

APPENDIX 2 – DRAINAGE STRUCTURES

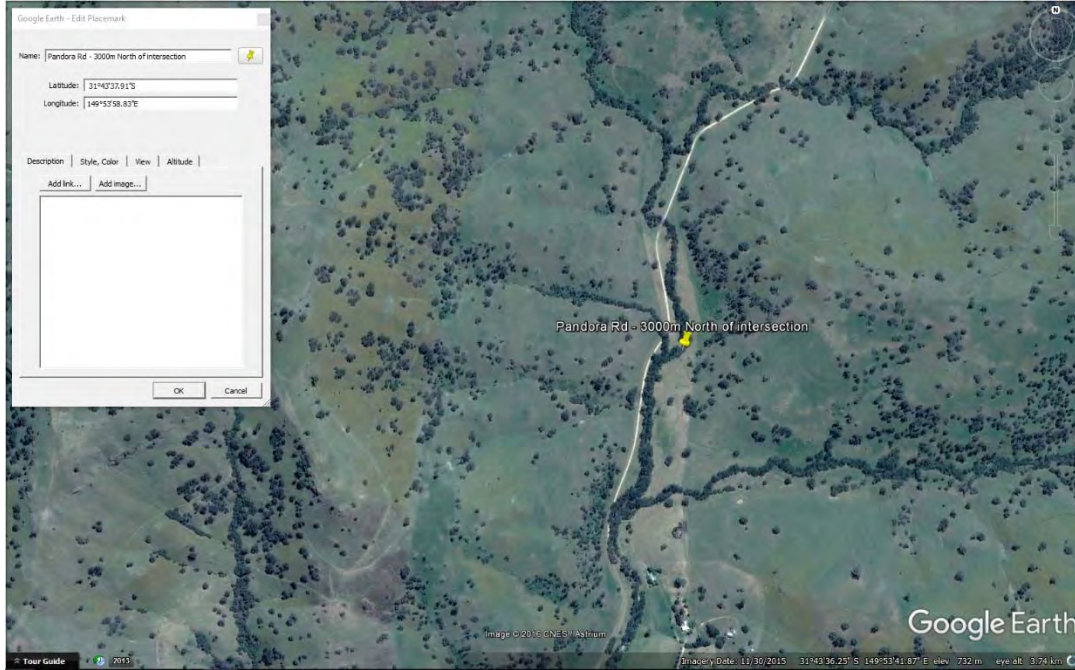
APPENDIX 2 - DRAINAGE AND CREEK CROSSING STRUCTURES

Note: Road names are based on Google Maps

S001 – Pandora Rd – 3000m North of Coolah Creek Intersection

4000mm Causeway

Survey recommended to verify compliance with vertical geometry requirements.

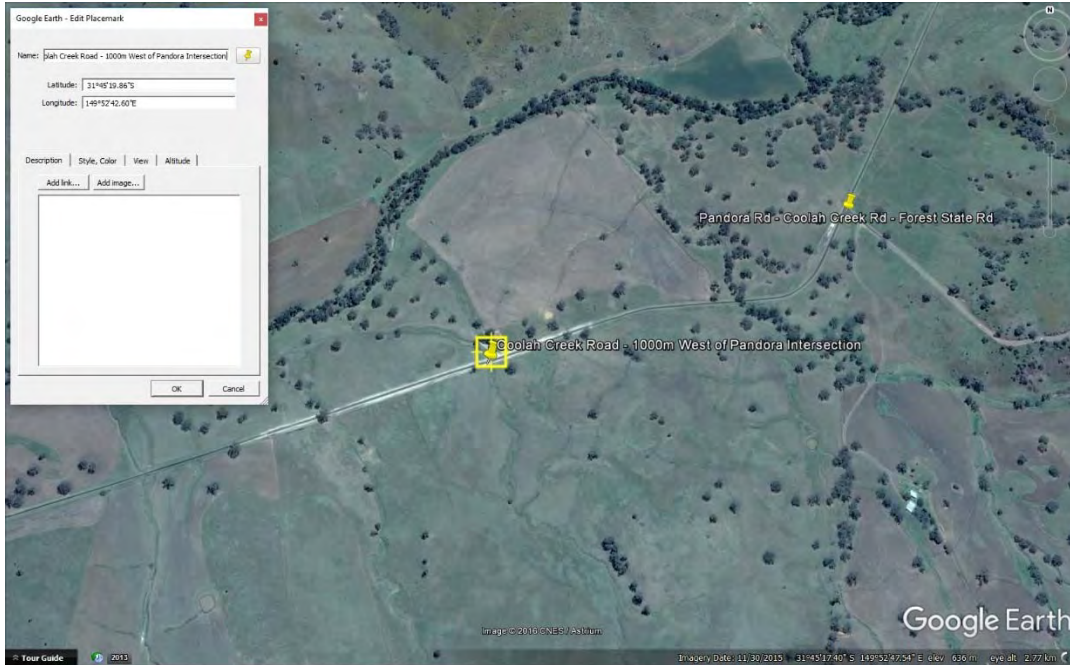


S001 – Location Plan



S001 – View to North

S002 – Coolah Creek Rd – 1000m West of Pandora Rd
4-750mm Pipe Culvert
Fair and Serviceable Condition, Good Internal Condition



