

# **Road Construction Contract**

## **C6838 Supplementary Conditions of Contract**

### **USER GUIDE**

#### **INSTRUCTIONS FOR USE**

This guide is intended to be a guide only for any of the parties to a Contract using these Supplementary Conditions but do not form part of the Contract.

Amendments have been made, where necessary, to conform to the specific requirements of the Queensland Department of Main Roads and Government legislation.

In this User Guide, the text comprising the Supplementary Conditions of Contract has been printed only on the left hand pages. The opposite right hand pages contain a brief commentary on and/or description of selected clauses.

The original issue of this User Guide was produced in 1996 and referred to the August 1996 version of the Road Construction Contract (RCC), which was then current. There have been several subsequent versions of the RCC (viz. December 1999, November 2001, February 2002 and January 2004). The User Guide has therefore been revised to incorporate and comment on all of the important changes made to the RCC up to, and including, the September 2005 version.

In practice, no changes are to be made to the Supplementary Conditions of Contract unless authorised by General Manager (Engineering & Technology).

# Supplementary Conditions of Contract

## 1 ORDER OF PRECEDENCE OF DOCUMENTS

The following order of precedence shall apply where there is any ambiguity, discrepancy or inconsistency between the documents comprising the Contract. (Documents higher in the list have a higher priority).

- (a) Formal Instrument of Agreement;
- (b) Letter of Acceptance;
- (c) Notices to Tenderers;
- (d) Any Special Conditions of Contract;
- (e) Supplementary Conditions of Contract;
- (f) General Conditions of Contract;
- (g) Drawings;
- (h) Standard Drawings Roads;
- (i) Project-Specific Supplementary Specifications;
- (j) Standard Specifications Roads;
- (k) Manual of Uniform Traffic Control Devices;
- (l) Conditions of Tendering;
- (m) Completed Tender Form and Tender Schedules modified as necessary by post-tender correspondence;
- (n) Other Contract Documents.

## 2 METHOD OF MEASUREMENT AND PAYMENT

### 2.1 Schedule of Rates Contract

For a schedule of rates contract, or the schedule of rates part of a part schedule of rates and part lump sum contract, the quantity of completed work shall be measured in accordance with the Standard Method of Measurement specified in Clause 2 of Standard Specification MRS11.01 *Introduction to Standard Specifications*.

Where the unit of measurement for an item in the Schedule of Rates is stated as "lump sum", the Contractor may include part of the relevant amount in a claim for payment under Clause 42.1 of the General Conditions of Contract. Valuations of items to be included for payment will be made based on the Superintendent's assessment of the percentage of completed and conforming work or, where an appropriate formula is included in the specification associated with the particular work, in accordance with that formula.

### 2.2 Lump Sum Contract

For a lump sum contract, or the lump sum part of a part schedule of rates and part lump sum contract, the Contractor may include part of relevant items contained in the Schedule of Prices in a claim for payment under Clause 42.1 of the General Conditions of Contract. Valuations of items to be included for payment will be made based on the Superintendent's assessment of the value of conforming work completed or, where an appropriate formula is included in the specification associated with the particular work, in accordance with that formula.

### 2.3 Goods and Services Tax (GST)

Further to Clause 3.2, 3.3, 40.5 and 42 of the General Conditions of Contract items to be included for payment, other than amounts shown at "Security and Retention", "Liquidated Damages" and "Other", shall be exclusive of the amount of GST.

The amount of GST shall be added to the subtotalled amount after retention has been taken out (where applicable) as shown on Form C6883.2 on the basis that that amount is a supply to the Principal by the Contractor or a supply by the Contractor to the Principal, as the case may be.

In the event that the Principal pays to the Contractor or the Contractor pays to the Principal, as the case may be, an amount on account of the GST in respect of a supply made under the Contract, and that amount exceeds the amount of the liability for GST in respect of the supply, then the Contractor or the Principal (as the case may be) shall reimburse the other party the amount by which the GST has been overpaid.

## 3 RISE AND FALL

### 3.1 General

Where the Contract is subject to rise and fall in accordance with clause 3.4 of the General Conditions of Contract, the Contract Sum shall be subject to adjustment for variations in the cost of labour and materials and the adjustment shall be effected in the claims for payment submitted by the Contractor in accordance with Clause 42 of the General Conditions of Contract. Any cost adjustment shall be calculated from the formula —

$$D = \frac{0.85 \times (C - B) \times A}{B}$$

## **1 ORDER OF PRECEDENCE OF DOCUMENTS**

The order of precedence of the Contract documents is listed. It should be noted that in the Road Construction Contract at Clause 8 of GCoC, there are provisions in respect of discrepancies in the documents and the statement that "The several documents forming the Contract are to be taken as mutually explanatory of one another".

Note the Letter of Acceptance is second on the list but that other correspondence between the parties in the period from tender to award have a low ranking number under (n) "Other Contract Documents". It is imperative that agreements reached between the parties in the tender evaluation period which have significant contractual importance are expressed in the Letter of Acceptance. This applies to conditions that may have been included in the tender.

## **2 METHOD OF MEASUREMENT AND PAYMENT**

### **2.1 Schedule of Rates Contract**

In determining the completed value of schedule of rates items for inclusion in a payment certificate, the Superintendent is directed to comply with the requirements and guidelines contained in DMR Standard Specification MRS11.01 Introduction to Standard Specifications.

A schedule of rates Contract may contain some "lump sum" items. The Contractor is entitled to claim progressive payment for the value of such items as the work or supply progresses. In valuing these items, the Superintendent must make a fair and reasonable assessment of the percentage that is complete and conforming. There may be a separate specification for some of the items, and this specification may have prescribed values or percentage to be certified at particular stages. The Superintendent should take proper account of these specifications and methods of determining values. By way of example, Clause 5.2 Establishment of Contractor's Site Facilities and/or Camp of Standard Specification MRS11.28 gives a formula for calculating the payment that should be approved for such items.

Note that the Superintendent is not responsible for whether the amount so calculated is a fair assessment of the Contractor's actual costs. The value of the item in the schedule has been accepted and the Superintendent is only required to assess the amount owing by using the prescribed formula or appropriate method in other circumstances.

### **2.2 Lump Sum Contract**

Similar to 2.1 above, the Superintendent's valuation of items contained in the Schedule of Prices is to be made on a reasonable assessment of the value of conforming works, or taking account of any relevant formulae that might be continued in separate specifications for those items.

### **2.3 Goods and Services Tax (GST)**

The amount of the GST payable is to be calculated and added to the subtotal of the net value of the items as shown in Form C6883.2. Note that this total is not to include any relevant amounts for "Security and Retention", "Liquidated Damages" or "Other".

If it is subsequently determined that an amount in excess of the GST liability has been paid, then the overpayment is to be reimbursed.

where —

**A** = the certified amount for payment which has not been adjusted in accordance with this clause, less —

- (i) any variations or payments made under a provisional sum item;
- (ii) any Daywork;
- (iii) the value of bitumen which is the subject of a separate costs adjustment pursuant to Clause 3.2 of the Supplementary Conditions of Contract. The value of bitumen shall be calculated by (E x F) as defined in Clause 3.2;

**B** = the value of the Road and Bridge Construction Index applicable at 9.00 am on the 15th day of the month prior to the date of lodgement of tenders for the Contract;

**C** = the value of the Road and Bridge Construction Index applicable at 9.00 am on the 15<sup>th</sup> day of the month during which the work is performed; and

**D** = the applicable cost adjustment for this payment claim.

The value of the indices B and C shall be as stated in Table 16 of Catalogue Number 6427.0 "Producer Price Indexes" published quarterly by the Australian Bureau of Statistics. The applicable index numbers shall be the latest released by the Australian Bureau of Statistics at the relevant times and dates and will generally be the index numbers for the previous quarter although they may be those for the quarter before the previous quarter.

If at any time the Road and Bridge Construction Index is discontinued or modified, the Superintendent shall request the Australian Bureau of Statistics to nominate the index or authority which in its opinion is the most practical for the purposes of measuring any variation in costs during the performance of the Contract. The index or authority nominated by the Australian Bureau of Statistics shall be adopted for the purposes of making the calculation under this clause. If the Australian Bureau of Statistics fails to nominate an index or authority which is practical for the purpose of measuring any variation in costs, then the amount of the cost adjustment applied to payment claims shall be the amount determined by the Superintendent acting reasonably.

The calculated cost adjustment for rise and fall shall be applied to each progress payment and shall commence from the first payment certificate that values work under the contract.

No cost adjustment shall be permitted for work carried out after the Date for Practical Completion.

### **3.2 Adjustment for the cost of bitumen**

(a) The contract value shall be subject to adjustment for variations in the cost of bitumen supplied by the Contractor. The adjustment shall be effected in the claims for payment submitted by the Contractor in accordance with clause 42 of the General Conditions of Contract.

Any cost adjustment shall be calculated from the formula  $H = (G-F) \times E$ , where —

**E** (Tonne) = the quantity of bitumen supplied by the Contractor derived from:

The calculation of residual bitumen at 15 degrees Celsius where the product is sprayed bituminous surfacing or a tack coat;

The approved design binder content where the product is asphalt;

The approved residual binder content where the product is a bituminous slurry surfacing.

Where the binder is modified bitumen, the quantity shall be the quantity of manufactured polymer modified binder.

**F** (\$/Tonne) = the price of Class 170 bitumen applicable at 9:00am on the reference date. The reference date shall be the 15th day of the month prior to the time for lodgement of tenders for the contract occurred;

**G** (\$/Tonne) = the price of Class 170 bitumen on the 15th day of the month during which the work is performed. The Price of Class 170 bitumen shall be the average general market price of bitumen of the Queensland manufacturers; and

**H** (\$) = the applicable cost adjustment for this claim for payment.

(b) If the Contract is subject to adjustment for rise and fall in accordance with clause 3.4 of the General Conditions of Contract, the adjustment to the contract value of bitumen products supplied by the Contractor shall be separately determined in accordance with clause 3.2(a).

### **3 RISE AND FALL**

Rise and Fall now applies to all RCC Contract with a Contract duration equal to or greater than 365 days.

The last paragraph confirms that cost adjustment shall not apply for work carried out after the Date for Practical Completion and Superintendents should observe this provision. Note that particular attention should be given to any variation work agreed to after the Date for Practical Completion.

Care should be taken in respect of the valuation of variations and it should be specifically noted whether such valuation is or is not inclusive of Rise and Fall. It is possible to create considerable additional work for Superintendents if an efficient system is not used to value variations in respect of Rise and Fall.

The Department of Main Roads shall apply rise and fall provisions to all departmental contracts in accordance with Engineering Policy EP138. When the Contract Duration is equal to or more than 365 calendar days, the moneys payable to the Contractor under the Contract shall be subject to adjustment for rise and fall. All contracts, regardless of duration, shall be subject to adjustment for contractor-supplied bitumen price variations.

