



TECHNICAL SPECIFICATION

DRFA PROGRAM – WOWAN AREA RECONSTRUCTION WORKS
CONTRACT NUMBER: T2526.16

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1. INTRODUCTION

Banana Shire Council (Council) has been activated under a declared event, resulting in damage to the regions local road network. Council requires restoration works for its public assets to be carried out under the Disaster Recovery Funding Arrangements (DRFA) Program.

2. PURPOSE

The purpose of this specification is to:

1. Ensure that the quality of restoration works supplied to Council by the Contractor, are of satisfactory durability, strength and appearance, meets all relevant standards; and
2. Specify essential technical and operational requirements pertaining to Disaster Recovery Funding Arrangement (DRFA) works included in this Contract.

3. AVAILABLE INFORMATION

3.1 Labour, Equipment and Materials

The Scope of Work requires the Contractor to provide, at their own cost and expense, all transport, labour, traffic control, materials, plant & equipment, signage, electronic systems and processes, office and site facilities, for the proper and complete performance of the works.

The scope of work includes reconstructing eligible essential public assets, damaged by the eligible disaster, to their pre-disaster function in accordance with the Queensland Disaster Funding Guidelines June 2021 Clause 9.1 (3) Assistance available.

Traffic Control must be provided in accordance with the Queensland Guide for Temporary Traffic Management (QGTMM) and associated standards.

The Contractor shall take a sustainable approach to material management. The following information is available to help with your understanding of intended scope of this project:

- | | |
|--|--------------|
| • General Specification | (Appendix A) |
| • Site | (Appendix B) |
| • Schedule K1 – Price Schedule | (Appendix C) |
| • QRA Treatment Guide 20-21 | (Appendix D) |
| • Technical Specification | (Appendix E) |
| • Minimum Traffic Signage Requirements | (Appendix F) |

The Contractor shall familiarise themselves as to the nature of the Site of the Works and of all matters and things relating to the WUC, including but not limited to the nature of ground, slope stability, services and amenities, in ground services, condition of the sites, access to the sites and likely weather conditions.

The Contractor must not rely on dimensions and levels provided by the Principal and must obtain or check all measurements before commencing the Works.

The Contractor shall verify details of existing work before modifying it. Any discrepancies must be reported to the Superintendent immediately.
Specific (spot) levels shown on drawings take precedence over contour lines and ground profile lines.

Standard AHD and Geocentric Datum of Australia (GDA94) is the basis of all levels and coordinates associated with the Works unless stated otherwise. The Contractor is responsible for setting out of the Work from GPS coordinates or Recover and a qualified Surveyor is to be engaged to undertake the set out (if applicable).

The Superintendent may require samples of any or all materials to be submitted for its approval before their use. Whether the Superintendent has called for samples or not, all materials used in the WUC are subject to the Superintendent's written approval:

- (a) the Contractor may request the Superintendent to direct that alternative materials or equipment be substituted; and
- (b) the Superintendent may (but shall not be obliged to do so for the benefit of the Contractor), if the Superintendent is of the opinion that the characteristics of type, quality, appearance, finish, method of construction and/or performance are not less than is required by the Contract, direct a variation for the convenience of the Contractor allowing the substitution.

The Contractor shall provide all materials, plant, personnel and other items of work necessary for the proper completion of WUC or the compliance by the Contractor with any of its other obligations under the Contract, (including items which are not expressly mentioned in the Contract, but which are obviously and indispensably necessary for the proper completion of such work or the compliance of the Contractor with its other obligations under the Contract);

All plant and equipment used by the contractor for the WUC shall be appropriately licenced/registered and worthy for use in accordance with current legislative requirements and manufacturer's specifications.

All work shall be carried out by suitably qualified persons having experience in the particular types of work to be executed.

3.2 Work Scheduling priorities

The Contractor shall program the Works in accordance with priorities issued by the Superintendent. The Superintendent will work with the Contractor to minimise disruption to the community and prioritise high risk works.

Key considerations include:

- QRA Program of Work (POW) completion dates
- School zones
- High Traffic volumes roads
- Community areas
- Tourist precincts
- Conflicts with other construction projects
- Intersections with DTMR roads including Traffic Disruption Notices and Road Corridor Permits if required

3.2 Work Categories

All Works shall be managed using the work categories and treatment types as set out in Schedule K1 – Price Schedule, Queensland Reconstruction Authority (QRA) Treatment Guide 2020–21 and issued in accordance with the approved Program of Work.

4. COMMERCIAL REQUIREMENTS

4.1 Issuance of Work and Contractor/s Payment Claims

4.1.1 Scheduled Quantities and Associated Costs

- a) Quantities listed by the Superintendent are to be treated as maximum values. No variations will be considered for each line item nominated in the Schedule of Rates without the express written approval by the Superintendent or Delegated Officer.
- b) All costs associated with the initial Site establishment and transportation, labour, traffic control, materials, plant & equipment, signage, and electronic resources must be included in the Price Schedule. The Contractor is responsible for any costs related to daily travel to and from the site including vehicle, plant, fuel, maintenance, accommodation and any other costs.

4.1.2 Issuance of work

- a) The Contractor shall develop a Works Program for WUC utilizing the base data provided in Schedule K1 – Price Schedule and submit to the Superintendent for approval. Approval shall not be unreasonably withheld by the Superintendent.
- b) Following approval of the Works Program by the Superintendent, the Superintendent shall issue approval to commence by the issuance of Possession of Site to the Contractor to commence.
- c) The Contractor shall maintain and update the Works Program on a weekly basis and provide an electronic copy of the updated plan to the Superintendent.

4.1.3 Site Pre-Works Package

The following documentation and information must be provided to the Superintendent as a requirement of the Principal giving access to or possession of the Site and within the times stated within the General Conditions of Contract if applicable, or thereafter the earlier of:

- a) 20 Business Days after the Date of Acceptance of Tender; and
- b) 5 Business Days prior to any scheduled pre-start meeting.

Item	Description	Relevant clause
A.	Updated Program	Clause 32 of the General Conditions of Contract. Refer clause 9 of the General Specification
B	Dilapidation Survey	Annexure Part A, item 14A. Refer clause 11.7 of the General Specification
C	Work health and safety documentation (including, if applicable, evidence of payment of fees and lodgement of notice appointing Contractor as principal contractor)	Clause 12A of the General Conditions of Contract
D	Environmental Management plan	Clause 14.1 of the General Specification

E	Traffic Management Plan and Traffic Guidance Schemes	Clause 18 of the General Specification
F	Evidence of Insurance	Clause 19 of the General Conditions of Contract
G	Service locations	Clause 2.1 (b) of the General Specification
H	Quality Management Plan, including Lot Plan and Inspection and Testing Plans (ITPs)	Clause 29.2 (b) of the General Conditions of Contract
I	WHS Management Plan	Clause 11B of the General Conditions of Contract

The Contractor is to undertake “Before You Dig Australia” (formerly Dial Before You Dig (DBYD)) for all operations.

The Contractor shall make enquires to all Authorities to determine the locations of services and shall exercise care in not disturbing these services during the execution of the works.

The location and size of services shown on the drawings should be considered approximate only. Confirmation shall be made on Site with the assistance of Authorities where possible.

The Contractor shall be responsible for the rectification of any services damaged or interfered with on Site or during activities directly associated with the Works during the course of the Works. Rectification shall include details such as bedding and overlays of granular materials.

Should conflicts occur with services, the Contractor shall arrange to divert or relocate as required by the Superintendent.

Should conflicts occur with service mains, the Contractor shall notify the Superintendent promptly in writing and shall arrange to have the service relocated/diverted by the appropriate Authority.

