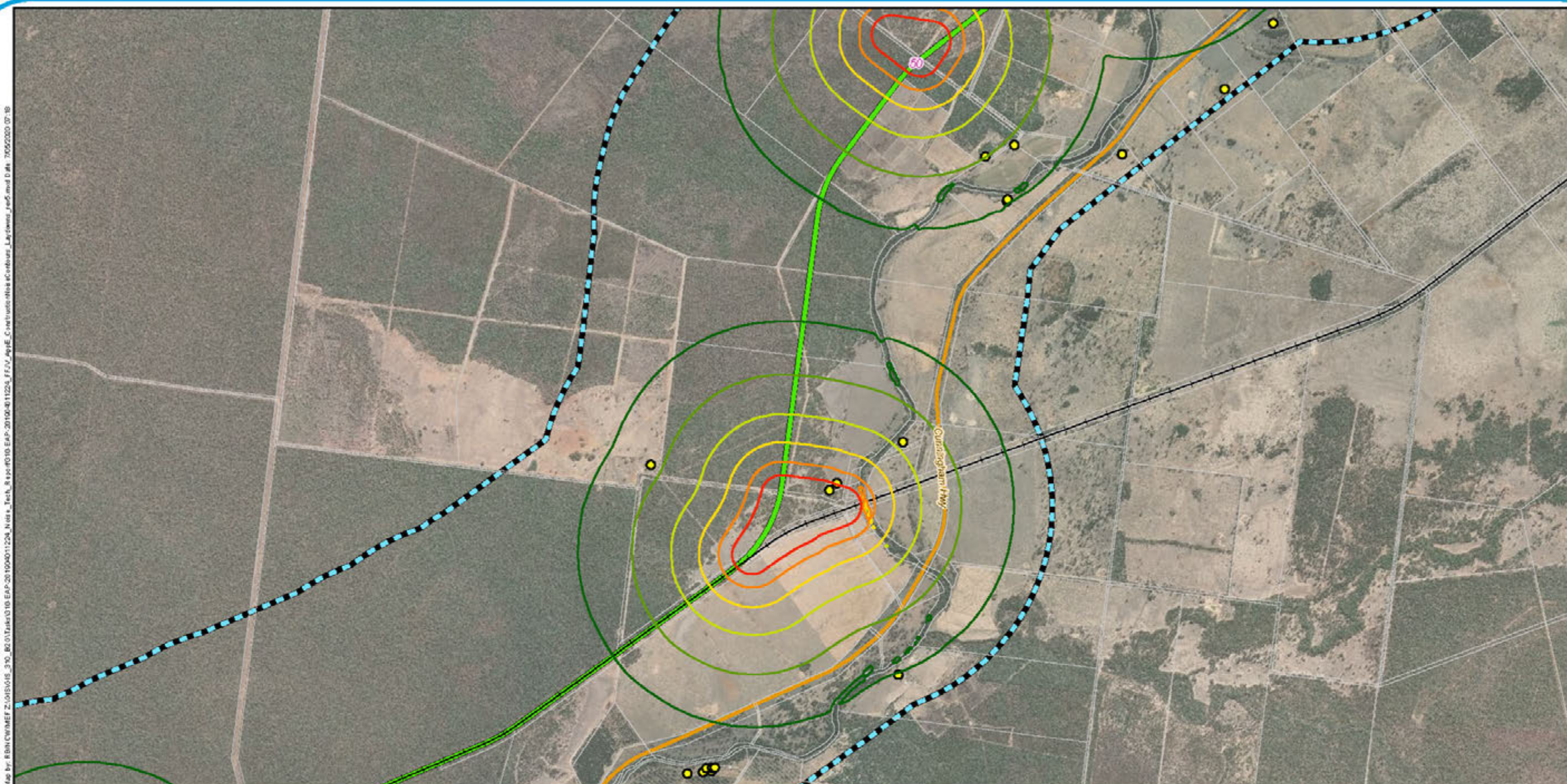
Methodology outlined in section 5.2



- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

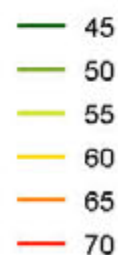
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility





- Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Cadastre
- Noise and vibration impact assessment area

Methodology outlined in section 5.2

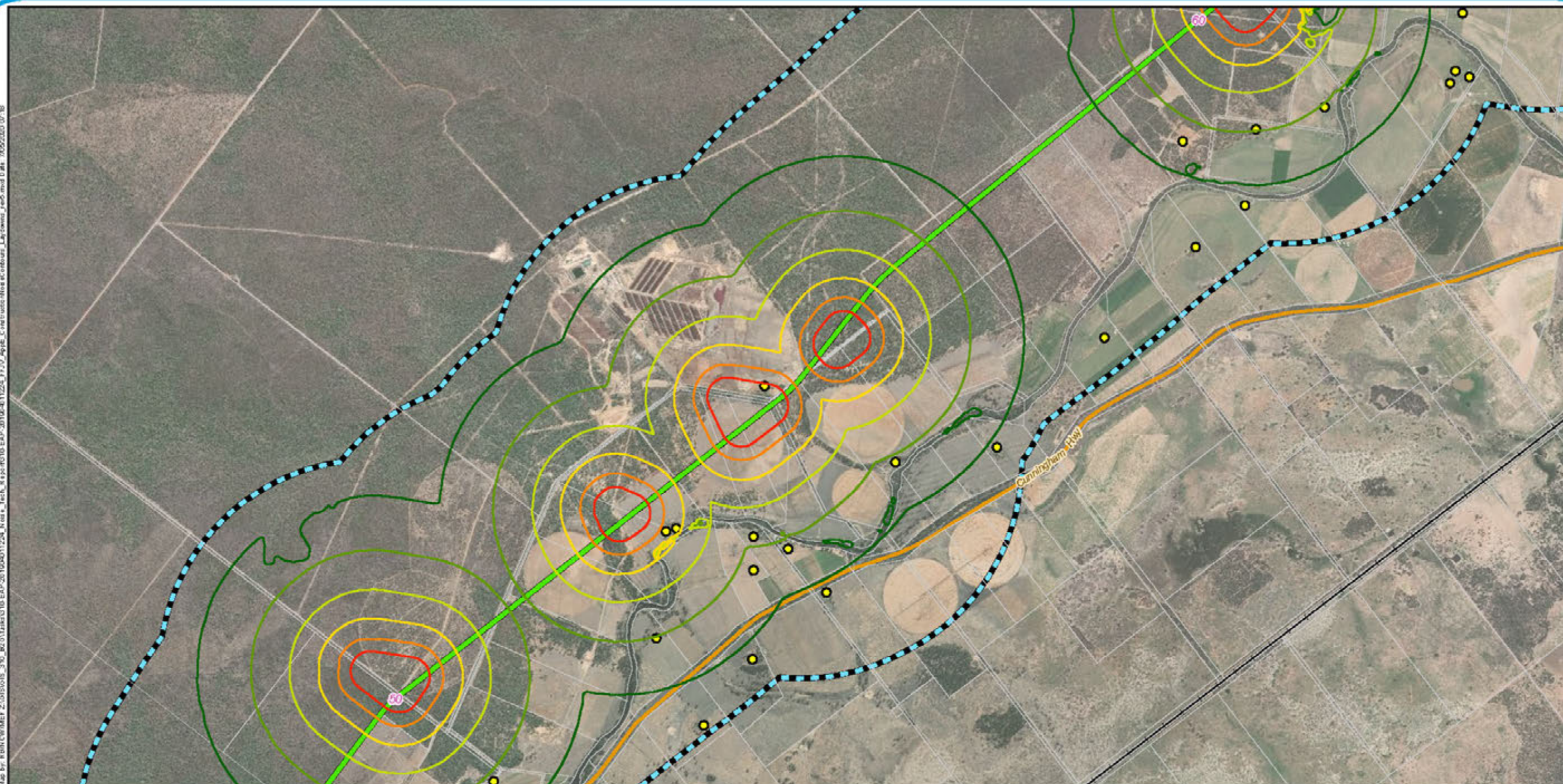


- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

-  Hotel/Motel
-  Industrial
-  Medical Building
-  Outdoor Recreation
-  Residential
-  Sporting Facility



Map by: RBN/CW/MET 2/05/2018 310_B201Task0316 EAP-201004011224_Note_Tech_Rpt01010 EAP-201004011224_FF_V_ApplE_Contributors/Contours_Laydowns_yes.mxd Date: 7/05/2020 07:18



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Cadastral
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
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- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



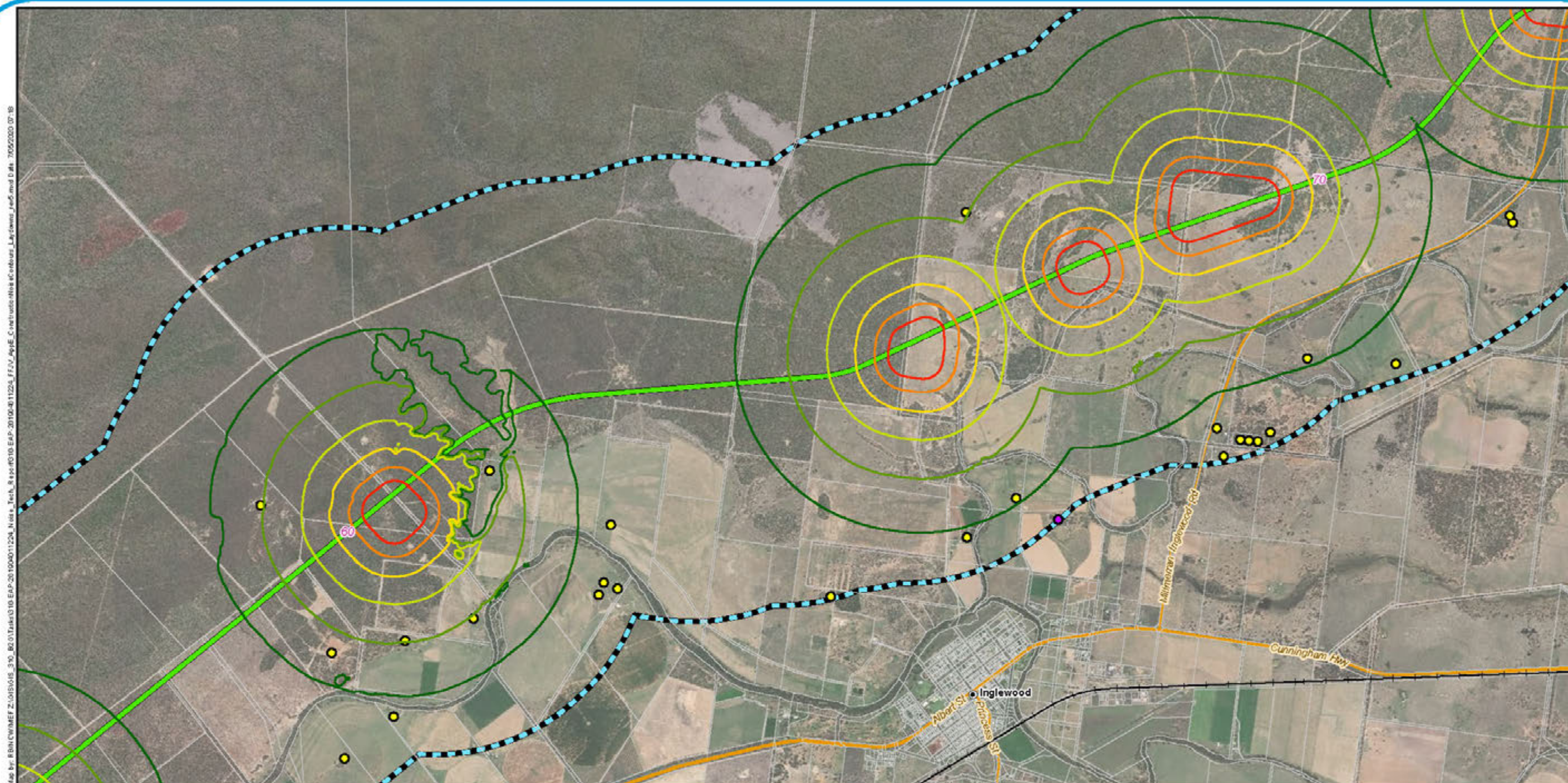
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Future Freight
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Issue date: 08/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

Map by: RBN/CW/MET/2/04/2018/310_B2/01/Task/310_EAP/2019/04/11/224_L_F2/V_Ap/E_Construction Noise Contours_Laydowns_yes.mxd Date: 7/05/2020 07:18



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

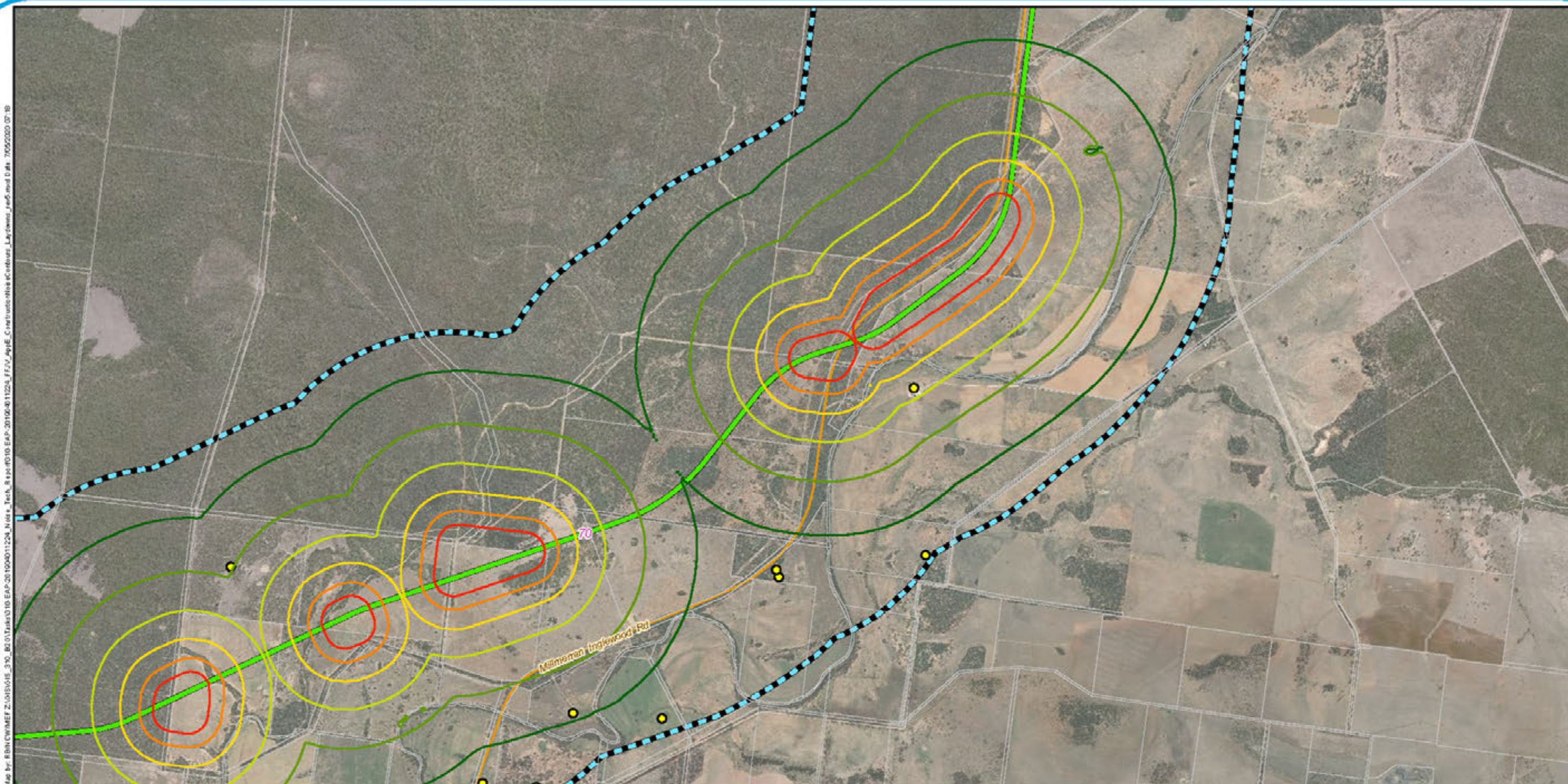
- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



- Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

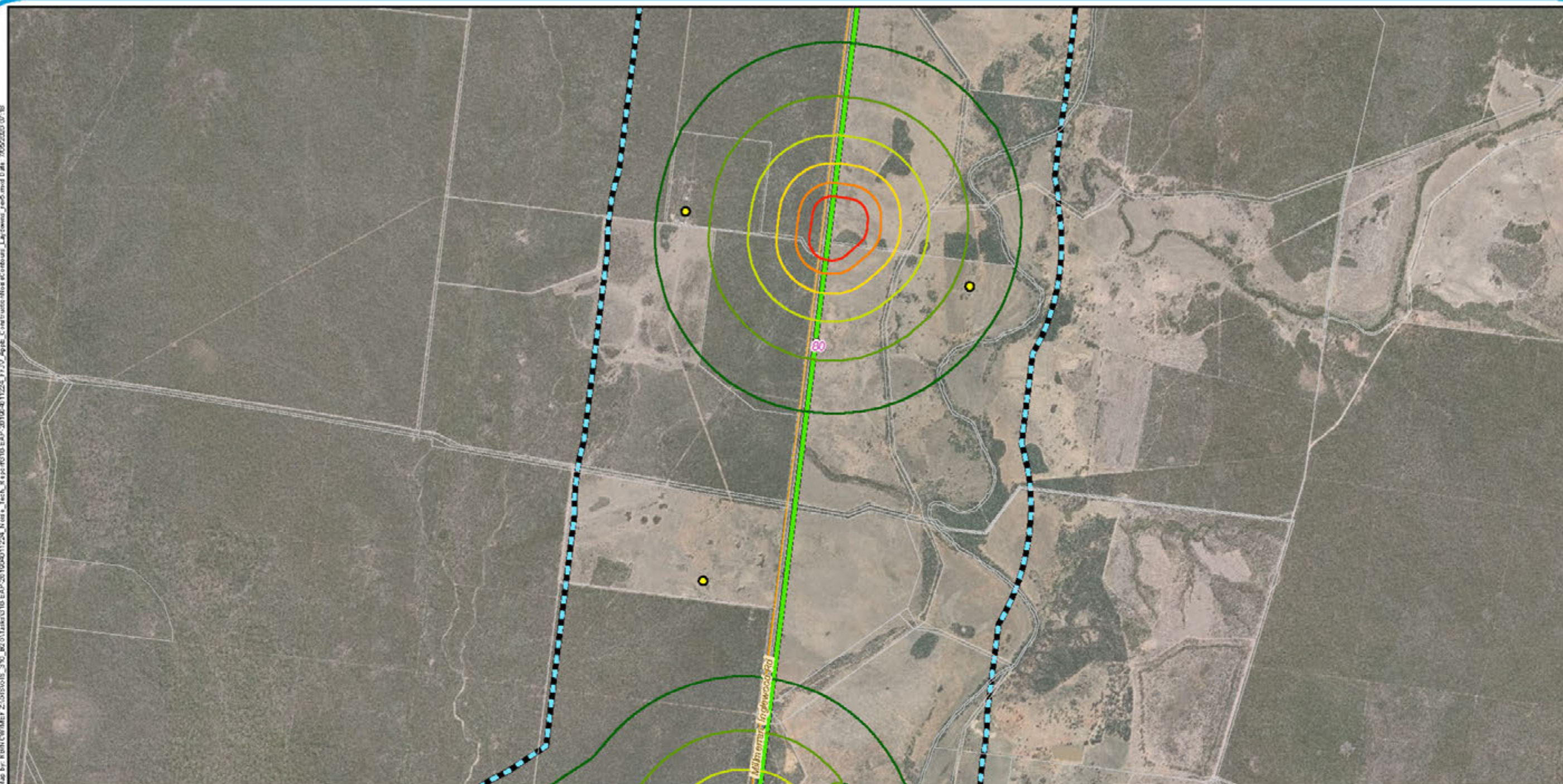
Methodology outlined in section 5.2



- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

-  Hotel/Motel
-  Industrial
-  Medical Building
-  Outdoor Recreation
-  Residential
-  Sporting Facility





- Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

Methodology outlined in section 5.2

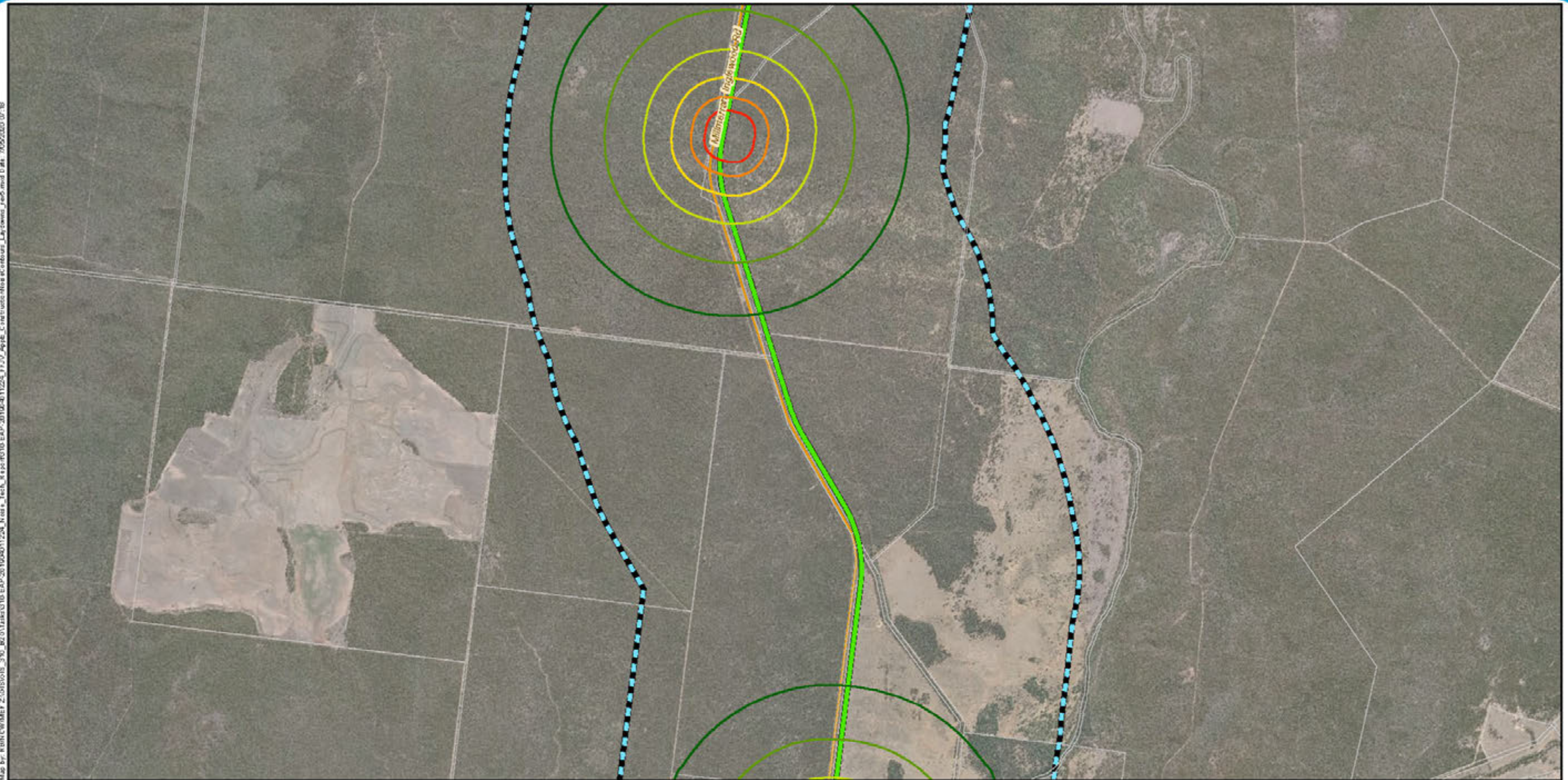


- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

-  Hotel/Motel
-  Industrial
-  Medical Building
-  Outdoor Recreation
-  Residential
-  Sporting Facility



Map by: RBN/CW/MET 2:0451018_310_B2017Task016 EAP-201904011224_N.dwg Tech: RBN/CW/MET 2:0451018 EAP-201904011224_N.dwg Date: 7/05/2020 07:18