S002 – Location Plan



S002 - View to North



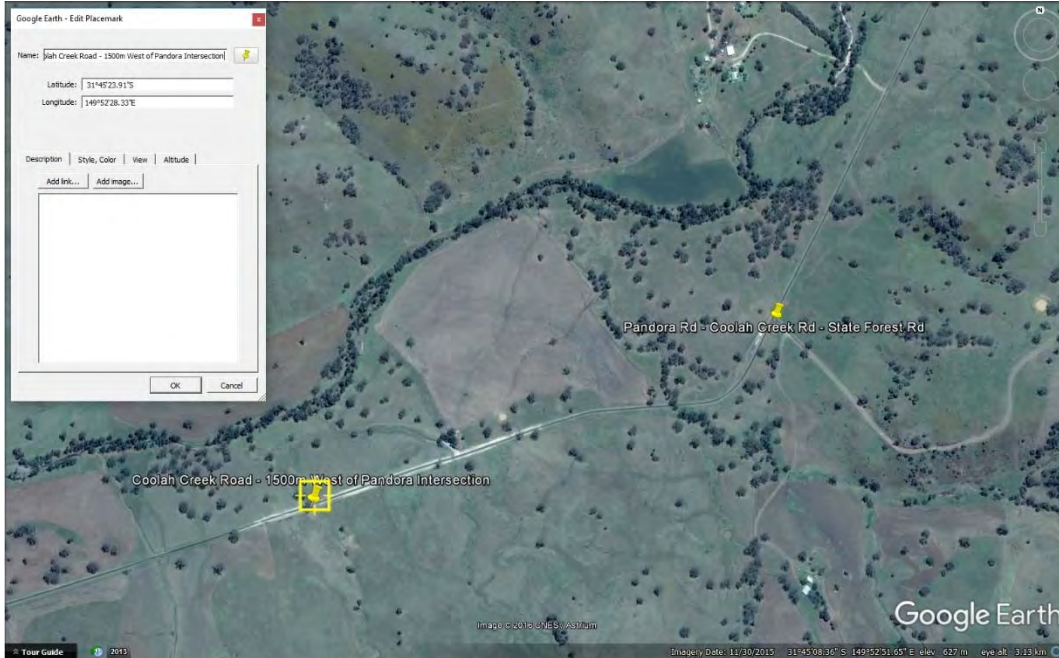
S002 – Edge View of Road



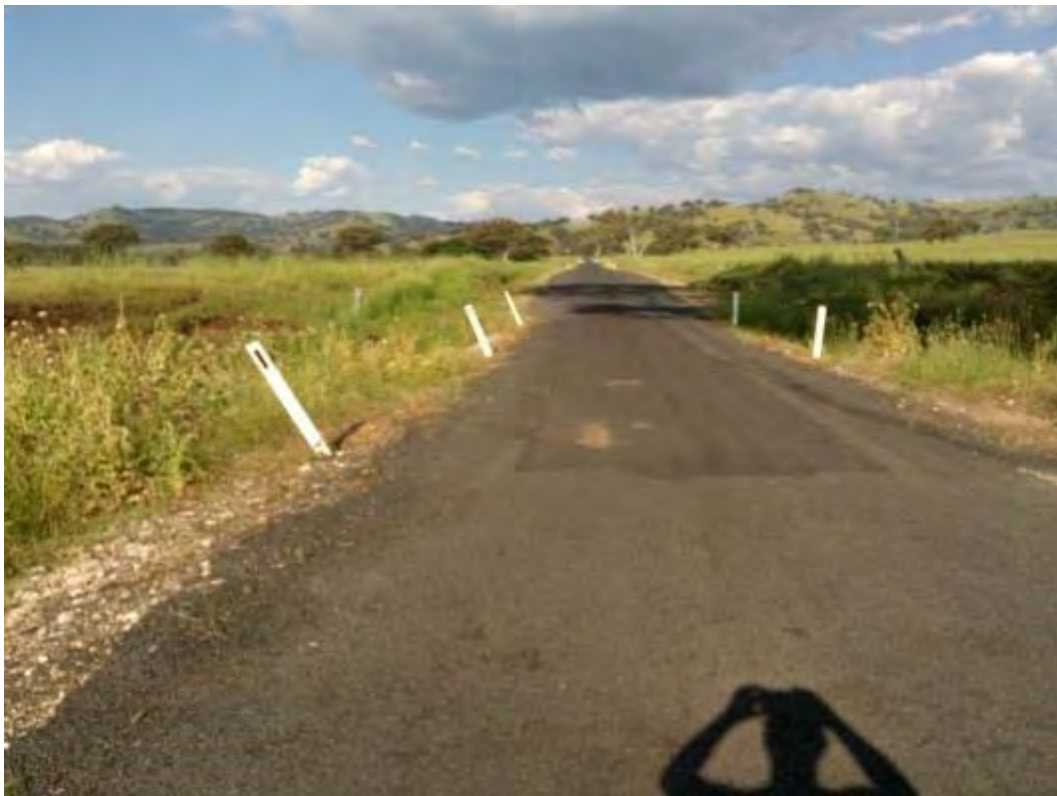
S002 – Internal View Good Condition

S003 – Coolah Creek Rd – 1500m West of Pandora Intersection

3-900mm Pipe Culvert
Good Condition and Serviceable



S003 – Location Plan

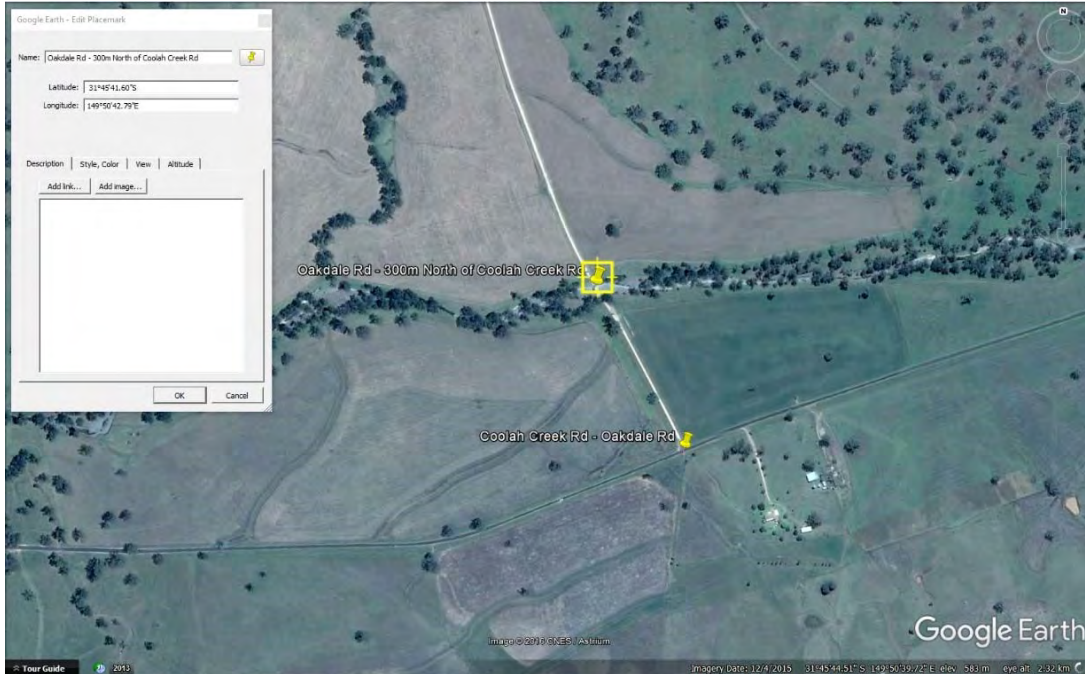


S003 - View to East



S003 – 3 - 900mm Pipe Culvert

S004 – Oakdale Rd - 300m North of Coolah Creek Rd
Concrete Causeway, Submerged and Flood Prone.
Poor Condition and Serviceable. Upgrade likely required.
Surface on Causeway is slippery due to moss



S004 – Location Plan



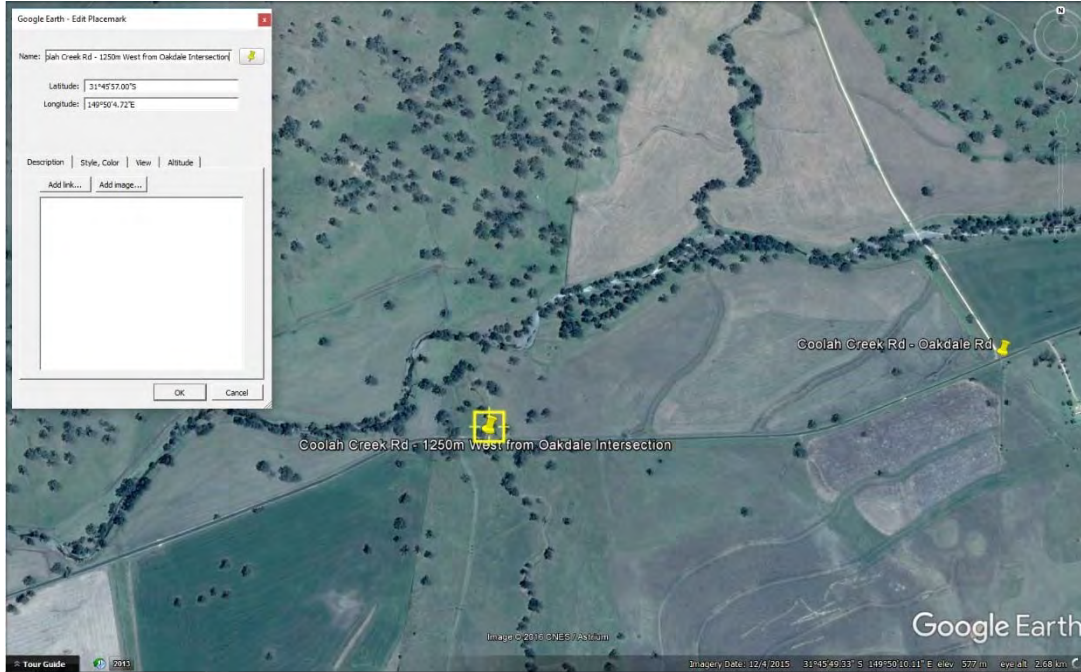
S004 – View to North



S004 – Top View of Causeway, Slippery Mossy Surface as Shown

S005 – Coolah Creek Rd - 1250m West from Oakdale-Coolah Creek Intersection

Concrete causeway with bitumen seal - 3-1200mm Pipe Culvert,
Entrance to culvert is blocked,
Further inspection of internal condition is required
Fair condition and Serviceable



S005 – Location Plan

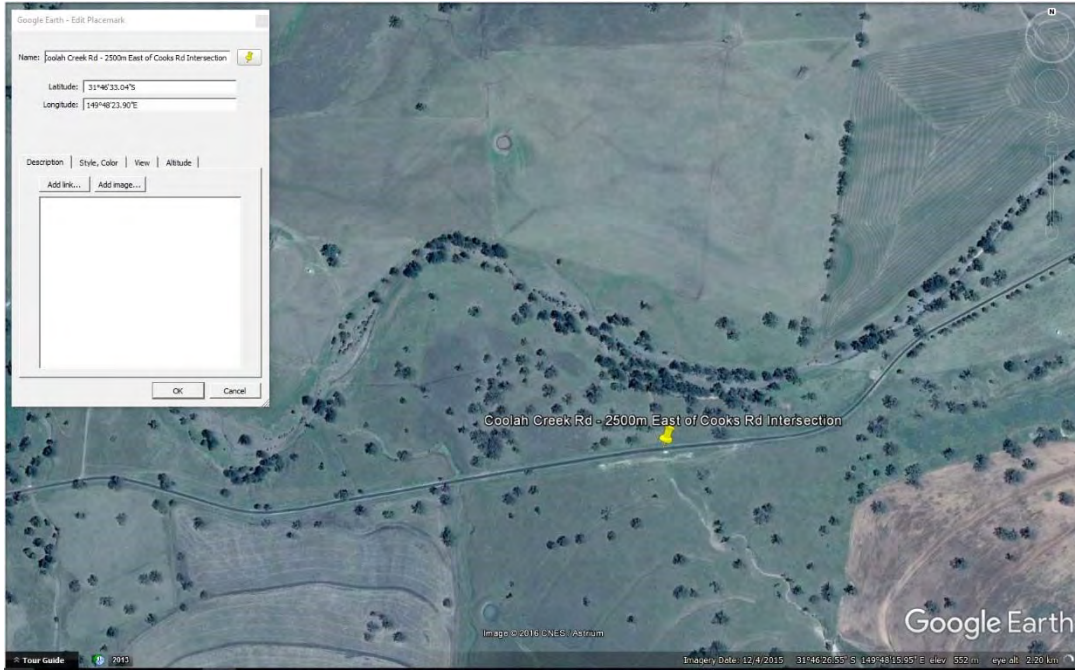


S005 – Blocked Pipe Culvert



S005 – View to East

S006 – Coolah Creek Rd - 2500m East of Cooks Dr Intersection
1200mm Pipe Culvert
Good condition and Serviceable



S006 - Location Plan



S006 - View to East

S007 – Coolah Creek Rd - 1500m East of Cooks Dr Intersection

Concrete causeway 3-1050mm Pipe Culvert

Big invert cracks internally

Poor condition and serviceable, upgrade required.



S007 – Location Plan

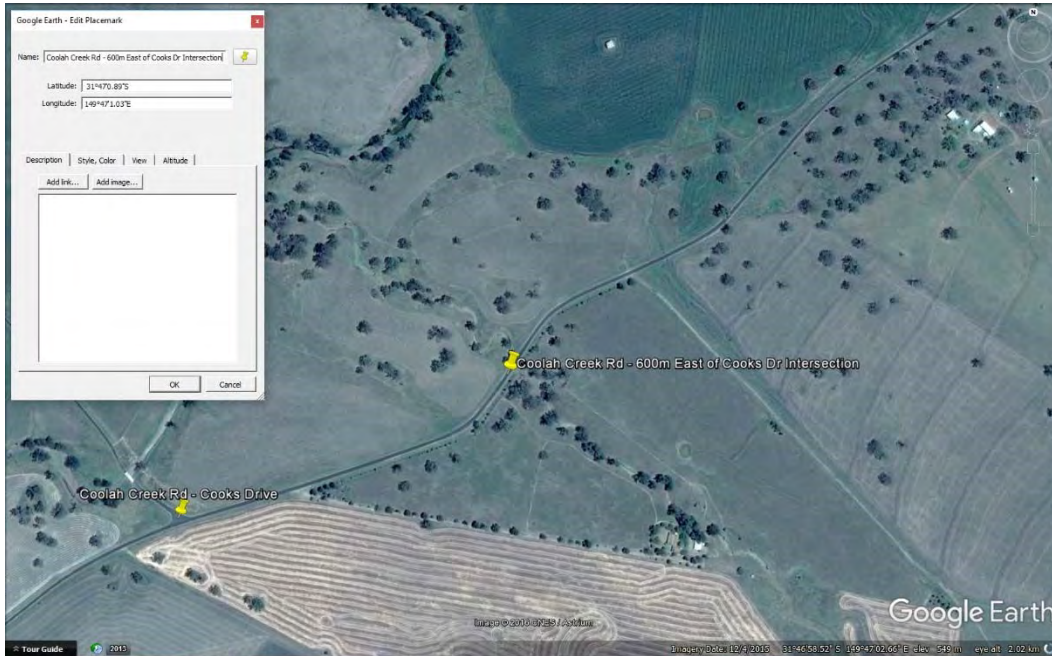


S007 - 3-1050 Pipe Culvert, Crack shown on bottom side of middle Culvert



S007 – Internal View, Crack shown along circumference at Mid-Length

S008 – Coolah Creek Rd - 600m East of Cooks Dr Intersection
3 -1200mm Pipe Culvert
Fair Condition and serviceable