4.1.4 Temporary Services

The Contractor shall provide and maintain temporary services necessary for the execution of the work under the Contract, install such services in accordance with the requirements of the relevant Authorities and pay charges in connection with the installation and use of such services. Unless there is a specific reference to the provision of temporary services in the Contract, the cost of providing temporary services shall be considered as being included in the Contract Sum, unless otherwise agreed in writing by the Superintendent.

Such services shall be made available to Sub-contractors. On completion, the Contractor shall disconnect temporary services and clear away all traces.

Temporary Services includes detours and side-tracks etc.

4.1.5 Works Management

All works shall be performed in accordance with Section 8 and all other provisions of the Specification. The Works shall be recorded using the RECOVER software application.

4.1.6 Claim Submission Package

On completion of the Works being claimed for the corresponding month, and prior to submission of a final Invoice, the Contractor must submit a Payment Claim and a Quality Assurance Pack

including any Quality Assurance documentation & associated test results.

Confirmation that material used is compliant with the Maintenance Gravel requirements.

- a) Payment Claim - The Payment claim shall include the following details:
 - i) Date of claim
 - ii) Scheduled items including unique ID Codes
 - iii) Dates of completed work/s
 - iv) Purchase Order number;
 - v) Project number
- b) Quality Assurance Pack - The Quality Assurance Pack shall include the following:
 - i) Lot coversheets
 - ii) Delivery dockets
 - iii) Copy of the Traffic Guidance Scheme (TGS) and daily check sheets
 - iv) Evidence of environmental inspections or reports
 - v) Inspection Test in accordance with the Treatment Guidelines specified below.
 - vi) Data Collection - Using RECOVER Software - update Submission Description Reference number using the 'Restoration' button and carryout the following:
 - i. Progression Photos (Including plant and equipment)
 - ii. Completion Date
 - iii. Completion Photos

All submitted payment claims and invoices must, as a minimum, include the following information in addition statutory invoice information:

- i) Contract Number / Project / Job Number
- ii) Purchase Order Number
- iii) Claim Period (The month in which the claim is submitted)
- iv) Construction Period (The period within which the works were completed)
- v) Quality Assurance Documents (QA) / Inspection Test Plan (ITP)
- vi) Statutory Declarations

Invoices must be dated on or after the date the Payment Schedule.

4.2 Site

The Contractor/s will be required to examine the Site and its surroundings prior to commencing of works on site.

4.3.1 Hours of Work

- a) The working hours and workings days for work on the site are stated in Item 22A.' Noise shall be maintained at a minimum in accordance with local law.
 - a. Refer <https://www.banana.qld.gov.au/downloads/download/50/local-laws>

4.4 Site Management

- a) The Contractor/s is to promptly advise the Superintendent of any cancellations or delays because of inclement weather and/or breakdowns of plant and/or equipment.
- b) Where Works have commenced and are paused (i.e. overnight) and are subject to changed trafficable conditions (i.e. storm events), the Contractor/s are responsible for ensuring that sufficient safety and environmental control measures are in place for the management of the Site. Including but not limited to the following:

- i) Aftercare Signage
- ii) Erosion Controls

The contractor must take time and date stamped photographs of control measure prior to leaving site forward to the Superintendent or delegated officer.

- c) In the event of adverse and/or extreme weather events negatively impacting on the work Sites, it will be deemed the Contractor/s responsibility to carry out any repairs/rectification works.
- d) All costs associated with this Clause 4.4 are the responsibility of the Contractor.

4.5 Crew Availability

The Superintendent may request additional resources (multiple crews) to meet program/ conflicting project requirements. The Contractor shall facilitate such requests when provided a minimum of 3 weeks' notice.

5. GENERAL REQUIREMENTS

The WUC includes unsealed road works as a part of this program. The Contractor shall conduct the following during the undertaking of works:

- a. Coordinate and execute in an expeditious manner considering safety, quality, environment, and traffic management for the works included in the scope.
- b. Cooperation and collaboration, using "best for project" mindset.
- c. Site Establishment and dis-establishment.
- d. Provision of all supervision, plant, materials and labour to deliver road restoration and associated works as per the Contract
- e. Removal and reinstatement of any guidepost, sign, or marker within the worksite to perform the works.
- f. Removal of the material from the shoulder to enable drainage of the pavement and shoulder to the table drain or other appropriate collection point.
- g. All other operations in the Scope of Works.
- h. Obtain all necessary Approvals for completion of works from the relevant authorities, i.e., the Department of Natural Resources (DNR) and the Department of Transport and Main Roads (DTMR), if work is adjoining a state-controlled road.
- i. Obtain all necessary Approvals for water extraction. The Approval requires completion of paperwork for water extraction records.
- j. Maintenance of haul roads, including the use of unsealed roads for the WUC, used during construction to maintain a safe road condition and minimise dust. The maintenance may include water carts, grading and rolling to ensure the road is in no worse condition following completion of works than before commencement.
- k. Sequencing works as to not damage already completed works.

All works performed must comply with the Construction work Code of Practice May 2018 and Traffic Management for Construction or Maintenance Work Code of Practice 2008, which is to extend to all sub-contractors, consultants, and suppliers engaged by the successful

Contractor/s for the purposes of the delivery of the Contract requirements.

The Contractor/s is to ensure that, whilst performing works associated with this Contract, a current hard copy and electronic copy of all required accreditations, licenses, and Management Systems, including Work Health and Safety Management documents, are available and on Site at all times.

The Council is committed to providing a high standard of customer service and requires Contractor/s to maintain this standard. Contractor/s shall at all times operate in accordance with the Banana Shire Council Code of Conduct and promote a positive public image for the Council, be courteous to members of the public and the Council's employees. The Code of Conduct can be found online www.banana.qld.gov.au/downloads/file/5205/code-of-conduct-employees.

The Contractor/s shall be responsible for communications to emergency services and the DTMR. In the case of communication with the DTMR, if required, it is the Contractor/s responsibility to provide the necessary traffic disruption forms and accompanying compliant TGS and TMP documentation to the DTMR, if required. The Council will be responsible for any media enquiries concerning the Contract, or individual programs of work.

Any use of Sub-Contractors to perform works on behalf of the Contractor must have prior written approval by the Superintendent. The Contractor will be required to provide details of sub-contractor management procedures prior to engagement to ensure capability to perform the works in accordance with the General Terms and Conditions of Contract.

Utility and service identification, protection and permit approvals are the responsibility of the Contractor/s.

The Contractor/s is responsible for the provision of water supply to all Sites. This includes obtaining permits from the relevant authority, where necessary.

The Superintendent may at its sole discretion remove any personnel from the site or any other Council premises.

5.8 Clean Up

The Contractor/s is responsible for leaving all work Sites in a clean and tidy condition at the end of each day.

5.9 Provision of Lights

- a) The Contractor/s is responsible for providing sufficient lighting to all Sites, including stockpile locations; and
- b) The Contractor/s is responsible for the provision of Hydraulic Lighting Towers where required.
- c) Where available, the Council supports and encourages the Contractor/s to utilise solar light facilities for the provision of lighting at relevant sites.

5.10 Traffic Control

The Contract is responsible for ensuring all Traffic Control is provided in accordance with the requirements set out in Appendix F – Minimum Traffic Signage Requirements.

6. BUSINESS MANAGEMENT SYSTEMS, DOCUMENTATION AND COMPLIANCE

6.1 Business Management Systems and Management Plans

The Contractor/s must prepare and maintain a Business Management Systems and Management Plans in accordance with this Clause 6.

Documents supporting these processes must be submitted to the Superintendent for approval prior to the commencement of the Contract. The Superintendent will notify the Contractor/s of acceptance in writing.

The Management Systems and Management Plans must be submitted to the Superintendent:

- i) in final form prior to the Commencement Date; and
- ii) after any changes are made.