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



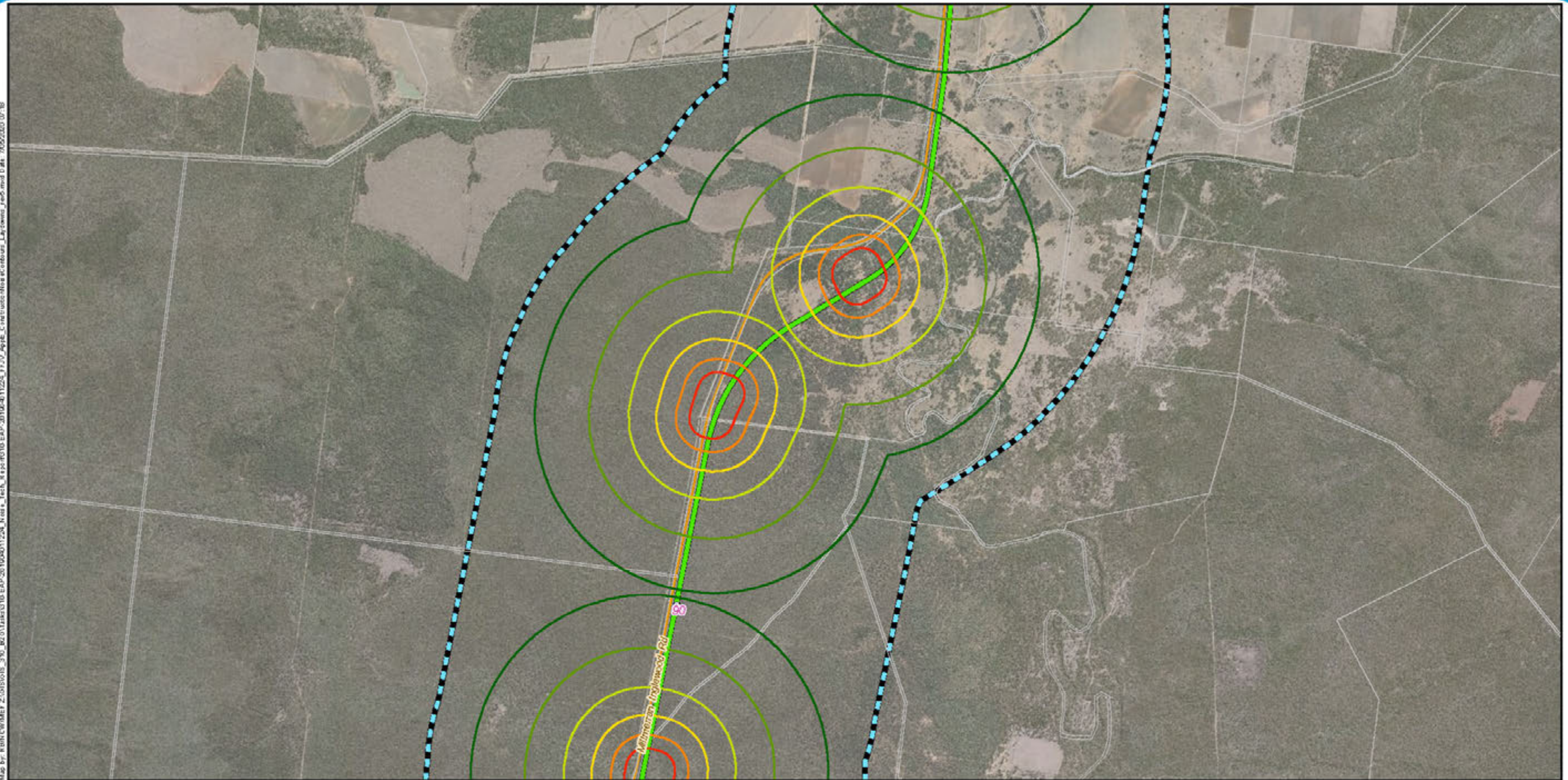
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Future Freight
 Integrating Community, Environment and Engineering

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Map by: RBN/CW/MET 2:00/50/18_310_B201/Task/316_EAP-201004011224_Note_Tech_Rpt/316_EAP-201004011224_FF_V_AppE_Construction Noise Contours_Laydowns_yes.mxd Date: 7/05/2020 07:18



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility

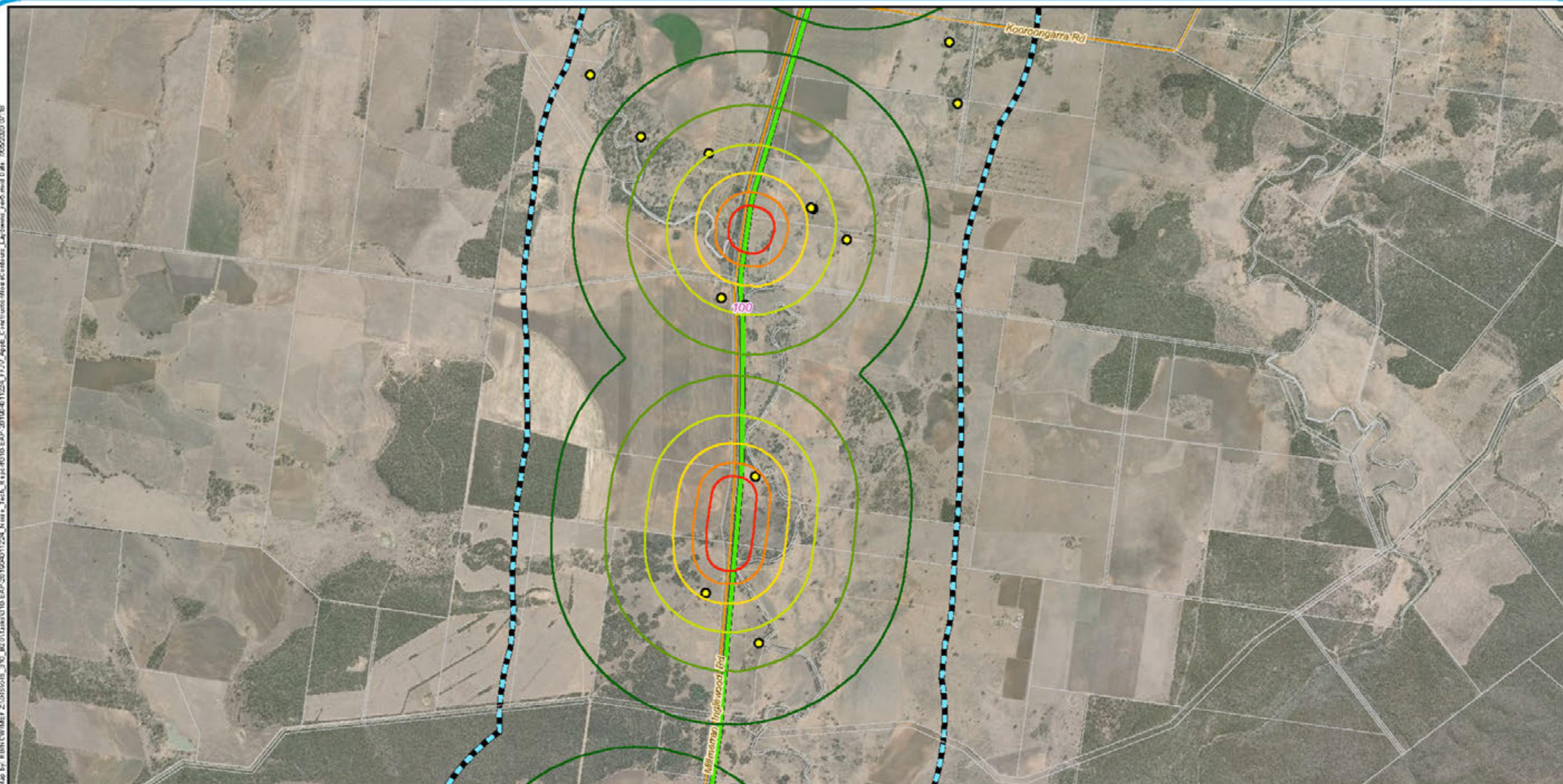


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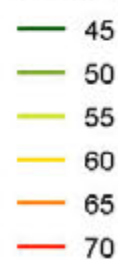
Future Freight
 Integrating Community, Environment and Engineering

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 Coordinate System: GDA 1994 MGA Zone 56



- Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

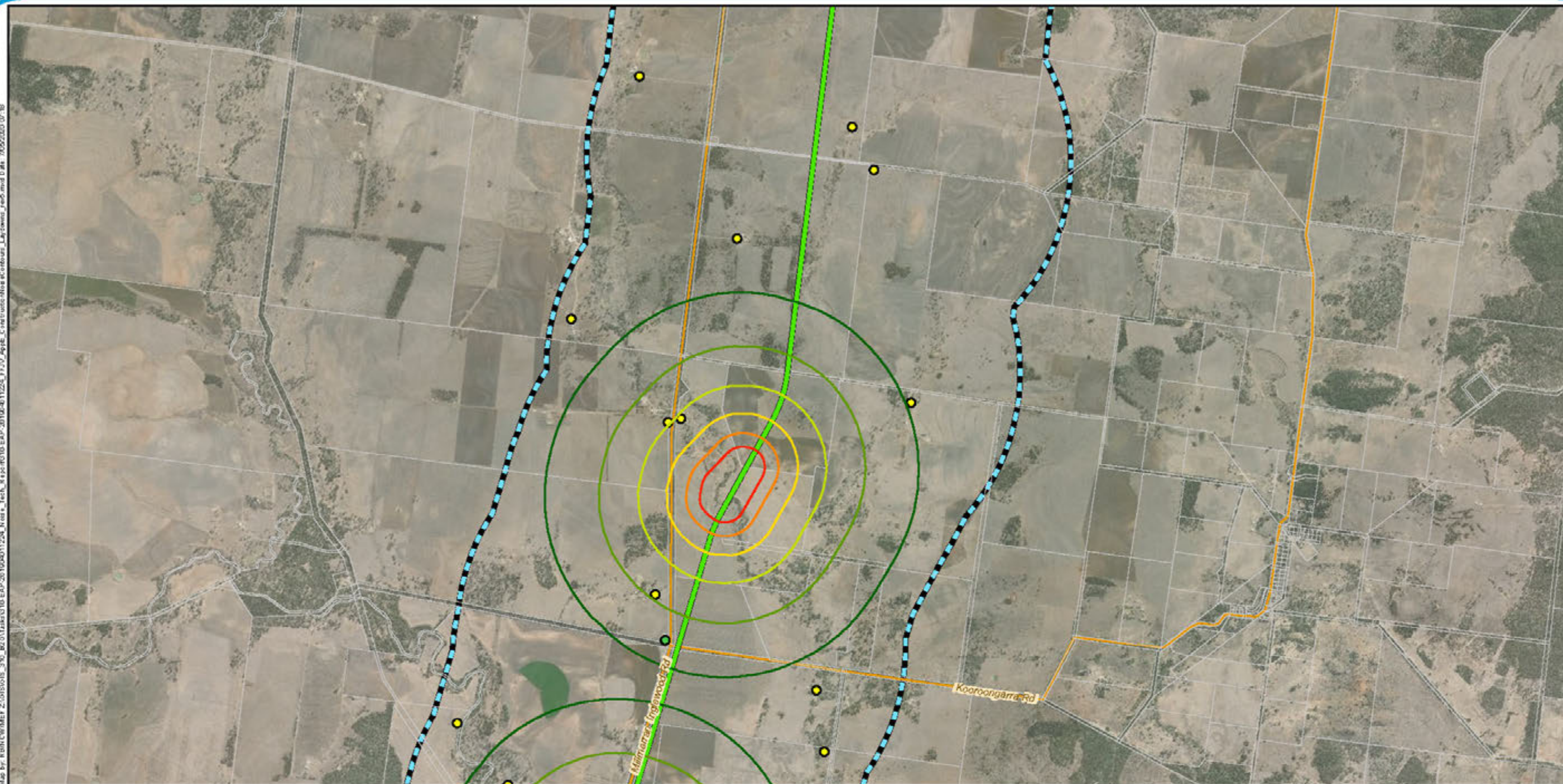
Methodology outlined in section 5.2



- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage



Map by: RBN/CW/MET 2:0451018_310_B2017010316 EAP-201004011224_Net_S_Tech_Rpt-101016 EAP-201004011224_FF_V_ApE_Construction Noise Contours_Laydowns_yes.mxd Date: 7/05/2020 07:18



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



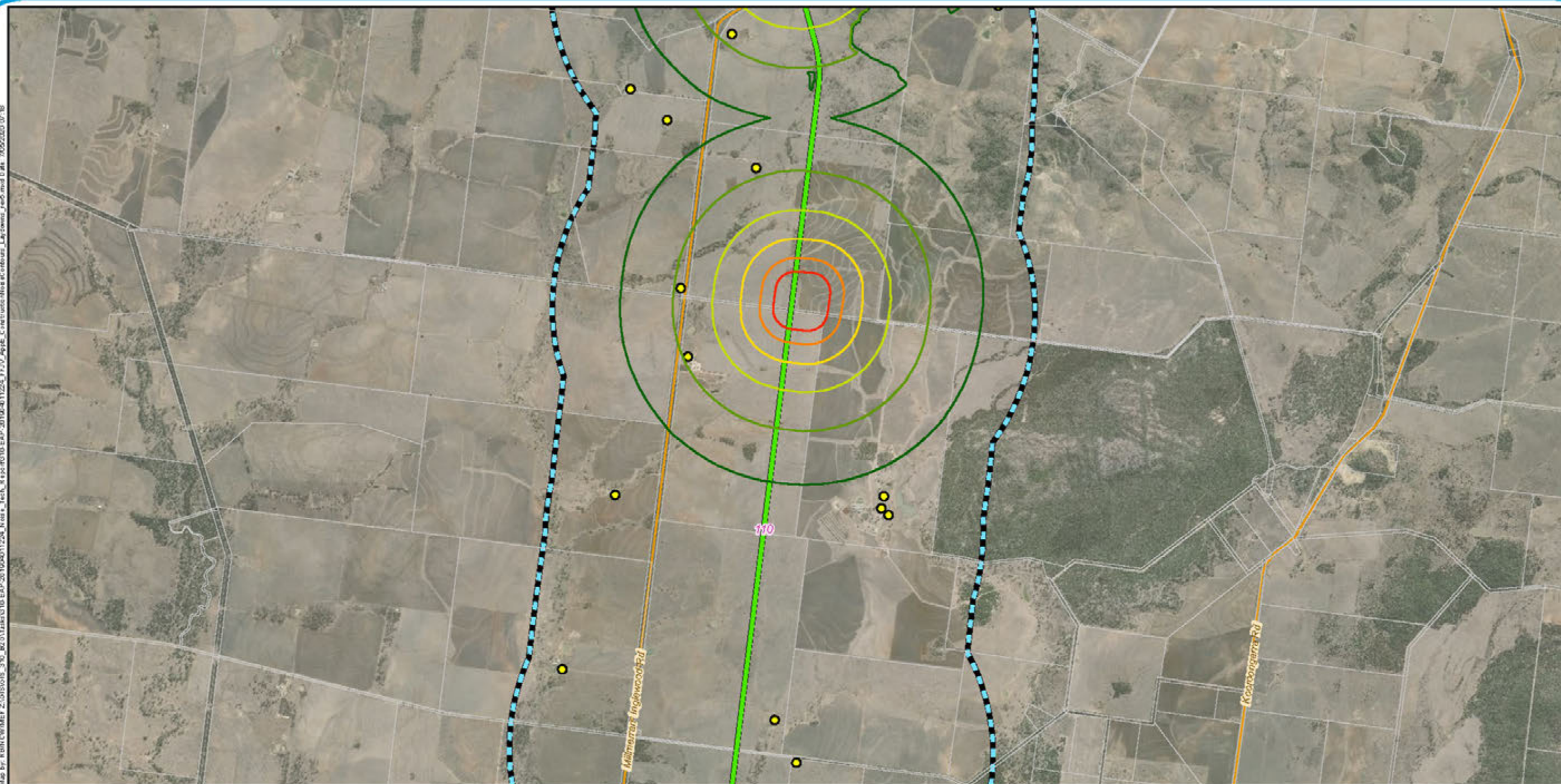
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Future Freight
 Integrating Community, Environment and Engineering

Issue date: 08/05/2020 Version: 5
 Coordinate System: GDA 1994 MGA Zone 56

Map by: BBN/CWMEF 2:0451018_310_B201TakaG16 EAP-201004011204_Note_Tech_Rpt1010 EAP-201004011204_FF_V_ApE_Construction Noise Contours_Laydowns_yes.mxd Date: 7/05/2020 07:18



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility

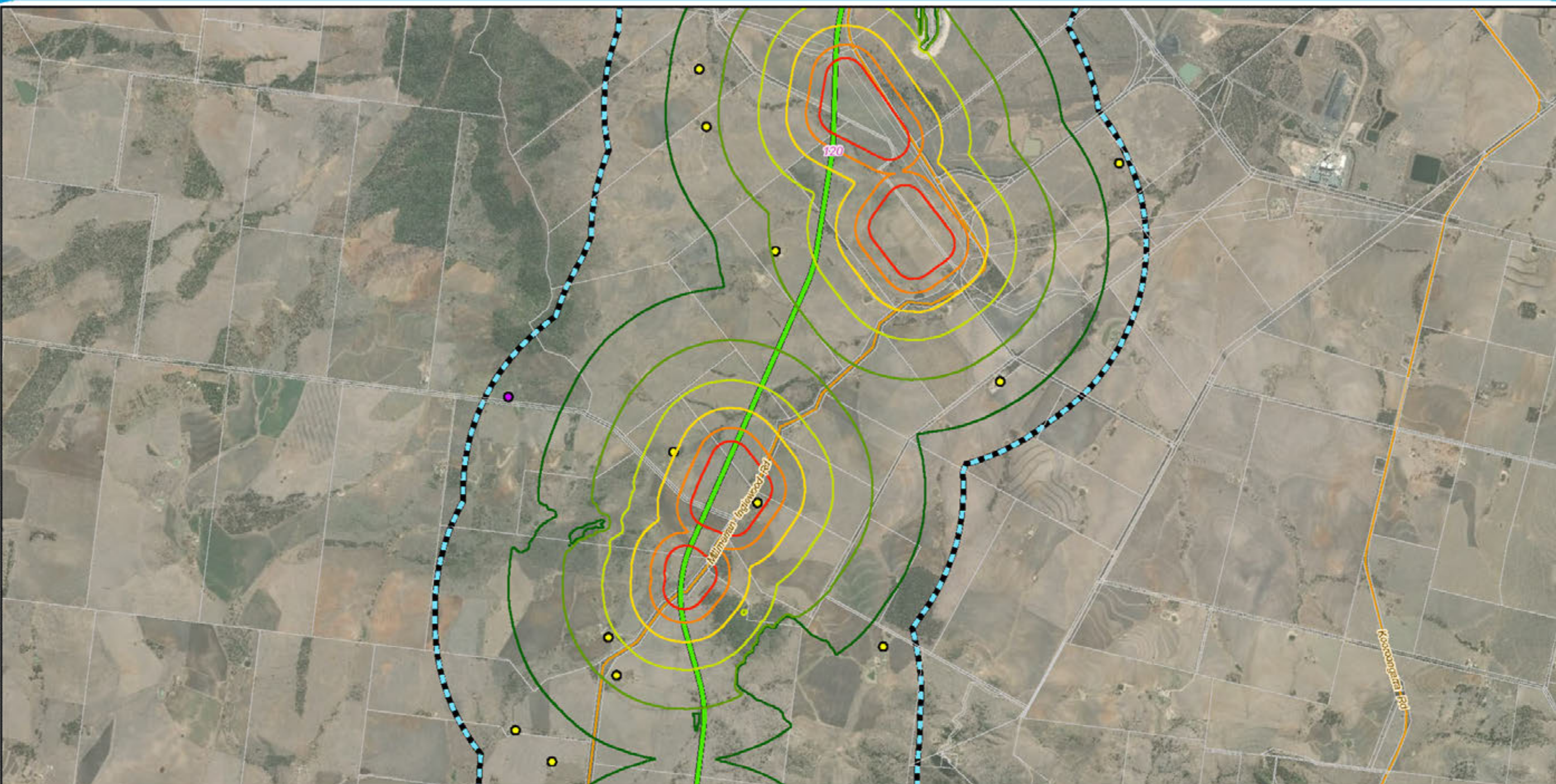


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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

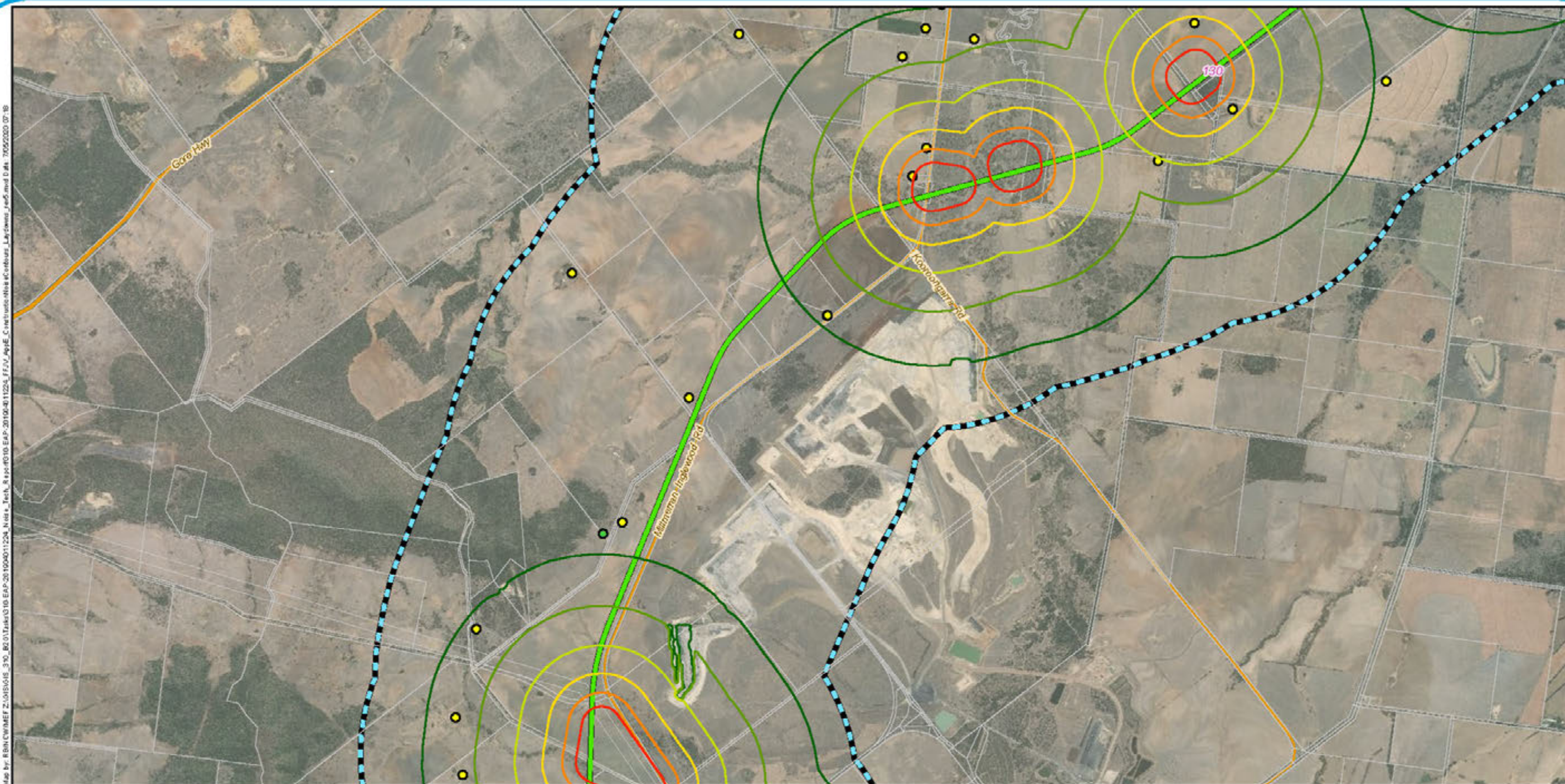
- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km



- Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

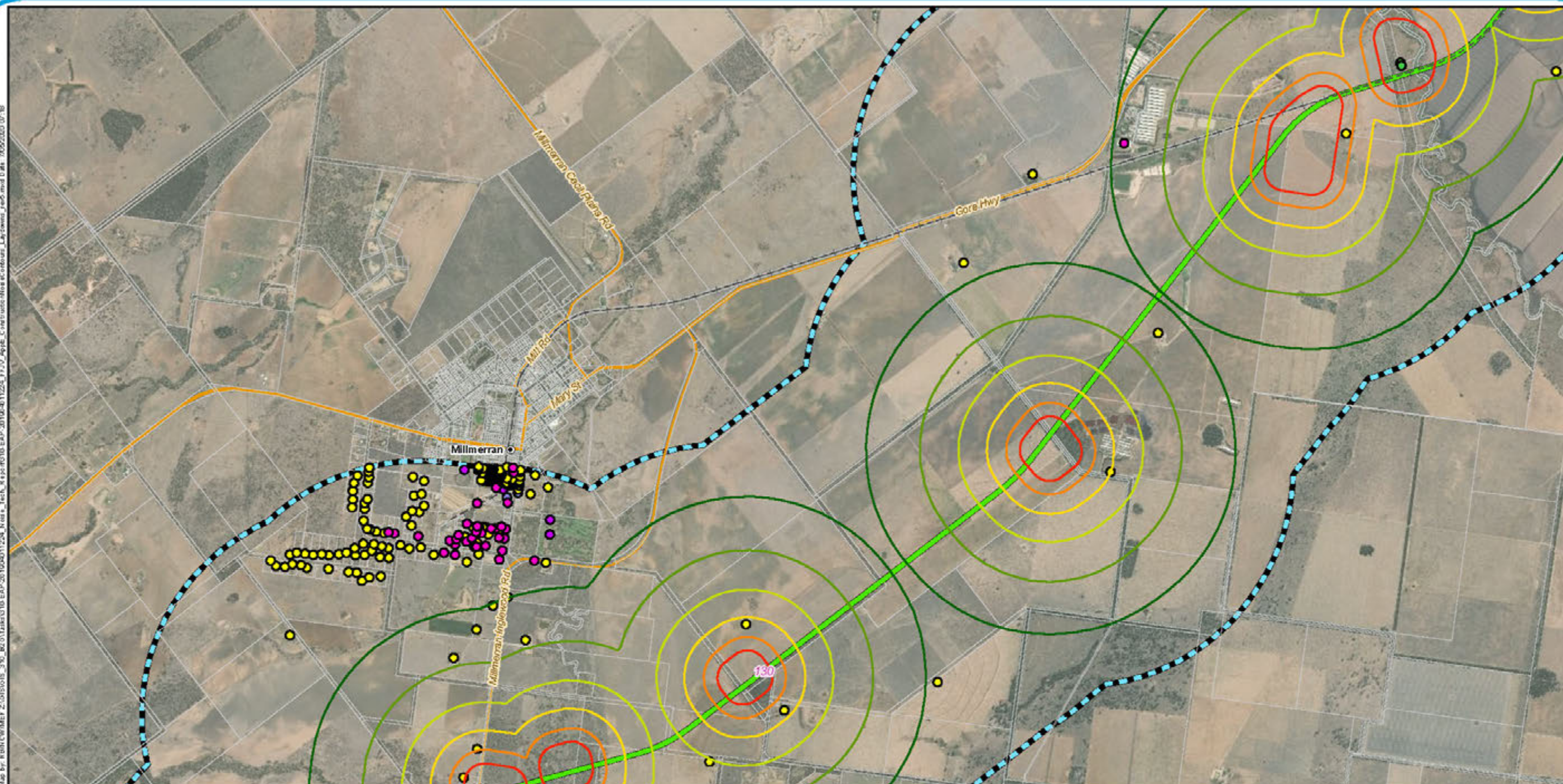
Methodology outlined in section 5.2



- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility





- Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (non-operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