S008 - Site Location



S008 – View to North



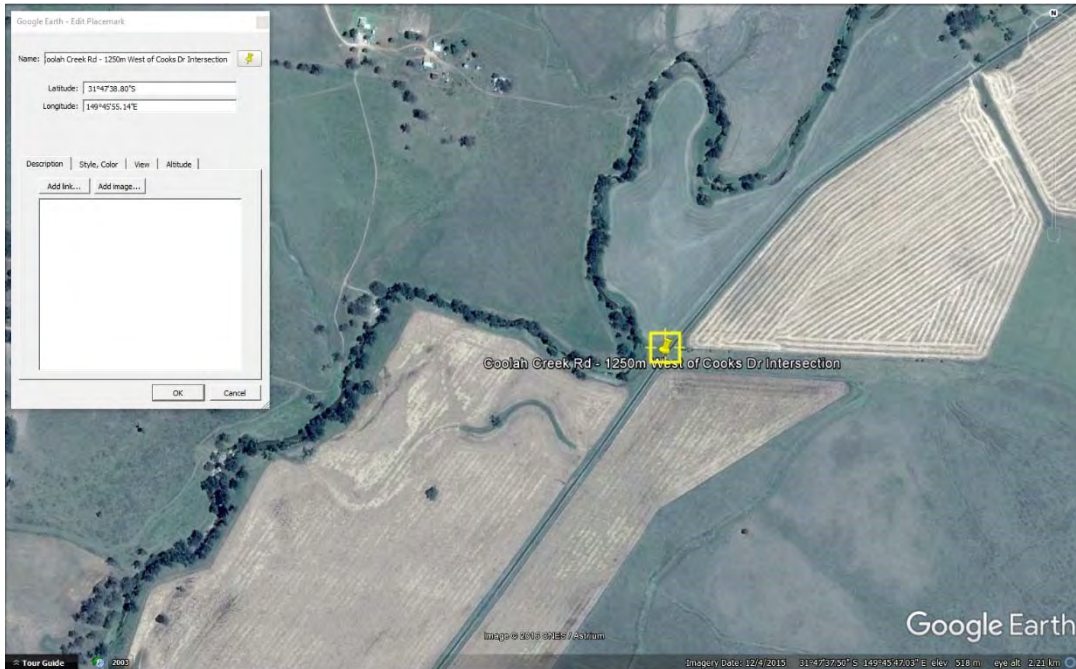
S008 – View Down River



S008 – 3 × 1200mm Pipe Culvert

S009 – Coolah Creek Road - 1250m West of Cooks Drive Intersection

4-1200mm Wide-450mm High Reinforced Concrete Box Culvert – Skewed across road alignment.
Good Condition and Serviceable

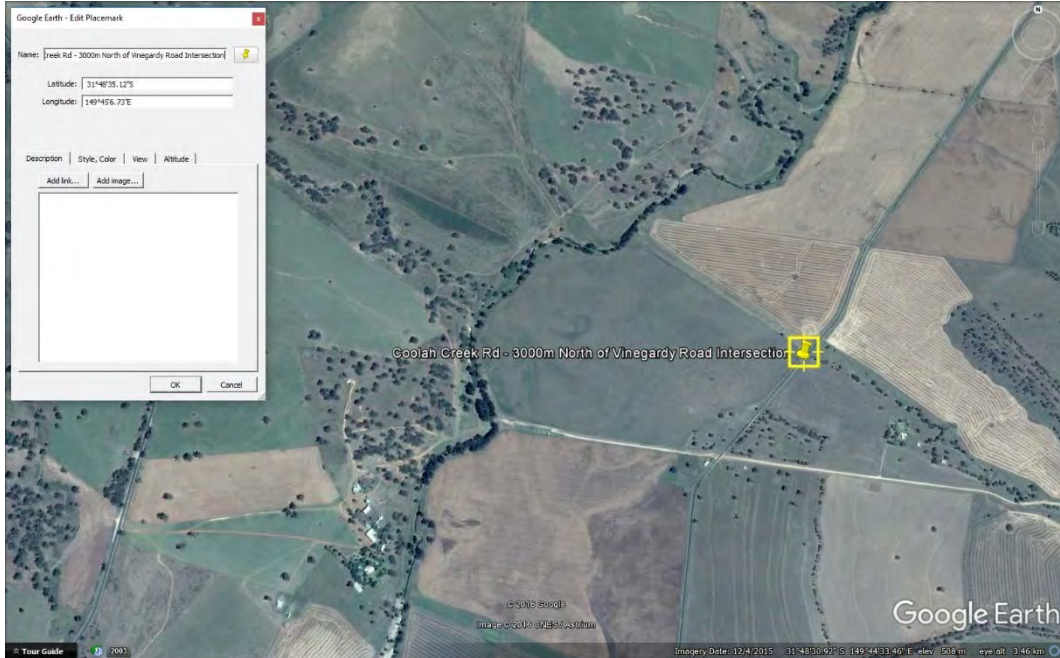


S009 – Location Plan



S009 – 4-1200mm Wide-450mm High Reinforced Concrete Box Culvert

S010 – Coolah Creek Rd - 3000m North of Vinegaroy Road Intersection
3-1050mm Pipe Culvert
Moderate Condition and Serviceable. Poorly maintained.



S010 – Location Plan



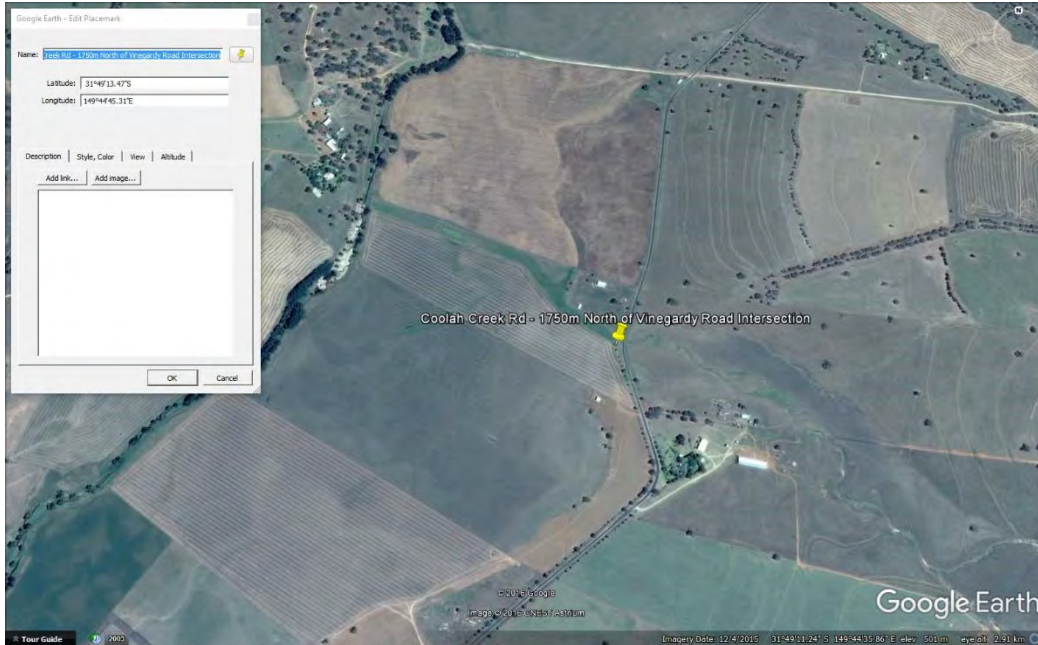
S010 – View to North

S011 - Coolah Creek Rd - 1750m North of Vinegaroy Road Intersection

Concrete Causeway 3-1050mm Pipe Culvert

Internal Condition is satisfactory.

Good Condition and Serviceable



S011 - Location Plan



S011 – View to South

Level 2, 39 Sherwood Road
Toowong QLD 4066

mail@icubed.com.au
www.icubed.com.au

P: 07 3870 8888



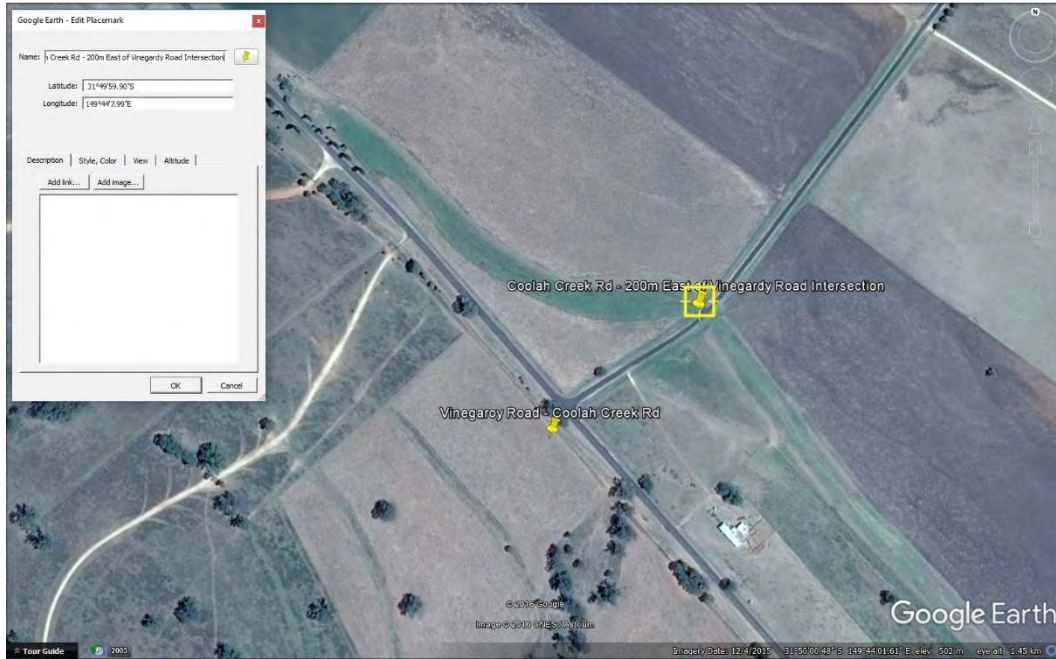
S011 –3-1050 Pipe Culvert



S011 – Interior View

S012 - Coolah Creek Rd - 200m East of Vinegaroy Road Intersection

7500mm wide Concrete Causeway with bitumen seal,
3-750mm high-2400mm long reinforced concrete box culvert
Fair condition and serviceable