Due to the significant variation in the cost of road construction in recent years the department shall apply rise and fall provisions to contracts. The department has chosen the Road and Bridge Construction Index (ABS 4121) as representative of the fluctuation in the industry for general construction costs. The bitumen adjustment is not based on the Road and Bridge Construction Index, or the Consumer Price Index, because neither is reflective of the fluctuating international oil prices. For the rise and fall of bitumen, the department has decided to apply a cost adjustment based on the value of Class 170 bitumen.

Variations in the price of road construction cause cost risks to both the Department of Main Roads and Contractors on Main Roads contracts. Main Roads is seeking to equitably share this risk by applying a rise and fall provision to contracts.

The application of the general rise and fall provisions result in rise and fall being payable on schedule items (minus the value of bitumen and the value of work completed after the Date for Practical Completion). Variations shall have any applicable rise and fall valued into the approved variation price. Dayworks, bonuses, work after Date for Practical Completion, bitumen schedule items and the bitumen adjustment will not attract the application of rise and fall.

The bitumen adjustment provisions shall apply only to contractor-supplied bitumen and not to principal-supplied bitumen. The adjustment is based on Class 170 bitumen price. This is premised on the assumption that price differences for other classes of bitumen (for example, Class 320, commonly used in asphalt) fluctuate by similar amounts to Class 170.

Administration forms C6883 and C6884 are supplied to provide assistance in the application of this provision.

## **4 CONTRACTOR'S STAFF**

### **4.1 General**

The Contractor shall employ on the Site at least the positions and numbers of staff stated in Clause 1A of the Annexure to the Supplementary Conditions of Contract. Where no such numbers are stated, the Contractor shall employ an adequate number of experienced staff necessary to carry out the requirements of the Contract.

For each of the positions described in Clauses 4.2 to 4.10, the value of Y is given in Item 1A of the Annexure to the Supplementary Conditions of Contract.

The personnel nominated by the Contractor to fill the required positions shall have at least the qualifications and experience described in Clauses 4.2 to 4.9 inclusive, and shall be able to read, write and converse fluently in the English language.

Except as provided under Clause 4.4, where the skills of the individual warrant and where the lack of complexity of the project permits, consideration will be given by the Superintendent (or Principal at the pre-award stage) to a suitably skilled and qualified person carrying out up to two of the following positions.

### **4.2 Project Manager**

Unless otherwise stated in Item 1B of the Annexure to the Supplementary Conditions of Contract, the Contractor's Project Manager shall be an experienced Project Manager, with a minimum of Y years experience in planning and executing large civil engineering works of a similar nature to those in this Contract.

The Project Manager shall be the Contractor's Representative for the purpose of Clause 25 of the General Conditions of Contract.

The Project Manager shall be based on the Site and shall be authorised to discuss and resolve contractual and technical issues.

Where the Contractor's Project Manager is not an engineer a qualified engineer (who may be a consultant) with the necessary formal engineering qualifications and experience shall be available for matters requiring engineering decisions.

### **4.3 Project Engineers**

Unless otherwise stated in Item 1C of the Annexure to the Supplementary Conditions of Contract, where a Contractor employs a Project Engineer on the Site in accordance with Clause 4.1, the Contractor's Project Engineer shall be an experienced engineer

with a minimum of Y years experience in civil engineering works of a similar nature to those in this contract and who is eligible to become a Chartered Professional Engineer if the minimum years of experience shown in Item 1A of the Annexure is greater than five years.

### **4.4 Contractor's Quality Representative**

Unless otherwise stated in Item 1D of the Annexure to the Supplementary Conditions of Contract, where a Contractor employs a Contractor's Quality Representative on the Site in accordance with Clause 4.1, the Contractor's Quality Representative (CQR) shall be a person with an appropriate qualification or experience in civil engineering, surveying, quality management or similar qualifications satisfactory to the Superintendent and who shall have at least Y years experience in the civil construction industry. The Contractor's Quality Representative shall have the necessary authority and responsibility to ensure compliance with the Contractor's Quality System for the Contract. The Contractor's Quality Representative shall not be the Project Manager.

The CQR shall be knowledgeable in quality standards and procedures and be able to demonstrate an understanding of and commitment to the principles of Quality Assurance.

The CQR shall be on the Site at all times during the execution of the work under the Contract unless approved otherwise by the Superintendent.

### **4.5 Environmental Representative**

Unless otherwise stated in Item 1E of the Annexure to the Supplementary Conditions of Contract, where the Contractor employs on the Site an Environmental Representative in accordance with Clause 4.1, the Contractor's Environmental Representative shall be a person with an appropriate qualification in biology, environmental science or similar qualification satisfactory to the Superintendent and shall have a minimum of Y years experience in an advisory capacity in planning and implementing environmental requirements for construction works. The Contractor's Environmental Representative shall be familiar with the requirements of the Environmental Protection Act 1994.

Where the Environmental Representative does not have the qualifications and experience to deal with all environmental issues associated with the Contract, the Environmental Representative shall be given authority and responsibility to consult appropriate specialist advice.

## **4 CONTRACTOR'S STAFF**

### **4.1 General**

The experience required and numbers of staff which the Contractor must employ on the site are specified in Item 1A of the Annexure to the Supplementary Conditions of Contract (SCoC).

The Superintendent should exercise some discretion in administering the requirements as stated in relation to the number of personnel required. The size and geographical location of the project may be such that fulfilling the obligation of, for example, the Landscape Representative and/or the Environmental Representative may not occupy a person full-time and hence "doubling up" of responsibilities may be reasonable under the circumstances. Amendments made to SCoC in 2005 allow some "doubling up" of responsibilities.

### **4.2 General Comments on Personnel**

These clauses elaborate on the requirements for the various positions. The minimum amount of experience required for each position is set out in Annexure to the SCoC Items 1B to 1I. As noted in Clause 4.1, some consideration should be given to the size and location of the project.

On some projects the qualifications and experience requested has been higher than reasonably necessary or available, resulting in difficulty for the Contractor and ultimately the Principal. This applies particularly to small projects and remote projects. It is suggested that considerable care be given to the qualifications and experience requested and that the details be obtained during the tender process.

#### **4.2.1 Project Manager**

The second paragraph acknowledges that the Project Manager may not be a qualified engineer. It may be on a smaller project that the person nominated as the Project Manager is only on site part of the time. This would be acceptable but the person could not be nominated as the Contractor's Representative under Clause 25 of the General Conditions of Contract (GCoC) which requires a full time presence during execution of work under the Contract. Special arrangements could be made for some projects.

#### **4.3 Project Engineers**

#### **4.4 Contractor's Quality Representative**

While it is noted above that "doubling up" of some job functions might be acceptable, this clause is quite specific, with justification, that the Project Manager must not also be the Contractor's Quality Representative (CQR). This is to reinforce the independence of the quality monitoring function, which must not be compromised by a potential conflict of interest with the business and profitability responsibilities of the Project Manager

#### **4.6 Landscape Representative**

Unless otherwise stated in Item 1F of the Annexure to the Supplementary Conditions of Contract, where a Contractor employs on the Site a Landscape Representative in accordance with Clause 4.1, the Contractor's Landscape Representative shall be a person who holds a license from the Queensland Building Services Authority or is an employee of a company holding a license in structural landscaping and has a minimum of Y years experience as a supervisor of construction of structural landscaping.

#### **4.7 Community Liaison Officer**

Unless otherwise stated in Item 1G of the Annexure to the Supplementary Conditions of Contract, where a Contractor employs on the Site a Community Liaison Officer in accordance with Clause 4.1, the Contractor's Community Liaison Officer shall be a person with at least Y years experience in the establishment and operation of community liaison programs relating to the construction of significant new projects.

#### **4.8 Surveyor**

Unless otherwise stated in Item 1H of the Annexure to the Supplementary Conditions of Contract, the Contractor's Surveyors shall be eligible for ordinary membership to the Institution of Engineering and Mining Surveyors, Australia.

The Contractors' Surveyor shall have had extensive experience in setting out engineering work of a similar nature to the work under the Contract.

#### **4.9 Works Supervisor**

The Works Supervisor and other supervisory staff employed by the Contractor on the Site shall be competent and experienced in the respective parts of the work for which they are responsible.

The Contractor shall employ Works Supervisors in at least the disciplines nominated in Item 1I of the Annexure to the Supplementary Conditions of Contract.

#### **4.10 Key Personnel**

Those personnel nominated by the Contractor in its tender and accepted by the Principal shall be the Contractor's key personnel for the Contract.

The Contractor shall maintain these key personnel on the work under the Contract and shall not replace them unless the Superintendent approves the substitute.

Any vacancy of key personnel shall be promptly filled by the Contractor with a person who shall

possess at least equal experience, qualifications and ability as the person replaced.

### **5 TRAINING REQUIREMENTS**

In Clause 5 —

“apprentices, trainees and/or cadets” shall mean any employees engaged in a formal apprenticeship as provided for in State vocational education and training legislation or a cadetship or scholarship incorporating formal tertiary or technical education that results in a nationally recognised building and construction qualification;

“up-skill” shall mean to train workers engaged on the site of the works where such training culminates in a nationally recognised building and construction competency or qualification. Up-skilling must be provided by a training organisation that is registered with a State or Territory Training Authority.

Further to Clause 29 of the General Conditions of Contract, the Contractor, in its execution of the work under the Contract, shall —

- (a) employ on the Site, either directly or indirectly through subcontractors, apprentices, trainees and/or cadets; or
- (b) employ on the Site, either directly or indirectly through subcontractors, apprentices, trainees and/or cadets and up-skill workers employed on the Site.

For a number of labour hours no less than —

- (i) as provided for in a training plan approved in writing by the Director-General, Department of Employment and Training; or
- (ii) the number of hours nominated in Item 1J of the Annexure to the Supplementary Conditions of Contract; or where no hours are nominated;
- (iii) a number expressed in hours, derived by multiplying the accepted Contract Sum by 0.0004 (ie Contract Sum x 0.0004 = number of training labour hours).

In complying with this clause, not less than 75% of the required number of training labour hours shall be performed by apprentices, trainees and/or cadets. All apprentice, trainee and/or cadet labour hours shall be attributable to the required training labour hours.

However, the number of attributable labour hours to up-skill a worker shall be limited to the nominal hours deemed necessary to adequately present the educational material, in a classroom delivery mode,

#### **4.10 Key Personnel**

This clause places an obligation on the Contractor to actually employ on site those personnel who were nominated as the site management team in the tender proposal.