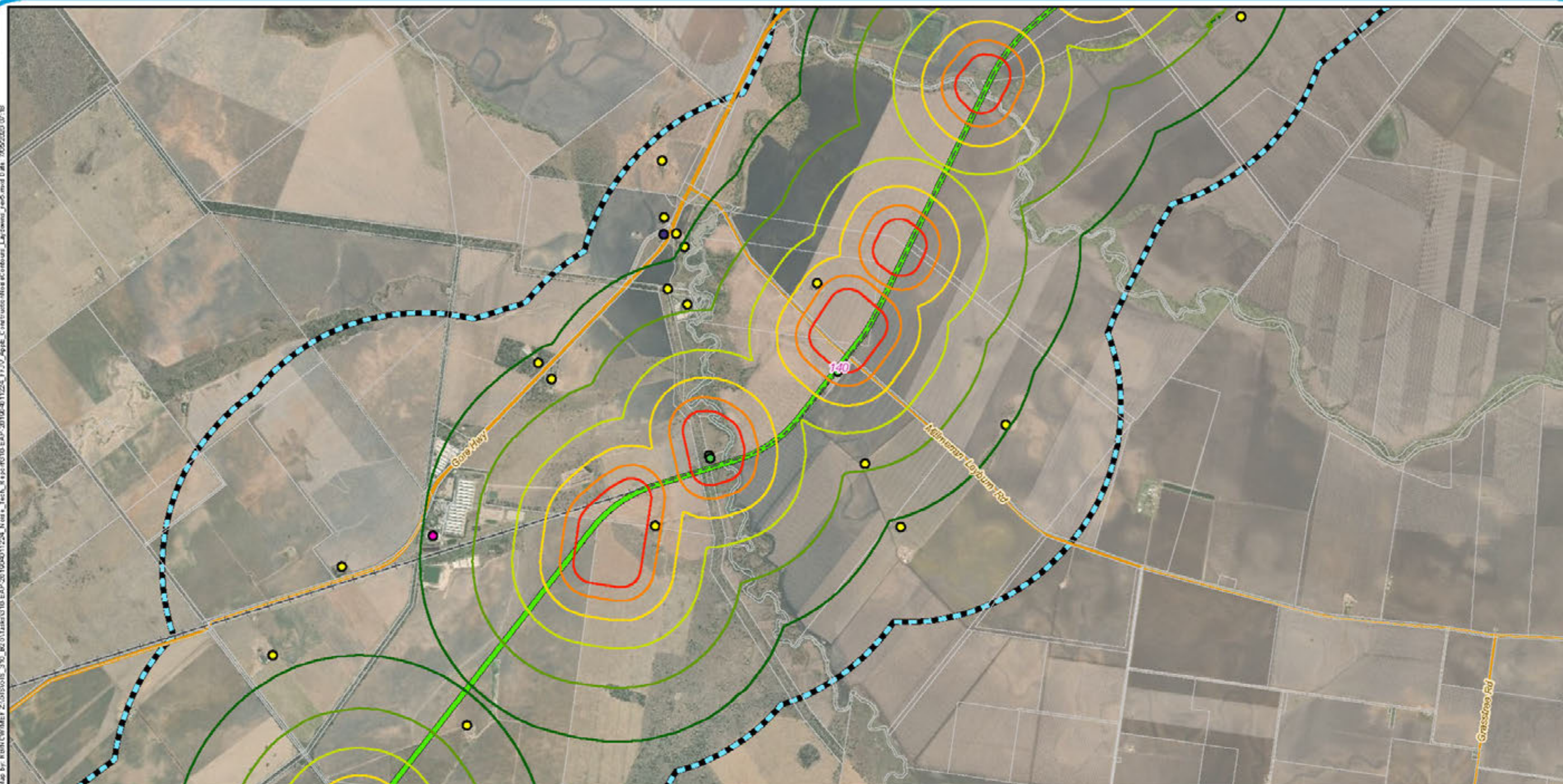
Methodology outlined in section 5.2



- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

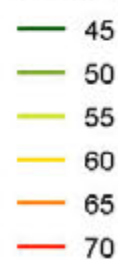
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility





- Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (non-operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

Methodology outlined in section 5.2



- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000



0 0.3 0.6 0.9 1.2 1.5 km



Future Freight

Issue date: 08/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

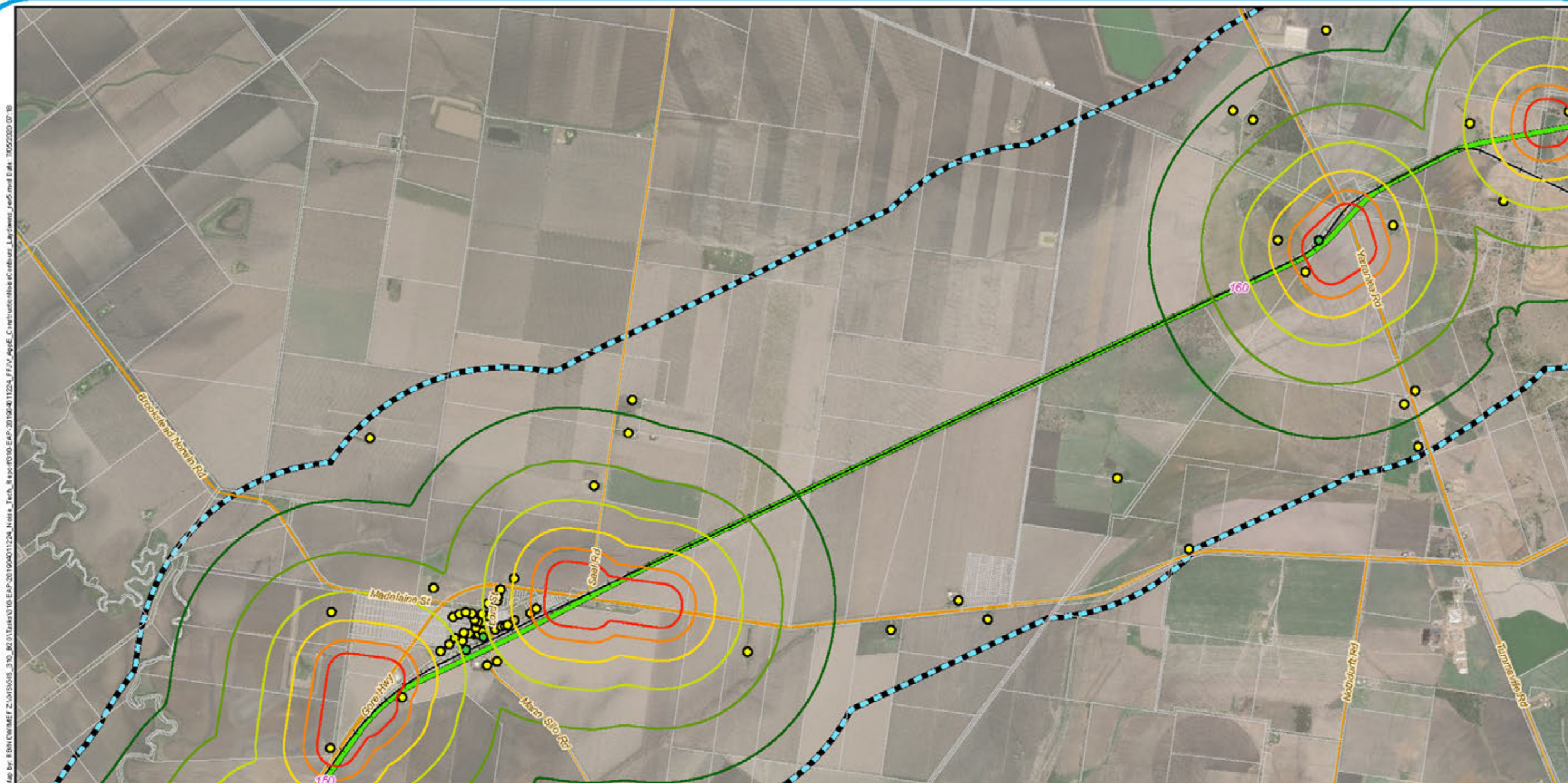
Appendix E20: Construction noise contours laydowns



- Methodology outlined in section 5.2**

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility





- Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

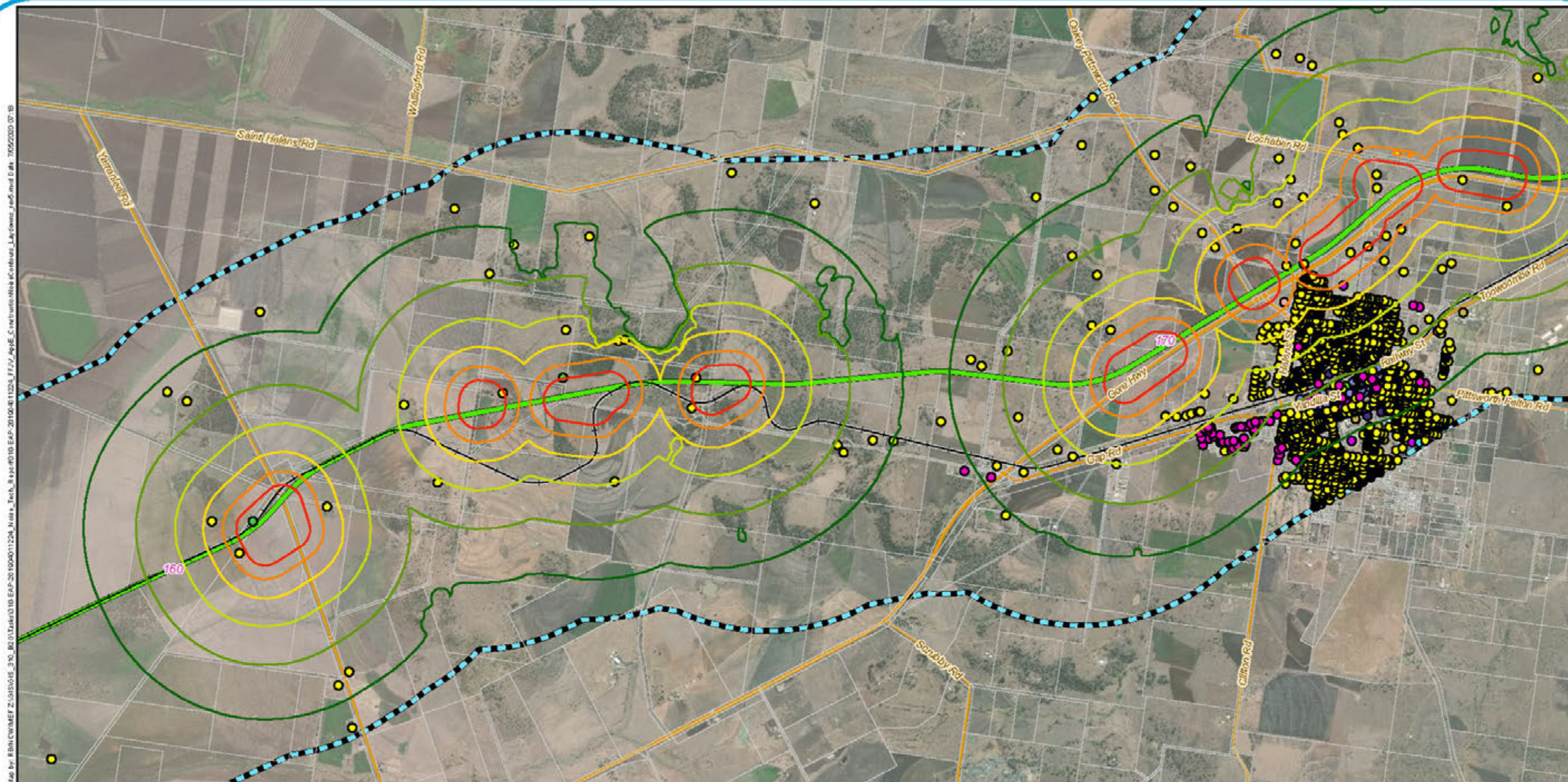
Methodology outlined in section 5.2



- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage

- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility





Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

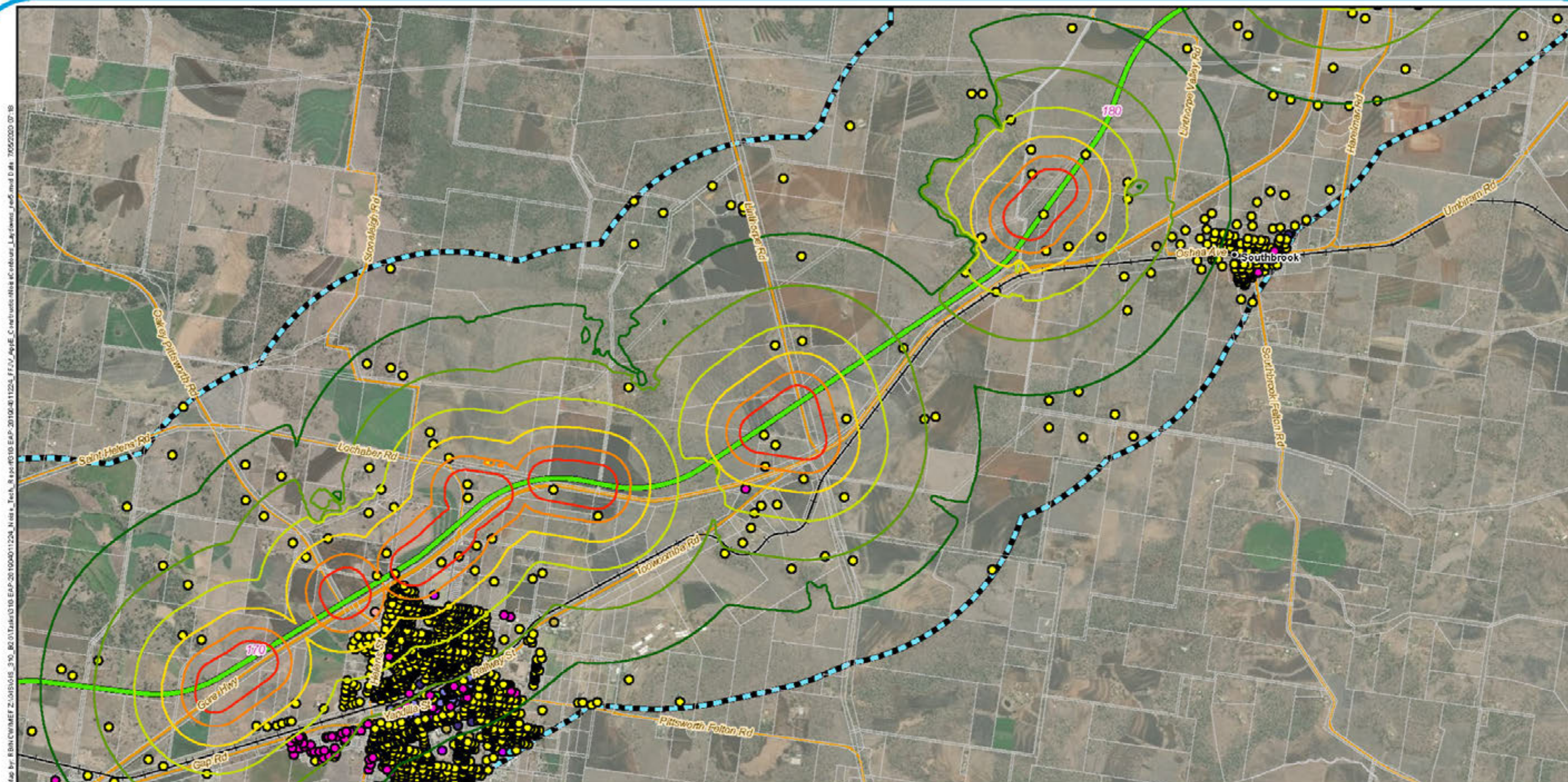
- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

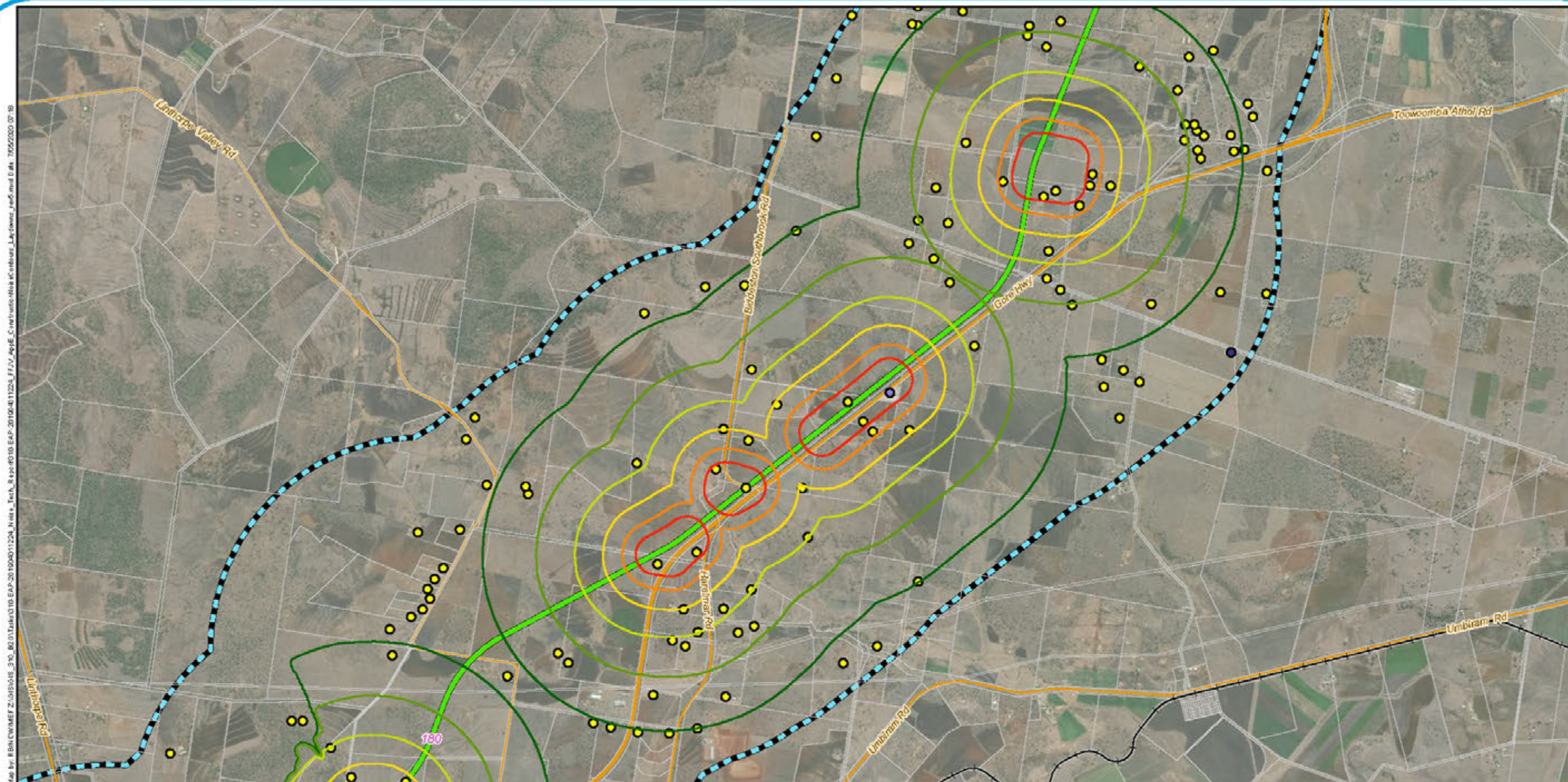
- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility

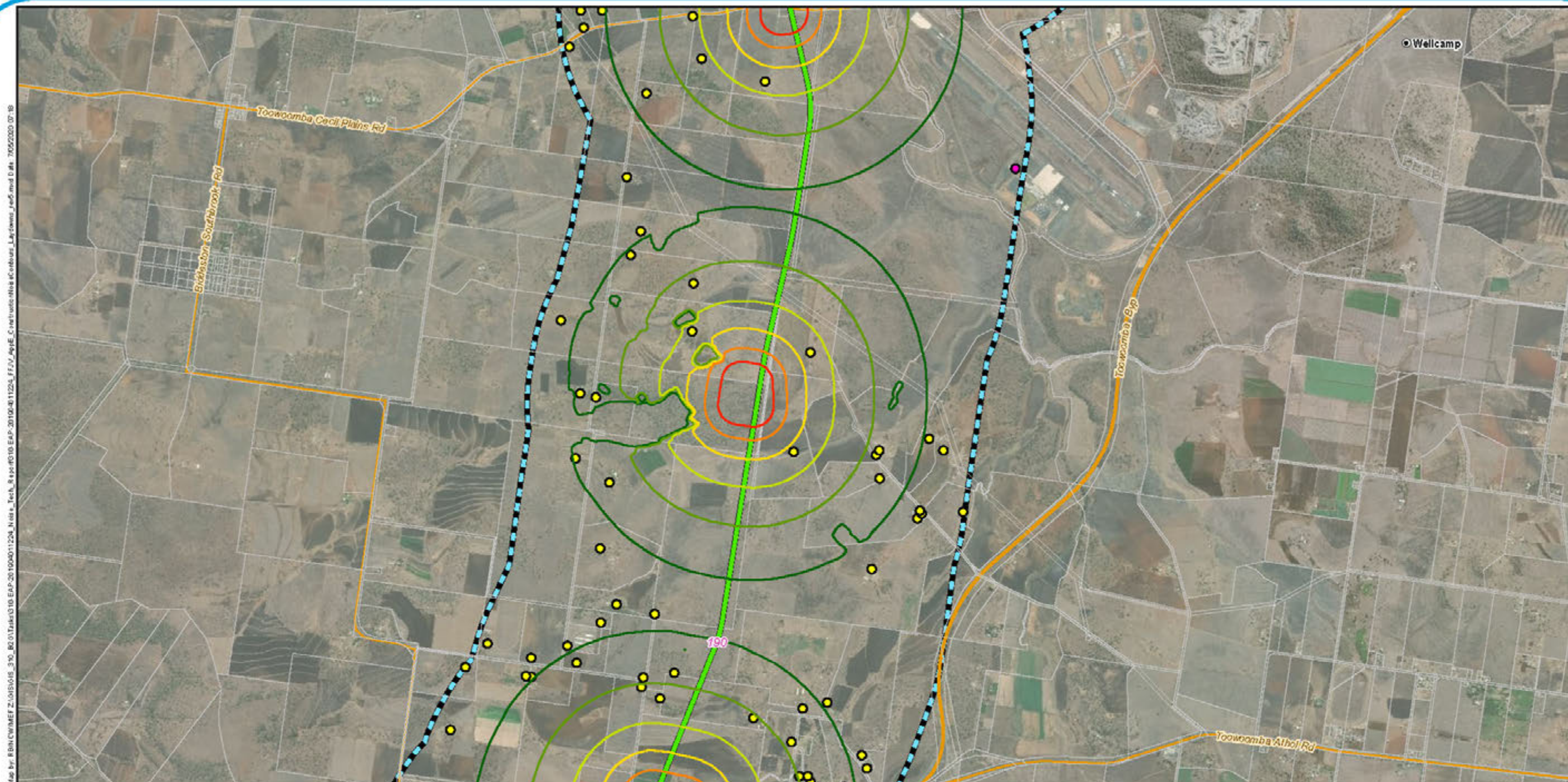


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 Integrating Community, Environment and Engineering

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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility

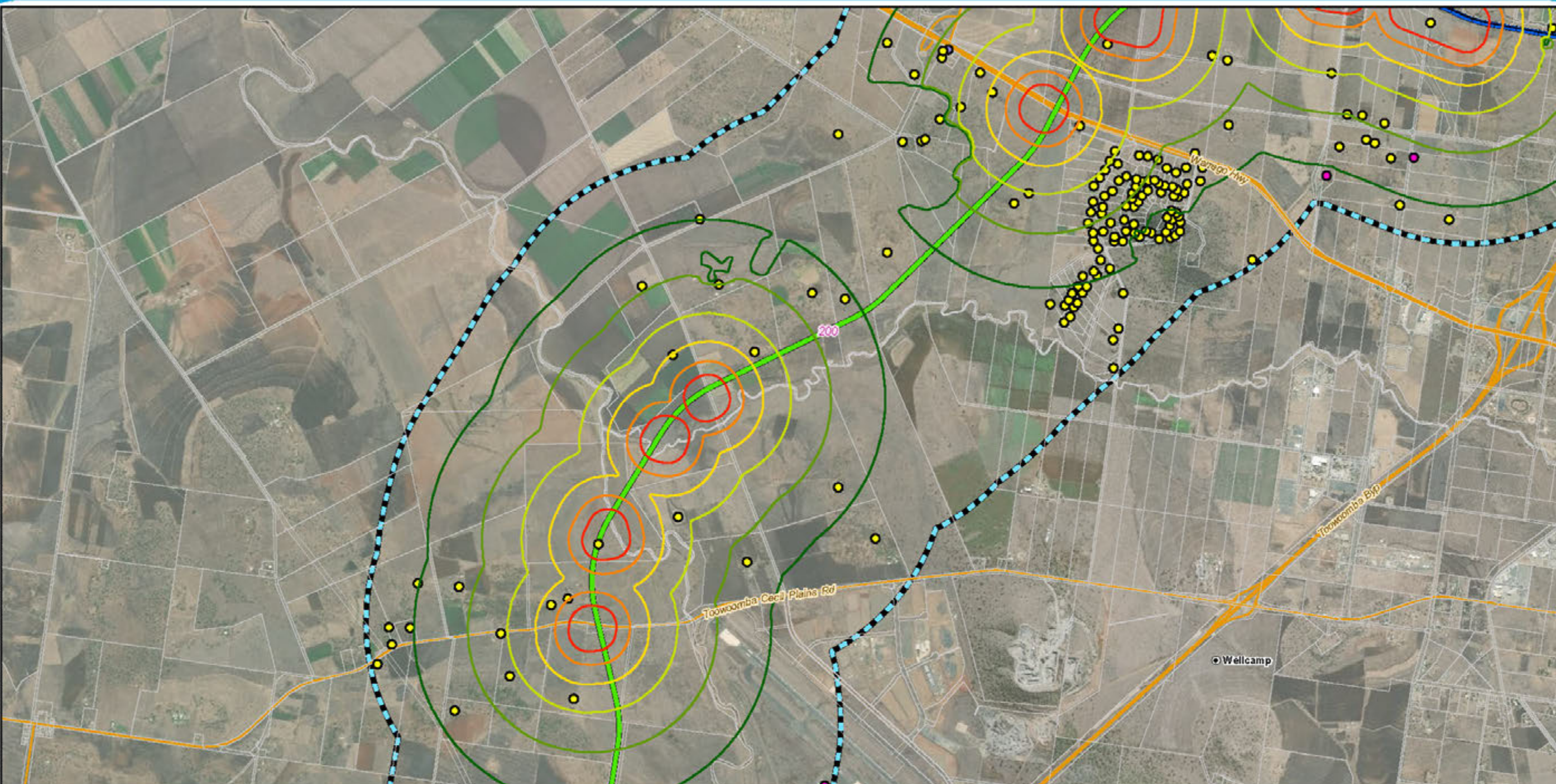


A3 scale: 1:40,000
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Integrating Community, Environment and Engineering

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Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Gowrie to Helidon alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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Future Freight
 Integrating Community, Environment and Engineering

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 Coordinate System: GDA 1994 MGA Zone 56

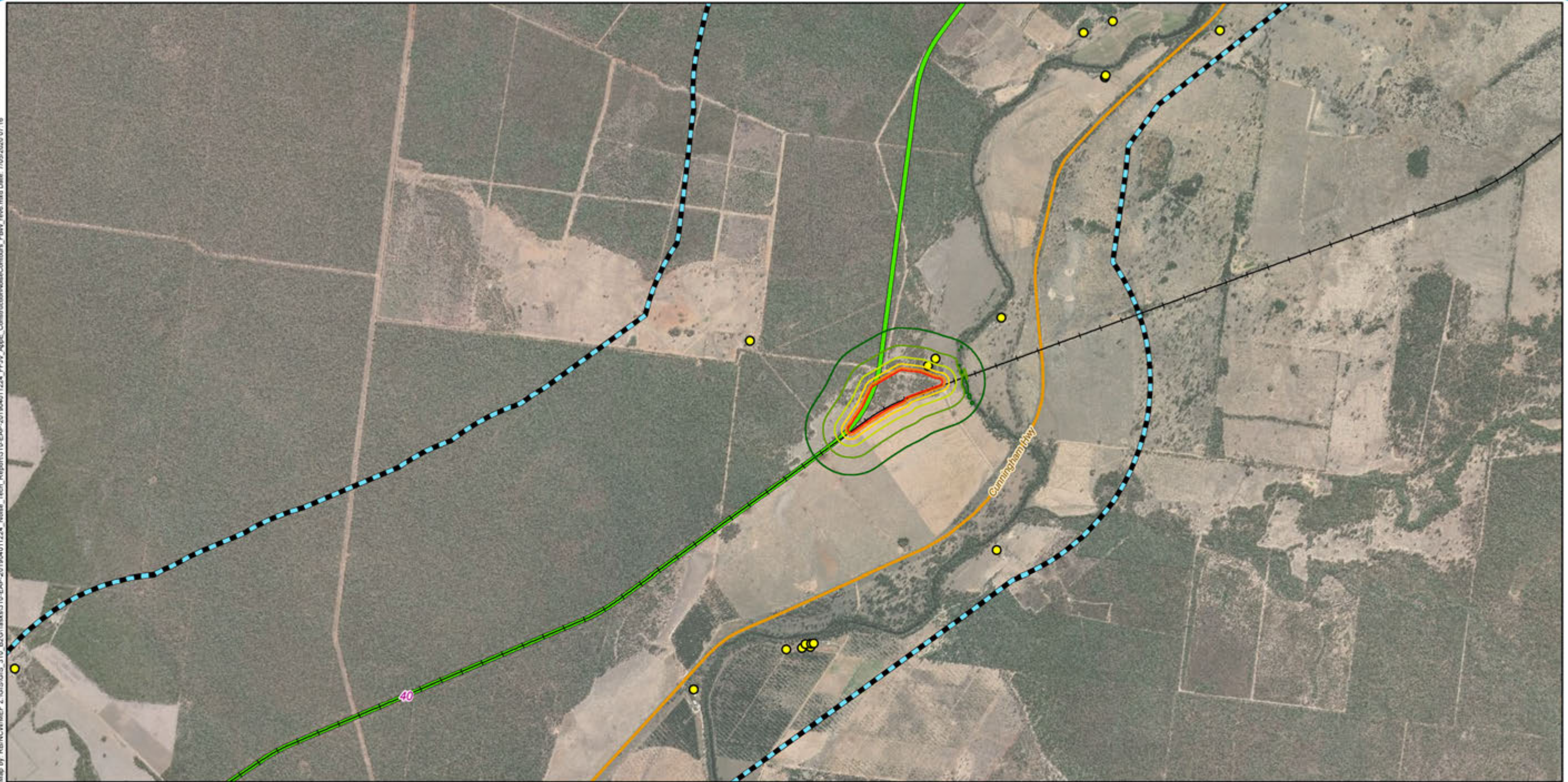


- Methodology outlined in section 5.2**

-



Map by: REINOVMEF 2:GIS/015_310_B207Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FFJV_AppE_ConstructionNoiseContours_FBW_rv6.mxd Date: 7/05/2020 07:18



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- ▭ Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

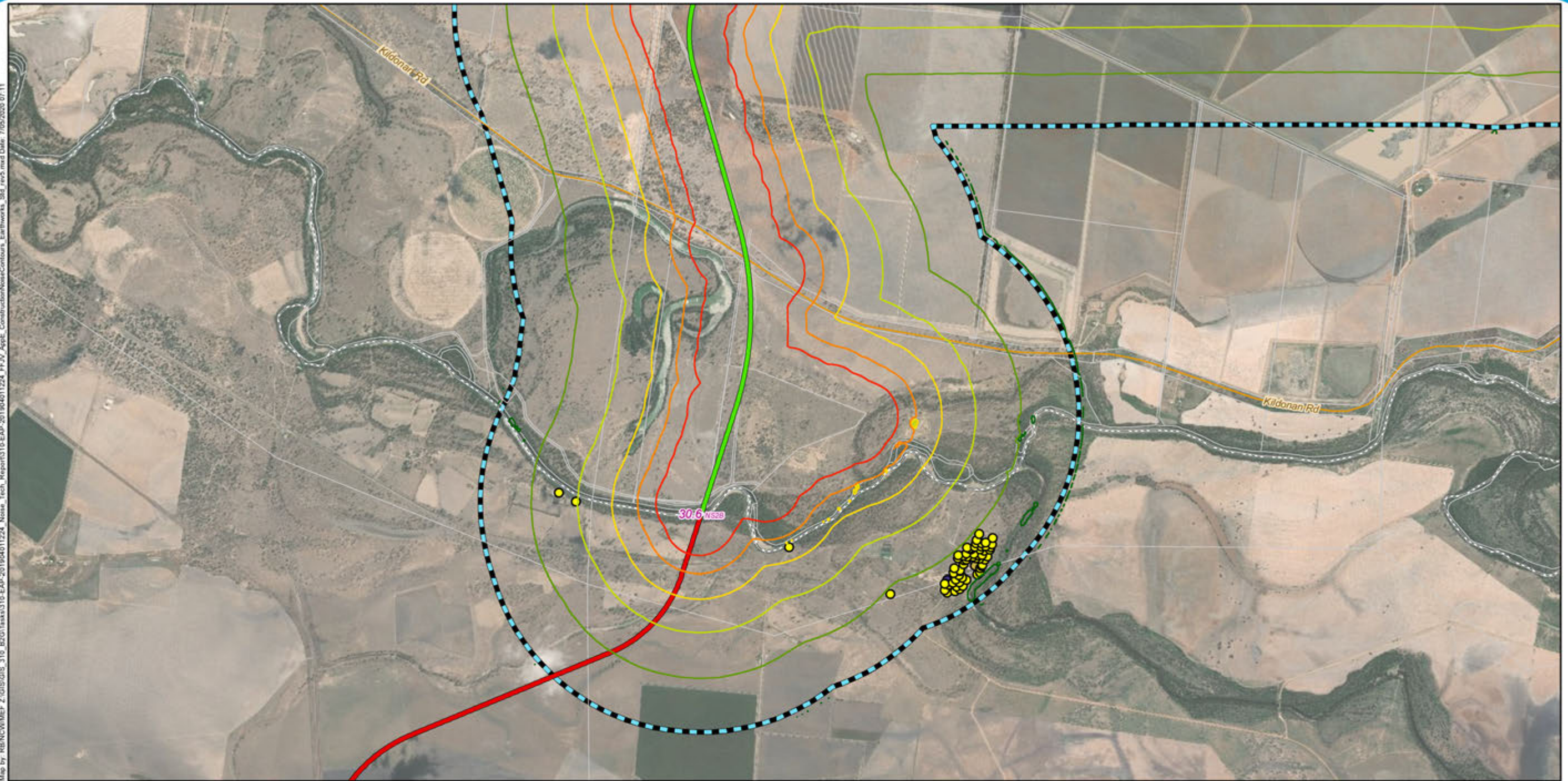
Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km

Map by: REINOVMEP 2:GIS/GIS_310_B201Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_ApE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- North Star to NSW/QLD border alignment
- Minor roads
- NSW/QLD border
- Cadastre
- ▤ Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

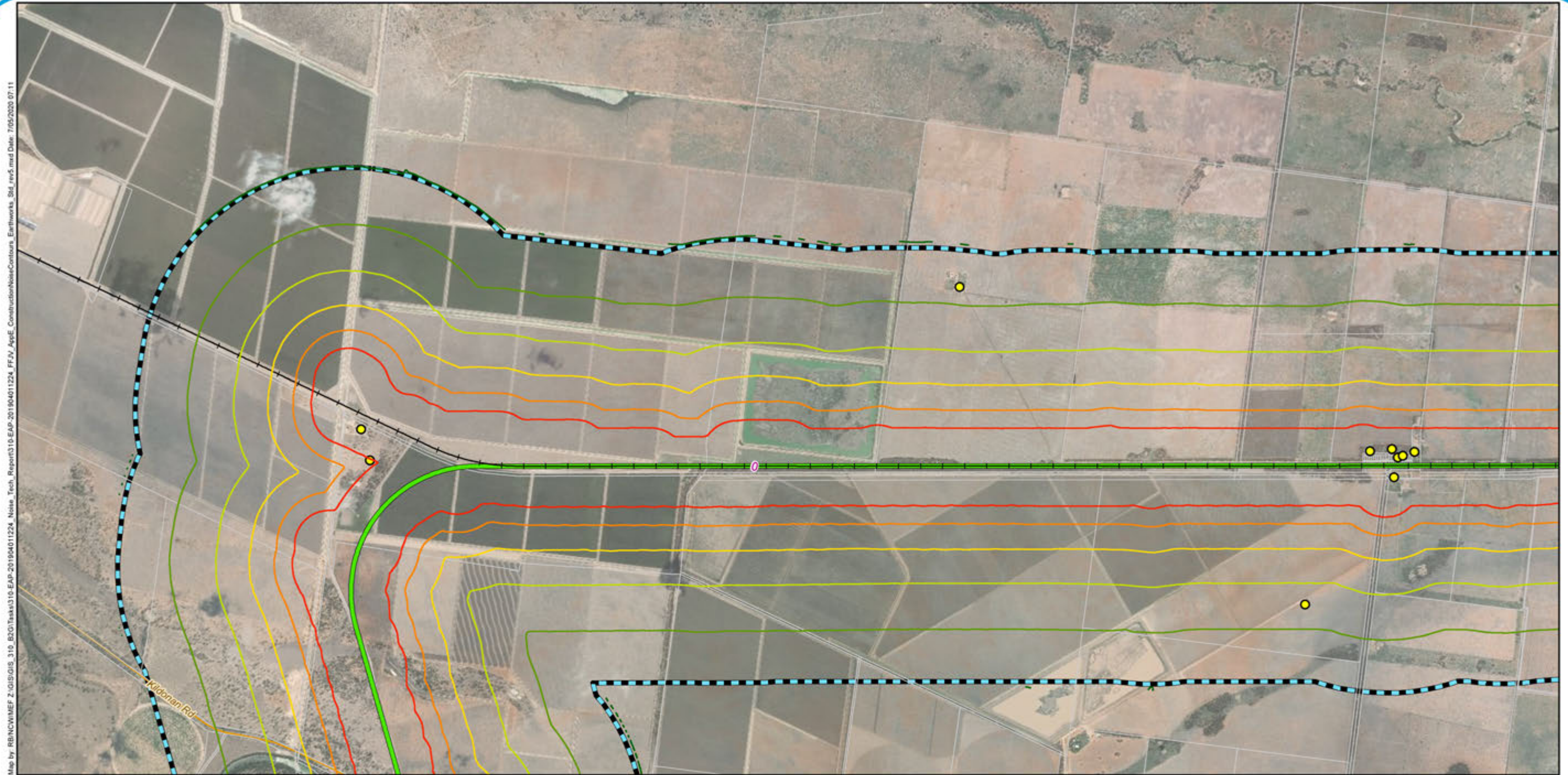
Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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Map by: REINOVIMEP 2-IGIS/IGIS_310_B207Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_3d_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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Border to Gowrie

**Appendix E2: Construction noise contours
earthworks (standard construction hours)**

Map by: REINOVMEF 2:GIS/015_310_B2GT/Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FFJV_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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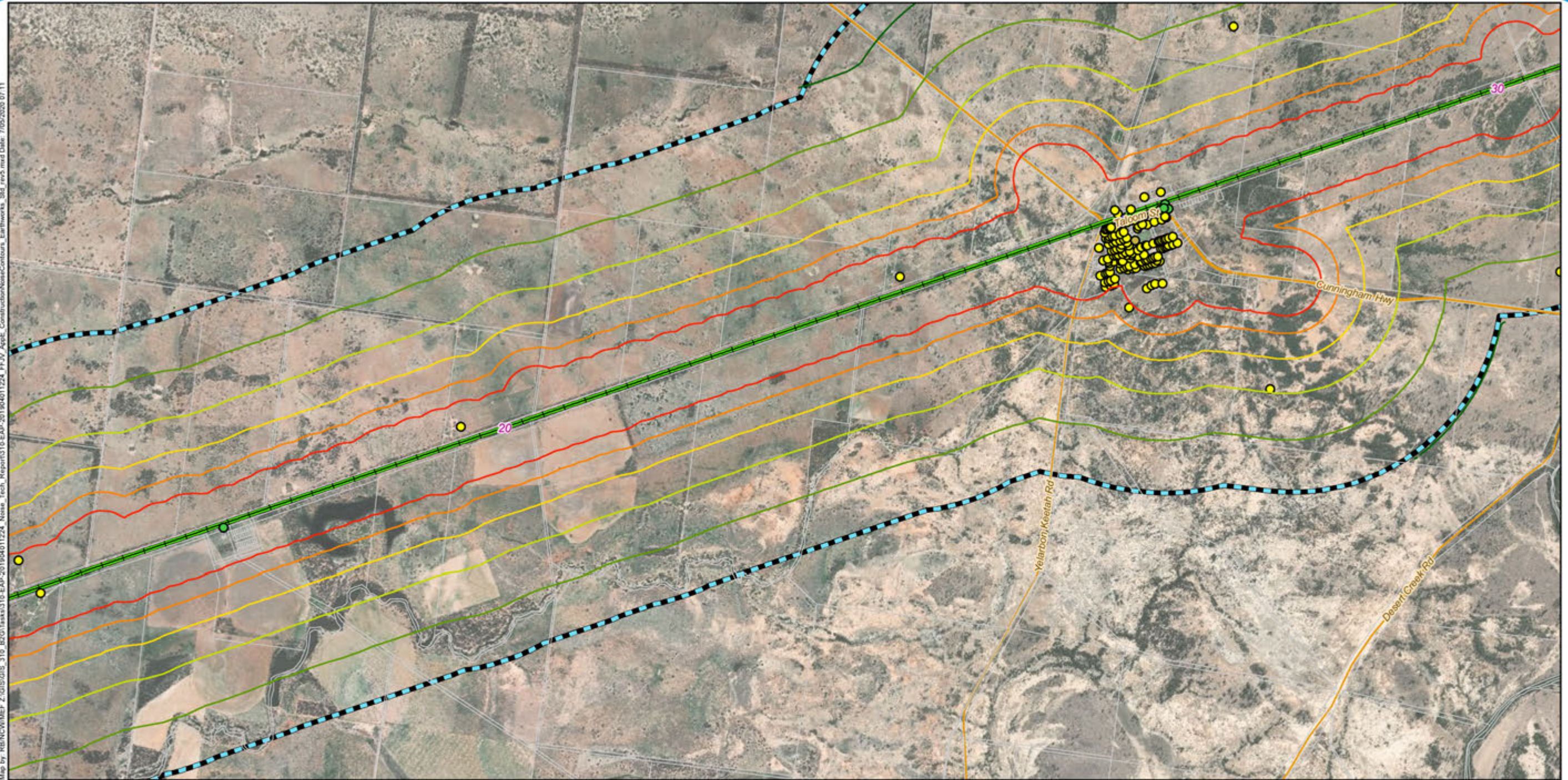
Future Freight
 Integrating Community, Environment and Engineering

Issue date: 06/05/2020 Version: 5
 Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E3: Construction noise contours
 earthworks (standard construction hours)**

Map by: REINOVMEF 2:GIS/015_310_B20/Traffic/310-EAP-201904011224_Noise_Tech_Report/310-EAP-201904011224_FF/V_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



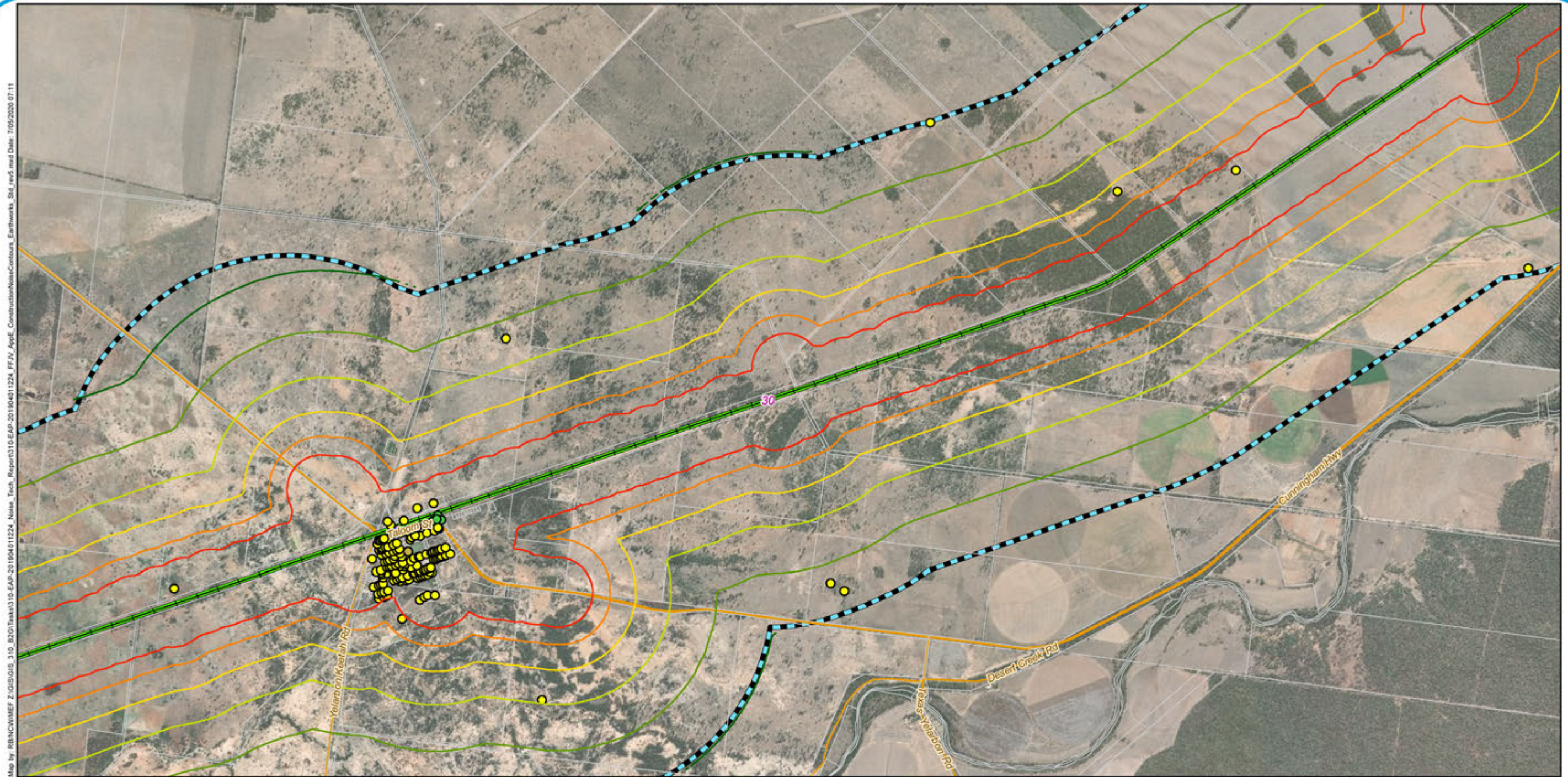
Future Freight
Integrating Community, Environment and Engineering

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Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E4: Construction noise contours
earthworks (standard construction hours)**

Map by: REINCMWMEF 2:GIS/015_310_B201Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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Future Freight
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Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E5: Construction noise contours
earthworks (standard construction hours)**

Map by: RENOVIMET 2:GIS/015_310_E2017Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Cadastre
- ▤ Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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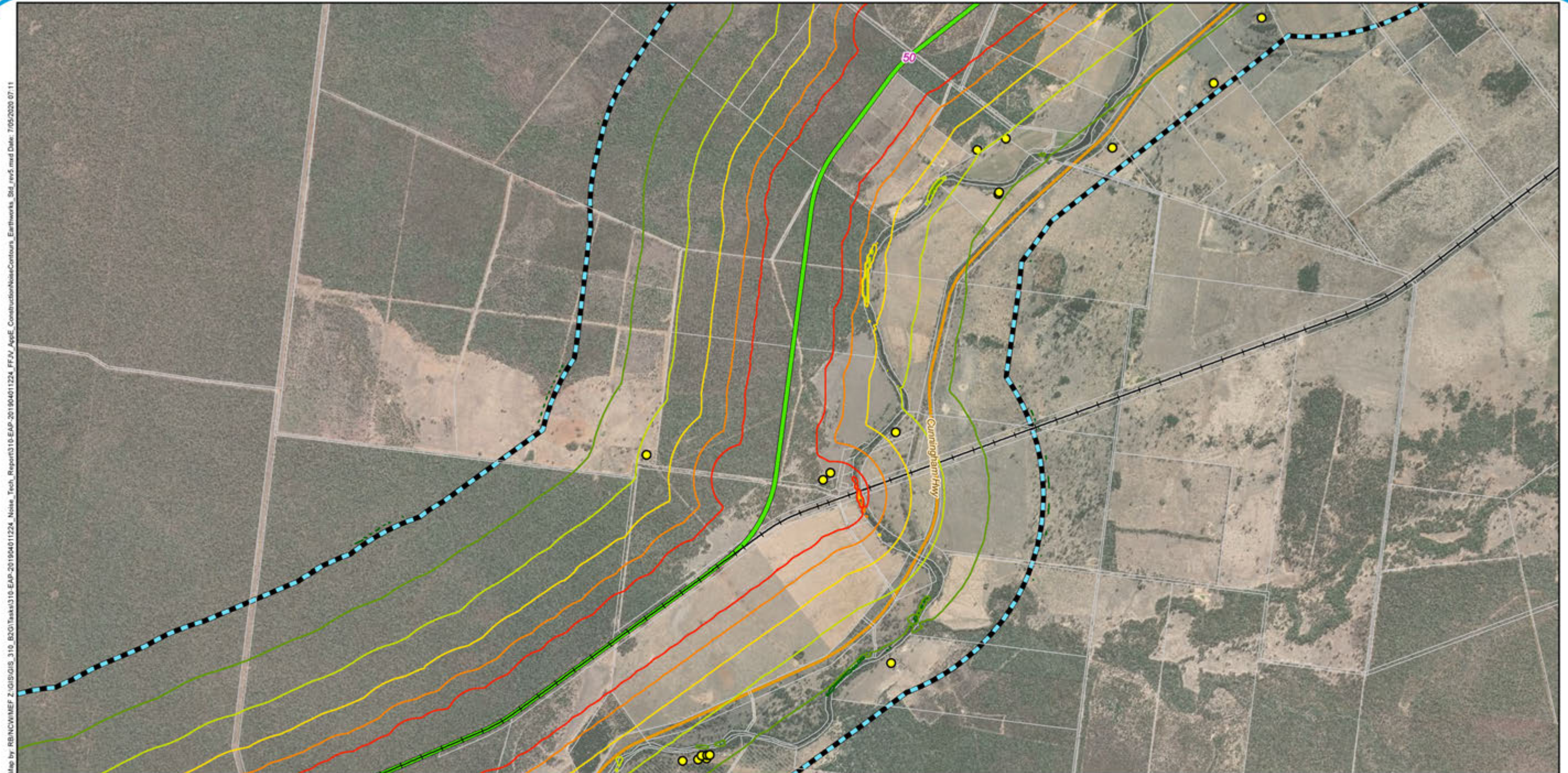
Future Freight
 Integrating Community, Environment and Engineering