S012 – Location Plan

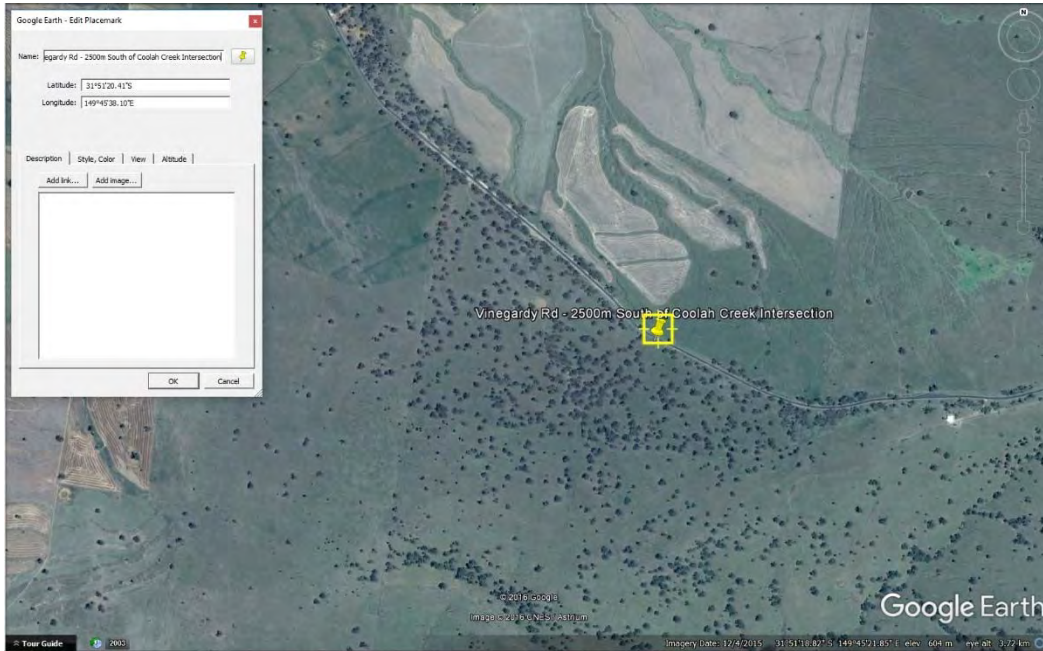


S012 – View to South



S012 – 3-750mm high-2400mm long reinforced concrete box culvert

S013 - Vinegaroy Rd - 2500m South of Coolah Creek Intersection
1200mm Pipe Culvert
Good Condition and Serviceable



S013 – Location Plan



S013 – View to North



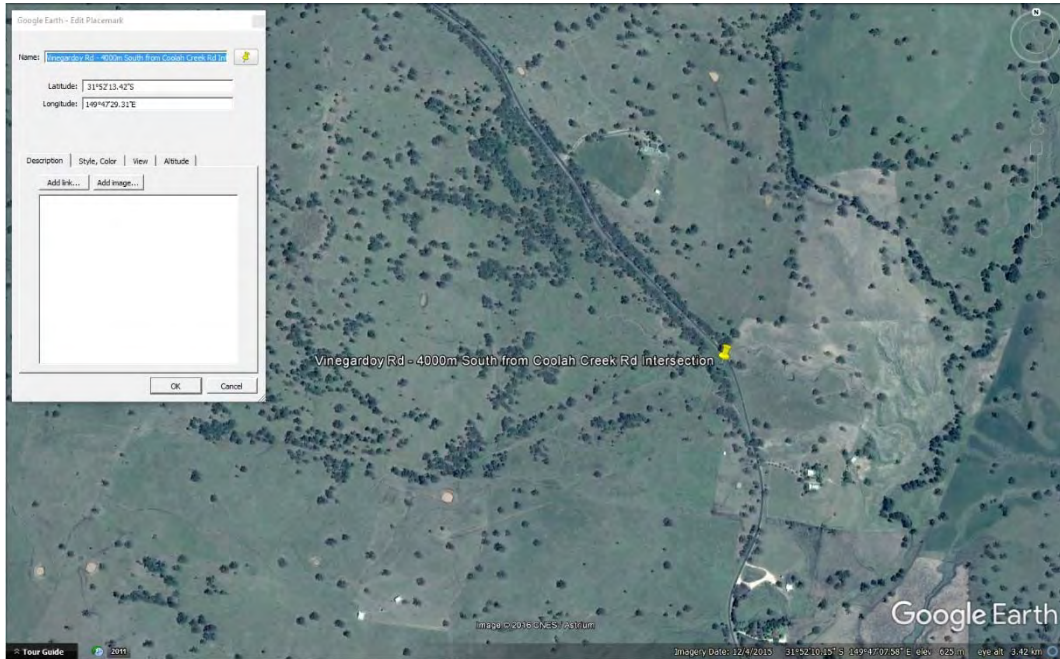
S013 – Single 1200mm Pipe Culvert

S014 – Vinegaroy Rd - 4000m South from Coolah Creek Rd Intersection

Causeway Dual-1200mm pipe culvert

Skewed and not level

Moderate condition and Serviceable



S014 – Location Plan

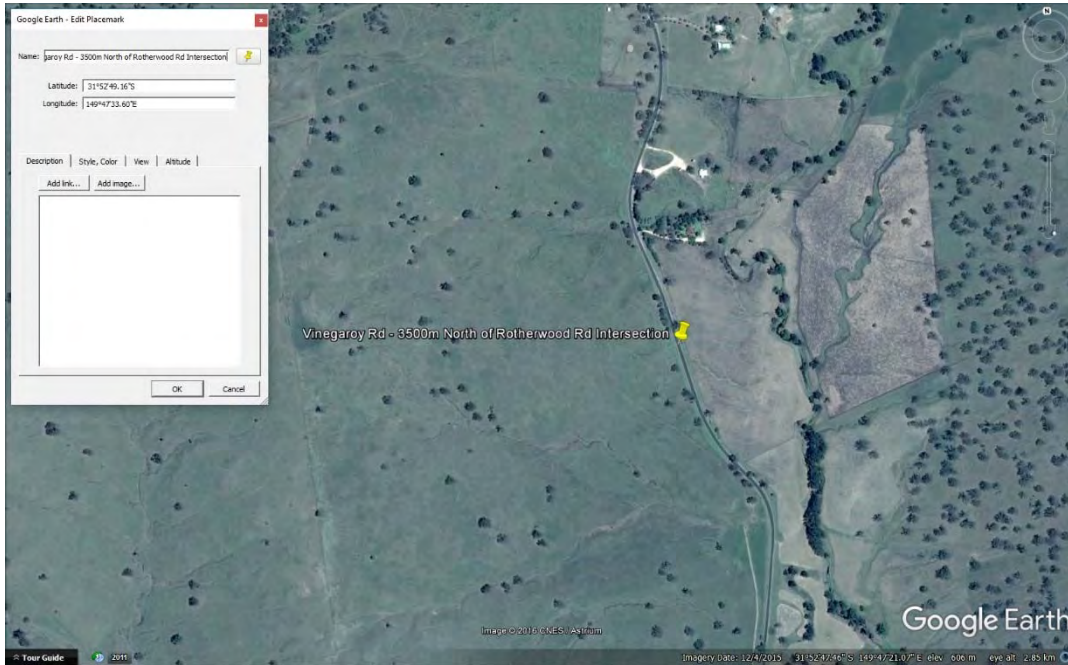


S014 – View to North



S014 – Dual 1200mm Pipe Culvert

S015 - Vinegaroy Rd - 3500m North of Rotherwood Rd intersection
450mm pipe culvert
Fair condition and serviceable



S015 – Location Plan



S015 – View to East



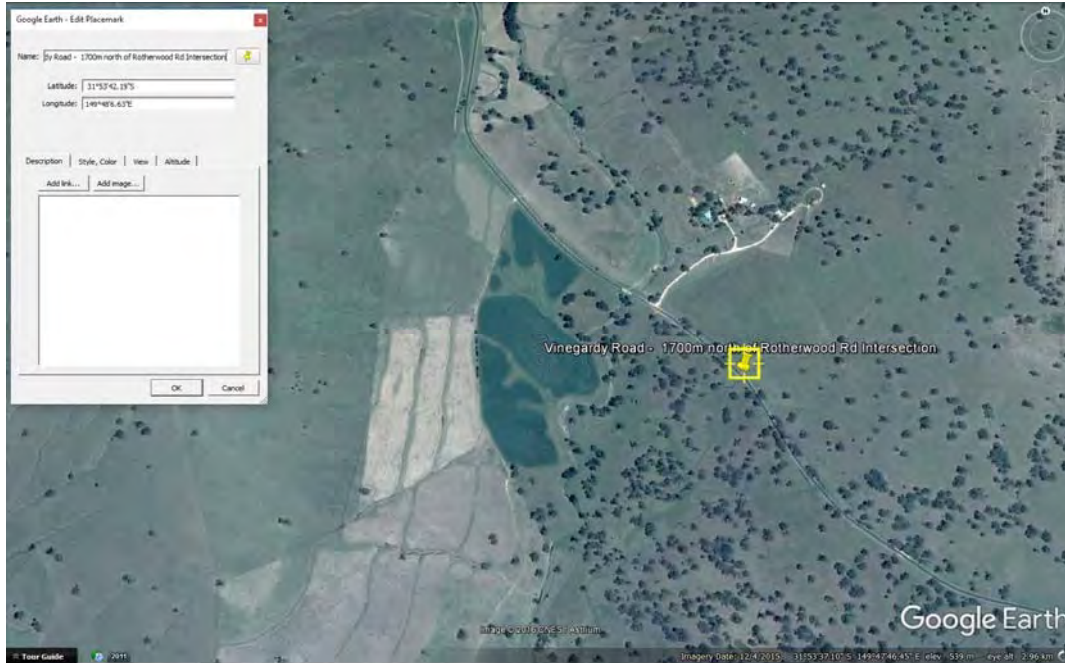
S015 – 450mm Pipe Culvert

S016 – Vinegaroy Road – 1700m North of Rotherwood Rd Intersection

Dual 900mm Pipe Culvert.

Scouring of outlet visible.

Moderate Condition and Serviceable.