It frequently arises that some nominated staff will not be available at the time of award because of the time between submission of the tender and award of the Contract, and that some personnel will, for various reasons, have to be replaced during the course of the Contract. However, note that the Contractor cannot replace personnel without the Superintendent's approval. This power should be used with discretion, again taking account of the size and location of the project. Any attempt by the Contractor to downgrade the overall level and experience of Site Staff is a serious issue and should be resisted and the Principal should be advised.

### **5 TRAINING REQUIREMENTS**

This clause originally appears as Clause 29.4 Apprenticeship/Training Requirements in the August 1996 version of the GCoC. It was extended and relocated to the SCoC in the December 1999 version.

The requirement is to satisfy legislation administered by Department of Employment and Training. The Superintendent should become aware of the provisions in this Clause and administer them adequately, including but not limited to the obligations listed in Items A, B and C.

The Contractors is cautioned that failure to comply with the requirements of "the 10% training policy", in part or in whole, will be taken into account in the award of future contracts with the Principal. This is a major issue and the Superintendent or Principal's Representative must keep adequate records to support any views expressed at the end of the Contract.

Some Contractors (eg RoadTek) have negotiated a whole of business approach to provision of training rather than project by project. This has been accepted by the Department of Industrial Relations.

for the worker to achieve an identified competency or qualification. Such nominal hours shall be as determined by the Department of Employment and Training.

The Contractor shall —

- A. Within 14 days of the Date of Acceptance of Tender, submit to the Department of Employment and Training, with a copy to the Superintendent, a completed Compliance Plan (Form C6852.1 as attached at Part 8); and
- B. Within 7 days of the expiration of each successive thirteen (13) week period commencing from the Date of Acceptance of Tender, submit to the Department of Employment and Training, with a copy to the Superintendent, a copy of the Interim Compliance Report (Form C6852.2 as attached at Part 8); and
- C. Within 14 days of the Date of Practical Completion, or if there are Separable Portions, the last occurring Date of Practical Completion, submit to the Department of Employment and Training, with a copy to the Superintendent, a completed Practical Completion Compliance Report (Form C6852.3 as attached at Part 8).

The Contractor acknowledges that failure to comply in part or in whole with Clause 5 will be a substantive factor that will be taken into account in the award of future contracts by the Principal.

## **6 EVIDENCE OF CONFORMANCE OF WORK**

Further to Clause 42.1 of the General Conditions of Contract, the Contractor shall apply the following procedure when submitting evidence of conformance of work to the Superintendent —

- (a) the work shall be completed in accordance with the provisions of the Contract in respect to quantity, quality and any other relevant requirements;
- (b) the work shall be inspected and tested in accordance with the requirements of the Contract;
- (c) inspection and test results shall be analysed to demonstrate compliance with the Contract; and
- (d) a conformance report shall be presented to the Superintendent.

The Contractor shall submit a conformance report to the Superintendent promptly on completion of the

work and prior to substantial progress on subsequent work.

## **7 CONTRACT PLAN**

### **7.1 General**

The Contractor shall establish, review, maintain and update a Contract Plan which documents and maintains the systems, procedures and plans required to be implemented under the Contract.

As a minimum the Contract Plan shall include —

- (a) the construction program;
- (b) the Quality Plan;
- (c) the Environmental Management Plan;
- (d) the Construction Workplace Plan;
- (e) the Traffic Management Plan (where required); and
- (f) the Community Liaison Plan (where required).

These documents shall comply with the relevant Contract requirements and the interconnections between the plans shall be documented.

Failure by the Contractor to provide a suitable construction program, Quality Plan, Environmental Management Plan, Construction Workplace Plan, Traffic Management Plan (where required) or Community Liaison Plan (where required), or to implement and/or maintain such a program or Plan, will be a substantial breach of Contract for the purposes of the operation of Clause 44.2 of the General Conditions of Contract.

### **7.2 Interim Plans**

Where the Contractor proposes to commence work before the Superintendent has given a direction under the provisions of Clause 8.4 of the General Conditions of Contract that a Plan is suitable, the Contractor shall submit to the Superintendent an interim Environmental Management Plan, Construction Workplace Plan, Traffic Management Plan (where required) and Community Liaison Plan (where required). These Plans shall be submitted 7 days before the Contractor commences work on the Site. They shall be compiled in accordance with the requirements set out in these Supplementary Conditions of Contract or the relevant Standard Specifications as appropriate, and contain sufficient particulars to demonstrate the Contractor's commitment to its obligations and the management of the environmental, safety, traffic and community liaison issues for the first two months of the Contract period.

## **6 EVIDENCE OF CONFORMANCE OF WORK**

This is a particularly important clause and its provisions have been subject to a range of interpretations. The final paragraph is to be noted carefully in regard to:

- The conformance report must be complying with the definition stated in MRS11.01 viz :  
*"conformance report Summary statement submitted by the Contractor to the Superintendent of the evidence pertaining to each lot which demonstrates that the specified requirements for that lot have been met."*
- If quality records, including test reports, are not attached to the Conformation Report (permitted by Clause 12 QUALITY RECORDS in MRS11.50) then the Superintendent must be satisfied that test results were obtained and analysed by the Contractor.

Where test results are not provided to the Superintendent, there must be regular audits of the Contractor's records to ensure that test results are being taken and analysed and are in an orderly formate for handover as required by Clause 12 of MRS11.50. This clause gives the Superintendent the authority to inspect such records.

Refer to Clause 42 of the GCoC in regard to the performance guarantee permitted to facilitate prompt payment for completed work. A Contractor who leaves a performance guarantee in place for such works is in breach of Clause 6 SCoC in that the Conformance Report is not submitted promptly.

## **7 CONTRACT PLAN**

### **7.1 General**

Since the 1996 version of the Road Construction Contract (RCC) there have been increased requirements for the Contractor to provide a comprehensive and co-ordinated plan which incorporates its separate plans. The Contractor should submit plans within 28 days of the Date of Acceptance of Tender, which imposes a heavy workload on the Superintendent to review and, where appropriate, comment on such plans in the 14 days after they are submitted. It is suggested that the Superintendent take a proactive approach in the period leading up to the submission of the Contract Plan and monitor the Contractor's progress.

The importance of the Contract Plan is recognised in the last paragraph where failure to provide, implement and/or maintain each of the separate components of the Contract Plan constitutes a substantial breach of Contract under Clause 44.2 of the GCoC.

### **7.2 Interim Plans**

In recognition of the often substantial work in compiling the Contract Plan, a Contractor is allowed to have Interim Plans for the:

- Environmental Management Plan;
- Safety Plan;
- Traffic Management Plan; and
- Community Liaison Plan.

These must be submitted 7 days before work commences on site. No such provision is made for:

- The Construction Program; or
- The Quality Plan.

The time period specified is the first two months of the Contract period. This means the complete plans should be in place two months after the Date of Acceptance of Tender.

## **8 PLANNING AND REVIEW OF PROGRESS**

### **8.1 General**

The following provisions are additional to the requirements of Clause 33 of the General Conditions of Contract.

The Contractor shall prepare, implement and maintain a construction program in accordance with Clause 8.

The Contractor shall be fully responsible for maintaining all work under the Contract to its construction program including works carried out by the Contractor and by its subcontractors.

### **8.2 Construction Program**

Within 28 days after the Date of Acceptance of Tender, or as otherwise stated in Item 2A of the Annexure to the Supplementary Conditions of Contract, the Contractor shall prepare and submit its construction program to the Superintendent for a direction as to its suitability in accordance with Clause 8.4 of the General Conditions of Contract.

The construction program shall take one of the following forms as stated in Item 2B of the Annexure to the Supplementary Conditions of Contract —

- (a) a critical path network, in accordance with Clause 8.3; or
- (b) a bar chart in accordance with the requirements of Clause 8.4.

The construction program —

- (i) shall be consistent with the program which was submitted with the Contractor's tender;
- (ii) shall show the Contractor's bona fide planned work activities and sequences for bringing the work under the Contract to Practical Completion by the Date for Practical Completion; and
- (iii) shall not affect the time for performance by the Principal or the Superintendent of any of their obligations or oblige either of them to do anything earlier than is necessary to enable the Contractor to bring the work under the Contract to Practical Completion on the Date for Practical Completion.

The Contractor may implement and revise as necessary its construction program while carrying out work under the Contract.

If the Contractor fails to comply strictly with the provisions of Clause 8, the Principal may suspend

payments under Clause 42 of the General Conditions of Contract until the Contractor does comply.

### **8.3 Critical Path Network Program**

A critical path network program shall be prepared on a computerised project management system approved by the Superintendent. The Contractor's software shall be capable of exporting data in an electronic format which can be readily loaded into the Superintendent's project management software which is nominated in Item 2C of the Annexure to the Supplementary Conditions of Contract.

Without limitation, the program shall include —

- (a) all significant key dates and milestones, including dates by which the Principal is required to supply information or materials, or is required to have done anything;
- (b) an appropriate number of activities not less than the number stated in Item 2D of the Annexure to the Supplementary Conditions of Contract;
- (c) activity durations of not longer than 21 days;
- (d) activities identified by whole numbers, with sufficient gaps in the logical sequence to allow later insertion of additional activities should that be required;
- (e) total float for each activity;
- (f) a separate detailed activity listing showing coding, estimated durations and full logic links between activities;
- (g) one start activity (award of the Contract) and one end activity, or if there are Separable Portions, one end activity for each Separable Portion (Practical Completion attained);
- (h) one or more continuous paths of zero float from the start activity to the end activity or end activities;
- (i) all external constraints including, without limitation, constraints on working days, working hours and traffic lane access;
- (j) any resource and/or logic restraints (non-zero lags shall only be shown where an engineering or resource requirement can be demonstrated);
- (k) at least 2 calendars, one for calendar days and one for working days;
- (l) activity weightings expressed as a percentage of the total cost of the work under the Contract;

## **8 PLANNING AND REVUE OF PROGRESS FOR MAJOR WORKS**

### **8.1 General**

The 1996 version of this clause was aimed at major projects. Since then, significant changes have been implemented to allow the Principal to specify the type of program, the minimum size of the program and the level of detail required such that the clause may apply to all contracts.

This is one of the most important provisions of the SCoC (and the Contract generally) and frequently Superintendents have difficulty in obtaining timely and fully conforming construction programs in day-to-day contract administration.

The absence of a program or submission by the Contractor of unsatisfactory or incorrect programs, can have a significant impact on the Superintendent's decisions under many clauses, including:

- Clause 33.3 Acceleration;
- Clause 35.5 Extensions of Time for Practical Completion'
- Clause 36 DELAY OR DISRUPTIONS COSTS; and
- Clause 40 VARIATIONS.

However, the range of issues impacted extends to many other areas, such as:

- possession of site;
- use of the site by others (including following Contractors);
- working hours;
- suspension of work;
- separable portions;
- mandatory milestones; and
- liquidated damages

as well as matters relating to the Superintendent's and/or Principal's staff resources for issues such as contract administration, operation and maintenance.