Issue date: 06/05/2020 Version: 5
 Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E6: Construction noise contours
 earthworks (standard construction hours)**

Map by: REINOVMEF 2-IGIS/IGIS_310_B201Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_ApE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



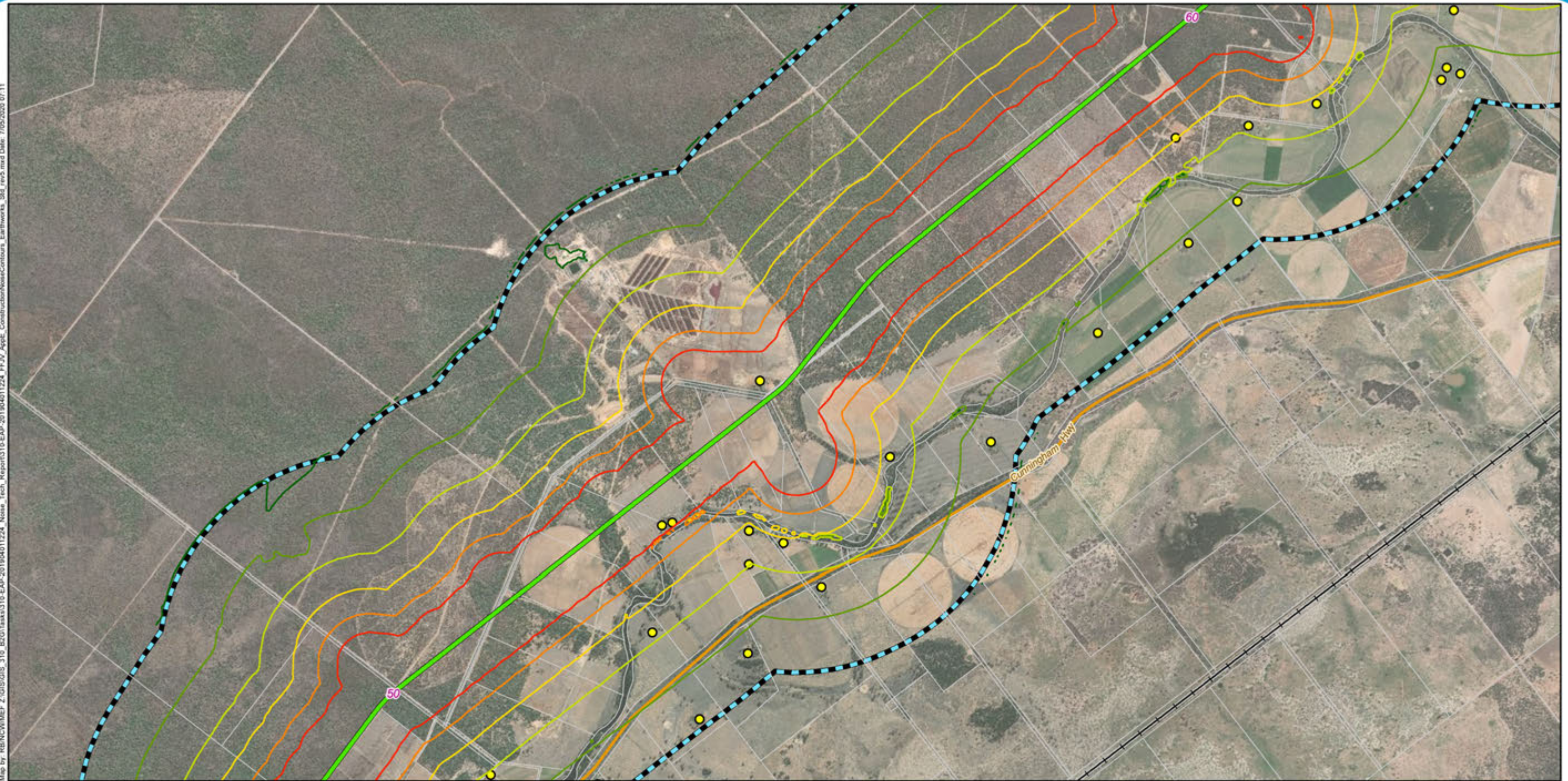
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Issue date: 06/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E7: Construction noise contours
earthworks (standard construction hours)**

Map by: REINCMWMEF 2:GIS/015_310_B201Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_ApplE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km



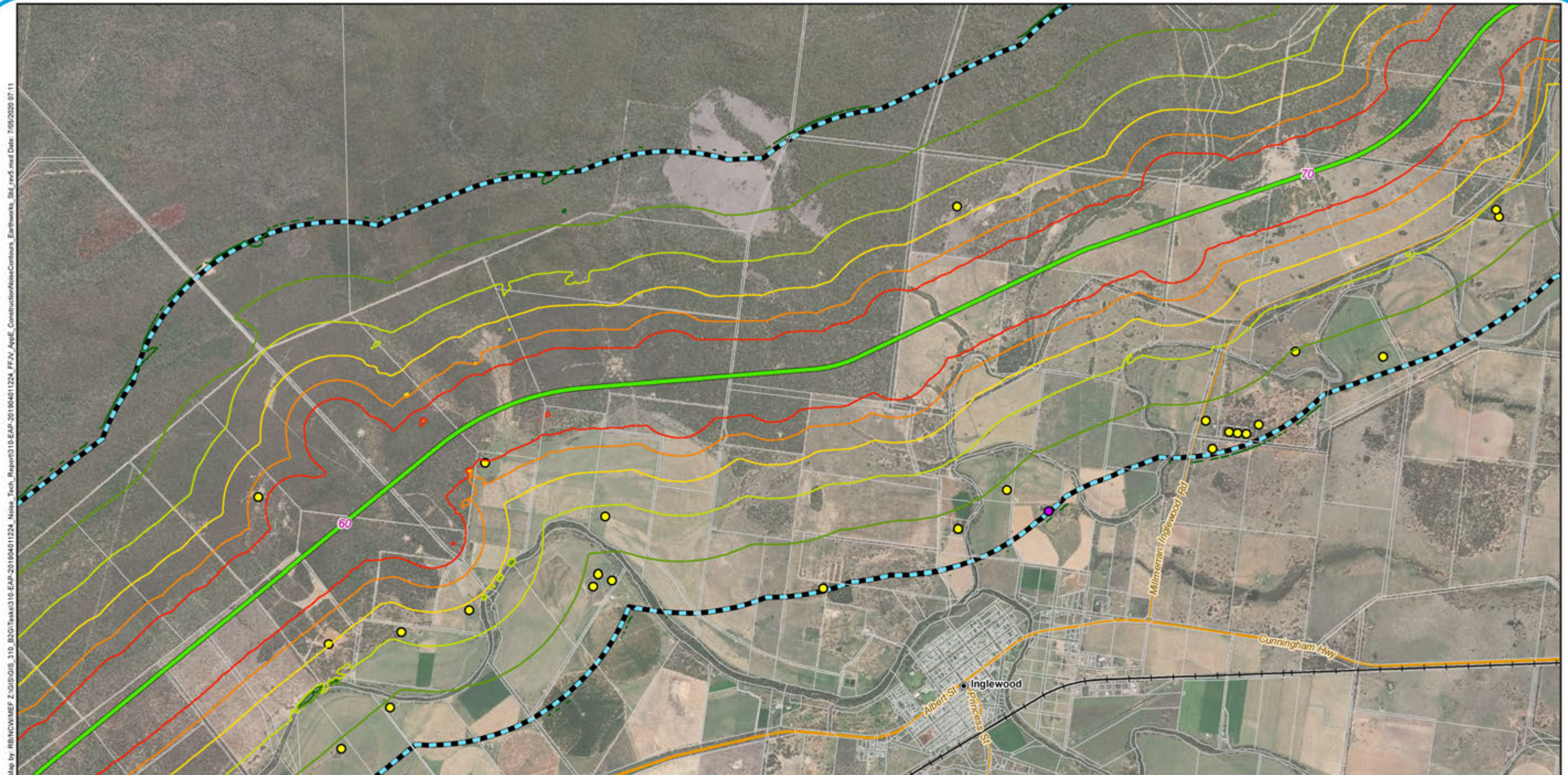
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Issue date: 06/05/2020 Version: 5
 Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E8: Construction noise contours
 earthworks (standard construction hours)**

Map by: REINOVMEF 2:GIS/015_310_B207Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_ApplE_ConstructionNoiseContours_Earthworks_3d_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- ▨ Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



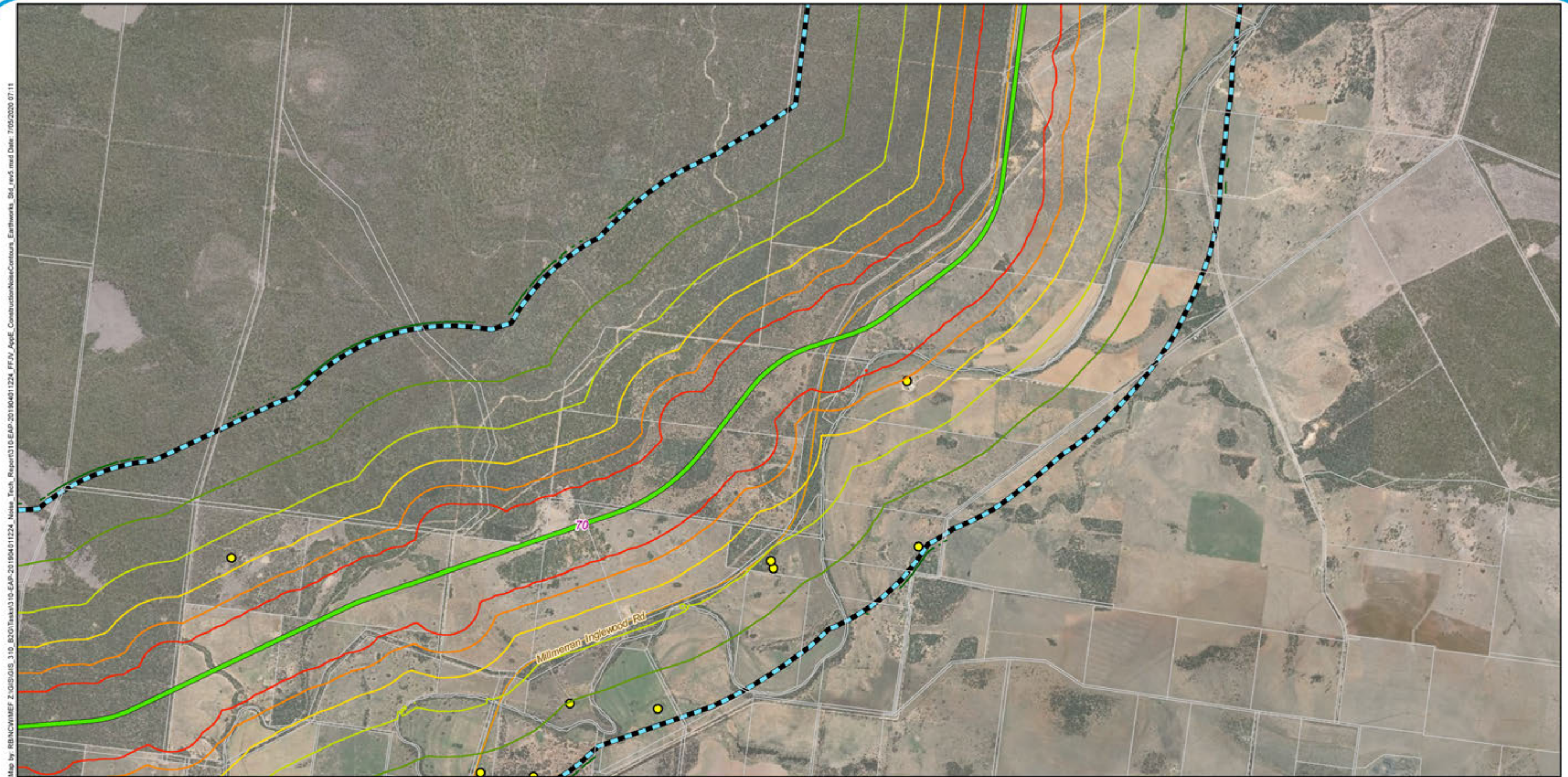
Future Freight
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Issue date: 06/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E9: Construction noise contours
earthworks (standard construction hours)**

Map by: RENOVIMEF 2-IGIS/IGIS 310, B20/Traffic/310-EAP-201904011224_Noise_Tech_Report/310-EAP-201904011224_FF/V_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- ▨ Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km



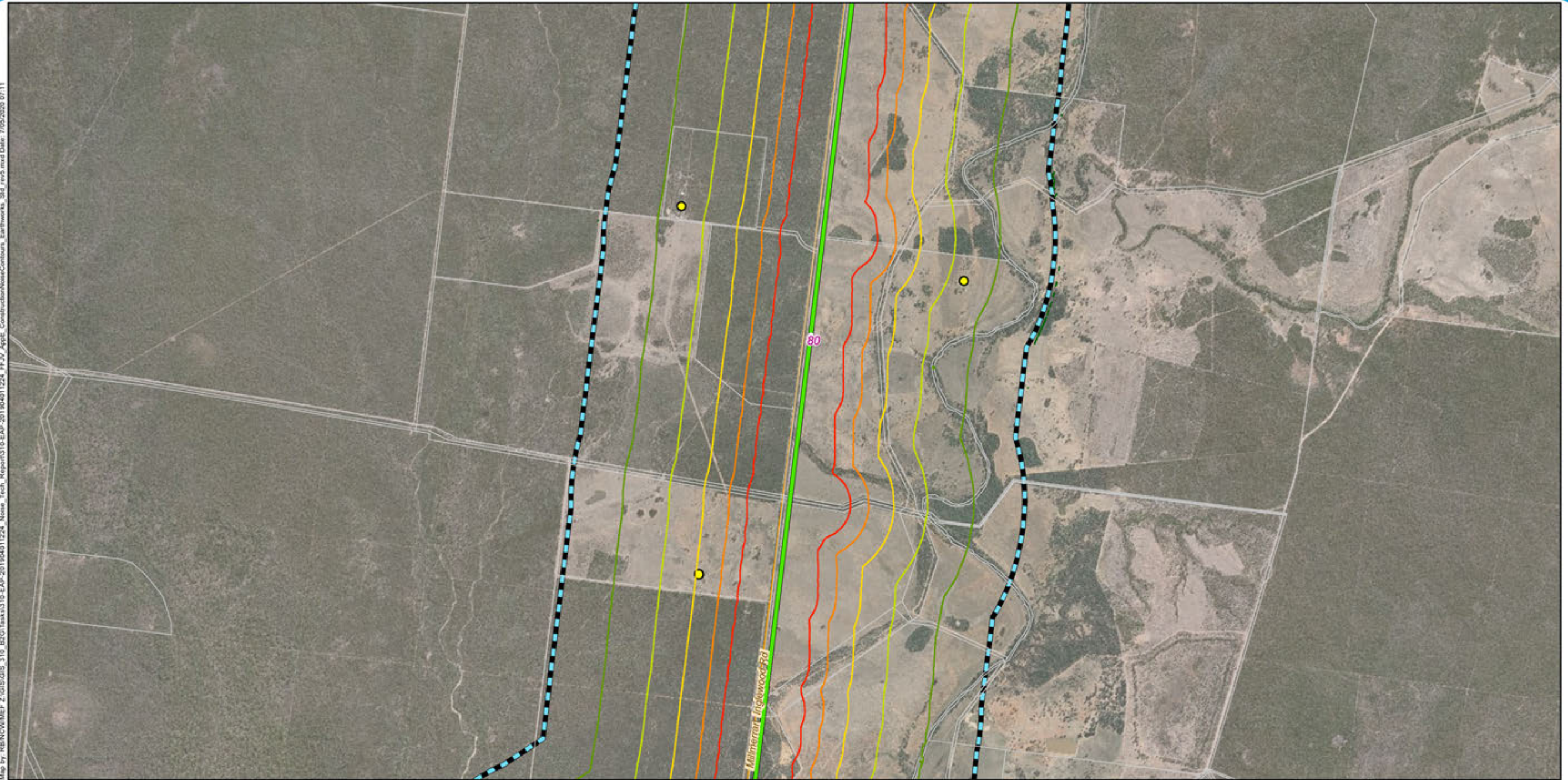
Future Freight
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Issue date: 06/05/2020 Version: 5
 Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E10: Construction noise contours
 earthworks (standard construction hours)**

Map by: REINOVMEF 2-IGIS/IGIS_310_B20/Traffic310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_ApPE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
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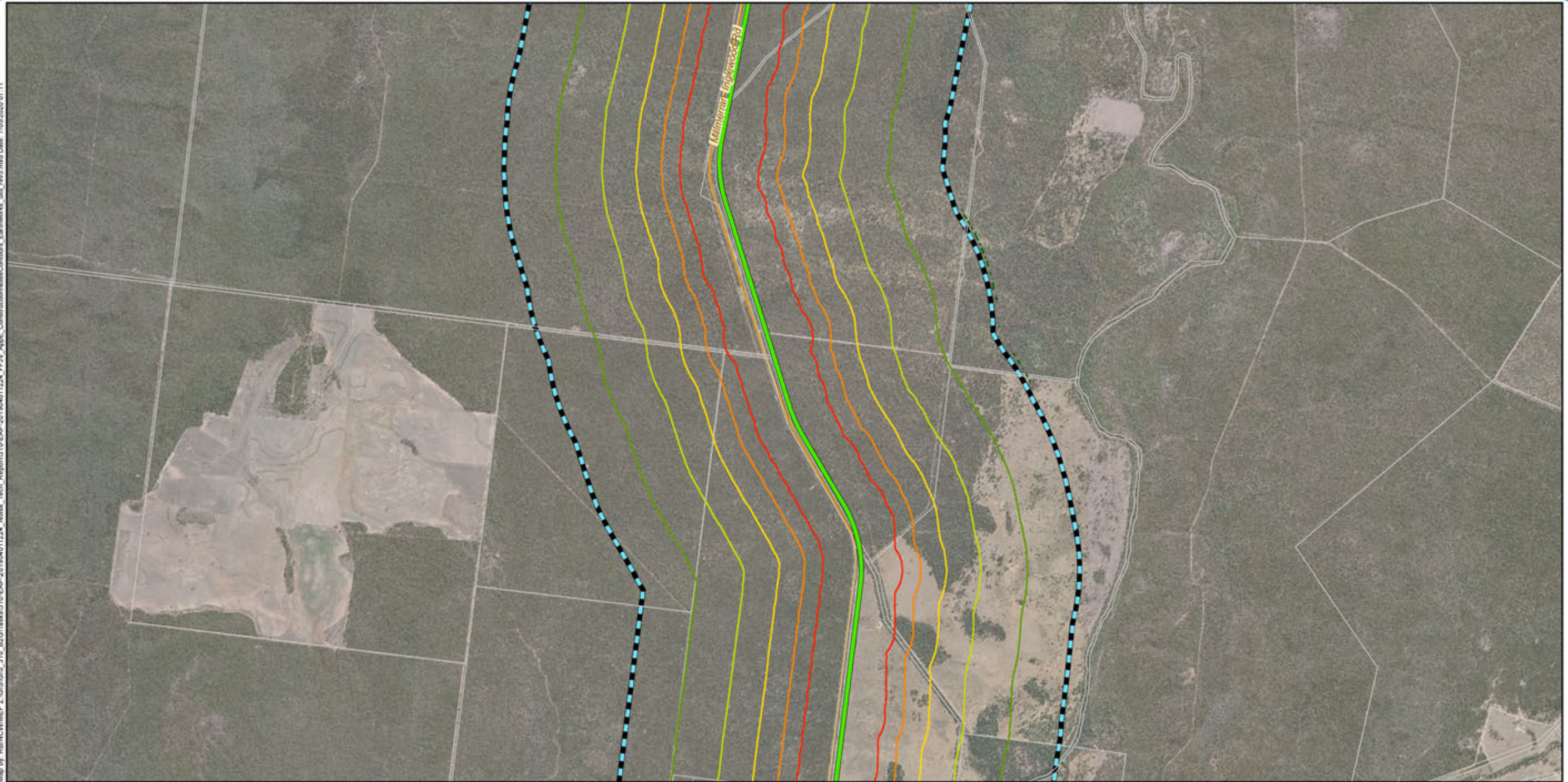
Future Freight
Integrating Community, Environment and Engineering

Issue date: 06/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

Appendix E11: Construction noise contours earthworks (standard construction hours)

Map by: REINOVIMET 2-IGIS/IGIS_310_B20/Traffic/310-EAP-201904011224_Noise_Tech_Report/310-EAP-201904011224_FF/V_AppE_ConstructionNoiseContours_Earthworks_Sd_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km



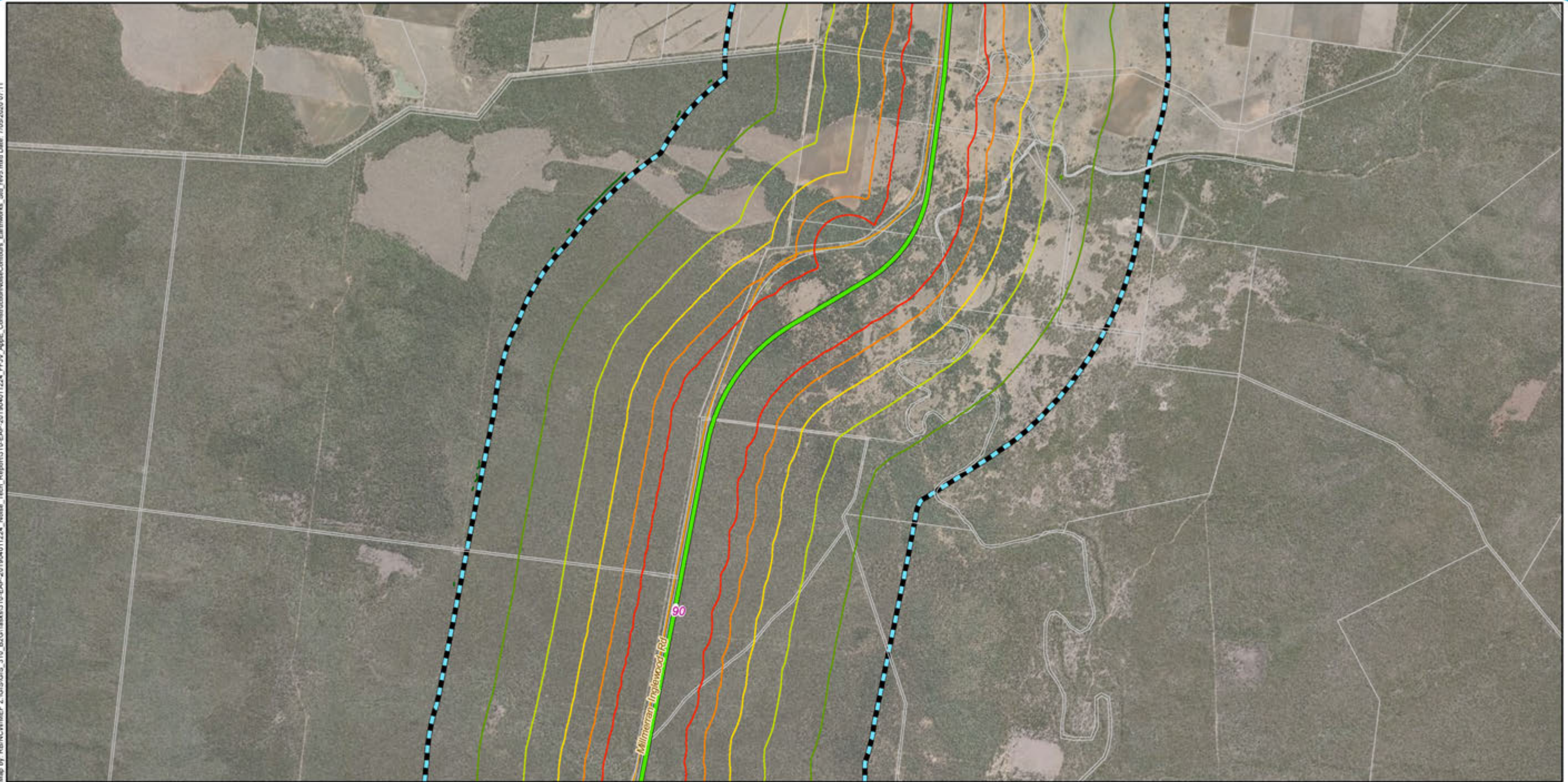
Future Freight
 Integrating Community, Environment and Engineering

Issue date: 06/05/2020 Version: 5
 Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

Appendix E12: Construction noise contours earthworks (standard construction hours)

Map by: REINVENTMEP 2:GIS/015_310_B201Task0310-EAP-201904011224_Noise_Tech_Report0310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- - - Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km



Future Freight
 Integrating Community, Environment and Engineering

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 Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E13: Construction noise contours
 earthworks (standard construction hours)**

Map by: REINCMWMEF 2:GIS/015_310_B201Task0310-EAP-201904011224_Noise_Tech_Report0310-EAP-201904011224_FFJV_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- ▭ Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km