S016 – Location Plan



S016 – Dual 900mm Pipe Culvert

Level 2, 39 Sherwood Road
Toowong QLD 4066

mail@icubed.com.au
www.icubed.com.au

P: 07 3870 8888



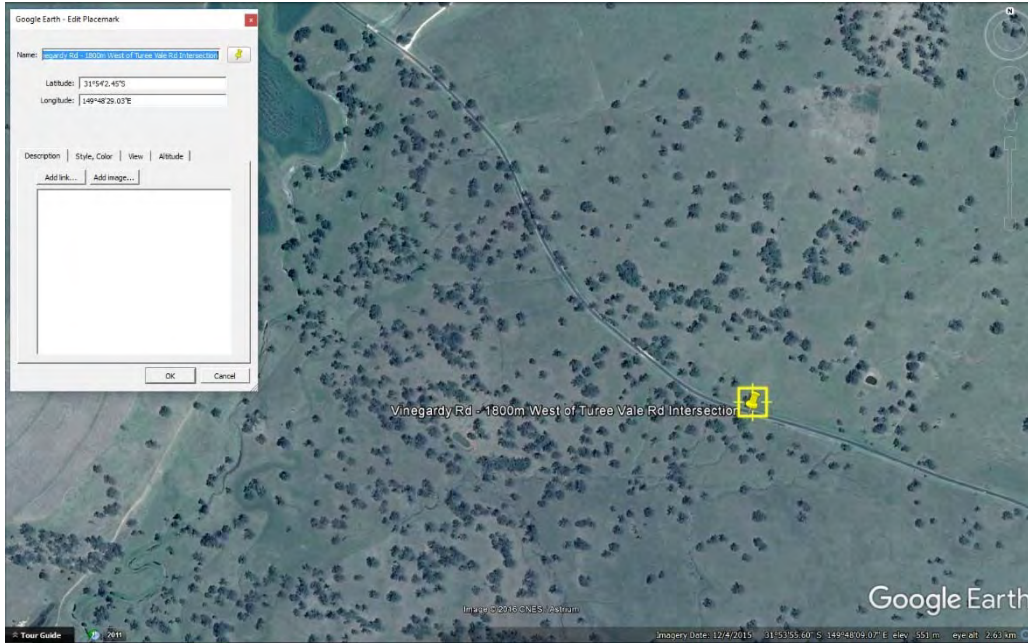
S016 – View North

S017 – Vinegaroy Rd - 1800m West of Turee Vale Rd Intersection

Dual-1050mm pipe culvert

Fair condition and serviceable.

Poorly maintained.



S017- Location Plan



S017 – Dual-1050mm Pipe Culvert



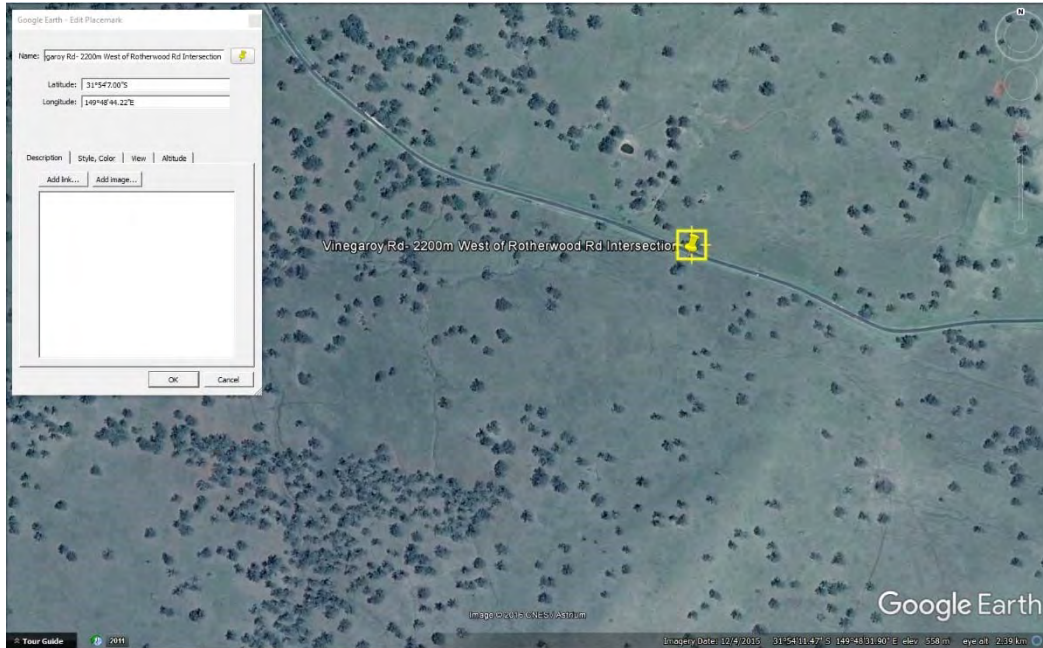
S017 – View to North-West

S018 – Vinegaroy Rd- 2200m West of Rotherwood Rd Intersection

450mm Pipe Culvert

Currently blocked, to be reassessed prior to construction.

Moderate condition and serviceable. Maintenance required.



S018 – Location Plan

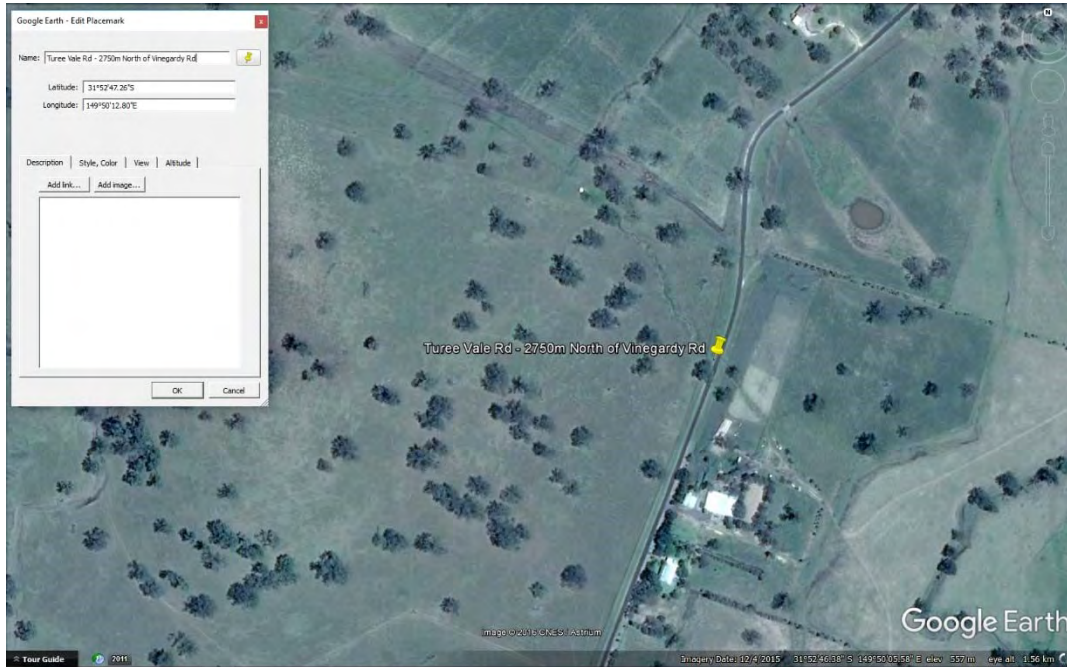


S018 – Blocked Pipe Culvert



S018 – View to West

S019 – Turee Vale Rd - 2750m North of Vinegaroy Rd
Pipe culvert not accessible. Dimensions and condition unknown.
Maintenance required prior to construction to enable inspection.

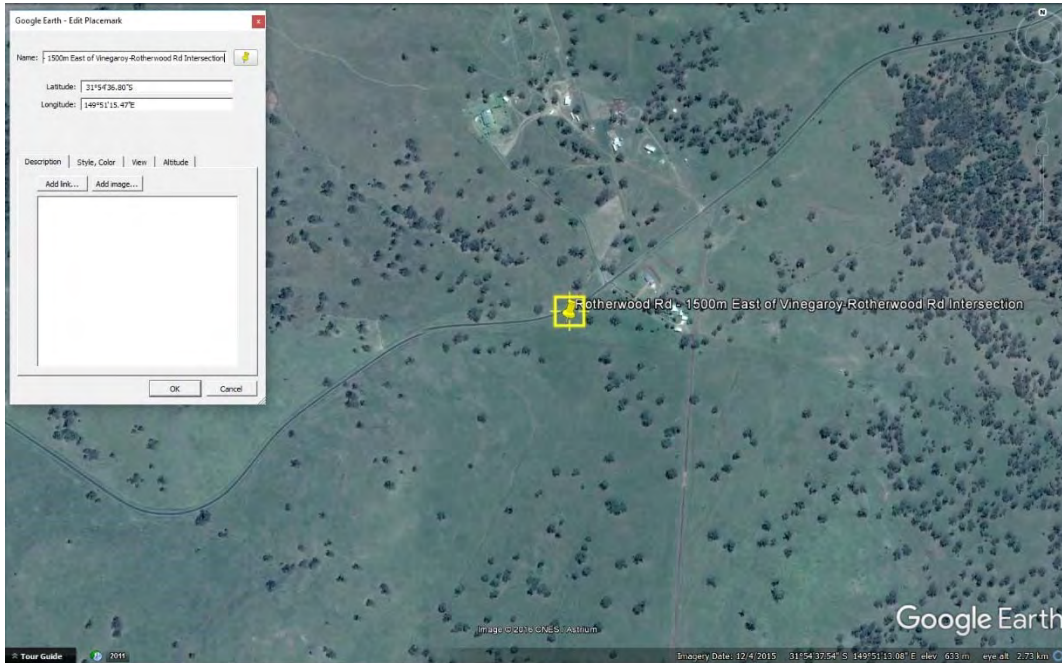


S019 – Location Plan



S019 – View to North

S023 – Rotherwood Road – 1500m East of Vinegaroy Intersection
Dual 1200mm-600mm Reinforced Concrete Box Culvert
Fair Condition and Serviceable



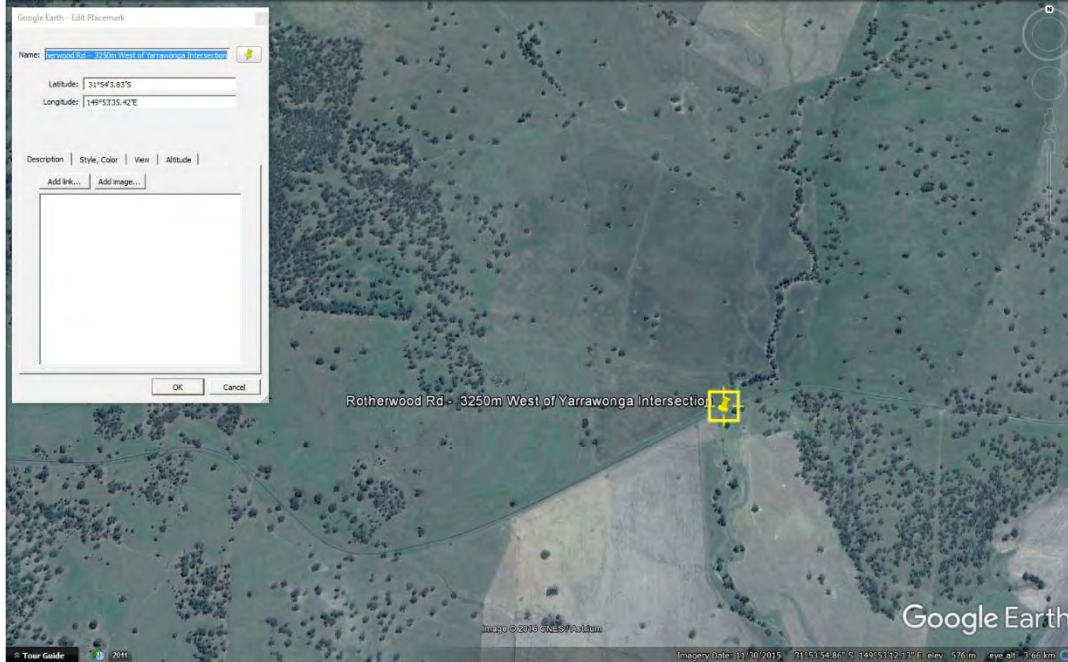
S023 – Location Plan



S023 – View to East

S024 – Rotherwood Rd - 3250m West of Yarrawonga Intersection

Causeway on Starkey Creek
Submerged and prone to flooding
Poor condition, upgrade required.