Superintendents need to be thoroughly familiar with the provisions of this clause, the full impact of the construction program throughout the Contract and the remedies for non-compliance with Clause 8.

### **8.2 Construction Program**

It is important to obtain a construction program early in the Contract period and the Superintendent should be proactive by stressing the importance of the Contractor's meeting the 28 day period prescribed in Clause 8.2 (or as stated in Item 2A of the Annexure to the SCoC) and in monitoring progress on the Contract in that period.

With the widespread use of project management software, the option of a bar chart (option (b)) is only applied to small and simple works.

Clause 8.4(c) of the GCoC states that the Superintendent has 14 days (or as stated in Item 8C of the Annexure to the GCoC) to respond and this time provision must be observed. If the Superintendent fails to meet this time requirement then he is in breach of his obligations but there is no express remedy. Certainly the Contractor's program is not deemed suitable due to the Superintendent's failure to act in time.

Note that Clause 8.4(d) states that reasons must be provided by the Superintendent as to why a document is considered unsuitable. It is good practice for the Superintendent to meet with the Contractor to discuss the logic behind its program so the Superintendent fully understands the logic restraints as well as the resource restraints, as distinct from matters which are simply the Contractor's choice. The program remains the responsibility of the Contractor and, when providing reasons for not deeming the program to be suitable, the Superintendent must be careful to be sure he does not exceed his authority by introducing requirements outside those stated or reasonably inferred in the Contract.

Clause 8.4(d) of the GCoC provides for 7 days for the Contractor's response. The Superintendent must follow up the required changes such that a suitable construction program is in place at the earliest time. Particular attention is directed to the requirement in Clause 8.2(ii) of the SCoC that the construction program shall show "bona fide planned work activities and sequences.....".

- (m) projected progress of the work under the Contract, capable of being presented graphically;
- (n) the estimated value of work programmed in each month throughout the Contract.

The Contractor shall provide the necessary input such that its computerised project management system is capable of providing reports showing personnel, plant and machinery resources for each activity in man-hours, machine hours or by crews. The format and content of the report(s) shall be as agreed with the Superintendent.

#### **8.4 Bar Chart Program**

A bar chart program shall be prepared in the form of a bar chart which shall comply with the requirements of all subparagraphs of Clause 8.3 except (d), (f), (i), (j), (l), (m) and (n).

Notwithstanding the provisions of this clause, the Contractor may elect to provide a construction program in the form of a critical path network in accordance with Clause 8.3.

#### **8.5 Current Program**

Once the Superintendent gives a direction that a construction program is suitable, the construction program shall be designated the "Current Program". No changes shall be made to the Current Program without the prior agreement, in writing, of the Superintendent.

Until such time as the Superintendent gives direction that a construction program is suitable the Superintendent may have regard, as necessary, to the program submitted with the Contractor's tender.

Where a critical path network program is specified, with each program submitted under Clause 8.2, any revised program submitted under Clause 8.8 and any rolling program submitted under Clause 8.10, the Contractor shall submit appropriate information in the electronic format stated in Clause 8.3.

#### **8.6 Contractors' Liabilities and Obligations Not Relieved**

No direction as to use of nor any other comment or direction by the Superintendent regarding the suitability of or any change to any construction program submitted under Clause 8.2, any revised program submitted under Clause 8.8 or any rolling program submitted under Clause 8.10 shall —

- (a) relieve, limit or exclude any of the Contractor's liabilities or obligations under the Contract, including, without limitation, its obligation to execute the work under the

Contract to Practical Completion by the Date for Practical Completion and its responsibility for all planning, scheduling, sequences, methods and techniques necessary for the due performance of its obligations under the Contract;

- (b) constitute a direction to accelerate, disrupt, prolong or vary any or all of the Contractor's activities or the work under the Contract or any part thereof;
- (c) constitute a direction under the fifth paragraph of Clause 33.1 of the General Conditions of Contract;
- (d) constitute the granting of an extension of time for Practical Completion or a determination in relation to any application for an extension of time for Practical Completion; or
- (e) affect the time for performance by the Principal or the Superintendent of any of their obligations or oblige either of them to do anything earlier than is necessary to enable the Contractor to bring the work under the Contract to Practical Completion on the Date for Practical Completion.

#### **8.7 Current Program Not Part of Contract**

The Current Program does not form part of the Contract but may be used by the Superintendent to monitor the progress of the work under the Contract and assess claims for extension of time.

#### **8.8 Contractors' Revisions of Current Program**

If the actual progress of the work under the Contract varies significantly from that shown in the Current Program, the Contractor shall submit a revised program which shall (where possible) indicate how the Contractor proposes to accelerate the work in order to meet the Date for Practical Completion. A revised program shall comply with the provisions of Clause 8.2.

Once the Superintendent gives a direction that a revised program is suitable that program shall be the Current Program.

#### **8.9 Review of Current Program**

At each Site Conference held in accordance with Clause 17.2, the Contractor shall provide to the Superintendent a printed report which reviews the Current Program and highlights any significant impacts on the project for the period up to the next Site Conference.

## **8.2 Construction Program (continued)**

If the Contractor does not comply with the provisions of Clause 8 of the SCoC then, as provided for in the last paragraph of the clause, the Principal may suspend payments due to the Contractor under Clause 42 of the GCoC. This entitlement to withhold payment indicates the importance the Principal places on the submission of a conforming program. Clearly, the Superintendent has a responsibility to keep the Principal fully informed of any failure by the Contractor to comply with the provisions of Clause 8. It is then the Principal's decision whether or not to exercise its power to withhold payments.(Refer to comments on Clause 6.2 of the GCoC regarding the withholding of payment and the possible resultant implications under BCIPA

The Superintendent has an obligation to give "a direction as to its suitability" when responding to the construction program submitted by the Contractor. He should not use the word "approved" as this may be perceived in some way as "approving" a non-conformance in the program which may only become evident at some later time. This is an important matter. It is suggested that the Superintendent use the words "deemed suitable" if the program apparently conforms with the requirements.

Refer to Clause 8.6 of the SCoC.

## **8.3 Critical Path Network**

The task of complying with the expressed requirements in Items (a) to (n) is substantial and the Superintendent must carefully review the Contractor's program for each separate requirement. To do this properly he must be proficient in the software package used by the Contractor (specified in Item 2C of the Annexure).

Software packages generally have the ability to generate reports which reveal common deficiencies, such as:

- activities without a predecessor activity;
- activities without a successor activity; and
- negative float

and also areas that may warrant particular review, such as:

- negative lags;
- start-start logic links;
- multiple critical paths;
- excessive number of critical activities which depends on the complexity of the project and corresponding network; and
- multiple calendars.

The Contractor is required to submit its plant resources, key personnel and subcontractor resources in Schedules P6, P5, and P4 respectively. The Superintendent should check that the durations allowed for key activities in the program can, in fact, be achieved by the resources nominated.

The Superintendent should carefully check changes between the Tender program and the construction program and understand the impact of such changes. Again, the comment is made that on most contracts the Superintendent should meet with the Contractor's programmer to review the program so that the Superintendent properly understands all aspects of the program and the Work Breakdown Structure (WBS) before responding to the Contractor.

## **8.4 Bar Chart Program**

This clause was not included in the 1996 version and is self-evident. The Superintendent must check the logic of the bar chart program and confirm that the resources advised by the Contractor can achieve the necessary productivity to achieve the durations shown.

## **8.5 Current Program**

The significance of all aspects of the Tender Program is often not appreciated during the Tender Assessment period. It is the Principal's responsibility to ensure that the Tender Program is suitable for the initial period after award. All the Contractor's programs and versions must have a unique identification name/number and date. In program or time claim analysis it can be confusing if two programs have the same name.

Note the requirement that the Contractor must submit the program to the Superintendent in electronic format.

## **8.6 Contractor's Liabilities and Obligations Not Relieved**

The purpose of this clause is to prevent a Contractor placing undue importance on a Superintendent's directions under Clause 8. It is not uncommon for matters, the potential impact of which was not fully appreciated by the Superintendent at the time he gave his direction, to arise at a later date in respect of programs that were deemed suitable to use.

## 8.10 Short Term Rolling Program

Where a critical path network program is specified, the Contractor shall each month prepare and submit to the Superintendent a detailed short term rolling program for the work under the Contract ("the rolling program"). The rolling program shall —

- (a) be drawn on a horizontal time scale;
- (b) show all activities scheduled for the next 2 months;
- (c) be submitted at a date within one week of the date of submission;
- (d) be in sufficient detail to monitor the day-to-day progress of the work under the Contract; and
- (e) be accompanied by an updated projection of the estimated value of work programmed in each month for the remainder of the Contract.

## 8.11 Data for Preparation of Factual Network

The Contractor shall maintain adequate records of its progress in a format agreed with the Superintendent. The records may be examined by the Superintendent at any time and, if agreed, signed by both the Contractor and the Superintendent as a true record of the Contractor's performance.

# 9 QUALITY SYSTEM REQUIREMENTS

## 9.1 General

Further to Clause 30.2 of the General Conditions of Contract, the Contractor shall establish, implement and maintain a Quality System which complies with the requirements of AS 9001 and includes the requirements of Clause 9 and the requirements of Main Roads Specification MRS11.50 *Specific Quality Systems Requirements*. The implementation of AS 9001 for construction works shall be based on HB 90.3 *The Construction Industry Guide to ISO 9001: 2000*.

The scope of the Contractor's Quality System shall include all activities and functions which the Contractor is required to perform in execution of the Contract. This includes management of subcontractors.

The Superintendent may require the Contractor to demonstrate that it has a certified Quality System with a capability relevant to the work. This requirement can be fulfilled by the production of either —

- (a) a Quality System Certificate and Capability Schedule issued by a recognized JAS-ANZ organization (third party certification); or
- (b) a Quality System Certificate and Capability Schedule issued by Supplier Performance Monitoring and Management of Queensland Purchasing (formerly Supplier Quality Development (SQD)) (second party certification).

The Superintendent shall be provided with access to documented procedures, records and other information where such access is required for assessment of the performance of the Contractor or its sub-contractors or agents, subject to the provision by the Superintendent of reasonable notice to the Contractor.

The Superintendent may arrange for audits of the Contractor's Quality System, or seek access to reports on audits performed by others on the Contractor's Quality System, in order to assess any aspects of the Contractor's operations in relation to the provisions of the Contract.

Failure by the Contractor to either establish, implement or maintain its Quality System shall constitute a substantial breach for the purposes of the operation of Clause 44.2 of the General Conditions of Contract.