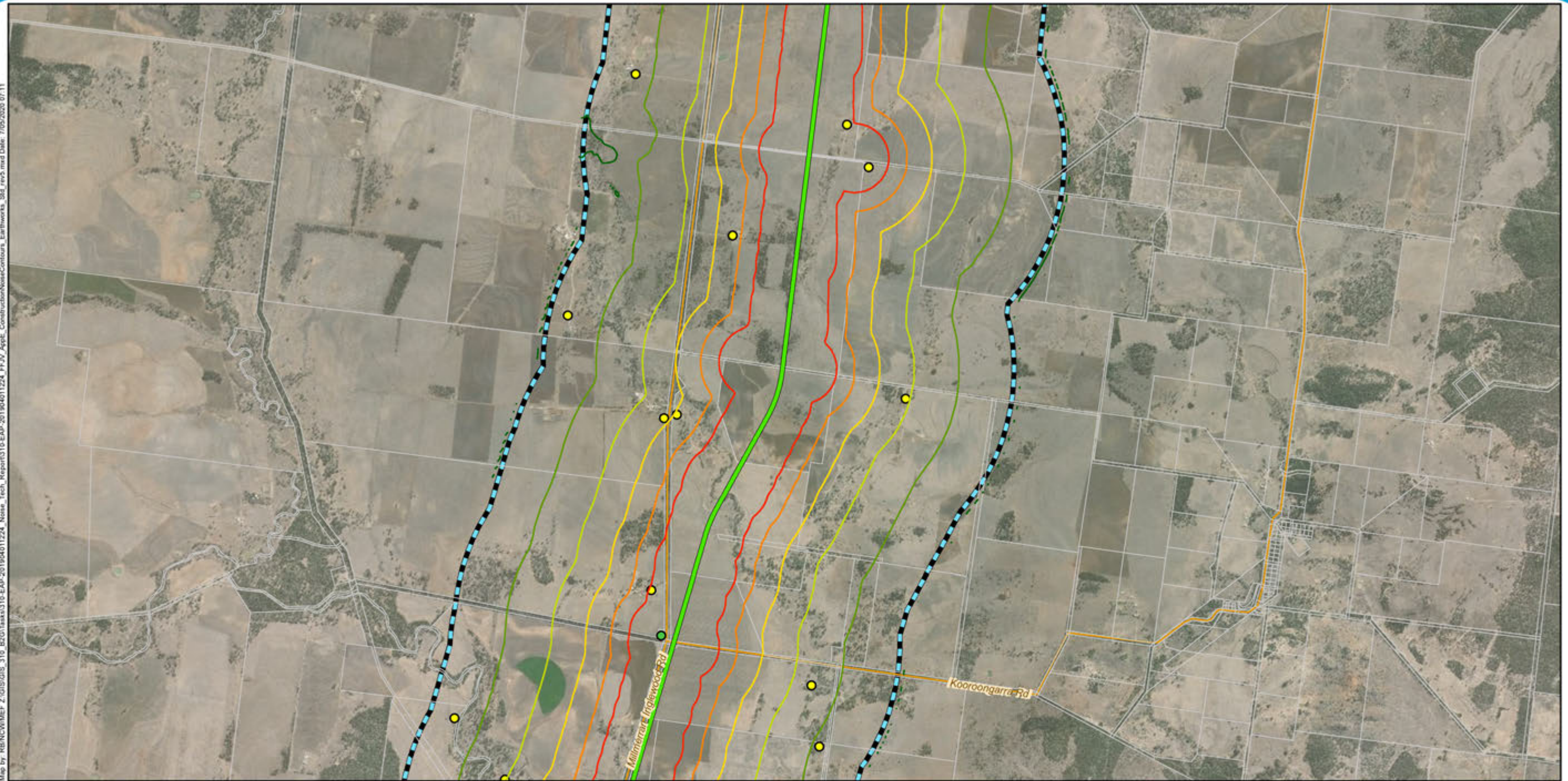


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Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie Appendix E14: Construction noise contours earthworks (standard construction hours)

Map by: REINOVMEF 2:GIS/015_310_E201Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FFJV_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- - - Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

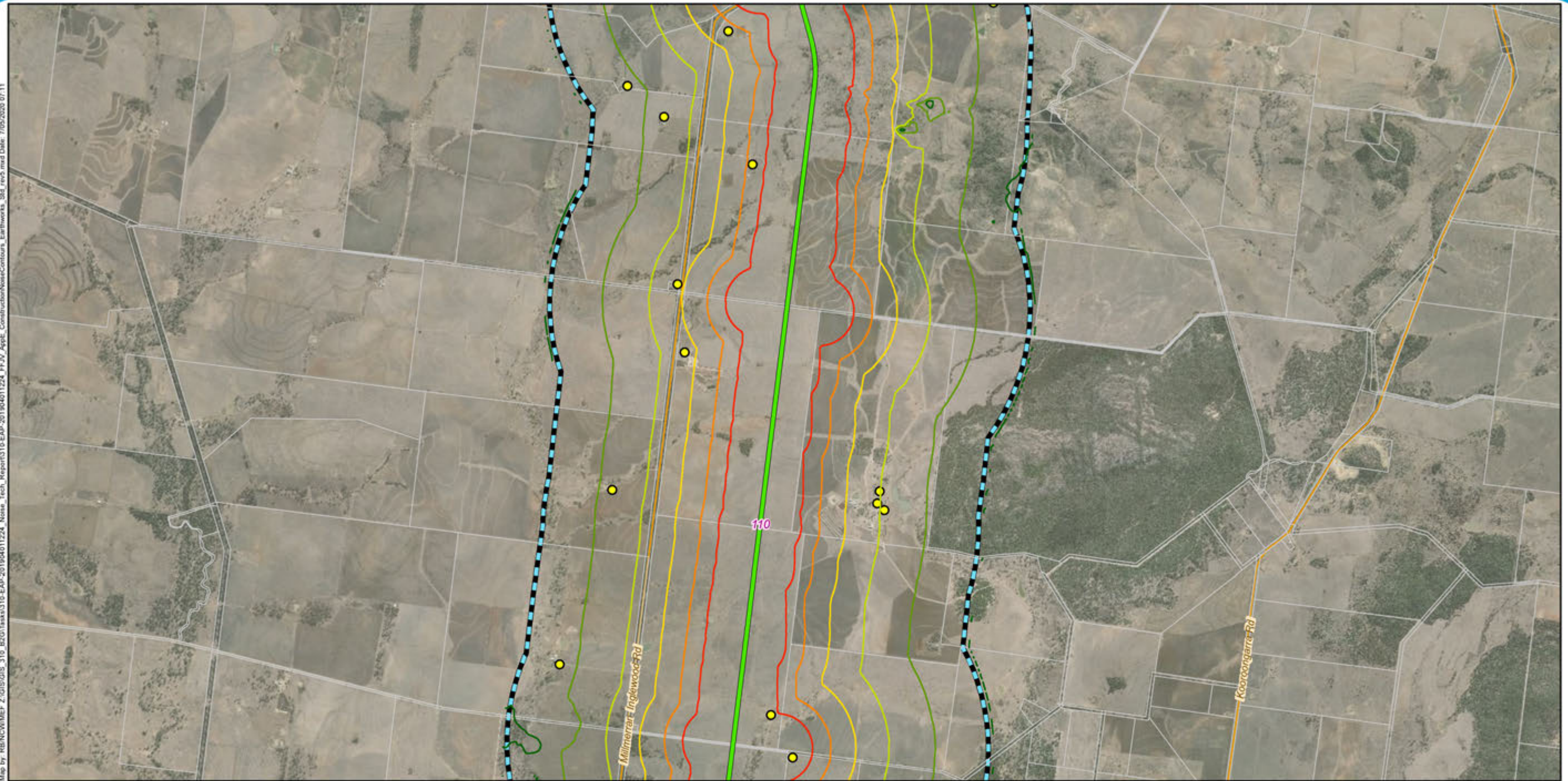
Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km

Map by: REINOVIMEF 2-IGIS/IGIS_310_B20/Trauka310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_3d_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km

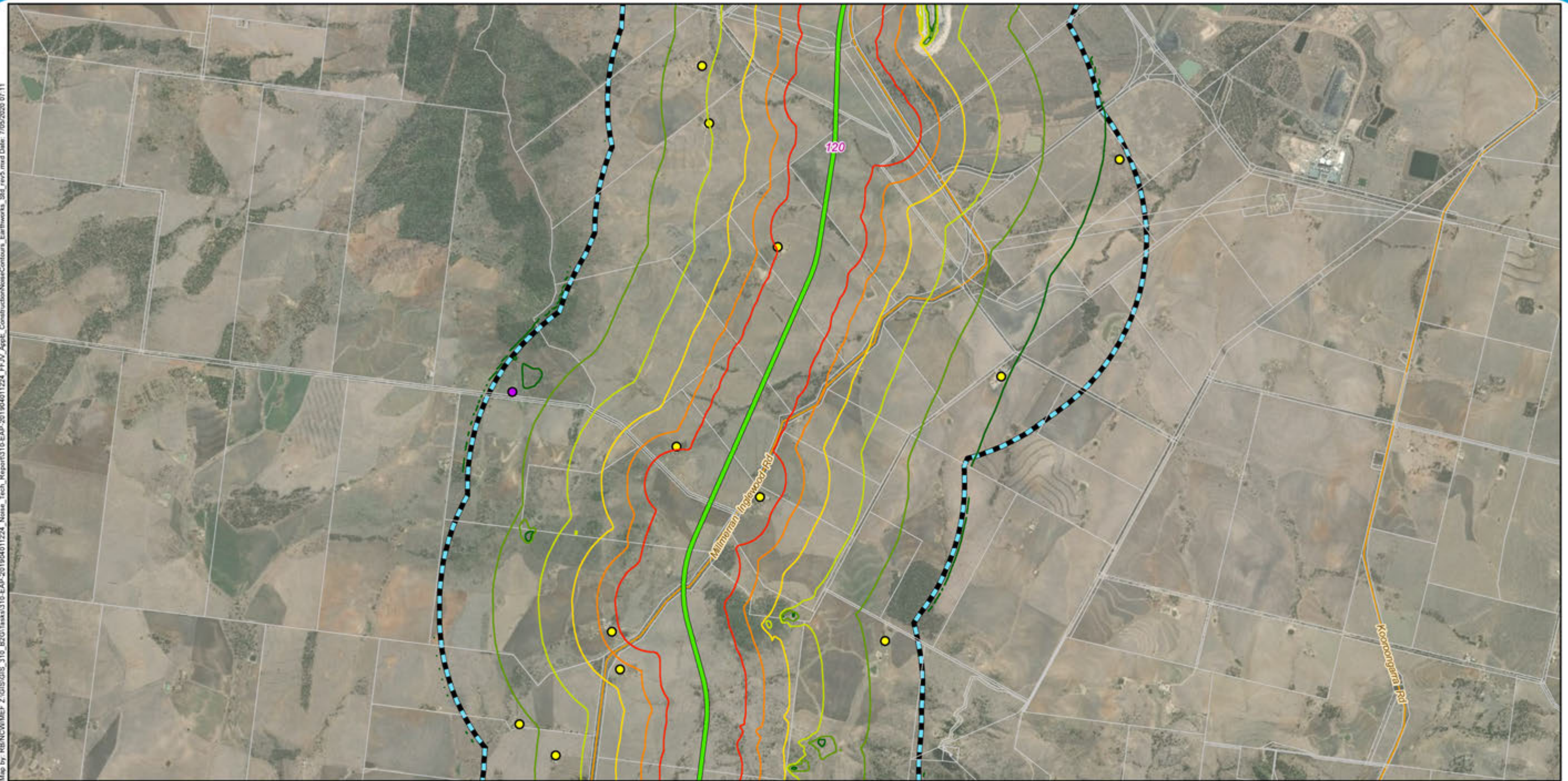


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 Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie Appendix E16: Construction noise contours earthworks (standard construction hours)

Map by: REINOVIMEF 2-IGIS/IGIS_310_B20/Traffic/310-EAP-201904011224_Noise_Tech_Report/310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km



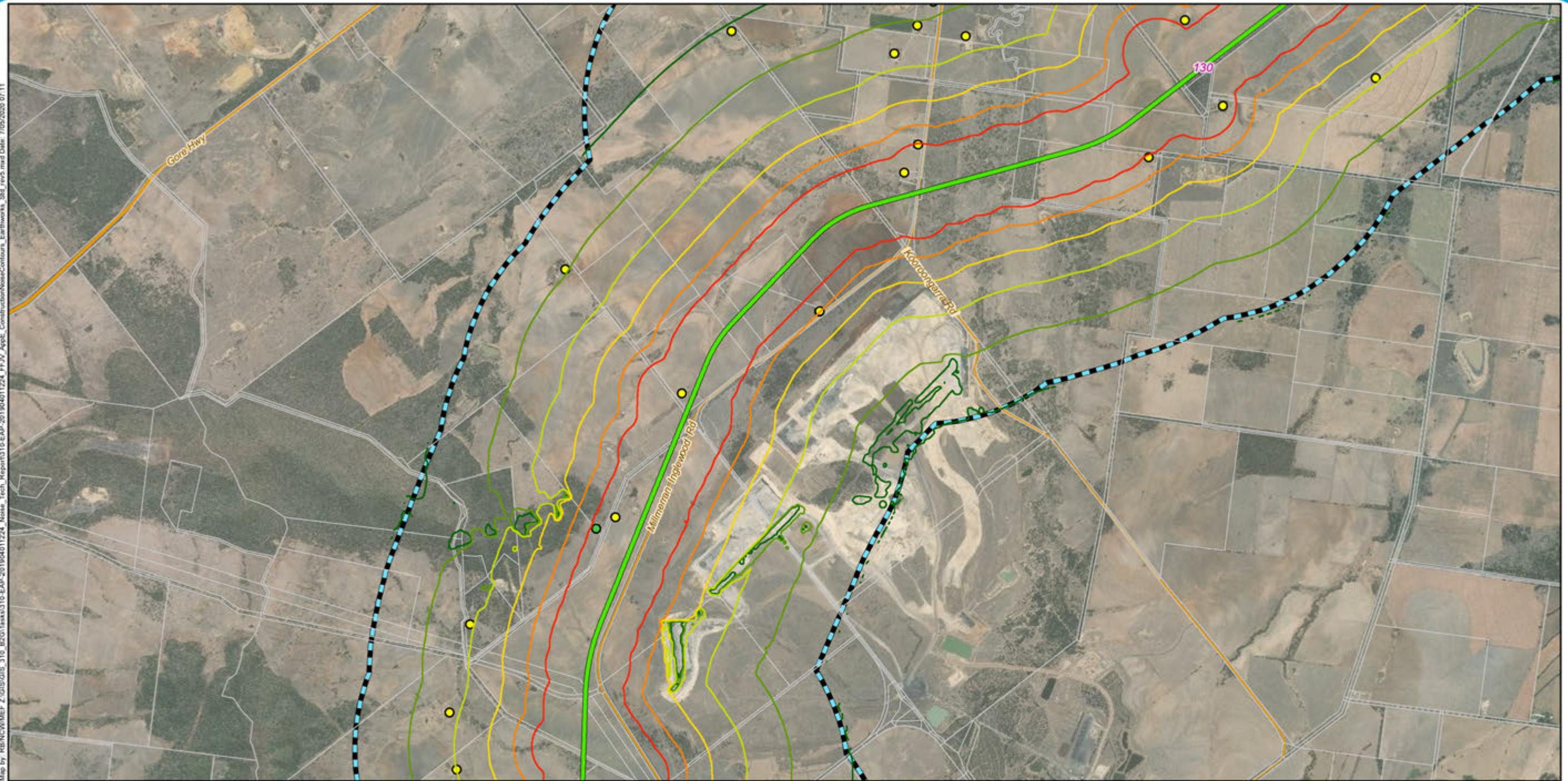
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 Integrating Community, Environment and Engineering

Issue date: 06/05/2020 Version: 5
 Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E17: Construction noise contours
 earthworks (standard construction hours)**

Map by: REINCYMEF 2-IGIS/IGIS 310, B20/Trauka310-EAP-201904011224, Noise, Tech, Report310-EAP-201904011224, FF JV, AppE, ConstructionNoiseContours, Earthworks, Std, rev5, mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

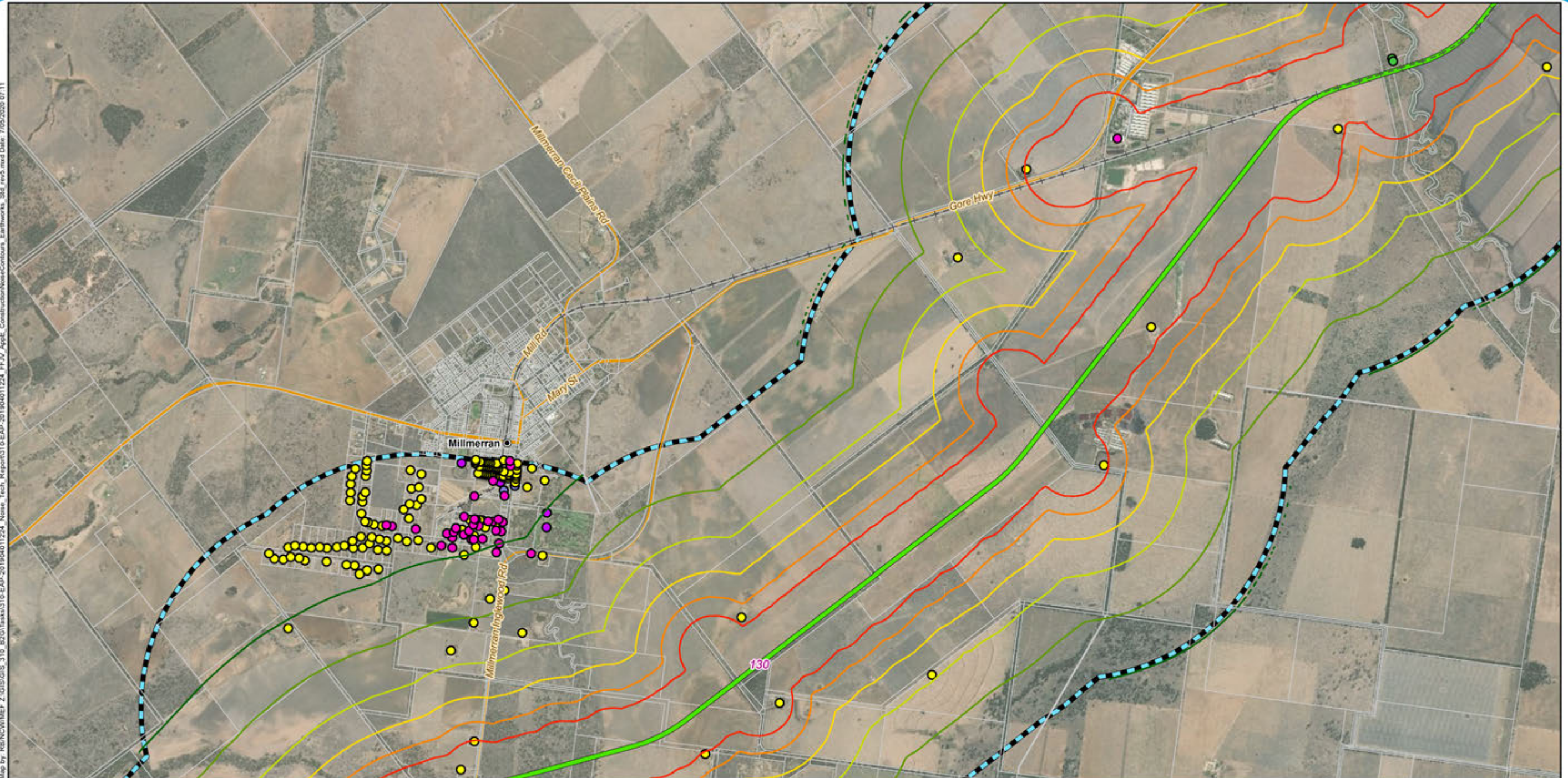
Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km

Map by: REINOVIMEP 2-IGIS/IGIS_310_E207Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (non-operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



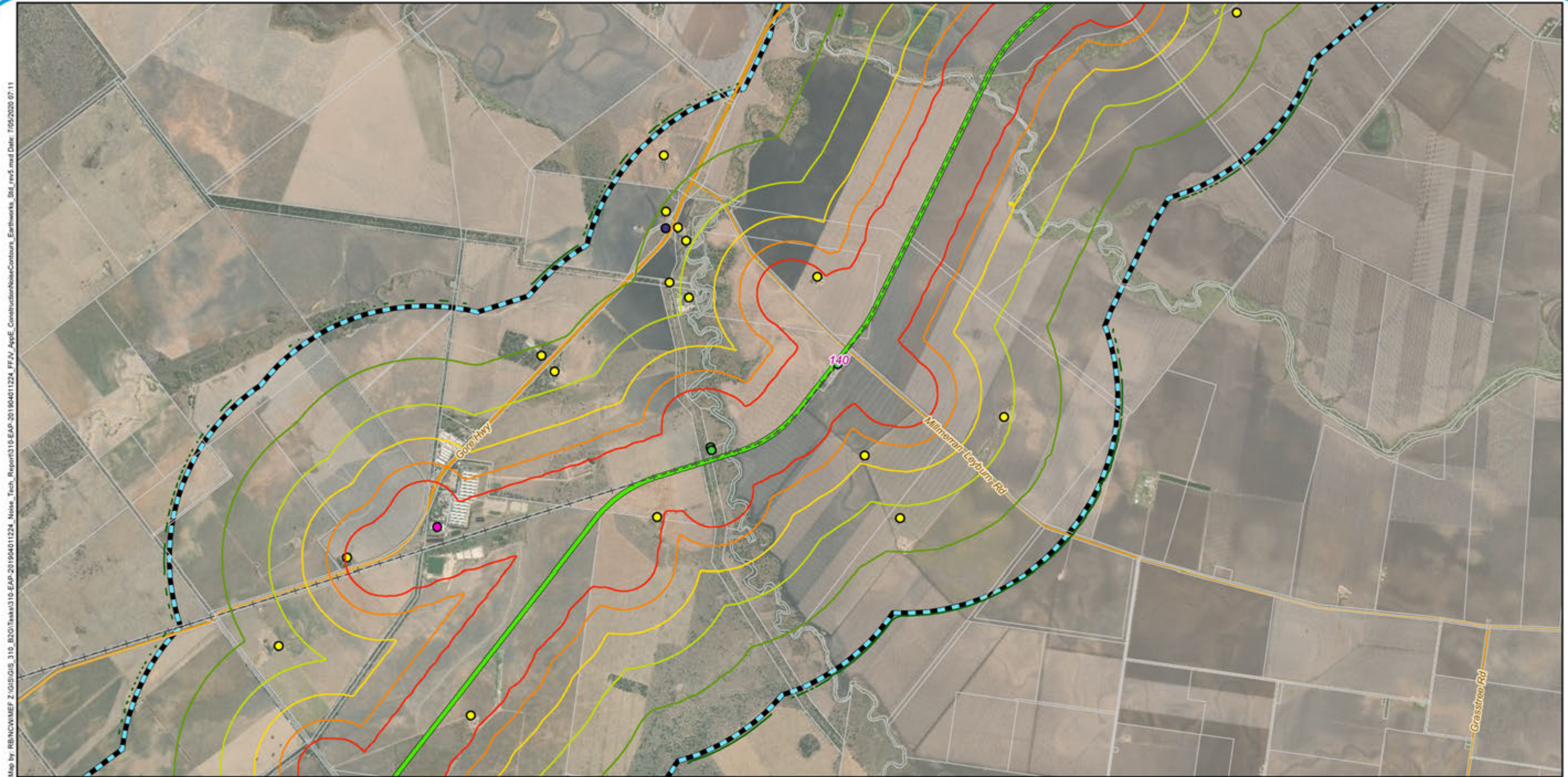
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Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E19: Construction noise contours
earthworks (standard construction hours)**

Map by: REINVENTMEP 2-IGIS/IGIS_310_E20/Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF/V_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (non-operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