The Management Systems and Plans must include:

- i) a method of identifying and recording risks or processes related to the provision of services and subsequent procedures to manage same;
- ii) a documented review process;
- iii) a process of continual improvement;
- iv) a process to identify and monitor relevant legislation and standards as they relate to this Contract;
- v) identified targets and objectives to be achieved;
- vi) record management system to record, maintain and monitor the systems;
- vii) periodic auditing of the systems;
- viii) a process to identify and monitor all delays experienced regardless of responsibility for the delay; and
- ix) other items as required by the Superintendent from time to time.

Compliance with the Management Systems and Plans does not release or discharge the Contractor from compliance with its obligations under this Contract.

To enable the Superintendent to monitor and audit the Contractor compliance with its obligations under this Contract, the Contractor/s must at all times, allow the Superintendent prompt and unhindered access to the Contractor staff, systems, plans and records as used by the Contractor in connection with the WUC.

6.1 Work Health and Safety Management System

- a) The Contractor/s must develop, implement, maintain and comply with an occupational health and safety management system, personal protective equipment guidelines in accordance with ISO 45001:2018 and the Work Health and Safety Regulation 2011 (or any higher standard that amends or replaces that standard); or
- b) Other applicable system accepted by the Superintendent.

6.2.1 Safety – Minimum Standards

a) WHS Obligations

The Contractor is responsible for the health and safety of its Personnel and any other person affected by its performance of the Works under the Contract.

The Contractor must ensure adequate facilities, suitable precautions and safeguards are provided for the welfare at work of its Personnel, including ensuring access to those facilities.

The Contractor must provide the Superintendent, on request, with evidence (including any documents specifically requested) that it and its Personnel, are complying with applicable WHS

Requirements.

b) WHS Risk Management

The Contractor must ensure it has systems in place to identify, assess, control, eliminate (or if it is not possible to eliminate reduce so far as is reasonably practicable) and review risks and hazards at the Site and connected with the WUC. The appropriate systems are to be reviewed and maintained periodically and regularly as appropriate.

c) Inspections

The Contractor must ensure that it regularly conducts health, safety and security audits relating to the Contractor carrying out the performance of the work at the Site, retains copies of audit documents and promptly provides the Superintendent with copies of such audit documents upon request.

Should the Superintendent observe, in its opinion, an unsafe act or become aware of a planned unsafe act in relation to the WUC, it has the authority to direct the Contractor or any of the Contractor's Personnel concerned, to cease the unsafe performance of the WUC. The Contractor shall, at its sole expense, modify its method in order to satisfy the Superintendent that the WUC are proceeding in a safe manner.

The ceasing of the WUC, pending compliance with a safety Direction, will not relieve the Contractor of the responsibility to effectively perform the Contract.

If the Contractor fails to comply with a Direction under this clause, in addition to any other remedies, the Superintendent may, after providing reasonable notice to the Contractor, take the necessary steps to achieve compliance. The reasonable cost incurred by the Superintendent shall be a debt due and payable by the Contractor.

d) Training

The Contractor must ensure only appropriately experienced, skilled and qualified persons are engaged to carry out the WUC.

e) Incident Notification

If an Incident occurs at the Workplace at which the WUC are being undertaken, the Contractor must, in addition to, and not in derogation of the requirements of the Contract:

- i) immediately verbally notify the Superintendent when any Incident occurs involving the Contractor performing the WUC, or to the members of the public or other persons on the Site;
- ii) if applicable, immediately notify relevant Regulators in accordance with the relevant WHS Laws;
- iii) within 24 hours of the Incident, submit a preliminary report to the Superintendent detailing the circumstances of the incident, its cause, and likely corrective measures to be implemented by the Contractor;
- iv) conduct a formal investigation into the Incident and then provide the Superintendent with a copy of the written investigation report within ten (10) days of the Incident occurring;
- v) provide copies of all documents and records requested by the Superintendent relevant to the Incident (including any correspondence with any relevant Authority or Regulator); and
- vi) report the status of the implementation and outcomes of actions undertaken to the

Superintendent as a result of the Investigation carried out by the Contractor. The Superintendent may review the effectiveness of such actions and may request additional actions and/or evidence of implementation which must be considered by the Contractor.

f) Workplace Health and Safety Officer

The Contractor shall as a minimum provide a Workplace Health and Safety Officer with Certificate IV in Work Health and Safety - Nationally recognised units of competency BSB41415 (latest qualification).

g) Personal Protective Equipment (PPE)

The following is the minimum PPE accepted on Site:

- i) Steel capped footwear;
- ii) Long sleeved shirts in high visibility colours;
- iii) Full length cut-proof trousers, for workers using cutting equipment, or trousers for all other workers, unless directed otherwise by the Superintendent;
- iv) Broad brimmed sun hat or safety helmet with broad brim;
- v) Safety Eyewear in accordance with the relevant Australian Standard;
- vi) Sunscreen SPF 30+.
- vii) Hearing protection must be worn when operating machinery, or when working in close proximity to machinery that produces excessive noise which is capable of causing hearing damage.

h) Tools

The following tools shall not be used for works undertaken on this Contract:

- i) 9-inch (230 mm) angle grinders
- ii) Non-retractable knife

i) General Standards

The Contractor/s must in performing the WUC:

- i) Ensure all staff employed under this Contract complete Council's On-Line Safety Induction process. Further details can be obtained from the Superintendent. The Contractor must ensure evidence of completed inductions are available on request by the Superintendent.
- ii) Comply with all statutory Laws; including but not limited Environmental and Workplace Health and Safety Legislation and Regulations;
- iii) Comply with all reasonable directions given by the Superintendent, in relation to statutory legislation.
- iv) Provide the Superintendent with a copy of any issued non-compliance work improvement notices issued by a statutory body.

- v) Rectify any non-compliance as directed in the work improvement notice;
- vi) Provide the Superintendent with a copy of the rectification notice;
- vii) Leave the Site or any other premises of the Council secure, clean, orderly and fit for immediate use, having regard to the condition of the Site or any other premises of the Council immediately prior to the performance of WUC.

6.2 Environmental Management System

- a) The Contractor/s must develop, implement, maintain and comply with an environmental management system in accordance with AS/ NZS ISO 14001 (or any higher standard that amends or replaces that standard); or
- b) other applicable system as accepted by the Superintendent.

6.3 Environmental Minimum Standards

6.3.1 Handling hydrocarbon-based materials

- a) The handling, storage, transport and use of bitumen shall comply with the requirements and practices outlined in the latest versions of the following documents:
 - i) Austroads – Bituminous Materials Safety Guide, AP-G41, and
 - ii) AAPA Advisory Note 7 – Guide to the Heating and Storage of Binders Sprayed Sealing and Asphalt Manufacture.
- b) Daily risk assessments must document control measures and take into consideration risk to the environment and human health from proximity of water ways, spill prevention and management, workers and public safety.

6.3.2 Spill management

For any hazardous substance spill which occurs the following steps should occur:

- a) Public access should be prevented to the immediate area where the spill has occurred and ensure that only personnel with the appropriate training and equipment deal with the spill (providing it is safe to do so).
- b) Review relevant Safety Data Sheet (SDS) for the spilt chemical (SDS should be located where the chemicals are used and stored). The SDS will have specific instructions on how to deal with chemical spills as well as first aid information. Safe work procedures should also be referred to.
- c) Using appropriate PPE promptly cover the spill with absorbent material taking care not to spread the spill further. Ensure any liquids are contained using a bund to stop them escaping to stormwater drains or flow paths.
- d) Waste should be transported and disposed of by a licensed operator/ facility in accordance

with the Environment Protection Act and associated Regulation. The Council Representative should be notified immediately. If there is a hazard to health or property, call 000.