## 9.2 Quality Plan

Within 28 days after the Date of Acceptance of Tender, or as otherwise stated in Item 3 of the Annexure to the Supplementary Conditions of Contract, the Contractor shall prepare and submit to the Superintendent for direction as to its suitability, in accordance with Clause 8.4 of the General Conditions of Contract, its Quality Plan.

The Quality Plan shall be consistent with Main Roads Specification MRS11.50 *Specific Quality System Requirements* and any Quality Plan outline submitted with the Contractor's tender (except to the extent that if any Quality Plan outline is inconsistent with MRS11.50 or any of the other documents comprising the Contract, then the Quality Plan shall be in accordance with MRS11.50 and the other documents comprising the Contract).

The Contractor shall implement and maintain the Quality Plan while carrying out the work under the Contract.

Inspection and test procedures shall be submitted to the Superintendent, for a direction as to their suitability in accordance with Clause 8.4 of the General Conditions of Contract, not later than 7 days prior to the commencement of the applicable work.

## **8.6 Contractor's Liabilities and Obligations Not Relieved (continued)**

A common example is that the Contractor may choose to accelerate works for its own reasons (eg to reduce its total cost) and the Superintendent may give a direction as to suitability which may be reasonable in the circumstances. A Contractor cannot then claim that it was "directed" to accelerate, eg under Clause 33 of the GCoC, and claim additional payment on the basis of the direction constituting a variation under Clause 40.

## **8.7 Current Program Not a Part of Contract**

This clause is often misunderstood and sometimes views are expressed that, because the current program is not "part of the Contract", it somehow has little weight in the contractual process. There are many important documents that are created during the construction period that are extremely important contractually. A current program is one of these. Its importance is not lessened by it not being part of the Contract.

## **8.8 Contractor's Revisions of Current Program**

A very important aspect of this clause is that there is a positive obligation on the Contractor to submit a revised program when actual progress varies significantly (eg when 50% of time has elapsed but only 25% of work is complete) from that shown on the current program.

## **8.9 Review of Current Program**

It is important for the Contractor to provide to the Superintendent regular printed reports which review the current program. This is a most useful way of determining when the current program should be revised as per Clause 8.8. The reports may be of considerable importance in analysis of time or money claims under the Contract.

Note that Clause 17.2 of the SCoC, which clause is referred to by Clause 8.9, requires the Site Conferences (and included review of the Current Program) to be held at intervals not exceeding one month. It is preferable if the amended programs are submitted to the Superintendent at least several days before the due date of each Conference so that there is adequate opportunity to make a thorough review in preparation for meaningful discussion at the Conference.

## **8.10 Short Term Rolling Program**

Again, this clause places a positive obligation on the Contractor to produce the rolling program each month. This is an important tool for the Superintendent and Principal. Most project management software packages can generate a rolling program from the current program. While it is not expressed in this clause, it is self-evident that the rolling program should be consistent with the construction program.

## **8.11 Data for Preparation of Factual Network**

The Contractor has an obligation to maintain significant records in respect of the progress of its work and this is set out in the clause. The Superintendent should ensure that the records are in fact kept and in a suitable format for use by the parties. Such records are frequently of considerable use in the analysis and quantification of variations and claims, as well as in the preparation of as-built details.

# **9 QUALITY SYSTEM REQUIREMENTS**

## **9.1 General**

This clause provides detailed provisions which are supplementary to Clause 30.2 of the GCoC and includes the requirements of Clause 5 of the Main Roads Specification MRS11.50 "Specific Quality System Requirements". The clause provides the authority for the Superintendent to access records held by the Contractor.

If the Contractor fails to comply with this clause, such failure is considered a substantial breach of Contract and the remedies as provided in Clause 44 of the GCoC shall apply. This provision indicates the seriousness with which failure to comply with quality requirements are considered.

## **9.2 Quality Plan**

The Contractor is required to submit its Quality Plan to the Superintendent for a direction as to its suitability within 28 days after the Date of Acceptance of Tender. Note that the provision in the initial version of the SCoC (November 1996) which required the Superintendent to audit the Plan and advise any non-conformances within 14 days has been deleted. Clause 8.4 of the GCoC is now referenced and this contains the 14 day requirement in Item (c).

The Contractor is also required to submit its inspection and test plans at least 7 days before its intention to commence work on applicable areas.

If the Contractor fails to comply strictly with the provisions of Clause 9.2, the Principal may suspend payments under Clause 42 of the General Conditions of Contract until the Contractor does comply.

### **9.3 Suspension of Works by Superintendent Due to Serious Non-conformance**

If, in the opinion of the Superintendent, any process, procedure, test method, calculation, analysis and/or report has resulted or will result in a serious non-conformance, then the Superintendent may, in accordance with Clause 34.1 of the General Conditions of Contract, direct the Contractor in writing, to suspend the whole or part of the work under the Contract and the Contractor shall immediately carry out any corrective and/or remedial action.

### **9.4 Contractors' Obligations Unaffected**

Notwithstanding any statements to the contrary in the Contractor's Quality System documentation or in the Quality Plan, no part of the Quality System shall be used to pre-empt, preclude or otherwise negate the requirements of any part of the Contract nor relieve the Contractor of its obligations under the Contract.

The Contractor's Quality System shall be used as an aid to achieving compliance with the Contract and in documenting such compliance, and in no way shall it relieve the Contractor of responsibility to comply with the requirements of the Contract.

## **10 ENVIRONMENTAL MANAGEMENT**

### **10.1 General**

For the purposes of Clause 10 "the Act" shall be the *Environmental Protection Act 1994*.

The Contractor shall at all times during the course of the Contract comply with the requirements of the Act. The Contractor shall implement and maintain measures to preserve and protect the natural environment on and adjacent to the Site.

### **10.2 Environmental Management Plan**

Within 28 days after the Date of Acceptance of Tender, or as otherwise stated in Item 4 of the Annexure to the Supplementary Conditions of Contract, the Contractor shall prepare and submit its Environmental Management Plan to the Superintendent for a direction as to its suitability, in accordance with Clause 8.4 of the General Conditions of Contract, (including a time-based schedule for its implementation).

The Environmental Management Plan shall be consistent with the Act, Main Roads' Standard

Specification MRS11.51 *Environmental Management* and any Environmental Management Plan outline submitted with the Contractor's tender (except that if any Environmental Management Plan outline be inconsistent with the Act, MRS11.51 or any of the other documents comprising the Contract, then the Environmental Management Plan shall be in accordance with the Act, MRS11.51 and the other documents comprising the Contract).

The Contractor shall implement the Environmental Management Plan in accordance with the schedule included in the Plan. The Contractor shall ensure that all applicable environment protection measures are implemented prior to proceeding with any relevant work under the Contract.

The Contractor shall monitor, update and control its Environmental Management Plan while carrying out work under the Contract.

If the Contractor fails to comply strictly with the provisions of Clause 10.2, the Principal may suspend payments under Clause 42 of the General Conditions of Contract until the Contractor does comply.

### **10.3 Contractors' Obligations**

Nothing contained in Clause 10 shall in any way limit or exclude any of the Contractor's obligations or liabilities under the Contract in respect of Clause 14 of the General Conditions of Contract.

## **11 WORKPLACE HEALTH AND SAFETY**

### **11.1 General**

For the purposes of Clause 11, the words "dangerous event", "principal contractor", "serious bodily injury", "work-caused illness" and "work injury" have the meanings assigned to them by the *Workplace Health and Safety Act 1995* ("the Act").

In addition, the principal contractor needs to conform to the *Electrical Safety Act 2002* and associated subordinate legislation.

The Contractor indemnifies the Principal against all liabilities which may be imposed under or which may arise out of enforcement of any section of the Act or Regulations.

### **11.2 Appointment of Principal Contractor**

Upon the Date of Acceptance of Tender –

- (a) the Principal is deemed to have appointed the Contractor to be the principal contractor pursuant to Section 13 of the Act;
- (b) the Contractor is deemed to have accepted the appointment; and

## **9.2 Quality Plan (continued)**

A further important addition is the provision for the Principal to suspend payments under Clause 42 of the GCoC until the Contractor complies with the requirements of Clause 9.2. This is a very powerful entitlement and it is important for the Superintendent to keep the Principal properly informed of the circumstances.

The Superintendent must give reasons why any documents are not suitable and the Contractor must submit new or amended documents within 7 days of receipt of the Superintendent's Notice (refer Clause 8.4(d) GCoC).

- See SL-008 for a Notice that a Quality Plan is required;
- See SL-015 for a Notice that a Quality Plan is suitable;
- See SL-015A for a Notice that a Quality Plan is not suitable.

## **9.3 Suspension of Works by Superintendent Due to Serious Non-Conformance**

This clause provides for the Superintendent to take action under Clause 34.1 of the GCoC, which is titled Suspension by Superintendent. The Contractor shall carry out corrective and/or remedial action as required. It must be emphasised that the Superintendent must act honestly and fairly and that such powers are not enacted without giving due thought consideration and communication beforehand.

## **9.4 Contractors Obligations Unaffected**

This clause makes it quite clear that, regardless of what might be stated in the Contractors QA system of the Quality Plan, nothing in such documents relieves the Contractor of its responsibilities under the Contract. The QA system is intended as an aid to achieving and documenting the Contractor's compliance, not to lessen the Contractor's responsibilities with respect to compliance.

# **10 ENVIRONMENTAL MANAGEMENT**

## **10.1 General**

This clause emphasises the importance of the Contractor's compliance with the requirements of the Environmental Protection Act 1994 (the Act).

## **10.2 Environmental Management Plan**

As noted above, the provision of an Environmental Management Plan (EMP) is now mandatory and the Plan must be submitted within 28 days after the Date of Acceptance of Tender in accordance with Clause 8.4 of the GCoC and must show a time-based schedule for its implementation.

The EMP must be consistent with the Act, DMR Standard Specification MRS11.51 and any other documents comprising the Contract. The EMP shall be updated while carrying out work under the Contract. Note that the Principal is entitled to suspend progress payments until the Contractor complies fully with the requirements of Clause 10.2. This is a significant power.

## **10.3 Contractor Obligations**

This clause makes it clear that nothing contained in Clause 10, or anything done by the Contractor in complying with Clause 10, in any way reduces or removes the Contractor's obligation to comply with Clause 14 Statutory Requirements of the GCoC.

# **11 WORKPLACE HEALTH AND SAFETY**

## **11.1 General**

For the purpose of understanding and complying with Clause 11, safety related words such as "serious bodily injury" and "work injury" are to be as defined in the "Workplace Health and Safety Act 1995 (the Act). The Contractor must also comply with the "Electrical Safety Act 2002" and subordinate legislation.

Note that the Contractor is to indemnify the Principal against all liabilities which might arise from enforcement of the Act or its Regulations. When the Contractor is appointed as the Principal Contractor under the WHS Act, this requirement is met. The Contractor is also required to indemnify the Principal under Clause 17.1 of GCoC which is achieved by the provision of insurance under Clause 18 of GCoC.