S024 – Location Plan

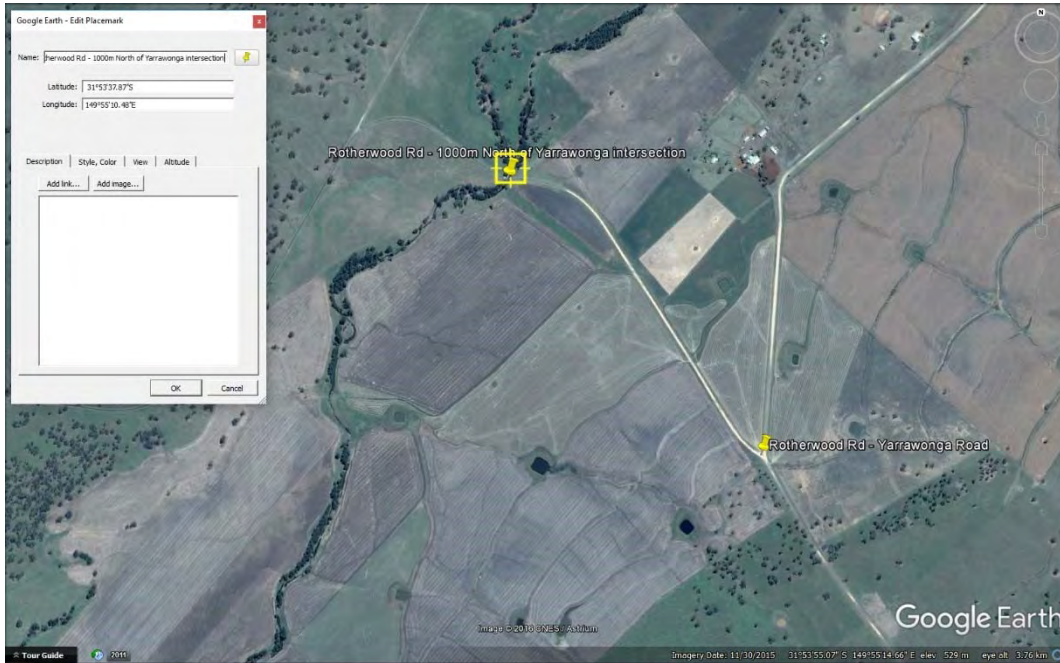


S024 – View to East



S024 – Causeway

S025 – Rotherwood Road 1000m North of Yarrawonga Intersection
Concrete Causeway 750mm invert culvert
Fair condition and serviceable



S025 – Location Plan



S025 – View East



S025 – Invert Culvert



S025 – Top View



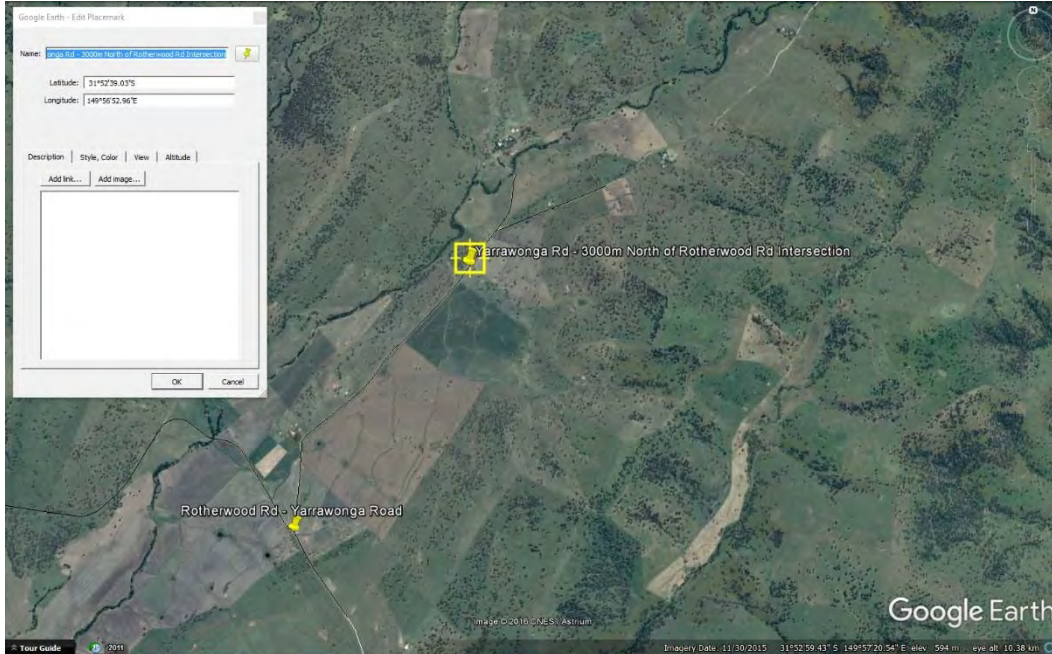
S025 – Edge of culvert is worn.

S026 - Yarrawonga Rd - 3000m North of Rotherwood Rd Intersection

600mm Pipe Culvert

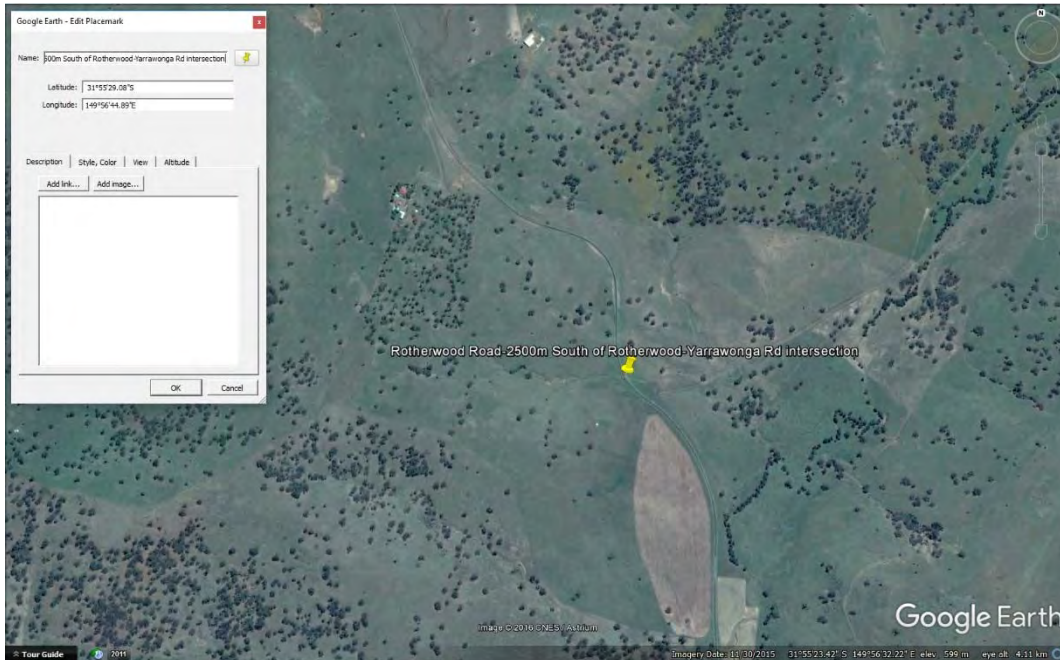
Blocked and inaccessible

Maintenance and further inspection required.



S026 – Location Plan

S027 – Rotherwood Road 2500m South of Rotherwood-Yarrowonga Rd intersection
Dual 1200mm pipe culvert
Moderate condition and serviceable



S027 – Location Plan



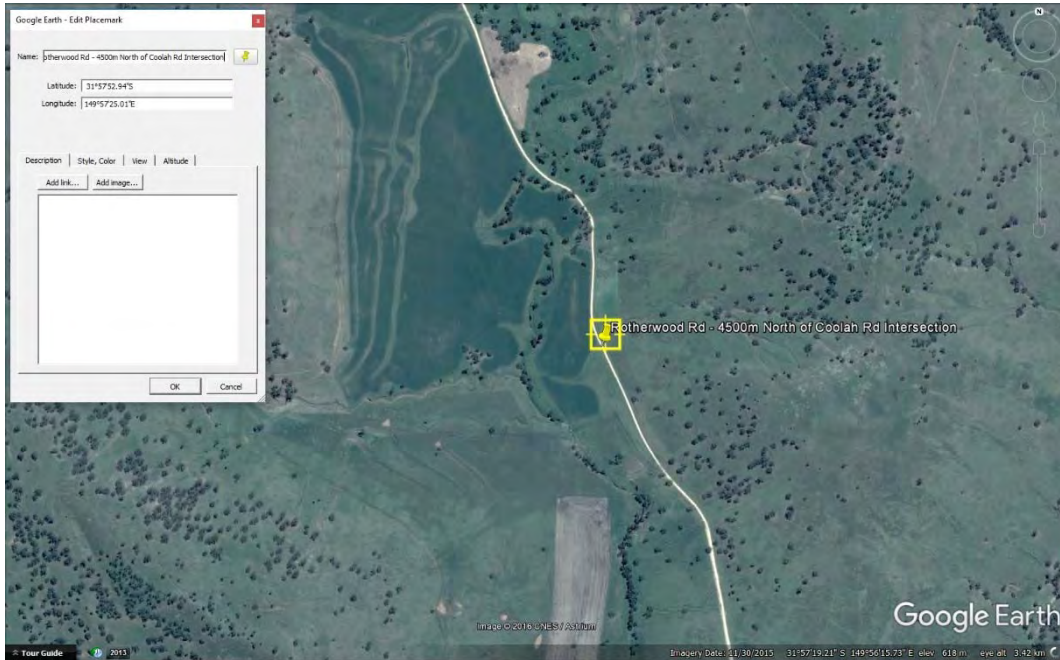
S027 – Dual Pipe Culvert

Level 2, 39 Sherwood Road
Toowong QLD 4066

mail@icubed.com.au
www.icubed.com.au

P: 07 3870 8888

S029 – Rotherwood Road 4500m North of Coolah Rd intersection
Causeway, 900mm Pipe Culvert
Moderate Condition and Serviceable