6.3.3 Noise Management

- a) The Contractor shall take all reasonable and practicable measures to prevent or minimise the noise have been taken (the general environmental duty (Environmental Protection Act 1994).
- b) Noise Management activities must be undertaken in accordance with provisions of Clause 4.3 Hours of Work (above).
- c) Contractors should note Environmental Protection Act 1994, Schedule 1 Exclusions relating to environmental nuisance or environmental harm sections 17A, 440 and 440Q Part 1 Environmental nuisance excluded from sections 440 and 440Q when performing these services.
- d) If regulatory Authorities impose quantitative limits on noise (for example, maximum noise levels or when noise can be generated) they are required to be complied with while providing WUC under each category of work specified.
- e) Implementation of alternative works practices, or staging works where possible and practical.
- f) Silencing / dampening of equipment where possible and no unnecessary idling of vehicles or plant

6.3.4 Waste and Resource Recovery

- a) The below Councils should be used when managing project waste:
 - i) AVOID unnecessary resource consumption;
 - ii) REDUCE waste generation and disposal;
 - iii) RE-USE waste resources without further manufacturing;
 - iv) RECYCLE waste resources to make the same or different products;
 - v) RECOVER waste resources, including the recovery of energy;
 - vi) TREAT waste before disposal;
 - vii) DISPOSE of waste only if there are no viable alternatives.

All litter must be collected, removed and disposed of by the Contractor once the Works are completed. The cost for litter disposal is the responsibility of the Contractor. If large items such as furniture have been illegally dumped the Superintendent's Representative must be advised, and the collection of large items will be the responsibility of Council. The Contractor shall be responsible for the security of the Contractor's Work Area and of construction plant and materials.

Work sites shall be free from rubbish, waste materials and refuse of any description at all times. Disestablishment shall include removal of all surplus materials, rubbish, waste materials and refuse of any description from the work site and from all construction or storage areas.

- b) The Contractor and Operator must ensure that it is aware of its requirements under the Environmental Protection Act 1994, Section 440ZG Depositing prescribed water contaminants in waters.
- c) The Contractor is responsible to manage waste or recovered resources in a way that does not impact on environmental values as described under the Environmental Protection Act 1994.
- d) Where resources can be recovered and material may be fit for beneficial reuse, recovered resources must be taken to a facility that can lawfully receive these materials for reprocessing in accordance with the Environmental Protection Act 1994.
- e) Remaining waste materials must be taken to a facility that can lawfully receive these materials for disposal in accordance with the Environmental Protection Act 1994.
- f) Records must be kept and provided to the Superintendent on quantities of waste and recovered materials removed from the site and where the waste and recovered resources have been taken for disposal or reuse.

6.4.5 Biosecurity

- a) The Contractor and Operator are to comply with the Queensland Biosecurity Act 2014 and be aware of their General Biosecurity Obligation under this legislation, to ensure they take all reasonable and practical steps to minimise the risks associated with invasive plants under their control.

6.4.6 Protected Flora and Fauna

- a) Where the Contractor or Operator's activities in relation to this Contract may have an impact on any fauna species listed as threatened (extinct in the wild, endangered or vulnerable) under the Nature Conservation Act, or any threatened species breeding place, the contractor should report this to the Superintendent's Representative.
- b) Native vegetation is protected and regulated under the Nature Conservation Act 1992. Clearing and pruning should be kept to a minimum for the purposes necessary to maintain infrastructure located on the road, other than fences as per the exempt clearing work on land dedicated as a road under the Land Act 1994.

6.4.7 Cultural Heritage

- a) The Contractor and Operator are to comply with the Laws including the Queensland Aboriginal Cultural Heritage Act 2003 and Queensland Torres Strait Islander Cultural Heritage Act 2003 and take all reasonable and practicable measures to ensure an activity does not harm cultural heritage (the "cultural heritage duty of care").
- b) The Contractor and Operator are to comply with the Laws including the Queensland Heritage Act 1992 and take all reasonable and practicable measures to ensure an activity does not harm cultural heritage.
- c) In the event an item of cultural heritage significance is detected, works must cease, and the Superintendent must be informed immediately.

6.4.8 Erosion and Sediment Control

- a) The Contractor shall be responsible for planning, implementing and maintaining all erosion and sediment control measures in accordance with industry best practice. Works must ensure that contaminated waters do not leave the project site and are contained in a manner that avoids pollution to waters as per the requirements under the Environment Protection Act 1994.

6.5 Quality Management System

- a) The Contractor/s must develop, implement, maintain and comply with a quality management system in accordance with AS/ NZS ISO 9001:2008 (or any higher standard that amends or replaces that standard); or
- b) Other applicable system as accepted by the Superintendent.
- c) The Contractor/s must provide the WUC in accordance with the provisions of Sections 7 Technical Standards and Section 8 Separable Portion Requirements within this document.

6.6 Risk Management System

- a) The Contractor/s must develop, implement, maintain and comply with a risk management system in accordance with AS1742.3 Clause 2.2.3 and AS/NZ ISO 31000 (or any higher standard that amends or replaces that standard); or
- b) Other applicable system as approved by the Superintendent.

6.7 Reporting and Site Specific Management Documentation and Compliance

6.7.1 Site Specific Reports & Plans

The Contractor/s will be required to develop Site specific Management Plans, which must be made available to the Superintendent at the commencement of the WUC and during the life of the program of works. Any requirement for Site specific plans is to be approved by the Superintendent prior to commencement of works at a specific Site.

These include, but are not limited to:

- a) Safety
 - i) Construction Site Safety Plan;
 - ii) Incident/ Emergency Management Plan;
 - iii) WHS Site Management Plan
 - iv) Traffic Management Plan;
- b) Environment
 - i) Environmental Management Plan (including Fauna/ Flora/ Cultural heritage protection);
 - ii) Erosion and Sediment Control Plan;
- c) Quality
 - i) Quality Management Plan;
 - ii) Inspection Test Plans

- iii) Non-conformance Reports;
- d) Communication
 - i) Construction Programs;
 - ii) Communication Management Plan

6.7.2 Program of Works Reporting

As a minimum the following reports shall be utilised during the Contract Term to ensure delivery of the Program of Work, validation of completed work and the management of the Site. The Superintendent may require additional reports or changes to the listed reports during the term of the Contract.

Regular communication with the Principal and its Superintendent and Superintendent's Representative throughout the WUC is required.

Program of Work Reporting			
Report Number	Report Title	Responsible Party	Frequency
A	Weekly Work Schedule	Contractor	Weekly – each Thursday
B	Monthly Progress Report	Contractor	Monthly – by the 25th of each month

6.7.3 Weekly Work Schedule

Provide the Superintendent with a weekly progress update via email by close of business on a Thursday. The update shall include progress from the previous week, planned works for the next week, and any contract delivery issues.

6.7.4 Monthly Progress Report

The Contractor shall provide in an Excel Format, a Project Schedule Report to the Superintendent by the date nominated by the Superintendent including but not limited to the following information:

- a) List of completed sites including start and completion dates
- b) List of incomplete sites including actual/planned start and planned completion dates
- c) List of Audits Completed on site including Process and Final Product Audits and associated outcome (i.e. Compliant, Observation / Low Risk / Medium Risk / High Risk);
- d) List of Incidents and/or Near Misses including incident date including whether the incident was a Lost time and/or Medical Treatment injury.
- e) List of all staff and subcontract resources employed for the provision of the WUC including man hours worked for the month in review.
- f) Adjusted monthly expenditure and cash flow.

6.8 Incidents and Reporting

As a minimum the Contractor must provide verbal and or telephone advice by close of business on the day of the occurrence to the Superintendent in the event of the following:

- a) Any Environmental or Quality incident, near miss or any other high-risk event.
- b) Receipt of a complaint.
- c) Any significant disruption to the program of WUC being provided.
- d) Any damage to the Council's or other parties' property or essential services.
- e) Any unserviceable network infrastructure identified at the Worksite.

