

Cert 1e - Quality Assurance Checksheet

ROADING



Date:

Consent Holder:

Resource Consent Number:

Development Name and Stage:

Site Address:

Design Engineer and Qualification(s):

| No | Test Required | Undertaken by | Quantity | Requirements | Checked |
|----------|---------------------------------|----------------------|--|--|---------|
| 1 | Sub-base | | | | |
| (a) | Grading | IANZ | 1/1000m ³ | >100% passing 70mm sieve Stone size <60% Pavement depth >40% passing 19mm sieve >10% passing 725um | |
| (b) | Sand Equivalent | IANZ | 1/1000m ³ | >25 | |
| (c) | Crushing Resistance | IANZ | 1/1000m ³ | Max 10% fines | |
| (d) | CBR | IANZ | 1/1000m ³ | 80% min | |
| (e) | Compaction Curve | IANZ | 1 test | Prior to pavement construction | |
| (f) | Compaction | IANZ | 20m alternate lanes | >95 mean, >92 min of MDD | |
| (g) | Tolerances (string results) | Surveyor/ Contractor | Centreline and edge of seal at 20m intervals | -25mm + 5mm | |
| 2 | Basecourse | | | | |
| (a) | Grading, TNZ or GAP40 | IANZ | 1/1000m ³ or road | Standard grading curves | |
| (b) | Compaction curve (OMC and MDD) | IANZ | 1 test | Prior to pavement construction | |
| (c) | Compaction (nuclear densometer) | IANZ | 20m alternate lanes | >98 mean, >95 min | |
| (d) | Crushing Resistance | IANZ | 1/1000m ³ or road | <10% | |
| (e) | Sand Equivalent | IANZ | 1/1000m ³ or road | Not less than 40 Not less than 25 (Minor roads) | |
| (f) | Tolerances | | | | |
| | - straight edge | CPEng | Entire Road and Edge of Seal | 10mm over 3m | |
| | - level (string) | CPEng | | -5m + 15mm no K&C 5m + 5mm K&C, Asphalt -0mm + 10mm K&C, 2 coat | |
| (g) | Metal Tapers | Surveyor | All Roads | 1:5 gradient and compaction | |

| | | | | | |
|--------|---|--------------------|---------------------------|---|-----|
| (h) | Benkelman Beam Test (asphaltic concrete) | Operator | Centre of lane every 20m | As per Code | |
| 3 | Edge Marker Posts | CPEng | Entire Road | MOTSAM | |
| 4 | Streetlights | CPEng | All | Completed as per design and working | |
| 5 | Street Planting | CPEng | All | As per approved documents, root shrouds in | |
| 6 | Concrete Work | CPEng | All | General check for workmanship and as per design | |
| | Concrete Strength Dockets | xxx | xxx | xxx | xxx |
| 7 | 2 Coat (refer) | | | | |
| (a) | Bitumen (M1 & M3) | Operator | 2 x 4L/Truck | M1 & M13 | |
| (b) | Chip (M6) | IANZ | 1 per 500m ³ | 85-89 | |
| | - Cleanliness | IANZ | 1 per 800m ³ | M/6 | |
| | - ALD/ALG | IANZ | Quarry every 6 months | 10% fines | |
| | - Crushing | IANZ | Quarry once every 2 years | AA or BA | |
| | - Weathering | IANZ | Quarry once every 2 years | | |
| | - Polished Stone | IANZ | Quarry once every 2 years | | |
| (c) | Tolerances | As per base course | | | |
| (d) | Spray Rate Design and Compliance | CPEng | Each Run | M/6 | |
| 8 | Asphaltic Concrete (compliance with TNZ M10) | | | | |
| (a) | Materials (TNZ M10) | IANZ | | M/6 | |
| (i) | Grading Envelope | IANZ | | Curve Compliance | |
| (ii) | Effective Binder Content | IANZ | | Refer to Spec | |
| (iii) | Minimum VMA % | IANZ | | Refer to Spec | |
| (iv) | Stability | IANZ | | Refer to Spec | |
| (v) | Air Voids | IANZ | | Refer to Spec | |
| (vi) | Flow | IANZ | | Refer to Spec | |
| (vii) | Coarse Aggregates | IANZ | | Refer to Spec | |
| | - Weathering | IANZ | | AA or BA | |
| | - Single Broken Faces | IANZ | | 98% min | |
| | - Two Broken Faces | IANZ | | 60% min | |
| | - Crushing Resistance | IANZ | | 200kN min 10% | |
| | - Polished Stone Value | IANZ | | 85% min by mass | |
| (viii) | Fine Aggregates | IANZ | | | |
| | - Crushing Resistance | IANZ | | 200kN | |
| | - Sand Equivalent | IANZ | | 35 minimum | |
| | - Clay Index (0/0075mm) | IANZ | | 3 maximum | |
| (b) | Laying | CPEng | Entire Road | P9 | |
| | - Joints | CPEng | Entire Road | P9 | |