S029 – Location Plan



S029 – View from West

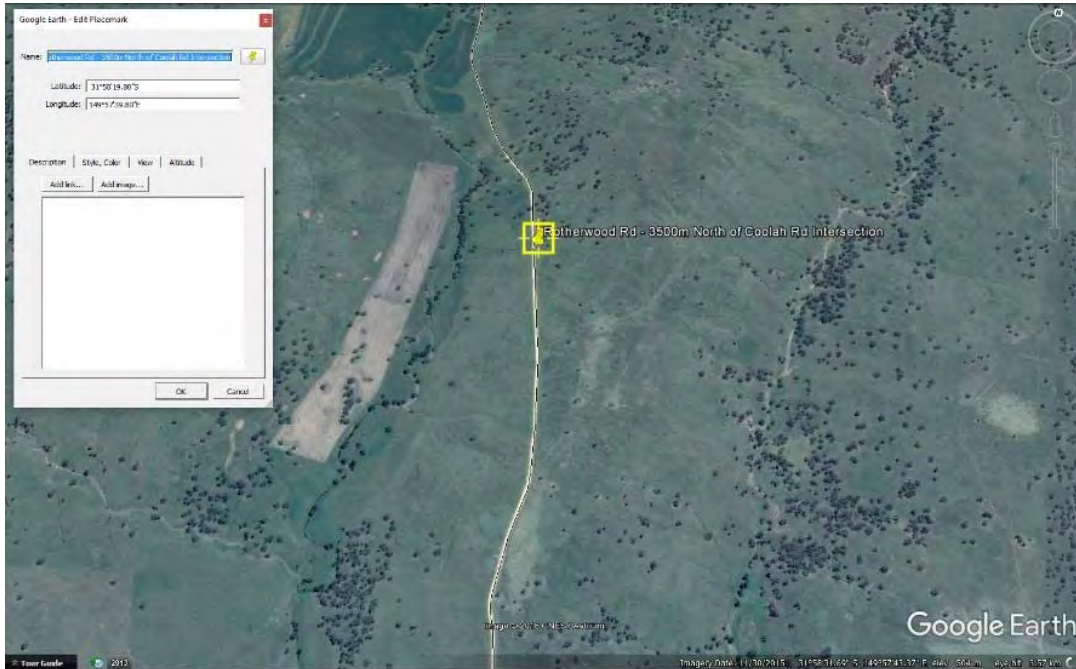
S030 – Rotherwood Rd - 3500m North of Coolah Rd Intersection

750mm Pipe Culvert

Cracked head wall,

No photo evidence of culvert but location of medium importance

Will require further inspection



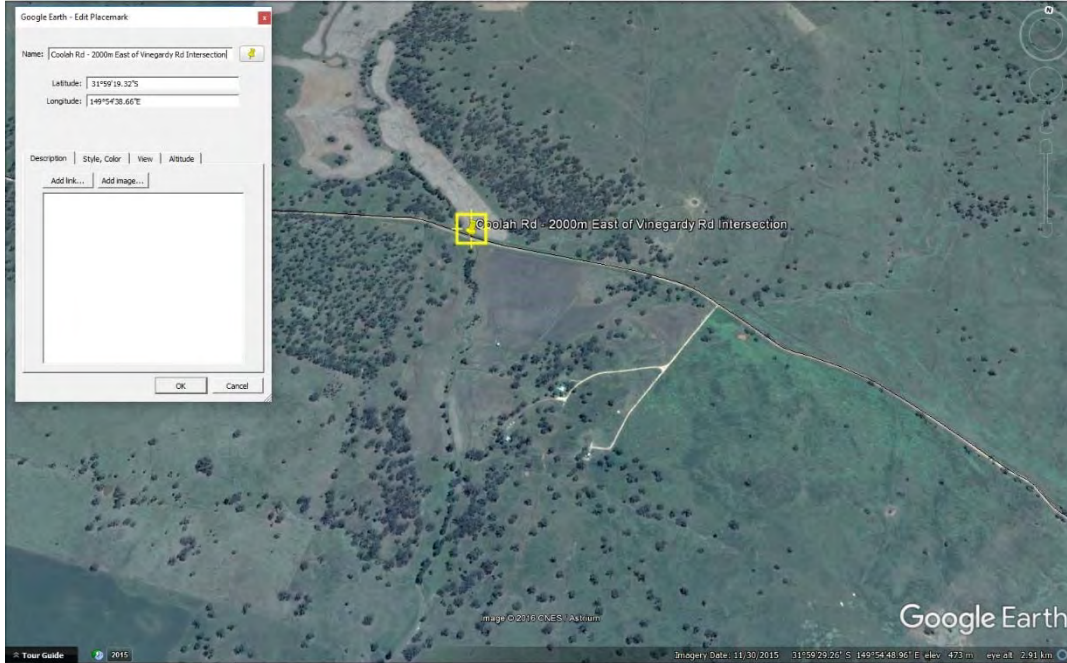
S030 – Location Plan

S031 - Coolah Rd - 2000m East of Vinegaroy Rd Intersection

Causeway

No culvert

Survey required to verify compliance with vertical geometry requirements of the proposed heavy vehicle configurations.



S031 – Location Plan

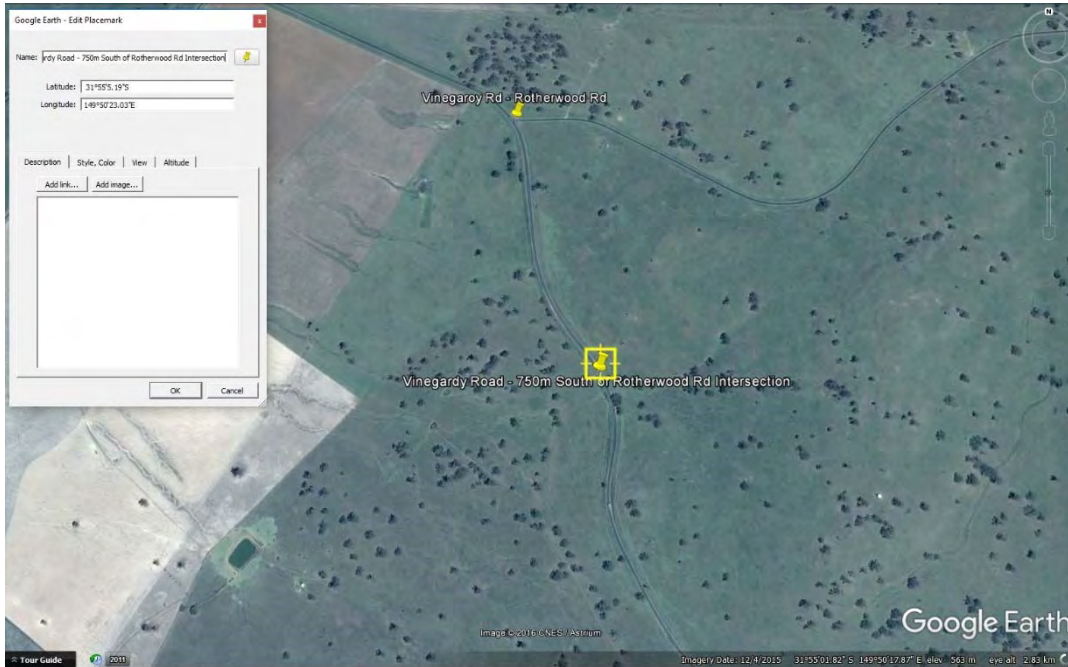


View to East



S031 – View to East, Steep section of Road

S032 – Vinegaroy Road – 750m South of Rotherwood Rd – Vinegaroy Rd Intersection
1200mm - 900mm Reinforced concrete box culvert
Moderate condition and serviceable