- (c) the Contractor, in respect of the work to be executed under the Contract, becomes responsible for the performance of the principal contractor's functions under the Act and under the Regulations and compliance standards in force under the Act.

Within 14 days of the Date of Acceptance of Tender the Contractor shall complete and execute the form included in the tender documents (Form C6853) accepting appointment as the principal contractor. The Principal will complete Form 34 and forward it to Workplace Health and Safety Queensland.

The Contractor's appointment as principal contractor shall continue until the Contractor completes all of the work under the Contract unless sooner revoked by the Principal giving 21 days notice in writing to the Contractor of its revocation or by the Principal taking over or terminating the Contract pursuant to any provision of the Contract or according to law.

### **11.3 Workplace**

The Site shall be the "construction workplace" as defined in the Act.

### **11.4 Workplace Health and Safety Officer**

The Contractor shall employ on the Site a Workplace Health and Safety Officer, in accordance with the provisions of the Act, notwithstanding that there may be less than 30 employees on the Site.

### **11.5 First Aid Officer**

The Contractor shall have on Site during working hours a First Aid Officer who shall hold qualifications in accordance with the Advisory Standard for First Aid. The First Aid Officer shall have a comprehensive first aid kit with all necessary equipment and supplies relevant to the numbers of staff on Site at any given time.

### **11.6 Reporting**

Where the Contractor in its capacity as principal contractor under the Act is required to author any document, notice or report to Workplace Health and Safety Queensland under the Act, a copy of such documents shall simultaneously be forwarded to the Superintendent.

The Contractor shall notify the Superintendent of every work-caused illness or work injury and of every dangerous event and serious bodily injury which occurs on the Site as soon as possible but not later than 12 hours after such occurrence.

### **11.7 Construction Workplace Plan**

Within 28 days after the Date of Acceptance of Tender, or as otherwise stated in Item 5 of the

Annexure to the Supplementary Conditions of Contract, the Contractor shall prepare and submit its Construction Workplace Plan (formerly referred to as Safety Plan) to the Superintendent for a direction as to its suitability in accordance with Clause 8.4 of the General Conditions of Contract.

The Construction Workplace Plan shall be in accordance with the requirements of the Act and subordinate legislation and shall include, without limitation, the following components —

- (a) principal contractor's administrative details (including ABN);
- (b) occupational health and safety policy;
- (c) responsibilities and accountabilities;
- (d) notifications and registrations;
- (e) plant and equipment and their controls;
- (f) emergency planning;
- (g) consultative processes;
- (h) prescribed and restricted occupations;
- (i) hazardous substance and dangerous goods management;
- (j) hazard identification, risk evaluation, control and monitoring;
- (k) training (including process for inductions);
- (l) subcontractor controls;
- (m) accident reporting, recording, investigation and analysis;
- (n) site safety rules;
- (o) work method statements for high risk activities
- (p) safe housekeeping practices
- (q) amenities
- (r) public safety;
- (s) safety inspections and audits; and
- (t) the requirements of the "Manual of Uniform Traffic Control Devices" for working with traffic

For information regarding roadworker safety, reference should be made to *Construction – Safety in the Civil Construction Industry (September 2000)* published by Division of Workplace Health and Safety ([www.dir.qld.gov.au](http://www.dir.qld.gov.au)).

The Contractor shall implement and maintain the Construction Workplace Plan while carrying out the work under the Contract. A copy of any amendment.

### **11.2 Appointment of Principal Contractor (continued)**

The "Principal Contractor" has particular meaning under the WH&SAct, and its meaning and the obligations of the Principal Contractor are to be adopted by the Contractor.

The Contractor is required to execute the Form (C6853) accepting appointment as Principal Contractor within 14 days of the Date of Acceptance of Tender. This appointment remains in place until the work under the Contract is completed, but the Principal can revoke it by written notice, or the Principal can terminate the Contract or take over the Contract.

### **11.4 Workplace Health and Safety Officer**

The Contractor must have on site a Workplace Health and Safety Officer, even though there may be fewer than 30 employees on the site. There is no obligation for this to be the sole job on site of the nominated person.

### **11.5 First Aid Officer**

It is mandatory for the Contractor to have a suitably qualified and equipped First Aid Officer on site during working hours. The level of supplies and equipment required on site, as a minimum, is governed by the number of personnel on site.

### **11.6 Reporting**

The Contractor is required to provide the Superintendent with a copy of any document, report, etc. which it is required to provide to Workplace Health and Safety Queensland under the Act as Principal Contractor. The Contractor is also required to inform the Superintendent within 12 hours of any work-caused illness, work injury or dangerous event which occurs on site.

### **11.7 Construction Workplace Plan**

Within 28 days of the Date of Acceptance of Tender, the Contractor must submit its Construction Workplace Plan to the Superintendent. This plan was previously known as the Safety Plan.

The list in the clause should not be taken as complete or exhaustive, but contains items that must be included in the Plan. Refer to Clause 8.4 of the GCoC for the 7 day requirement for the Superintendent's response to the Contractor's submission. The Plan is to be implemented and maintained throughout the Contract, and the Superintendent is to be given a copy of any amendments within 7 days of issue.

Note that, again, the Principal is entitled to suspend payment if the Contractor fails to comply fully with its obligations under this clause.

See SL-007 for a Notice that a Safety Plan is required.

to the Construction Workplace Plan shall be submitted to the Superintendent within 7 days after the date of such amendments.

If the Contractor fails to comply strictly with the provisions of Clause 11.7, the Principal may suspend payments under Clause 42 of the General Conditions of Contract until the Contractor does comply.

### **11.8 Safety Audits**

The Superintendent may carry out audits on the Contractor's Construction Workplace Plan at any time.

During any audit the Contractor shall provide the Superintendent with all documents, access and assistance necessary for its completion.

Auditing may take one or a combination of the following forms —

- (a) a check on whether the Contractor is complying with the provisions of the Construction Workplace Plan; or
- (b) a check on the Contractor's individual procedures and records.

If any non-conformance in the Contractor's Construction Workplace Plan is detected, the Contractor shall immediately rectify the non-conformance.

### **11.9 Contractors' Obligations**

Nothing contained in Clause 11 shall in any way limit or exclude any of the Contractors' obligations or liabilities under the Contract.

## **12 TRAFFIC MANAGEMENT**

### **12.1 General**

Further to Clause 11, the Contractor shall be responsible for the safe and orderly passage of vehicular and pedestrian traffic through and around the Site at all times from the commencement of work on the Site to the Date of Practical Completion.

For the purposes of Clause 12, "the Manual" shall be Main Roads' *Manual of Uniform Traffic Control Devices* (latest edition).

Where so stated in Item 6A of the Annexure to the Supplementary Conditions of Contract, the Contractor shall prepare, implement and maintain a Traffic Management Plan for the project and the provisions of Clause 12.2 shall apply.

### **12.2 Traffic Management Plan**

Within 28 days after the Date of Acceptance of Tender, or as otherwise stated in Item 6B of the Annexure to the Supplementary Conditions of

Contract, the Contractor shall prepare and submit its Traffic Management Plan to the Superintendent for a direction as to its suitability, in accordance with Clause 8.4 of the General Conditions of Contract, its Traffic Management Plan.

The Traffic Management Plan shall be consistent with the Manual, MRS11.02 *Provision for Traffic* and any Traffic Management Plan outline submitted with the Contractor's tender (except to the extent that should any Traffic Management Plan outline be inconsistent with the Manual, MRS11.02 or any of the other documents comprising the Contract, then the Traffic Management Plan shall be in accordance with the Manual, MRS11.02 and the other documents comprising the Contract).

The Traffic Management Plan shall include procedures to comply with any minimum traffic restrictions stated in Clause 12.3.

The Traffic Management Plan shall include details of all proposed road closures, detours, staged construction, necessary signing, the relevant Authorities whose approval is required to be obtained and all other relevant information.

The Contractor shall implement, monitor and update its Traffic Management Plan during the Contract and shall, within 7 days of its amendment, submit a copy of the Plan to the Superintendent.

If the Contractor fails to comply strictly with the provisions of Clause 12.2, the Principal may suspend payments under Clause 42 of the General Conditions of Contract until the Contractor does comply.

### **12.3 Restrictions to Traffic**

Restrictions to the passage of vehicular traffic through the Site shall be subject to any limiting requirements stated in MRS11.02 *Provision for Traffic*.

Special arrangements may be negotiated with the Principal for installation of overpass bridge planks and/or girders.

### **12.4 Notification of Traffic Changes**

The Contractor shall give the Superintendent a minimum of 14 days written notice of changes in traffic movements necessary for the performance of work under the Contract.

All road closures shall be subject to approval by the relevant Authority which shall be given a minimum of 14 days notice, or such other period as the Authority may require, of traffic changes which affect it.

### **11.8 Safety Audits**

The Superintendent is entitled to carry out – and should do so – safety audits at anytime. It is advisable for the Superintendent to carry out an audit in the early stages of a job to ensure that the Contractor is complying with the obligations under the Act and the Contract.

The Contractor is required to rectify immediately any non-conformance which is discovered by an audit.

## **12 QUALITY RECORDS**

### **12.1 General**

The Contractor shall, from the commencement of the Contract until the Date of Practical Completion, establish, file and maintain at its Site Office, or other location approved by the Superintendent for inspection by the Superintendent and the Principal, up-to-date records which demonstrate implementation of the Contractor's Quality System including the Contract Plan documents.

At completion of the Contract, the Contractor shall hand over to the Superintendent the following records or certified copies thereof:

- (a) the lot register;
- (b) test results, analyses, reports, measurements and observations as defined in the Contract or as nominated by the Superintendent;
- (c) all conformance and non-conformance reports; and
- (d) any as-constructed drawings required under the Contract.

Quality Records retained by the Contractor pursuant to the requirements of the Contractor's Quality System and the Contract shall be available for evaluation by the Superintendent up to and including the time of issue of the Final Certificate.

### **12.2 Retention of Records**

The Contractor shall retain all records from the Contract in accordance with statutory requirements and the Contractor's company policy.

If not otherwise required, records shall be kept for at least one year after the Date of Final Certificate.

## 12.5 Public Notification

The Principal regards as important the dissemination of information to the community regarding the nature and impact of the project.

During construction, adequate information shall be advertised publicly by the Contractor to keep the community informed of changes to normal traffic movements and of any possible disruptions. As much notice as possible of changes or disruptions shall be given, but it shall not be less than 48 hours. The Contractor shall obtain the agreement of the Superintendent as to the extent and nature of all such publicity prior to implementation. The Principal reserves the right to take control of and/or to incorporate publicity proposals by the Contractor into any project publicity arranged directly by the Principal.