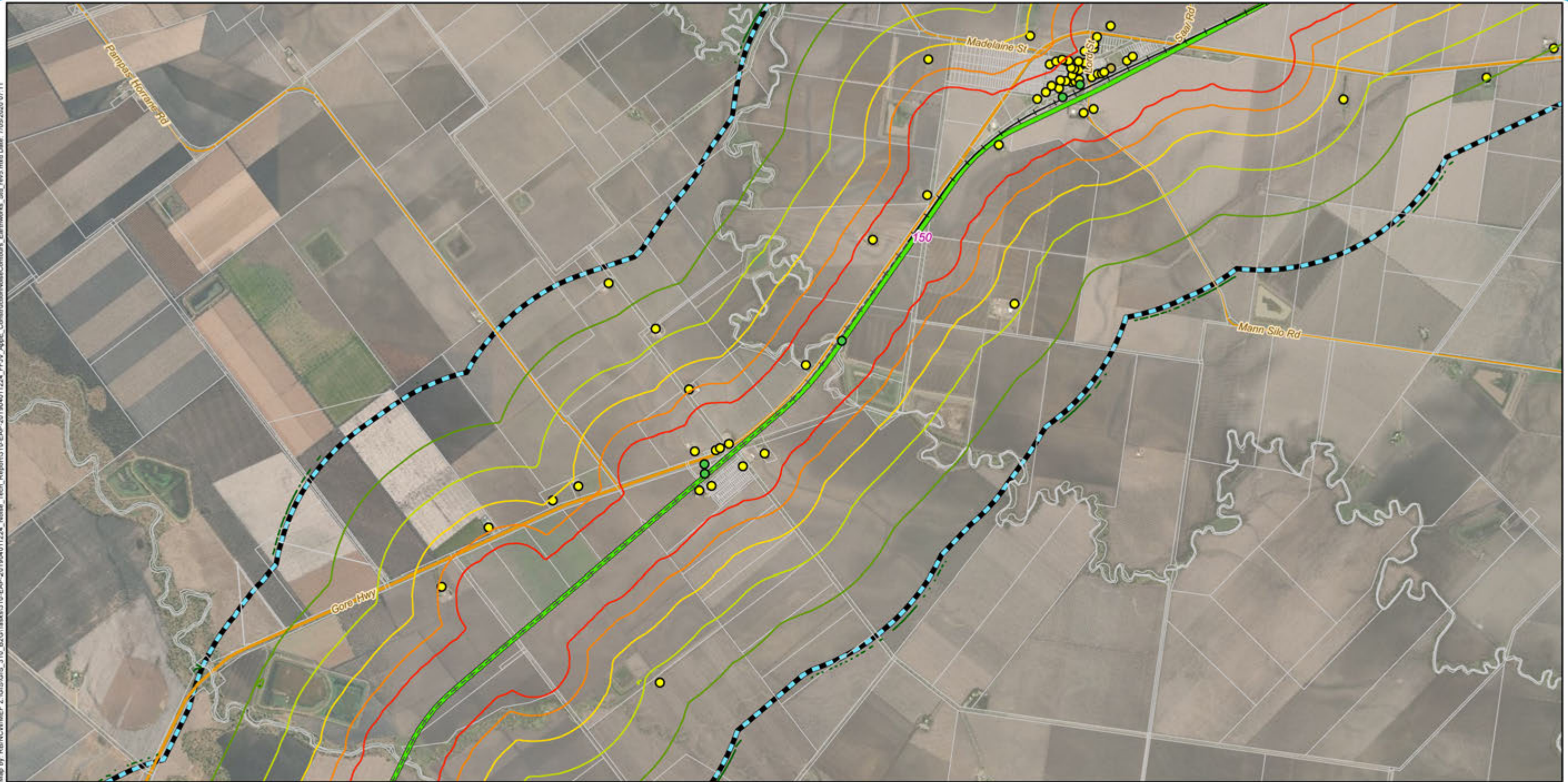
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Issue date: 06/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

Appendix E20: Construction noise contours earthworks (standard construction hours)

Map by: REINOVMEF 2:GIS/015_310_E2017Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_ApE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Existing rail (non-operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



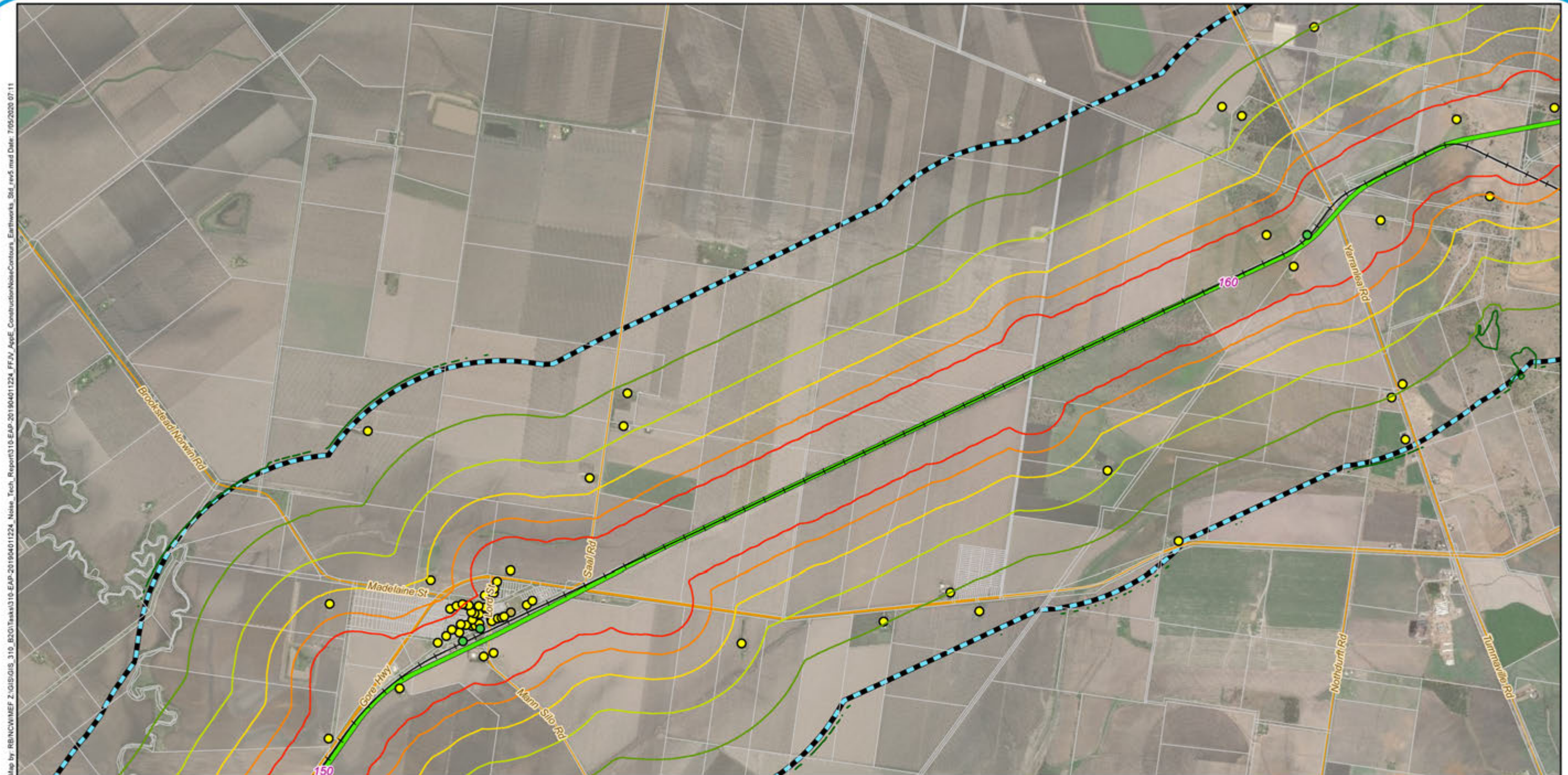
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Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E21: Construction noise contours
earthworks (standard construction hours)**

Map by: REINOVMEF 2:GIS/015_310_E201Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_ApE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km

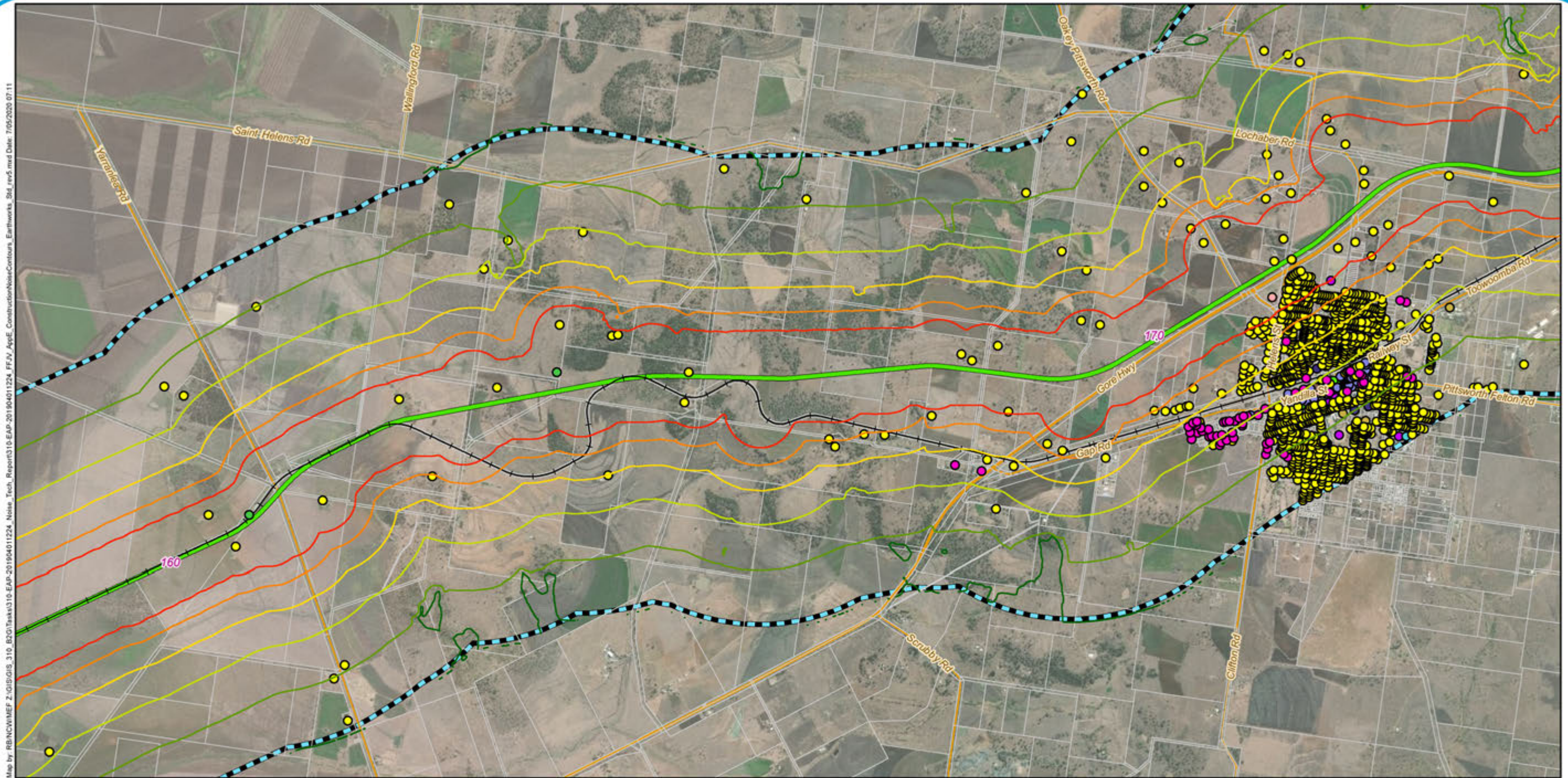


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Integrating Community, Environment and Engineering

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Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie Appendix E22: Construction noise contours earthworks (standard construction hours)

Map by: REINOVMEF 2-IGIS/IGIS_310_E20/Traffic310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km

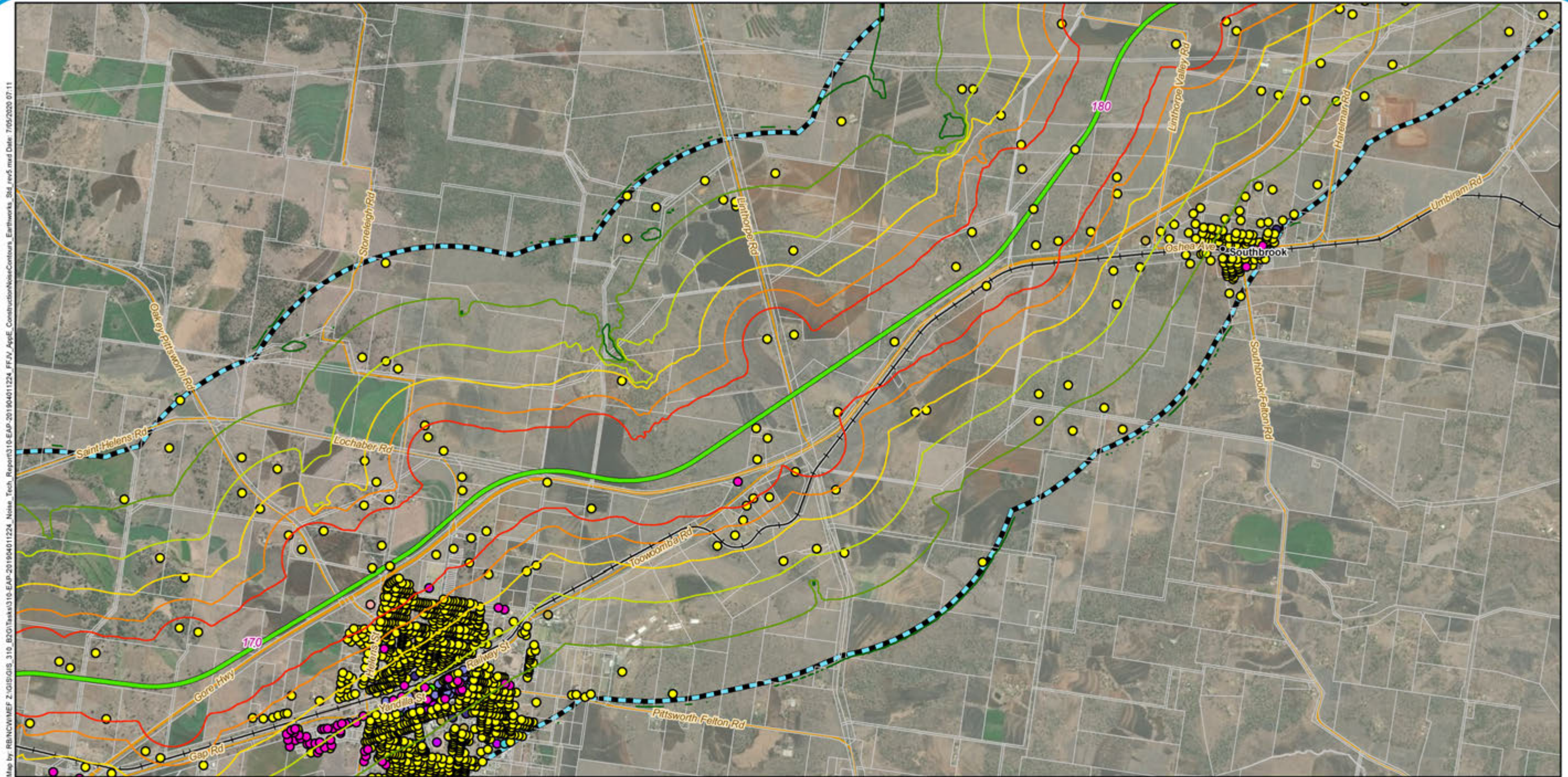


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Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E23: Construction noise contours
earthworks (standard construction hours)**



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



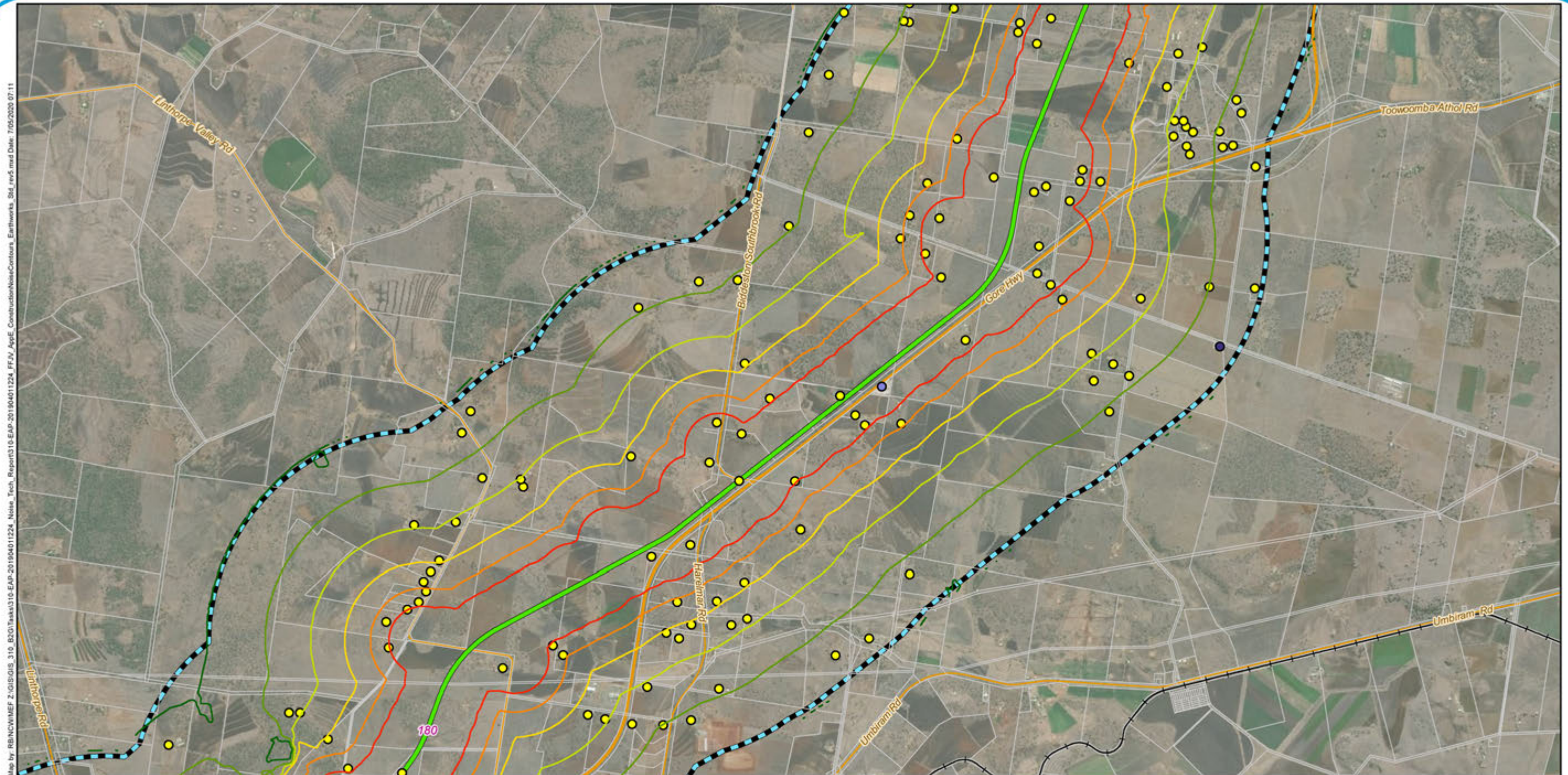
A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



Future Freight
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Issue date: 06/05/2020 Version: 5
Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie
Appendix E24: Construction noise contours
earthworks (standard construction hours)



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- ▭ Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

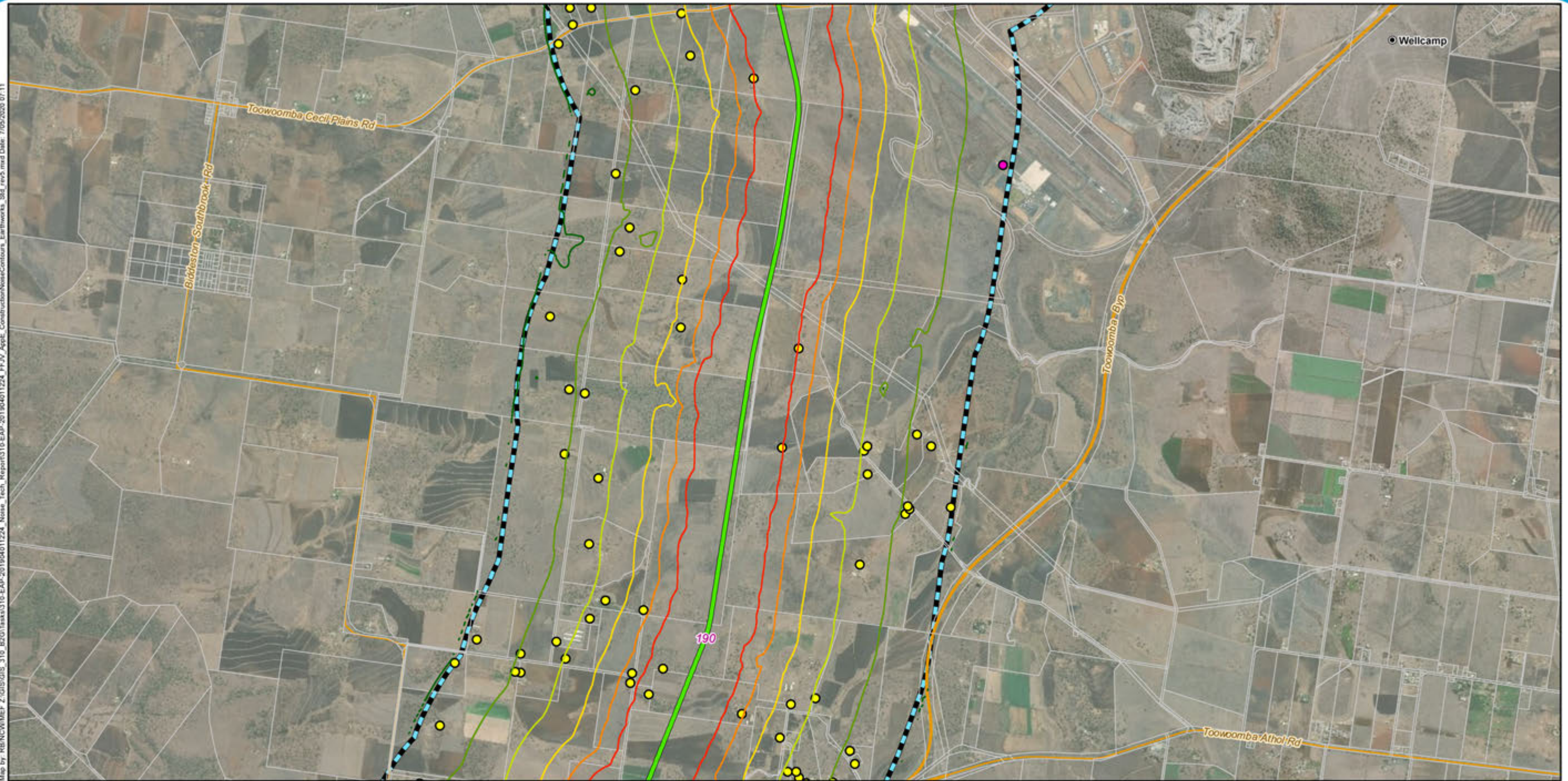
Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km

Map by: RENOVIMET 2-IGIS/IGIS_310_B20/Traffic/310-EAP-2019/04/11/224_Noise_Tech_Report/310-EAP-2019/04/11/224_FF JV_ApE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

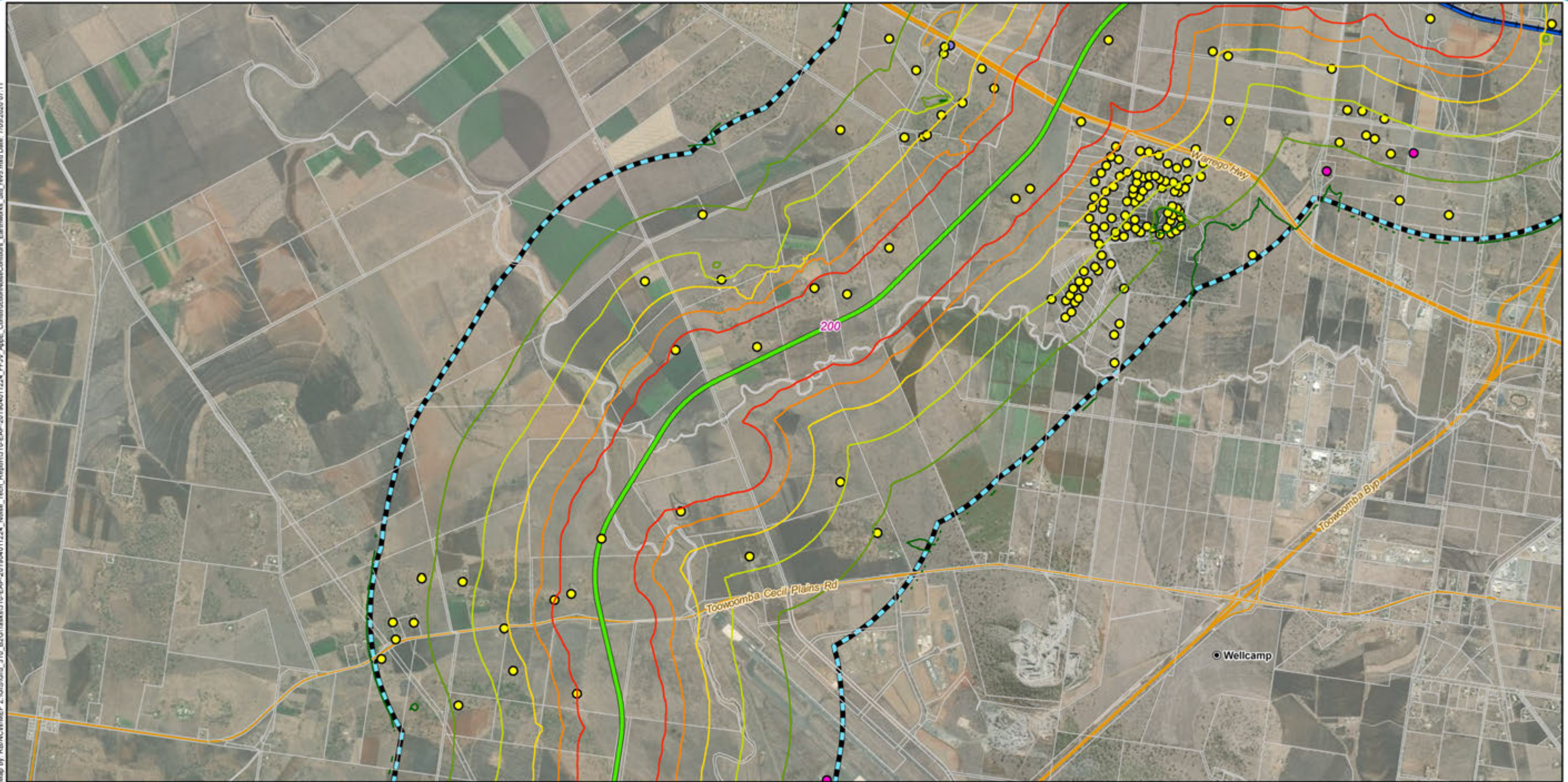
Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km

Map by: REINOVIMEP 2:GIS/GIS_310_E207Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Gowrie to Helidon alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