Provide a written incident report within two full Business Days.

The Contractor must advise the Superintendent of any notifiable workplace incidents that occur while working on behalf of the Council. Verbal and or telephone advice is required by close of business on the day of the occurrence. The Superintendent may require that the Contractor complete the Council's incident report form.

The Contractor is required to notify any Statutory Body if an incident arises out of the conduct of a business or undertaking that results in the death, serious injury or serious illness of a person or involves a dangerous event.

The Contractor is required to notify the Department of Environment and Science if an incident arises out of the conduct of a business or undertaking that may have caused or threatens serious or material environmental harm.

6.9 Qualifications and Training of Staff

The Contractor:

- a) Assumes full responsibility for ensuring Operators are assessed as competent for the tasks being undertaken.
- b) Provides competency training under the Authorisation of a Registered Training Organisation (RTO) with appropriate scope where applicable.

All machinery is to be controlled by competent operators in possession of appropriate and current licenses/tickets.

The Contractor and their employees must hold a current 30215 QLD General Safety Induction (Construction Industry) Card, with copies to be forwarded to the Superintendent prior to any employees undertaking duties under this contract.

For new staff, prior to commencing work, the Contractor shall forward to the Superintendent copies of all appropriate licenses and certificates and induction documentation.

The Contractor must provide adequate information, instruction, training and supervision to ensure that all employees are able to work in a safe manner. Skills and competencies must match the work activities within the contract. This includes plant operator tickets, statutory licensing and competency records. Copies of documents and records may be requested at any time during a Site audit conducted by the Superintendent's nominated Representative.

Personnel Details

- a) The Contractor/s shall maintain a schedule of all employees utilised for the provision of WUC
 - i) Staff names
 - ii) Staff levels

- iii) Staff years of experience
 - iv) All appropriate qualifications,
 - v) All required licenses
 - b) The Contractor shall and make available to the Superintendent or Representative upon request and reported to the the Superintendent monthly.
- 6.11 Performance management
- Results from all audits shall be collated and a report compiled. This report will be used as an indicator of contract performance and may also be used to assist with customer complaints and management.
- The Contractor will receive regular feedback on their performance from the Superintendent or Representative during the term of the Contract in an electronic format and during regular Performance Review Meetings.
- The Superintendent or Representative will undertake audits of the Contractor's Management systems and processes. These audits monitor compliance with the accepted procedures and statutory obligations.
- The Contractor must ensure that it cooperates and assists the Superintendent with any audit the Superintendent may conduct in relation to the Contractor's compliance with the Contract.
- Where a breach of Contract Terms and Conditions or persistent poor performance is identified, the Superintendent, shall issue an Improvement Notice to the Contractor in accordance with the provision of the Contract.
- The Contractor must undertake the necessary actions to meet the requirements of the Notice.
- The Notice will be placed on the Improvement Notice Register as a record of the Contractor's ongoing Contract Performance.

7. STANDARDS

- This section outlines the Technical Standards, Guidelines, Codes of Practice and other documentation applicable to works performed under the Contract. The Contractor shall ensure all works are compliant with the Standards. Any deviation from the Standards must have the written approval of the Superintendent or Delegated Officer. These Standards shall extend to all sub-contractors.
- 7.1 Gravel Specification
- The gravel material shall meet the specification specified in "Table 1: Gravel Specifications" and "Banana Shire Council Gravel Specifications".
- 7.2 Technical Standards
- a) Queensland Reconstruction Authority (QRA) Treatment Guide 2020–21 – July 2021
 - b) The current version of the applicable Institute of Public Works Engineering Australia – Design Guidelines for Lower Order Road (Website <http://www.ipweaq.com>)
 - c) Department of Transport and Main Roads Specification (Measurement)
 - i) MRS01 Introduction to Technical Specifications

- ii) MRS02 Provision for Traffic and Annexure
- d) Department of Transport and Main Roads Technical Specifications
 - i) MRTS01 Introduction to Technical Specifications
 - ii) MRTS02 Provision for Traffic
 - iii) MRTS03 Drainage Structures, Retaining Structures and Embankment Slope Protections
 - iv) MRTS04 General Earthworks
 - v) MRTS05 Unbound Pavements
 - vi) MRTS14 Road Furniture
 - vii) MRTS27 Geotextiles Separation and Filtration
 - viii) MRTS50 Specific Quality System Requirements
 - ix) MRTS52 Erosion and Sediment Control
 - x) QGTTM Queensland Guide to Temporary Traffic management
 - xi) AGTTM Austroads Guide to Temporary Traffic Management

7.3 Codes of Practice

- a) The National Code of Practice for the Construction Industry 2018
- b) Traffic Management for Construction or Maintenance Work Code of Practice 2008

7.4 Australian Standards

All materials and processing, where not otherwise specified herein, shall be in accordance with the relevant Australian Standards (AS) and referred to only by their allocated AS number. The latest available edition of those AS shall apply. Materials used for works under this Contract must conform to the standards.

- a) AS1141 – 2021 Methods for Sampling and Testing Aggregates

8. WORK CATEGORY REQUIREMENTS

8.1 General Standards

8.1.1 Material Requirements

The gravel material shall meet the specification specified in “Table 1: Gravel Specifications” and “Banana Shire Council Gravel Specifications”.

Maintenance Gravel is to comply with the following requirements:

- (a) Shrinkage Product: 100-365 (calculated: Linear Shrinkage x Percent Passing 0.425mm sieve)
- (b) Grading Coefficient: 16-34 (calculated: { [Percent Passing 26.5mm sieve – Percent Passing 2.36mm sieve] x Percent Passing 4.75mm sieve} /100)
- (c) Gravel must have a minimum 4 day Soak CBR: Min 40 (at 98% STD MDD)
- (d) Gravel finished surface tolerance is +/- 10mm

The gravel material shall meet the specification as follows.

Table 1: Gravel specifications

Sieve Size	% passing for all maximum sizes
26.5	100 – 100
19.0	100 – 100
9.5	74 – 88
4.75	55 – 71
2.36	40 – 57
0.425	19 – 33
0.075	9 – 21.1
Plastic Index	4 – 15
Linear Shrinkage	2 – 8
4 Day Soaked CBR	Min. 40 (at 98% MDD)

Initial testing shall occur at the stockpile site before delivery. Where relevant, the material is to be tested for:

- a) Grading;
- b) Plasticity Index;
- c) California Bearing Ratio;
- d) Optimum Moisture Content; and
- e) Density.

It is at the Superintendent's discretion that the frequency or the characteristics tested may be relaxed, and the Superintendent may vary the testing regime due to material quality performance, Quality Assurance processes and on-site verification.

8.1.2 Tyning / Cutting

Where grading or degrassing of the existing pavement is required, the Contractor shall undertake light cutting / tyning in accordance with the QRA Treatment Guide and shall not disturb any subgrade.

8.1.3 Electronic Program of Work

The Contractor shall use a program of work developed from Appendix C – Schedule K1 – Price Schedule to confirm the Site GPS locations, chainage, direction of works, site extents and treatment types. The Contract may adapt the schedule to support the most productive delivery the program. However, no changes may be made to the base data.

8.1.4 Hold Points & Witness Points

A Hold Point is defined as a position in the progress of the works, beyond which further work shall not proceed without mandatory verification by the CQR and the Superintendent. To obtain authorisation to proceed, the Contractor shall ensure that all work lots or work items affected by the lot or item in question are conforming.