## 12.6 Contractors' Obligations

Nothing contained in this Clause 12 shall in any way limit or exclude any of the Contractors' obligations or liabilities under the Contract in respect of the provisions of the Manual or the Contract.

# 13 COMMUNITY LIAISON

## 13.1 Introduction

Where so stated in Item 7A of the Annexure to the Supplementary Conditions of Contract, the Contractor shall prepare, implement and maintain a Community Liaison Plan for the project and the provisions of Clause 13.2 shall apply.

## 13.2 Community Liaison Plan

Within 28 days after the Date of Acceptance of Tender, or as otherwise stated in Item 7B of the Annexure to the Supplementary Conditions of Contract, the Contractor shall prepare and submit its Community Liaison Plan to the Superintendent for a direction as to its suitability, in accordance with Clause 8.4 of the General Conditions of Contract.

The Contractor shall implement and maintain the Community Liaison Plan while carrying out the work under the Contract.

If the Contractor fails to comply strictly with the provisions of Clause 13.2, the Principal may suspend payments under Clause 42 of the General Conditions of Contract until the Contractor does comply.

## 13.3 Contents of Community Liaison Plan

The Community Liaison Plan shall be formatted under at least the following headings —

- (a) overview;

- (b) objectives;
- (c) target audiences;
- (d) potential issues and opportunities;
- (e) strategy;
- (f) tactics
- (g) evaluation;
- (h) timeframes.

The Community Liaison Plan shall include procedures and timetables to —

- (i) make contact with any local businesses, schools, hospitals, community groups and residents adjacent to the Site and/or affected by the work under the Contract and the office of the relevant Local Government, to establish an effective communication network to be maintained during construction;
- (ii) anticipate the impacts of construction on the above groups and the broader community, and be proactive in keeping all parties informed via direct contact, through newsletters, leaflets, advertisements in newspapers, radio and other appropriate means, particularly in regard to changed traffic arrangements, duration of construction and local access issues;
- (iii) maintain a complaints register and respond to all registered complaints within 48 hours;
- (iv) prepare regular fact sheets for the information of visitors and the public;
- (v) develop procedures for the management of emergency situations and ensure that staff are trained in the appropriate response necessary to deal with such emergency situations; and
- (vi) implement the minimum reporting requirements set out in Table 1.

## 13.4 Community Liaison Officer

Where employed on the Site in accordance with Clause 4.1, the Contractor's Community Liaison Officer shall be responsible directly to the Contractor's Project Manager for the implementation and maintenance of the Community Liaison Plan.

## **13 COMMUNITY LIAISON**

### **13.1 Introduction**

A Community Liaison Plan (CLP) is not required for all contracts – e.g. a contract in a remote area of Western Queensland. If a CLP is required, this will be stated in Item 7A of the Annexure to the SCoC.

### **13.2 Community Liaison Plan**

If a CLP is required, the Contractor must submit its CLP to the Superintendent within 28 days of the Date of Acceptance of Tender. The general requirements for the CLP are tied to Clause 8.4 Supply of Documents by Contractor of the GCoC.

Note that, if the Contractor fails to comply with the requirements of Clause 13.2, the Principal may suspend due payments until the Contractor does comply.

### **13.3 Contents of Community Liaison Plan**

This clause provides information in Items (a) to (h) on what would be considered the minimum scope of headings to be addressed in the CLP, as well as basic procedures and timetables for necessary interaction with the community.

*Table 1 – Minimum Reporting Requirements for Community Liaison Plan*

Reporting Frequency	Event
Immediate	any emergency issue copy of any public inquiry forwarded by fax
Weekly	key activities achieved for previous week key activities planned for coming week summary of responses to complaints and inquiries summary of outstanding responses
Monthly	anticipated issues for coming month proposed actions in response to issues
Quarterly	key actions and achievements

### 13.5 Meetings and Reporting

An initial meeting with affected members of the local community will be convened by the Contractor within 28 days after the Date of Acceptance of Tender at which the Contractor shall undertake a brief presentation of the work to be undertaken under the Contract and the expected issues.

The Contractor shall report to the Superintendent at weekly meetings to be held between the Contractor's Community Liaison Officer, the Superintendent and a representative of the Principal.

### 13.6 Restrictions and Prior Permissions

All newsletters, leaflets and other public statements shall be submitted for the approval of the Superintendent prior to publication.

Direct contact or liaison by the Contractor with members of the press will not be permitted. However, assistance in formulating responses to questions raised by the press will be required from the Contractor's Community Liaison Officer.

### 13.7 Contractors' Obligations

Nothing contained in Clause 13 shall in any way limit or exclude any of the Contractors' obligations or liabilities under the Contract.

## 14 MANDATORY MILESTONES

The Principal may require that defined sections of the work under the Contract ("Mandatory Milestones") be completed by dates which are earlier than the Date for Practical Completion. Mandatory Milestones are not Separable Portions.

The Mandatory Milestones applicable to this Contract (if any) are listed in Item 8 of the Annexure to the Supplementary Conditions of Contract, together with the relevant completion dates.

The Contractor shall include specific activities for all Mandatory Milestones in its construction program, submitted in accordance with Clause 8, and the latest completion dates for such activities shall be consistent with completion of the Mandatory Milestones by the relevant specified completion dates.

A construction program will not be deemed suitable unless all Mandatory Milestones have been included in accordance with the previous paragraph.

Without limiting or affecting the general operation of Clause 35.5 of the General Conditions of Contract, that clause shall also apply to each Mandatory Milestone as though —

- (a) the expression "the work under the Contract" therein was a reference to each Mandatory Milestone;
- (b) the expressions "time for Practical Completion" and "Date for Practical Completion" therein were references to the completion date for each Mandatory Milestone;
- (c) the expression "Practical Completion" therein was a reference to completion of a Mandatory Milestone.

The dates for completion of the Mandatory Milestones will not be extended except where the Contractor has complied with Clause 35.5 (as it applies to Mandatory Milestones) and is entitled to such an extension under that clause.

For the avoidance of doubt —

- (i) and without limiting or affecting the general operation of Clauses 35.6, 36, 37 and 42.5 of the General Conditions of Contract, those clauses do not apply separately to Mandatory Milestones or to extensions of the dates for completion of Mandatory Milestones;
- (ii) the Contractor is not obliged to give possession of a Mandatory Milestone to the Principal upon completion of the Mandatory

### **13.4 Community Liaison Officer**

Note that the Community Liaison Officer is to report directly to the Project Manager. The clause also contains minimum reporting frequencies for various events.

### **13.5 Meetings and Reporting**

It is considered imperative that affected members of the local community are informed at an early stage regarding the work to be carried out, consequently the Contractor is obliged to hold a local community meeting within 28 days of the Date of Acceptance of Tender.

### **13.6 Restrictions and Prior Permissions**

The Principal considers it very important to be able to monitor communications between the project and the general community, particularly via the media. Accordingly, it is important that the Superintendent ensures that newsletters, leaflets etc. are submitted for approval before publication and that contact with the media (which requires skill and practice in this area to avoid being misrepresented) by the Contractor is prohibited. The Superintendent should work with the Contractor's Community Liaison Officer in preparing releases and/or responses.

### **13.7 Contractor's Obligations**

It is important for the Superintendent to ensure that any changes or variations that result from community liaison are properly directed under the terms of the Contract.

## **14 MANDATORY MILESTONES**

This facility in the Contract was not used in the original 1996 version and it has been introduced to provide the Superintendent with increased control over the Contractor's program and its working sequencing. It is the intention that this provision be used only where necessary and examples are:

- Work relating to the start or end of a school/university term;
- Work relating to public holidays or holiday periods;
- Work relating to particular events such as festivals, carnivals and the like.

The Mandatory Milestones are not Separable Portions and are not necessarily on the critical path for completion by the Date for Practical Completion. However, they are subject to extensions of time as provided for in Clause 35.5 of the GCoC.

It is to be expected that the Contractor will tie the Mandatory Milestones into the programming logic of the Construction Program.

Superintendents will need to keep records of EOTs to Mandatory Milestones in the same manner as is done for Separable Portions. It is suggested that a separate pro forma be used for EOTs to Mandatory Milestones.

The Superintendent should be aware of the provision for the Principal to withhold payment if Mandatory Milestones are not achieved. The provisions in Clause 14 are different to all other clauses in relation to the Principal withholding payment in that the Superintendent is required to incorporate the "deductions" in his Payment Certificate. It may not be clear what work is included in a Mandatory Milestone. If, for example, the Mandatory Milestone is completion of a noise wall there is little doubt, but if the Mandatory Milestone is a traffic switch then there could be doubt as to what work is / is not included in the Superintendent's "deduction".

- Milestone and the Principal is not obliged to take possession of a Mandatory Milestone at that time;
- (iii) the date of completion of a Mandatory Milestone is not to be regarded as a "Date of Practical Completion" for the purposes of any provision of the Contract; and
- (iv) the extension of a completion date for a Mandatory Milestone does not necessarily mean that the Date for Practical Completion of any work will be extended.

Without prejudice to any other power, right or remedy of the Principal or the Superintendent, if the Contractor fails to complete a Mandatory Milestone by the due date for completion thereof, the Superintendent may —

- where the Principal has already paid for part of the work comprised in the Mandatory Milestone - deduct the amounts so paid when calculating further payment certificates due after the completion date and withhold those amounts from payment certificates until such time as the Mandatory Milestone is completed; and
- not include any other amounts for the work comprised in the Mandatory Milestone in any payment certificates until such time as the Mandatory Milestone is completed.

The value of the work comprised in a Mandatory Milestone shall be a reasonable amount determined by the Superintendent taking into account the Schedule of Rates or Schedule of Prices.

## **15 RESTRICTIONS TO WORKING TIMES**

Further to Clause 32 of the General Conditions of Contract, work under the Contract involving lane closures, stop/go arrangements or construction traffic entering, operating on or leaving any through traffic lanes shall not be carried out during the periods stated in MRS11.02 Provision for Traffic.

## **16 LANE RENTALS AND LANE CLOSURES**

Where any work under the Contract necessitates lane or shoulder closures, other than those at the locations and times specifically described in the Contract, the Contractor shall pay to the Principal the lane rental charges listed in Item 9 of the Annexure to the Supplementary Conditions of Contract, for every hour or part thereof that the lane or shoulder remains closed.

Notwithstanding the application of lane rental charges by the Principal, the Contractor shall make every endeavour to ensure that traffic lanes and shoulders remain open to the safe passage of traffic at the posted speed at all times in accordance with the provisions of the Contract.

## **17 CONFERENCES**

### **17.1 Prestart Conference**

Prior to the commencement of work under the Contract the Contractor shall contact the Superintendent in order to arrange a Prestart Conference.