S032 – Location Plan



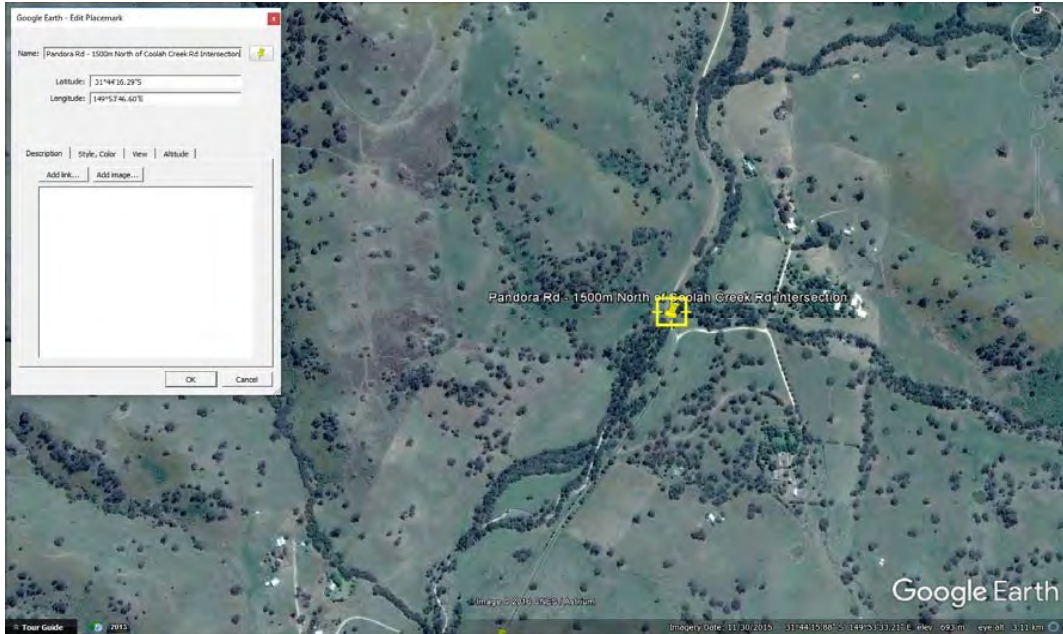
S032 – Box Culvert

S033 – Pandora Rd – 1500m North of Coolah Creek Intersection

4000mm-20000mm Concrete causeway

Poor condition and serviceable

Upgrade may be required



S033 – Location Plan



S033 – 4000mm – 20000mm Causeway

Level 2, 39 Sherwood Road

Toowong QLD 4066

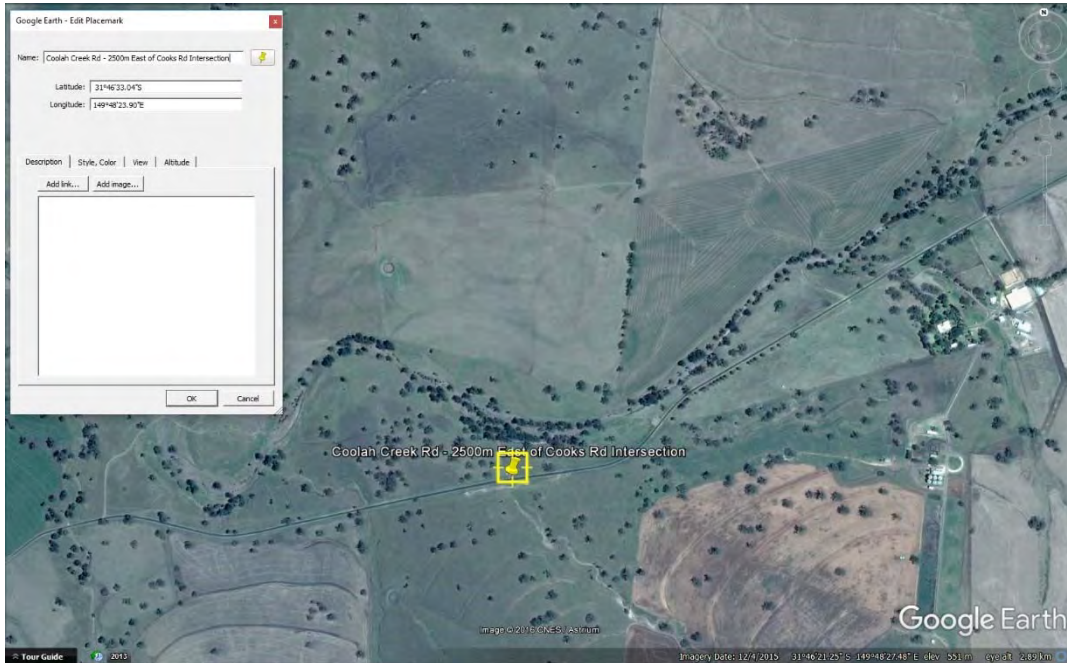
mail@icubed.com.au

www.icubed.com.au

P: 07 3870 8888

S034 - Coolah Creek Rd - 2500m East of Cooks Rd Intersection

Dual 1200mm pipe culvert and 900mm diameter pipe culvert drop inlet.
Good Condition and Serviceable.



S034 – Location Plan



S034 – Dual 1200mm + 900mm pipe culvert drop inlet



S034 – View to East



S034 –View to North

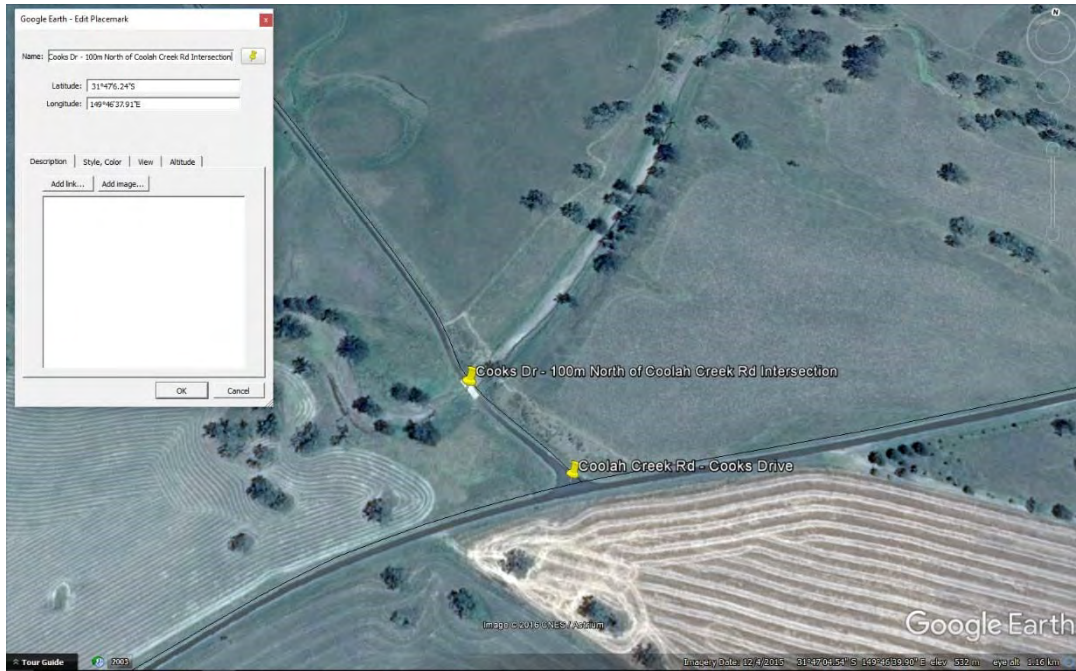
S035 – Cooks Dr - 100m North of Coolah Creek Rd Intersection

Approximately 4900mm-2000mm Floodway

Moderate condition and serviceable,

Survey required to verify compliance with vertical geometry requirements of the proposed heavy vehicle configurations.

Upgrade may be required.



S035 - Location Plan

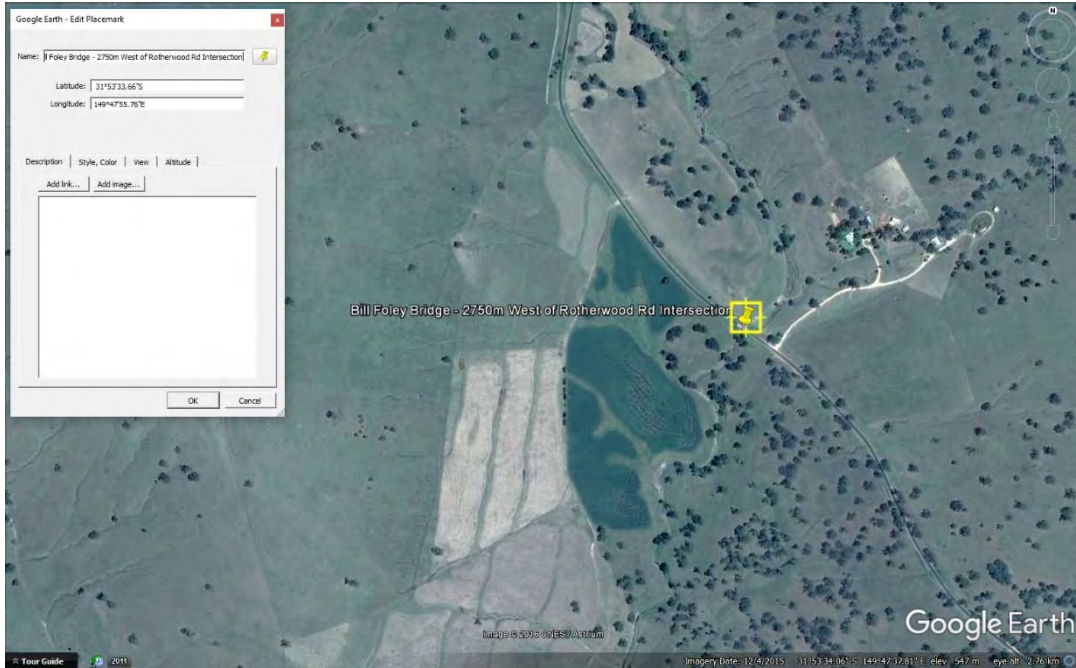


S035 – View of Causeway



S035 - View to South towards location, 'Road subject to Flooding' sign observed

Bill Foley Bridge – 2750m West of Rotherwood Rd
Reinforced concrete bridge labelled “1965 DMR” on Croppy Creek
4 x 7600mm spans by 7500mm with 4 x 360mm columns/bents
Fair condition and serviceable



S036 – Location Plan



S036 – Soffit View



S036 – View to North



S036 – View to North



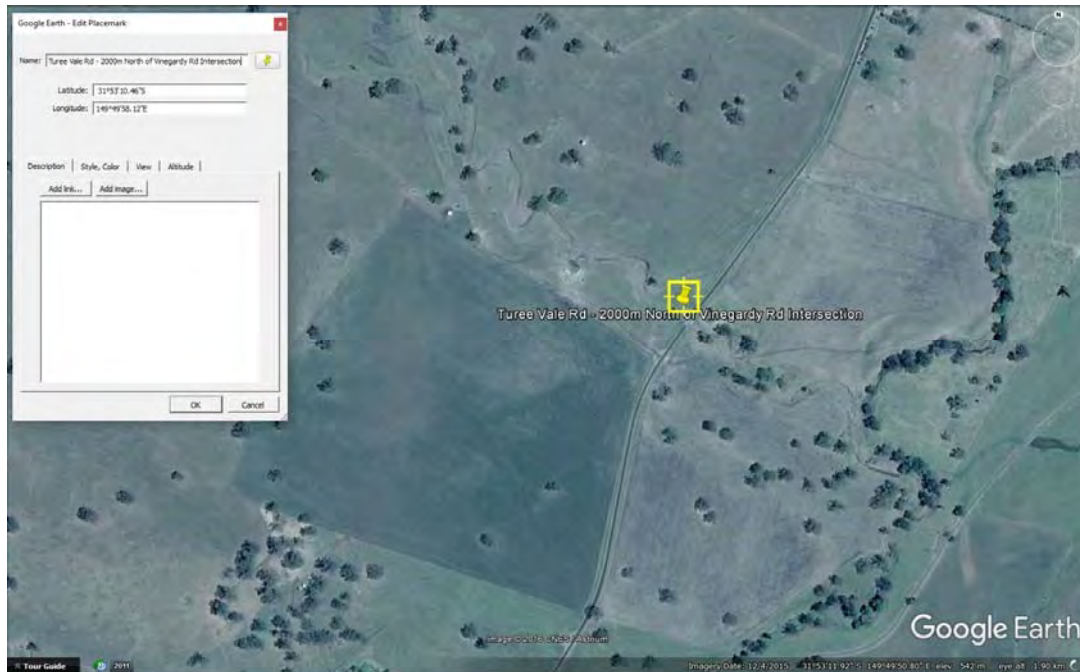
S036 – Bridge Label

S037 – Turee Vale Rd - 2000m North of Vinegaroy Rd Intersection

5500mm by16000mm concrete causeway with 1250mm pipe culvert

Exposed reinforcing steel will require repair.

Survey required to verify compliance with vertical geometry requirements of the proposed heavy vehicle configurations.



S037 – Location Plan



S037 – 1250mm Pipe Culvert



S037 – High flow water has eroded the concrete exposing the reinforcing Steel



S037 – View to South