Mandatory Hold Points shall apply prior to commencement of designated work lots or work

items. Mandatory Hold Points shall be verified by the Superintendent. The Contractor's Quality System shall include at least the following Hold Points. Those marked "Mandatory" shall be Mandatory Hold Points.

DNR Approval for Water Extraction	MANDATORY HOLD POINT
Completion of Dilapidation Survey	MANDATORY HOLD POINT

The Superintendent may direct the Contractor to insert additional Hold Points (including Mandatory Hold Points) in the Contractor's Inspection and Test Plans. The Superintendent may direct that any Mandatory Hold Point indicated in the Contractor's Inspection and Test Plans shall not be a Mandatory Hold Point.

A Witness Point is defined as a position in the progress of the works where the Contractor must notify the CQR and the Superintendent prior to proceeding and the option for witnessing the inspection or test may be exercised. If any do not attend, then work may nevertheless proceed, unless otherwise instructed.

An Inspection Point is defined as a position in the progress of the works where the Superintendent is required to inspect an activity.

When the Contractor is required to give notice to the Superintendent for inspections in accordance with the Contract, the Contractor should arrange to have a representative freely available for consultation during the inspection. The Contractor should also supply all equipment and labour requested by the Superintendent to check any dimensions, levels, bearings or build quality relating to the works.

The Contractor shall be liable for any costs relating to additional inspections that are required as a result of the Contractor not being ready to facilitate an inspection.

Inspections are to be timed to minimise the number of times that the Superintendent is required to travel to Site.

Random audit type inspections of the works, site and Contractor's documentation of the works may be undertaken by the Superintendent at any time.

The Quality Management Plan shall address all Inspection, Hold and Witness Points identified elsewhere in the Contract, Specifications, TMR Specifications and applicable standards, including but not limited to the following:

Job Description	Inspection/ Witness / Hold Point
Setting out of the works: Including signage, traffic control, extent of the works, notification of residents and site facilities	Hold Point
Non-conformance to any specified criteria	Hold Point
Proof roll of subgrade and pavement layers (where required)	Inspection Point

Inspection of formwork and reinforcement prior to placing concrete (where required)	Hold Point
Placing of material (where required)	Witness Point
Final inspection prior to Practical Completion	Hold Point

The Contractor shall give the Superintendent not less than forty-eight (48) hours' notice of their intention for an Inspection, Witness or Hold point to be undertaken.

The Superintendent shall have the right to enter, for the purpose of inspection and testing at any time during working hours, any premises where articles for inclusion in the works are being manufactured or stored. The Contractor shall afford the Superintendent every opportunity to inspect any article which is manufactured or stored off-site prior to delivery to the site for inclusion in the works.

8.1.4 Proceeding beyond a Hold Point or Witness Point

The Contractor shall give the Superintendent not less than two (2) working days' notice of its intention to proceed beyond a Hold Point.

The Contractor shall give the Superintendent not less than one (1) working days' notice of its intention to proceed beyond a Witness Point.

The Contractor shall ensure that all work lots or work items affected by the lot or item in question are conforming; and that all Conformance Reports for all work lots or work items affected by the lot or item in question have been made available to the Superintendent at least 6 working hours prior to the time the Contractor intends to proceed with the lot or item in question, thus ensuring that defective work are not built-in.

In the event of any non-conformance to the requirements of the Scope of Works, the Contractor shall immediately advise the Superintendent the details of such non-conformance, including location in the Works, and the proposed remedial actions.

8.1.5 Completed Work Evidence

The Contractor is to provide the Superintendent the following as a minimum as evidence for completed works:

- (i) Completed Inspection Test Plans with associated checklists and testing certificates;
- (ii) Gravel and Spoil Dockets
- (iii) Completed lot register; and
- (iv) Construction Photos.

8.2 Unsealed Road Treatments

8.2.1 Medium Formation Grading

Refer QRA Treatment Guide 2020-21 July 2021 - Page 9

Treatment Code: USP_MFG

In addition to the treatment requirements listed in the QRA Treatment Guide 2020-21 above the following sub-clauses must be applied where necessary:

a) Work Operations

The following operations shall be included as part of this Activity:

- a. The removal and re-instatement of roadside furniture (e.g. guideposts, signs etc.) as required.
- b. The de-grassing and shaping of the existing pavement.
- c. Clearing and reshaping table drain
- d. The grading of the existing pavement including light tyning / cutting, watering and compaction (NB: Do not rip into subgrade).
- e. The trimming and rolling to correct profile of the compacted formation.
- f. All other operations included in the Applicable Specification.

b) Restoration Standard

Where possible, the formation cross fall measured using the grader blade or other means shall be within ($\pm 0.5\%$) of 4%. Superelevation on curves shall be 4% to 6% also. No water shall pond on the surface. The graded surface shall be watered and rolled to provide a sound tight surface with minimal loose stones and no visible vertical movement. The cross section shall be visually uniform.

c) Testing Requirements

**

WITNESS POINT – for proof rolling of completed works.

The cross fall shall be 4% on straight sections with a (\pm) 0.5% tolerance.

Geometrics	
Horizontal, width compliance check	1 test per 100m
Crossfall primary	1 test per 50m (3 points across width)

8.2.2 Heavy Formation Grading

Refer QRA Treatment Guide 2020-21 July 2021 - Page 10

Treatments included in this category are as follows:

Treatment Code: USP_HFG
 USP_HFG50
 USP_HFG75

In addition to the treatment requirements listed in the QRA Treatment Guide 2020-21 above the following sub-clauses must be applied where necessary:

a) Work Operations

The following operations shall be included as part of this Activity:

- a) The removal and re-instatement of roadside furniture (e.g. guideposts, signs etc.) as required.
- b) The de-grassing and tyning (100 to 150mm allowable) of the existing pavement.
- c) The incorporation of gravel (supplied to the work site or other, if indicated on the Scope or won from site - displaced) and watering, mixing, compaction and trimming of the pavement material.
- d) The trimming and rolling to shape the compacted formation surface.
- e) The cleaning and reshaping of adjacent surface drainage lines such as table drains and diversion drains.
- f) The adequate erosion and sediment control within the drain as per current environmental protection standards
- g) All other operations included in the Applicable Specification.

Where clarification of details in relation to these Work Operations is required, the following Applicable Specifications provide additional requirements for compliance.

b) Restoration Standard

The formation cross fall measured using the grader blade or other means shall be within ($\pm 0.5\%$) of 4%. Superelevation on curves shall be 4% to 6% also. No water shall pond on the surface. The graded surface shall be watered and rolled to provide a sound tight surface with minimal loose stones and no visible vertical movement. The restored layer shall have a minimum depth of 75mm. The cross section shall be visually uniform. The restoration standard of the adjacent surface drainage shall be the same as per the applicable Activity Code.

c) Testing Requirements

- * WITNESS POINT – for proof rolling of completed works.
Heavy formation grading with material (50mm or 75mm incorporated) shall be compacted to 100% MDD. The MDD of the finished pavement be determined using test methods in accordance with AS1289. The frequency of the tests shall be 1 test per 250m³ or 1 test per road, which is greater.

Construction	
Proof roll (GVM 20t vehicle)	No visible vertical movement

- ** HOLD POINT
The cross fall shall be 4% on straight sections with a $\pm 0.5\%$ tolerance.

Geometrics

Horizontal, width compliance check	1 test per 100m
Crossfall primary	1 test per 50m (3 points across width)
Vertical, straight edge	1 test per 100m (L & R) (max deviation from a straight edge < 8mm).