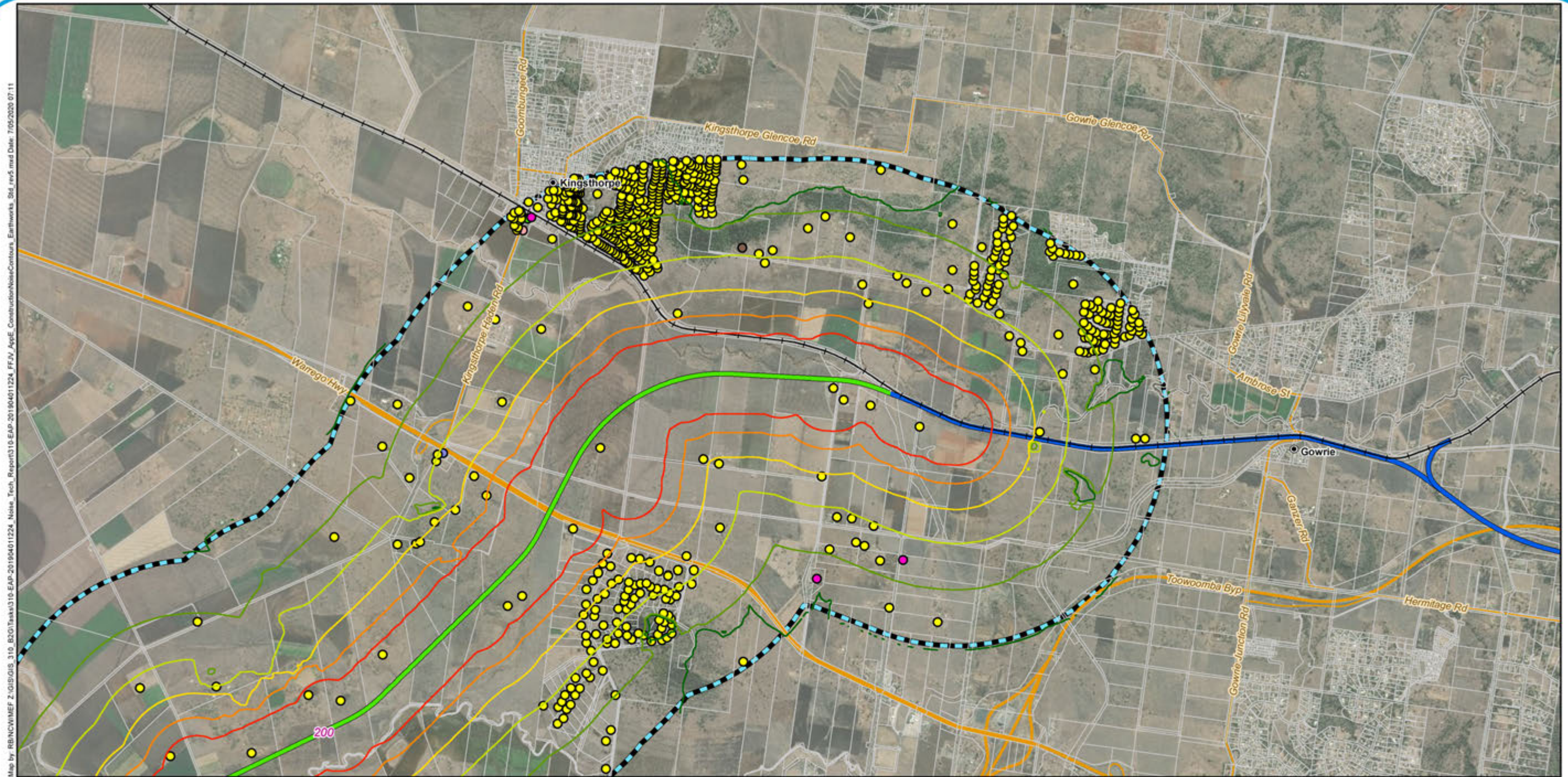
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Border to Gowrie

**Appendix E27: Construction noise contours
earthworks (standard construction hours)**

Map by: REINOVMEP 2-IGIS/IGIS_310_B20/Traffic310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_Std_rev5.mxd Date: 7/05/2020 07:11



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Gowrie to Helidon alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km

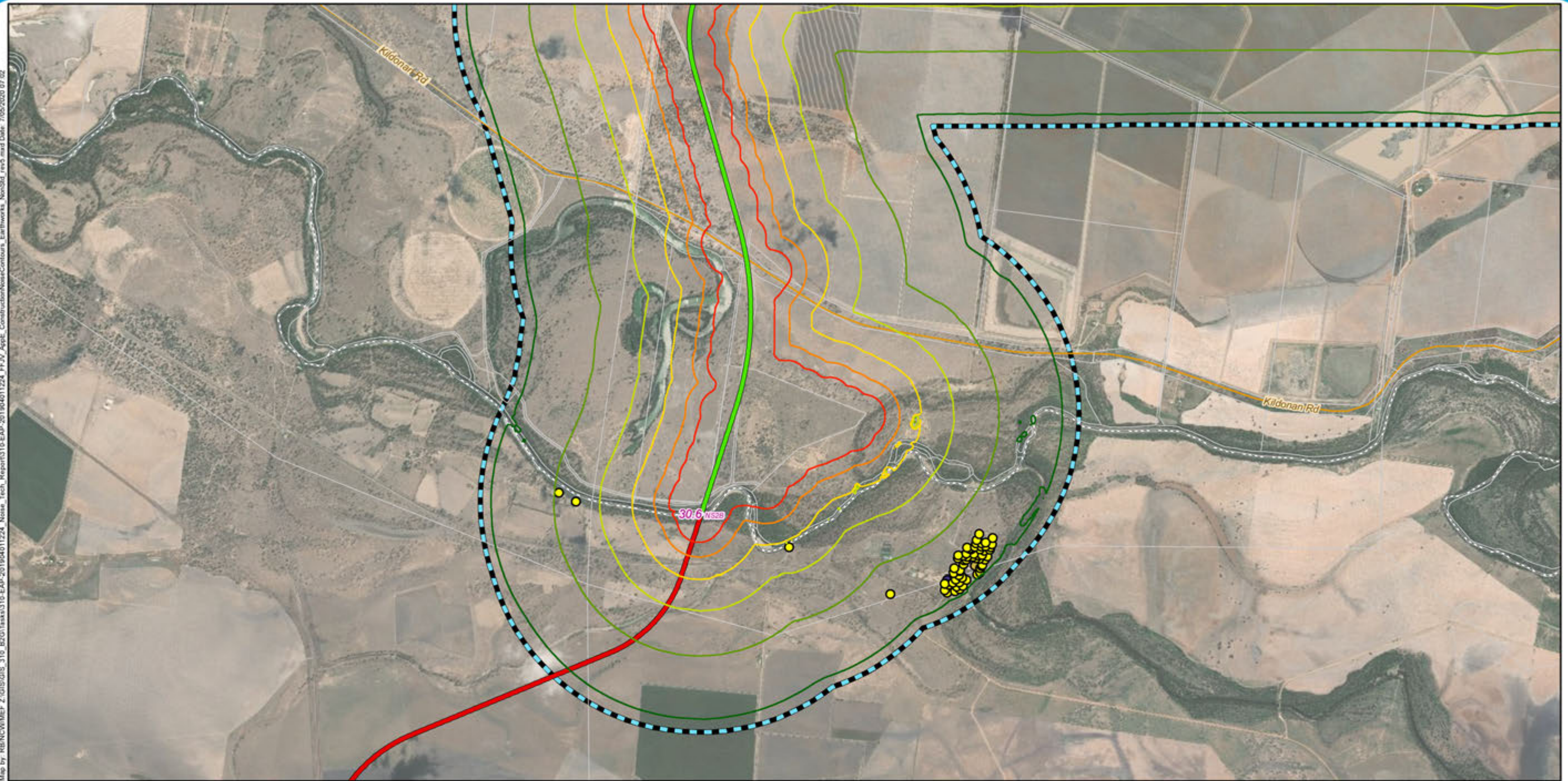


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Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie Appendix E28: Construction noise contours earthworks (standard construction hours)

Map by: REINOVMEP 2:GIS/GIS_310_B20/Traffic310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FFJV_AppE_ConstructionNoiseContours_Earthworks_NonStd_mxd Date: 7/05/2020 07:02



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- North Star to NSW/QLD border alignment
- Minor roads
- NSW/QLD border
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km

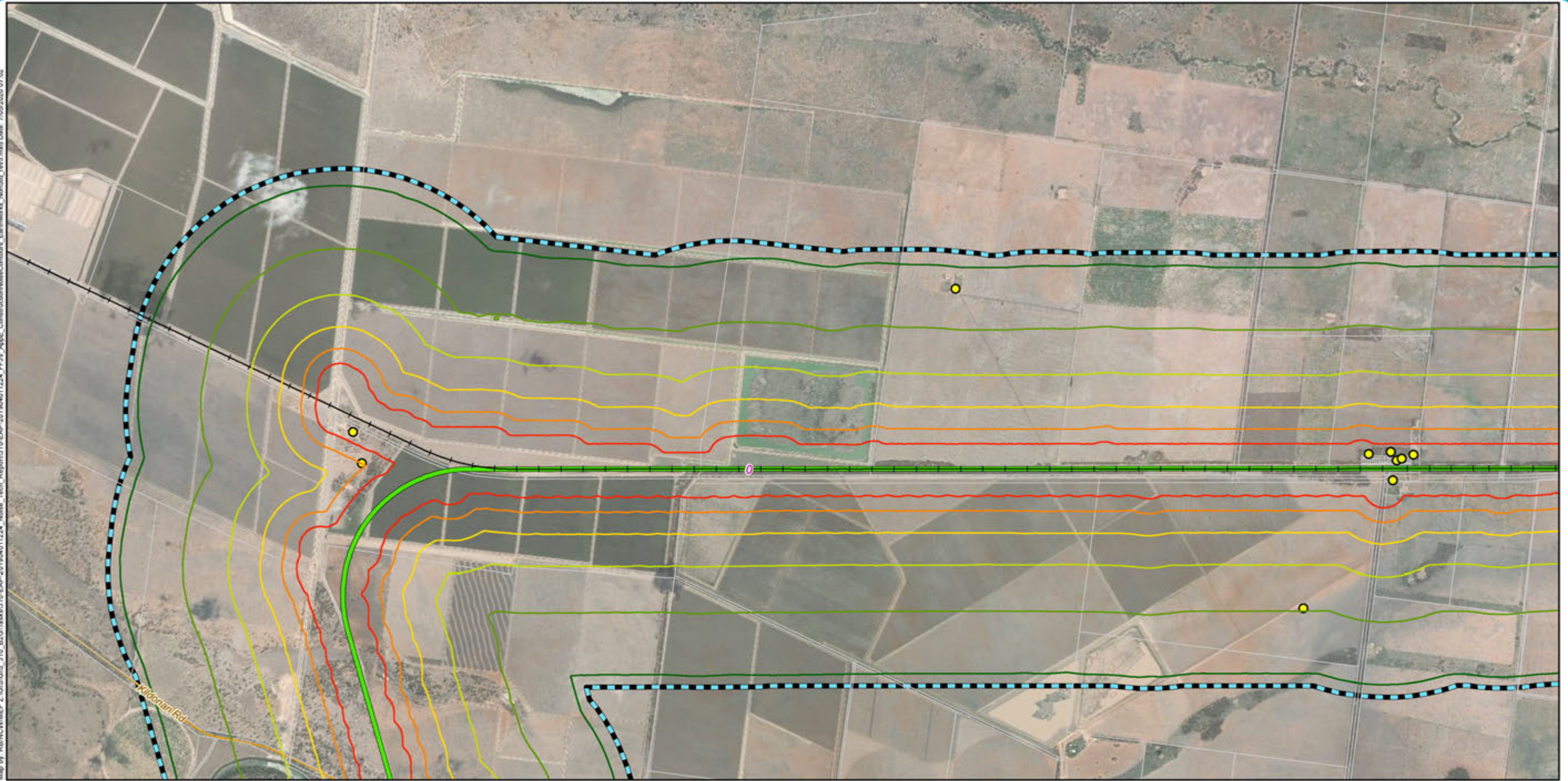


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 Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie Appendix E1: Construction noise contours earthworks (non standard construction hours)

Map by: REINOVMEF 2-IGIS/IGIS_310_E201Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_NonStd_mxd Date: 7/05/2020 07:02



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km



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Map by: REINOVMEF 2:GIS/015_310_E2017Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FFJV_AppE_ConstructionNoiseContours_Earthworks_NonStd_rnd.mxd Date: 7/05/2020 07:02



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km

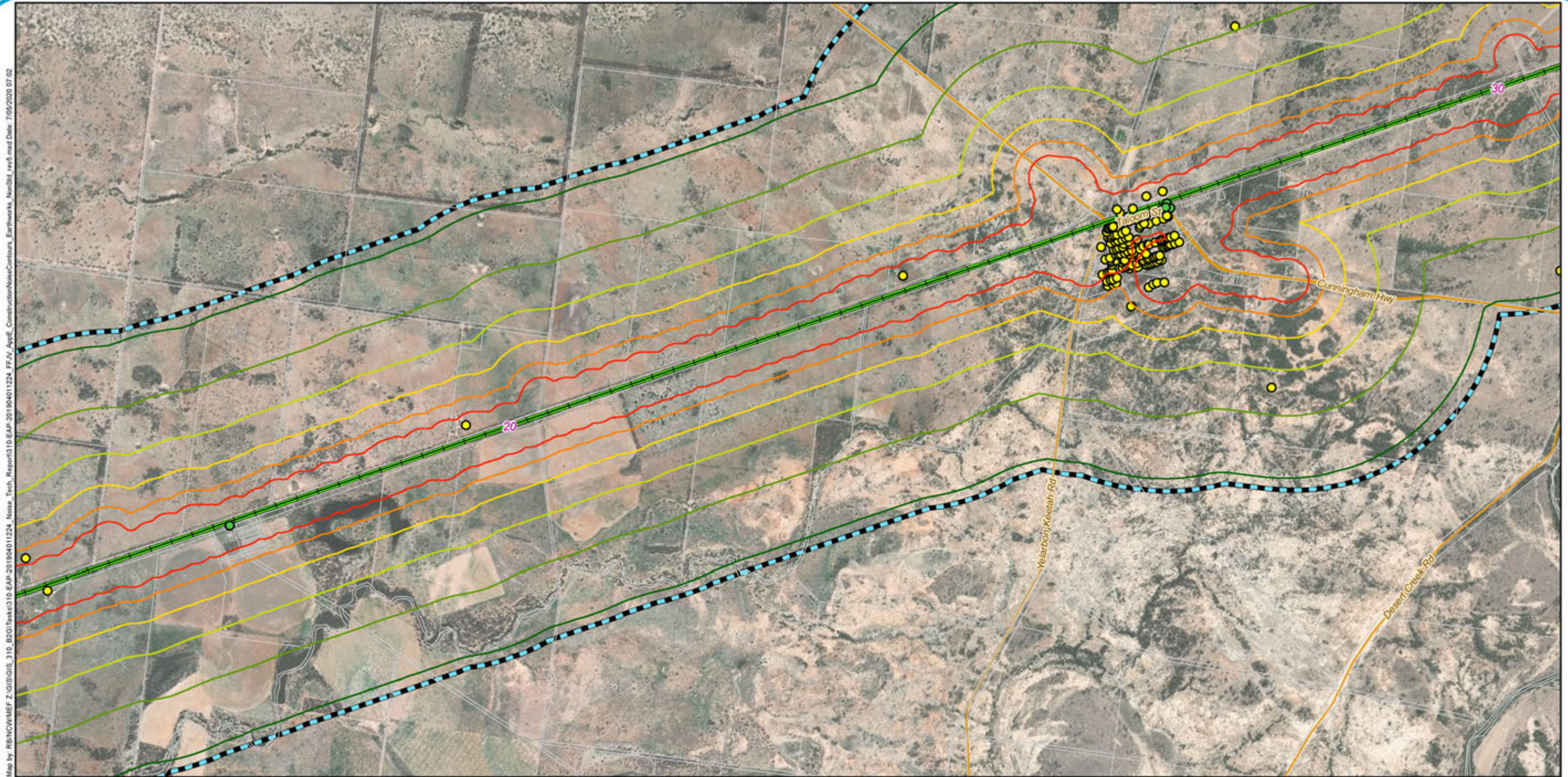


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Border to Gowrie
Appendix E3: Construction noise contours
earthworks (non standard construction hours)

Map by: RENOVIMEP 2-IGIS/IGIS_310_B207/Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FFJV_AppE_ConstructionNoiseContours_Earthworks_NonStd_rnd.mxd Date: 7/05/2020 07:02



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
 0 0.3 0.6 0.9 1.2 1.5 km



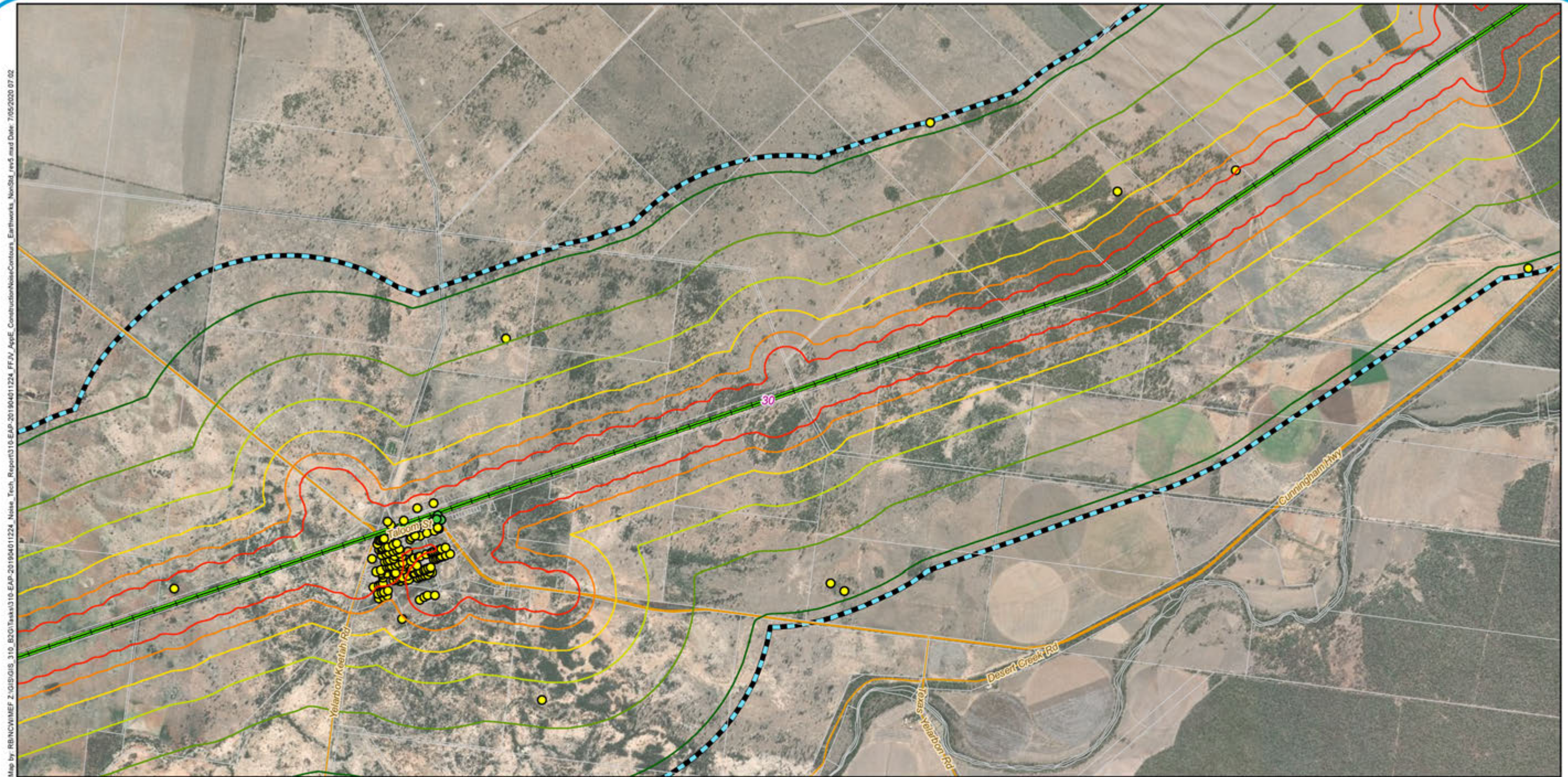
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 Coordinate System: GDA 1994 MGA Zone 56

Border to Gowrie

**Appendix E4: Construction noise contours
 earthworks (non standard construction hours)**

Map by: RENOVIMET 2:GIS/015_310_B201Tasks310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_NonStd_rnd.mxd Date: 7/05/2020 07:02



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Minor roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



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Border to Gowrie Appendix E5: Construction noise contours earthworks (non standard construction hours)

Map by: RENOVIMEP 2:GIS/013_310_E2017Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_AppE_ConstructionNoiseContours_Earthworks_NonStd_mxd Date: 7/05/2020 07:02



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Cadastre
- ▤ Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

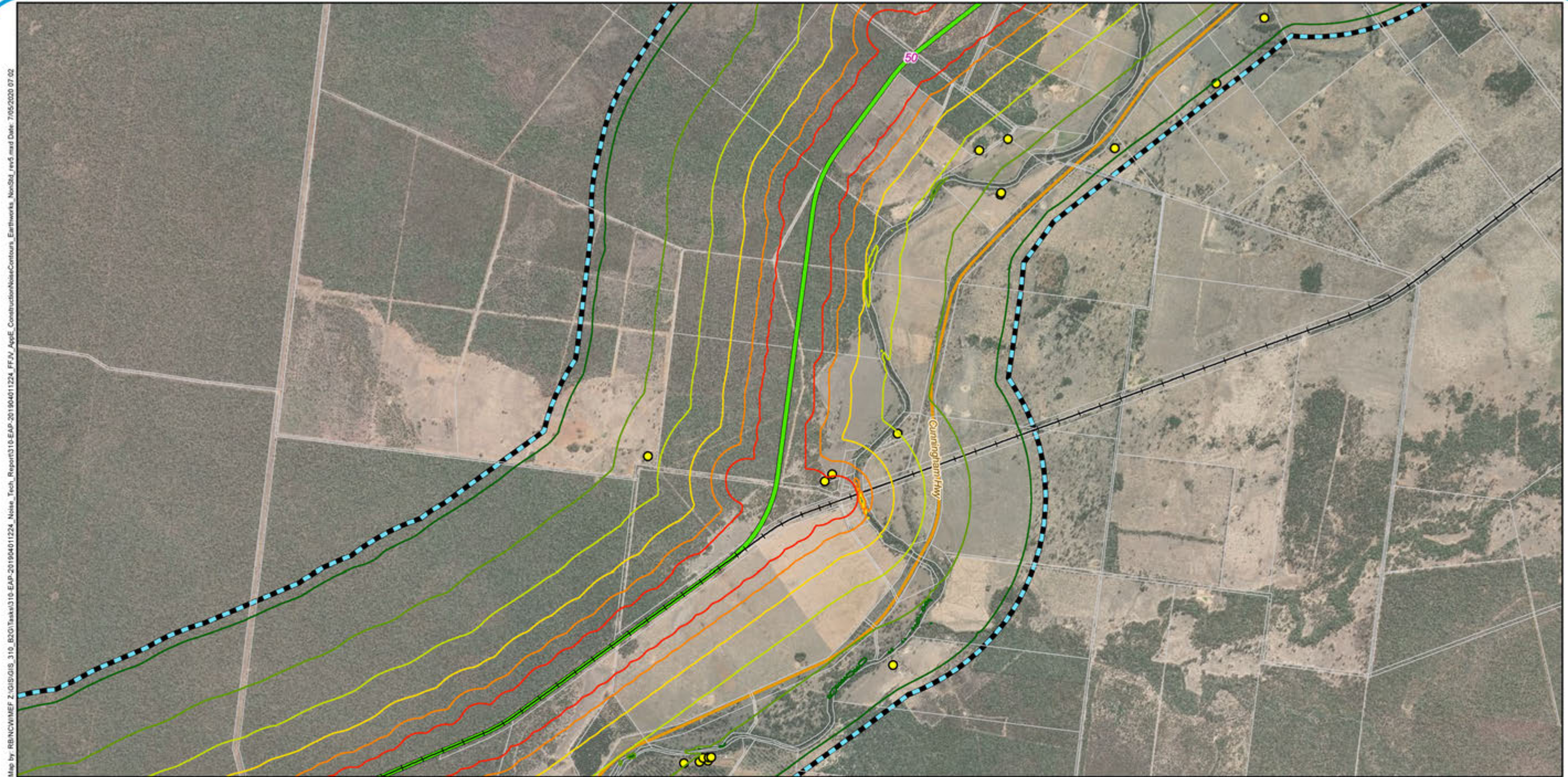
Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km

Map by: REINOVMEF 2-IGIS/IGIS_310_B201Task310-EAP-201904011224_Noise_Tech_Report310-EAP-201904011224_FF JV_ApE_ConstructionNoiseContours_Earthworks_NonStd_rnd.mxd Date: 7/05/2020 07:02



Legend

- 5 Chainage (km)
- Localities
- Border to Gowrie alignment
- Existing rail (operational)
- Major roads
- Cadastre
- Noise and vibration impact assessment area

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

Methodology outlined in section 5.2

- 45
- 50
- 55
- 60
- 65
- 70

Sensitive Receptors

- Commercial Office
- Commercial Retail
- Community Building
- Educational Building
- Heritage
- Hotel/Motel
- Industrial
- Medical Building
- Outdoor Recreation
- Residential
- Sporting Facility



A3 scale: 1:40,000
0 0.3 0.6 0.9 1.2 1.5 km



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Border to Gowrie
Appendix E7: Construction noise contours
earthworks (non standard construction hours)