



ABN 16 607 643 229

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Level One Report

Naric Civil Pty Ltd

Riverbank Estate Stage 16A

Market Drive, Caboolture South



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December 2020

Naric Civil Pty Ltd
P.O.Box 150
Redbank Qld 4301

Re: Riverbank Estate Stage 16A, Market Drive Caboolture South

Geotechnical Testing & Certification.

1 Scope

Ryan & Associates Geotechnical was commissioned by Naric Civil Pty Ltd to provide geotechnical inspections, testing and certification of the filling earthworks at the above-mentioned project.

The project was assumed to be a Residential development as per “AS3798 – 2007 Guidelines on Earthworks for Commercial and Residential Developments to Level one requirement as outlined in Section 8”.

The development comprises of 32 proposed Lots being constructed on previously developed land, controlled filling works has been completed to Lots 1368 – 1399 as detailed on earthworks drawing 19-000817.1 - 200 Refer to Appendix A “Site Plans”.

Ryan & Associates Geotechnical maintained a site presence during the works in accordance with AS3798 – 2007 Level 1. Appendix B – Testing Summary, of this report, contains the testing summary of all testing undertaken with achieved compaction densities.

Site inspections and compaction control testing was carried out as work progressed, with records compiled on all aspects of the earthworks.

This level one report does not cover any fill placed by others prior to or after Ryan & Associates controlled filling works.



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2 Foundation Preparation

2.1 Stripping of Area

All existing topsoil materials were stripped prior to the commencement of filling operations.

Inspections prior to the placement of fill revealed in-situ materials consisting of Silty Clay.

Proof rolling showed no movement under construction plant prior to filling.

2.2 Removal of Unsuitable Materials

No unsuitable materials were required to be removed prior to proof rolling and placement of fill.

3 Controlled Filling

Fill used consisted of on-site materials. Fills were placed using an Excavator and Grader in layers not exceeding 0.2m. The fill zones were compacted using an 815 Pad Foot Compactor.

4 Compaction Control Operations

Compliance testing of fill operations was performed by Ryan & Associates Geotechnical between the Months of September to December 2020.

The test results show, where applicable, a Dry Density Ratio of 95% standard or greater was consistently achieved for testing performed on fill materials.

Testing results are shown in the Testing Summary; refer to Appendix B – Testing Summary of this report.

Individual Lot Certificates for the controlled filling works to Lots 1368 - 1399 have been included within this report, refer to Appendix C.



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5 Conclusion

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in accordance with good engineering practice and can be considered controlled fill. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

The earthworks at the time of completion have been carried out to meet the requirements of Level 1 Certification as per AS3798 – 2007 “Guidelines on Earthworks for Commercial and Residential Development”, Clause 8.2.

RYAN & ASSOCIATES

Geotechnical Pty Ltd.

Stephen Roberts
Laboratory Manager



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6 Limitations

This level one certification report verifies that all supervised fill placed meets the minimum requirements of 95% standard compaction where applicable. As far as could be determined the earthworks at the time of completion have been carried out to meet the requirements of the drawing and specification.

This level one report makes no reference to previous filling works if any or natural ground and its suitability to future design beyond its acceptance of passing proof rolling.

This level one report only covers earthworks filling as detailed in the earth works drawings.

Unless otherwise stated, this Level 1 Certification does not address any other geotechnical issues which may relevant to building construction and serviceability.

This Level 1 Certification does not include backfill to service trenches, retaining walls bridging layers, top soil or any pavements.

A full geotechnical site investigation/classification and foundation design for the specific ground conditions should be carried out by a suitably qualified and experienced professional, prior to building when the structure type and location is known.



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Appendix A

Site Plan



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Appendix B

Testing Summary



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Appendix C

Individual Lot Certificates



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BULK FILL OPERATIONS TESTING CERTIFICATE

(As per AS3798-2007 - Level 1)

**Riverbank Estate Stage 16A
Market Drive, Caboolture South
Lot 1368**

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

The earthworks at the time of completion have been carried out to meet the requirements of Level 1 Certification as per AS3798 – 2007 “Guidelines on Earthworks for Commercial and Residential Development”.

This level one certificate verifies that all supervised fill placed meets the minimum requirements of 95% standard compaction where applicable as per drawing numbered 19-000817.1 - 200.

This level one certificate makes no reference to previous filling works if any or natural ground and its suitability to future design beyond its acceptance of passing proof rolling.

This level one certificate does not cover any fill placed by others prior to or after Ryan & Associates controlled filling works.

Unless otherwise stated, this Level 1 Certification does not address any other geotechnical issues which may be relevant to building construction and serviceability.

This Level 1 Certification does not include backfill to service trenches or retaining walls.

A full geotechnical site investigation/classification and foundation design for the specific ground conditions should be carried out by a suitably qualified and experienced professional, prior to building when the structure type and location is known.

S. Roberts

for and on behalf of

RYAN & ASSOCIATES GEOTECHNICAL

Enc. Drawing showing lateral extent of controlled filling

BULK FILL OPERATIONS TESTING CERTIFICATE

(As per AS3798-2007 - Level 1)

**Riverbank Estate Stage 16A
Market Drive, Caboolture South
Lot 1369**

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Market Drive, Caboolture South
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**Riverbank Estate Stage 16A
Market Drive, Caboolture South
Lot 1371**

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Market Drive, Caboolture South
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Lot 1374**

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Market Drive, Caboolture South
Lot 1377**

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BULK FILL OPERATIONS TESTING CERTIFICATE

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Market Drive, Caboolture South
Lot 1378

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Enc. Drawing showing lateral extent of controlled filling

BULK FILL OPERATIONS TESTING CERTIFICATE

(As per AS3798-2007 - Level 1)

Riverbank Estate Stage 16A
Market Drive, Caboolture South
Lot 1379

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BULK FILL OPERATIONS TESTING CERTIFICATE

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S. Roberts

for and on behalf of

RYAN & ASSOCIATES GEOTECHNICAL

Enc. Drawing showing lateral extent of controlled filling



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(As per AS3798-2007 - Level 1)

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Market Drive, Caboolture South
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A full geotechnical site investigation/classification and foundation design for the specific ground conditions should be carried out by a suitably qualified and experienced professional, prior to building when the structure type and location is known.

S. Roberts

for and on behalf of

RYAN & ASSOCIATES GEOTECHNICAL

Enc. Drawing showing lateral extent of controlled filling



ABN 16 607 643 229

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BULK FILL OPERATIONS TESTING CERTIFICATE

(As per AS3798-2007 - Level 1)

**Riverbank Estate Stage 16A
Market Drive, Caboolture South
Lot 1398**

The results obtained from compaction control testing together with onsite supervision made during earthworks operations indicate that fill materials were consistently placed in a controlled manner and in accordance with good engineering practice. As far as could be determined the earthworks have been carried out to meet the requirements of the drawings and specifications.

The earthworks at the time of completion have been carried out to meet the requirements of Level 1 Certification as per AS3798 – 2007 “Guidelines on Earthworks for Commercial and Residential Development”.

This level one certificate verifies that all supervised fill placed meets the minimum requirements of 95% standard compaction where applicable as per drawing numbered 19-000817.1 - 200.

This level one certificate makes no reference to previous filling works if any or natural ground and its suitability to future design beyond its acceptance of passing proof rolling.

This level one certificate does not cover any fill placed by others prior to or after Ryan & Associates controlled filling works.

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