8.2.3 Gravel/Material Supply

Refer QRA Treatment Guide 2020-21 July 2021 - Page 11

Treatments included in this category are as follows:

Treatment Code: USP_GMS

In addition to the treatment requirements listed in the QRA Treatment Guide 2020-21 the following sub-clauses must be applied where necessary:

a) Work Operations

The following operations shall be included as part of this Activity:

- The provision of traffic control for quarrying, cartage and delivery operations.
- All other operations included in the Applicable Specifications.
- Where clarification of details in relation to these Work Operations is required, the following Applicable Specifications provide additional requirements for compliance.

b) Restoration Standard

Nil (supply only).

c) Testing Requirements:

In accordance with section 8.1.1 Material Requirements.

8.2.4 Gravel Resheeting

Refer QRA Treatment Guide 2020-21 July 2021 - Page 12

Treatments included in this category are as follows:

Treatment Code: USP_GR
USP_GR100
USP_GR150

In addition to the treatment requirements listed in the QRA Treatment Guide 2020-21 the following sub-clauses must be applied where necessary:

a) Work Operations

The following operations shall be included as part of this Activity:

- The removal and re-instatement of roadside furniture (e.g. guide

- posts, signs etc.) as required.
- The de-grassing and tyning of the existing pavement, the supply, cartage and incorporation of gravel (maximum depth of additional layer to be 150 mm) and water, mixing compaction and trimming of the pavement material. The gravel material shall be tipped in a continuous and neat windrow along the shoulder of the roadway. A minimum width of 3.5m smooth, gravel free and safe traffic lane shall be allowed at all times for traffic vehicles with the adequate signage in place as per the MUTCD Part 3.
 - The trimming and rolling to shape of the compacted re-sheeted formation.
 - All other operations included in the Applicable Specification.
 - Where clarification of details in relation to these Work Operations is required, the following Applicable Specifications provide additional requirements for compliance.

b) Restoration Standard

All grass and other vegetation shall be removed from the work area and disposed of in an approved manner. The existing formation material shall be shaped to form a surface parallel to the planned finished surface of the shoulder. This surface shall be wide enough to enable the completed formation to conform to the cross-section shape specified in the contract. Where the reformed surface is greater than 75 mm below the planned finished surface, the surface shall be watered and compacted to a firm condition with no visible vertical movement under the compaction equipment before material is added. Where the reformed surface is less than 75 mm below the planned finished surface, the surface shall be scarified to a depth of 75 mm below the planned finished surface and watered to enable compaction after new material has been added.

No water shall pond on the surface. The graded surface shall be watered and rolled to provide a sound tight surface with minimal loose stones and no visible vertical movement. The cross section shall be visually uniform

c) Testing Requirements

WITNESS POINT – for proof rolling of completed works.

Gravel resheeting (100mm or 150mm incorporated) shall be compacted to 100% MDD. The MDD of the finished pavement be determined using test methods in accordance with AS1289. The frequency of the tests shall be 1 test per 100m³ or 1 test per road, which is greater.

Construction	
Compaction subgrade	Proof roll (GVM 20t vehicle) – no visible deflection
Compaction pavement	Proof roll (GVM 20t vehicle) – no visible deflection

**

HOLD POINT

The finished surface of the gravel re-sheeting layer shall have a uniform surface with coarse particles slightly exposed and free from loose, segregated and contaminated areas.

**

HOLD POINT

The crossfall shall be 4% on straight sections with a tolerance of +/- 0.5%.

Material

Approval for use	All materials need to be approved for use by the Superintendent prior to use.
Construction	
Segregation (Grading) – Visual	1/500m of road
Geometrics	
Horizontal, width compliance check	1 test per 100m
Crossfall primary	1 test per 50m (3 points across width)
Vertical, straight edge	1 test per 100m (L & R) (max deviation from a straight edge < 8mm).
Depth	Material Delivery dockets to verify quantity. Layer thickness

8.2.5 Reshape Table Drains

Refer QRA Treatment Guide 2020-21 July 2021 Page 13

Treatment Code: USP_RSTD

In addition to the treatment requirements listed in the QRA Treatment Guide 2020-21 the following sub-clauses must be applied where necessary:

a) Work Operations

The following operations shall be included as part of the above Activity:

- The removal and reinstatement of roadside furniture (e.g. guide posts, signs, etc.) as required.
- The removal of vegetation and debris on work area.
- The adequate erosion and sediment control within the drain as per current environmental protection standards.
- The restoration of the drain to the specified standard, including the cut to fill earthworks, trimming and disposal of all necessary material.
- All other operations included in the Applicable MRTS Specifications.

Where clarification of details in relation to the above Work Operations is required, the following Applicable Specifications provide additional requirement for compliance in these areas.

b) Restoration Standard

The drain shall be constructed as per the requirement in the contract. It is recognised in some cases where a shoulder has insufficient width (which cannot be corrected because of physical constraints), it is desirable to lessen the restoration depth and/or batter slope to ensure the drain itself remains trafficable (i.e. 600mm wide, 150mm deep, batter slope 1 on 4.) In this instance, the installation of the drains shall be undertaken to a standard that does not lessen the trafficable surface which is currently available to the road users (i.e. the existing shoulder and/or trafficable drain batter shall remain trafficable). The motorists should not perceive that the trafficable width has altered. The drain shall be free of all material that could block the flow of water into the drain and along it. The base shall be evenly sloped to allow water to flow to the outlet. The base of the drain shall be at least 500 mm below the edge of the road shoulder (for earth drains).

c) Testing Requirements

Geometrics	
Cross section (Depth, Invert width, Total width, transverse & longitudinal grade)	1 per 50 metres
Water Ponding, no ponding of water	Visual test

8.3 Localised Damage - Refer QRA Treatment Guide 2020-21 July 2021 Page 15

Treatments included in this category are as follows:

Pothole Repair Treatment Code: SPR_POT

In addition to the treatment requirements listed in the QRA Treatment Guide 2020-21 the following sub-clauses must be applied where necessary:

a) Work Operations

- Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- Removal of any cracked or loose material from the area to be repaired
- Formation of a vertical face on the edges; cleaned and shaped in the form of a rectangle
- Delivery, supply and application of bitumen emulsion tack coat.
- Delivery, supply, placement and compaction of asphalt
- Clean up of the site including the disposal of any waste

b) Materials and Construction

- All materials shall be supplied, manufactured and installed in accordance with MRTS30 and associated standards.

8.4 Clearing and Earthworks

Refer QRA Treatment Guide 2020-21 July 2021 Pages 23 to 24

Treatments included in this category are as follows:

Bulk excavate surplus material and remove from site. Treatment Code: EXC_RSOS
 Bulk excavate surplus material to spoil Treatment Code: EXC_RSS
 Clear mixed debris and remove from site Treatment Code: EXC_HVC
 Bulk fill - local Treatment Code: BKF_LOC
 Bulk fill - imported (> 10m3) – Treatment Code: BKF_IMP

In addition to the treatment requirements listed in the QRA Treatment Guide 2020-21 the following sub-clauses must be applied where necessary.

a) Work Operations

The following operations shall be included as part of this Activity:

- The removal and re-instatement of roadside furniture (e.g. guide posts, signs etc.) as required.
- Benching into firm material, removal of unsuitable material, compaction of foundations.
- The de-grassing, scarifying and preparation of the existing formation and the incorporation of water and adequate compaction of the formation and imported Class

- B (>CBR 15) Select Fill material or Selected Backfill Material as required.
- d. The supply, cartage and incorporation of Class B (>CBR 15) Select Fill material or Selected Fill Material and water as required.
- e. The compacting of Class B (>CBR 15) Select Fill or Selected Fill Material in layers as per Main Roads Technical Standard "MRTS04 General Earthworks - Table 15.3 A – Layer thickness for compaction."
- f. The trimming and rolling to shape of the compacted restored formation and surrounding disturbed area.
- g. All other operations included in the Applicable Specification.
- h. Where clarification of details in relation to these Work Operations is required, the following Applicable Specifications provide additional requirements for compliance.

b) Restoration Standard

All grass, other vegetation and unsuitable material shall be removed from the work area and disposed of in an approved manner. Benching into the existing formation is required to tie in the new embankment. The foundation or base of the embankment zone shall be compacted prior to placement of fill in layers. This surface shall be wide enough to enable the completed formation to conform to the cross-section shape specified in the contract. The graded surface shall be watered and rolled to provide a sound tight surface with minimal loose stones and no visible vertical movement. The cross section shall be visually uniform and transition neatly into the existing adjoining profile.

c) Testing Requirements

In accordance with section 8.1.1 Material Requirements for Bulk fill - imported (> 10m³) of road surface.

8.5 Protection Works

Refer QRA Treatment Guide 2020-21 July 2021 Page 30

Treatments included in this category are as follows:

Rock Protection Treatment Code: RK_RKP

In addition to the treatment requirements listed in the QRA Treatment Guide 2020-21 the following sub-clauses must be applied where necessary:

a) Work Operations

- a. Listed in Clause 2.1.5 of MRS01 Introduction to Specifications Restoration Standard
- b. Excavating, loading, hauling and unloading loose or surplus material
- c. Compaction of the base of excavation
- d. Supply, delivery and handling of geotextile including allowance for lapping
- e. Installation of geotextile including lapping / joining
- f. Supply and placing rock
- g. Disposal of surplus or unsuitable material

b) Material and Construction

- a. All rock materials and construction shall conform to the relevant requirements of MRTS03 *Drainage, Retaining Structures and Protective Treatments* and MRTS04 *General Earthworks*.
- b. Geotextile shall be a material of the appropriate strength class and filtration class complying with the requirements of MRTS27 *Geotextiles (Separation and Filtration)*.

Geotextile shall be supplied and installed / constructed in accordance with MRTS27
Geotextiles (Separation and Filtration).

c) Testing Requirements

Not applicable

8.6 Road Furniture and Delineation

Refer QRA Treatment Guide 2020-21 July 2021 Page 32

Treatments included in this category are as follows:

Repair road signage Treatment Code: RFD_RRS
Replace guide posts or markers Treatment: Code: RFD_RP
Replace sign (complete) includes post Treatment Code: RFD_RCS

In addition to the treatment requirements listed in the QRA Treatment Guide 2020-21 July 2021 the following sub-clauses must be applied where necessary:

a) Work Operations

- a. Work Operations listed in Clause 2.1.5 of MRS01 Introduction to Specifications
- b. Removal and disposal of the damaged components
- c. The supply and installation of new components, including fittings

b) Materials and Construction

- a. All materials shall be supplied, manufactured and installed in accordance with MRTS14 Road Furniture.

c) Completed Work Evidence

All hold point releases require GPS photographs with date, time and GPS co-ordinate stamps for evidence in addition to completed Inspection and Test Plans (ITP's.). Sufficient assessment photographs of completed works to confirm extent (including depth) of works are required. Electronic copies of photographs must be received by the Superintendent in order to enable payment of Contactor claims. Such photos must be clearly named to identify the site and work undertaken to which the claim relates.

8.7 Shoulders (Provisional Item)

Refer QRA Treatment Guide 2020-21 July 2021 Page 20 – 21

Treatments included in this category are as follows:

Reconstruct Unsealed Shoulder Treatment Code: SPR_USF
Heavy Shoulder Grading - Rural Treatment Code: SPR_HSG

In addition to the treatment requirements listed in the QRA Treatment Guide 2020-21 the

following sub-clauses must be applied where necessary:

a) Work Operations

The following operations shall be included as part of this Activity:

- a. The removal and re-instatement of roadside furniture (e.g. guide posts, signs etc.) as required.
- b. The de-grassing and tyning of the existing shoulder (including the winning of any suitable material on site adjacent to the width of the shoulder to be maintained), the incorporation of gravel (supplied to the work site under Activity Code 5.3, if indicated in the contract, or won from site) and watering, mixing, compaction and trimming of the shoulder material.
- c. Brooming of the sealed surface to remove any loose material.
- d. All other operations in the Applicable Specifications.
- e. This activity does not include the addition of imported gravel/material. The contractor must use localised material only.
- f. Includes the treatment of the adjacent surface drainage.

Where clarification of details in relation to these Work Operations is required, the following Applicable Specifications provide additional requirements for compliance.

b) Restoration Standard

At the sealed/unsealed interface, the finished unsealed surface shall be even and within +0, - 10 mm of the height of the adjacent seal. Shoulder cross fall measured using the grader blade or other means shall be within +0, -2% (absolute) when compared to the cross fall of the adjacent sealed pavement.

Note:

Where the cross fall of adjacent sealed pavement is so irregular that the + 0, - 2% (absolute) standard cannot be achieved, the cross fall on the finished unsealed surface shall be consistent with allowing the free drainage of water off the sealed pavement. In general, the width of the finished shoulder shall not exceed:

- a. 3m where seal width is less than 4.5m
- b. 2m where seal width is between 4.5 and 5.6m
- c. 1.5m where seal width is greater than 5.6m

See "Notes on Finished Cross Sections" below.

The graded surface shall be watered and rolled to provide a sound tight surface. No loose material shall be left on the sealed carriageway, in drains or around roadside furniture. The surface of the sealed carriageway shall not be damaged

Notes on Finished Cross Section

Suitable material which may exist outside the required shoulder width, and which is winnable, should be considered for use for shoulder re-sheeting before additional material is brought to the site.

Bus pull off areas or widened shoulders at intersections and turnouts are not to be reduced in width and shall be included in the work activity. Where the width of the existing shoulder being graded is less than the width specified previously under this Section, the width of the existing shoulder need not be increased to the width given, except where this will be done at no additional cost to the Superintendent. Confirmation of width required must be sought in writing from the Superintendent in cases of discrepancy between onsite conditions and scope requirements in the contract. Overall, finished shoulder width shall be constant and within +300mm/-100mm of the width nominated in the contract.

c) Testing Requirements

Construction	
Compaction pavement	Proof roll (GVM 20t vehicle) – no visible deflection
Proof roll	Vehicle approved by Superintendent – No vertical movement Proof rolling is to be done for all areas in between the compaction tests and is to be signed off on the contractors Inspection & Test plans
Geometrics (required on both subgrade and finished pavement level)	
Horizontal, width compliance check	1 test per 100m (+300mm / - 100mm)
Vertical primary	1 test per 50m (3 points across width) (+/-0.5%)
Vertical, straight edge	1 test per 50m (L & R) (max deviation from a straight edge < 5mm).

8.8 Units of Measurement

The following units of measure shall be applied to all Works performed under the contract:

Description of Works	Unit of Measurement
Bulk excavate surplus material and remove from site	m3
Gravel Resheeting 100mm	m3
Heavy formation grading	m
Heavy formation grading incorporating 50mm of imported material	m3
Heavy formation grading incorporating 75mm of imported material	m3
Medium formation grading	m

8.9 Salvaged Materials

Unless otherwise stated, all materials, plant equipment, fixtures and other items salvaged from the Site of the Works shall be the property of the Principal and shall not be removed from the site without the prior approval of the Superintendent. The Superintendent is to be immediately consulted when any find is made that is considered of relevant heritage value.

The Contractor is to obtain written approval from the Superintendent prior to removal from site of any material or material which is or may be suitable for use as fill on the site. Material which is unsuitable for re-use should be transported and dumped in an approved dump area.

Approval for dumping of materials, not otherwise designated, should be obtained from the Superintendent.

Council operates a spoil permit system where residents can request approval to access spoil material. Disposal of spoil material to local residents is as by written direction and approval of the Superintendent. In these circumstances, The Contractor must be a willing participant in assisting with the management of this system