The Prestart Conference shall —

- (a) establish lines of communication and clarify all relevant responsibilities and delegations;
- (b) discuss arrangements for submission and review of the construction program, Quality Plan, Environmental Management, Safety Plan, Traffic Management Plan (where required) and the Community Liaison Plan (where required);
- (c) discuss arrangements for project records, including access by the Superintendent, submission of test results and other reports, and disposition of records upon completion of the Contract;
- (d) discuss setting out of the Works, site accommodation, camp and delivery of materials and plant to the Site;
- (e) determine arrangements for site inspections and site conferences;
- (f) define arrangements for management of —
  - (i) payment claims;
  - (ii) variations; and
  - (iii) nonconformances;
- (g) discuss arrangements for all administrative requirements, including information and documents which the Contractor is obliged to submit to the Superintendent;
- (h) deal with any other matters nominated by the Contractor or the Superintendent; and
- (i) deal with requirements for post-construction review.

The Superintendent will, within 1 week of the Prestart Conference, issue to the Contractor a copy of the minutes. Within 2 days of receipt of the copy of

## **15 RESTRICTIONS TO WORKING TIMES**

Generally the working hours and working days for the project are stated in the Annexure to the GCoC, and, except under special circumstances, work is not to be carried out outside these times. However, Clause 15 also directs attention to the existence of further restrictions to certain activities (eg lane closures) as contained in Standard Specification MRS11.02 Provision for Traffic. The restrictions are listed in Item 3 (and its sub-Items) of the Annexure to this Specification.

The Superintendent must check the Contractor's program and sequencing plans to ensure they comply with these requirements.

## **16 LANE RENTALS AND LANE CLOSURES**

The use of lane rentals was not in the original 1996 SCoC and generally only applies to heavily trafficked highway projects. The Contract may prescribe locations and times at and during which lane or shoulder closures will be necessary, and the Contractor is not liable for lane rental costs during such periods. (Note that the Contractor is responsible for the cost of traffic control to effect these closures). However, if the Contractor wishes to close lanes or shoulders other than as specifically lists, and this is approved by the Superintendent, it must pay the Principal the hourly rate as provided in Item 9 of the Annexure to the SCoC.

Note that the payment by the Contractor of the lane rental charge to the Principal does not remove the Contractor's obligation to endeavour to ensure that traffic lanes and shoulders remain open (ie minimise any periods of closure) and that conditions on all traffic lanes remain safe at the posted speed limit.

## **17 CONFERENCES**

### **17.1 Prestart Conference**

The Contractor is required to contact the Superintendent and arrange to hold a Prestart Conference prior to commencement of work on site. The clause lists, as a minimum, issues (a) to (i) that must be addressed at this conference. These are additions to the 1996 version.

Note that there is no prescribed minimum period before commencement of work within which the conference must be held, but it is in the best interest of all parties that the timing be such as to allow for all preliminaries to be initiated before work commences. Note that the Superintendent is obliged to provide a copy of the minutes to the Contractor within one week and that there is a further series of 2 day cycles for the checking, amending and signing of what becomes the official record of the Prestart Conference. The Superintendent must ensure the Contractor signs the minutes.

the minutes, the Contractor shall notify the Superintendent in writing of any item from the minutes which, in its opinion, has not been correctly recorded. Within a further 2 days the Superintendent will arrange to amend the minutes where necessary and will return 2 copies to the Contractor for confirmation of the minutes. The Contractor shall confirm the minutes by returning a signed copy to the Superintendent within 2 days of receipt.

## **17.2 Site Conferences**

Site Conferences shall be held to review progress of the Works and to discuss and resolve other matters of concern related to the project.

Site Conferences shall be held at the intervals stated in Item 10 of the Annexure to the Supplementary Conditions of Contract or at such other intervals as are otherwise mutually agreed between the Contractor and the Superintendent, which intervals shall not exceed one month.

Site Conferences shall —

- (a) review progress of the work under the Contract;
- (b) review the Contract Plan documents and issues pertaining thereto;
- (c) review non-conformances and dispositions; and
- (d) discuss any matters of concern related to the project with a view to their resolution as far as possible.

Site Conferences shall be attended by the Contractor, the Superintendent, and/or their senior representatives. Subject to the prior approval of the Superintendent, other persons may attend all or part of any Site Conference, but at no time more than 4 persons from either the Contractor or Superintendent.

The Superintendent or Superintendent's Representative will chair the Site Conference and will arrange for the recording of minutes. The Superintendent will, within 1 week of the Site Conference, issue to the Contractor a copy of the minutes. Within 2 days of receipt of the copy of the minutes, the Contractor shall notify the Superintendent in writing of any item from the minutes which, in its opinion, has not been correctly recorded. Minutes of a Site Conference will be confirmed at the next Site Conference.

## **18 MATERIAL SUPPLIED BY THE PRINCIPAL**

Where the Principal intends to make available any materials under the Contract free of charge to the

Contractor ("Principal Supplied Material"), such materials are listed on a Principal Supplied Material List (Form C6827) included in Part 7, Project Specific Documents.

Where appropriate the following information is provided —

- (a) type of material;
- (b) quantity to be supplied;
- (c) method of supply, e.g. bulk, containers, road, rail;
- (d) responsibility for transport;
- (e) point of delivery by the Principal to the Contractor; and
- (f) point of return of any excess material and/or containers.

The Contractor's construction program shall show the date(s) on which any Principal Supplied Material is required, together with the quantity of such material. At least 20 days before any Principal Supplied Material is required, the Contractor shall advise the Superintendent in writing of the exact date of the requirement and the quantity required on that date.

The Contractor shall be responsible for the transport of the Principal Supplied Material where stated in the Principal Supplied Material List, and for the appropriate storage and care at all times so that it is not contaminated nor deteriorates. The Contractor shall take all necessary measures to reduce potential harm to the environment which might arise from the transport and storage of Principal Supplied Material. The Contractor shall comply with any relevant requirements in the Contract, and/or Statutes and/or Australian Standards and/or manufacturer's instructions in relation to the proper handling and care of any Principal Supplied Material.

Upon the receipt of any Principal Supplied Material, the Contractor shall immediately inspect the material and ensure that the specified quantity has been delivered and that the material is in a condition which complies with the relevant specification.

If, within 5 days, the Superintendent has not received written notification of any deficiencies, then it shall be deemed that the specified quantity of Principal Supplied Material has been delivered to the Contractor in a condition which complies with the relevant specification.

Any Principal Supplied Material which, after delivery to the Contractor, is lost, destroyed, contaminated or altered in any way such that the

## **17.2 Site Conferences**

Site Conferences must be held at the intervals as shown in Item 10 of the Annexure to the SCoC, or as otherwise agreed (ie they may be more frequent if this is considered necessary or advisable) but the maximum interval must not exceed one month. The clause states a number of agenda items which must be included for each meeting, and who should be represented. Note that the number of attendees representing either party is limited to a maximum of four at any one time, however, this may need to be varied for large projects.

The Superintendent is responsible for chairing the meetings and recording the minutes. As for the Prestart Conference, the Superintendent must issue the minutes within one week of the Site Conference. There is provision for the Contractor to seek amendment of the minutes, in writing. The minutes are to be confirmed at the next Site Conference and become the official record of the meeting.

## **18 MATERIAL SUPPLIED BY THE PRINCIPAL**

All materials which the Principal intends to supply to the Contractor, free of charge, for use in the Contract should be listed on Form C6827 Principal Supplied Material List (the List) which is included in Part 7 Project Specific Documents of the Contract documents. The clause lists in items (a) to (f) the minimum information that is to be provided regarding such materials, but the Superintendent is well advised to review the adequacy of this information with regard to the particular circumstances of the Contract.

Note that the Contractor is required to show on its construction program the dates when such materials are required and to confirm in writing the exact date and quantities a minimum of 20 days in advance.

Unless stated otherwise in the List (Form 6827), the Contractor is responsible for the transport and storage of all Principal Supplied Material, including responsibility for potential harm to the environment and preventing contamination and deterioration.

Note also that the Contractor must submit written notification within 5 days of receipt of any Principal Supplied Material if it considers there are any anomalies with regard to quantity or concerns with the quality. If the Contractor does not submit any such notification then it is deemed that the Principal Supplied Materials comply in all respects. Be aware that in some instances it is impractical to determine whether Principal Supplied Materials are satisfactory until they are installed in the works. Any subsequent loss or damage is the Contractor's responsibility, but it must notify the Superintendent, in writing, of any loss, damage, etc., within 5 days of becoming aware of the problem.

Any surplus Principal Supplied Materials remain the property of the Principal, not the Contractor, and must be returned to the location specified in the List at the Contractor's cost. The Superintendent has responsibility to track the supply and use of Principal Supplied Material in order that he can carry out these tasks.

The Contractor's obligations for the care of Principal Supplied Material do not limit or reduce its obligations or liability under Clause 16 Care of the Work and Reinstatement of Damage (GCoC).

material no longer complies with the relevant specification shall be immediately replaced by the Contractor with material which complies with the relevant specification. The Contractor shall notify the Superintendent in writing of any lost, destroyed, contaminated or altered material within 5 days of the Contractor becoming aware of such events.

Where excess Principal Supplied Material is specified to be returned to the Principal, any material which is excess to the requirements of the Contract shall be returned to the point of return nominated in the Principal Supplied Material List. Any empty containers shall also be returned to the nominated location.

Nothing in Clause 18 shall in any way limit or exclude in any way the Contractor's obligations or liabilities under Clause 16 of the General Conditions of Contract.

## **19 USE OF PROPRIETARY, TRADE OR BRAND NAMES**

The description in the Contract of any materials, plant, equipment, work or other items by a proprietary, trade or brand name, supplier's or manufacturer's name, model number or other specific means does not in any way relieve, limit or exclude any of the Contractor's obligations or liabilities under the Contract with respect to the materials, plant, equipment, work or any other items (including, but not limited to, obligations and liabilities under any warranties, performance guarantees or defects liability provisions of the Contract).

## **20 WORKSHOP DRAWINGS**

The Contractor shall prepare all fabrication, erection and construction drawings, referred to as "workshop drawings", required to supplement any information supplied by the Principal and these shall be submitted to the Superintendent for a direction as to their suitability, in accordance with Clause 8.4 of the General Conditions of Contract, where specified, at the time specified or, if not specified, 3 weeks before any work shown thereon is commenced. Where workshop drawings are deemed suitable by the Superintendent, the Contractor shall not be relieved of responsibility for the accuracy of such drawings or for all related safety, traffic management and/or environmental management matters.

## **21 SURVEY MARKS**

### **21.1 Survey Marks Provided by the Principal**

Further to Clause 28 of the General Conditions of Contract, the Principal has provided the survey marks listed in Item 11A of the Annexure to the Supplementary Conditions of Contract to the Contractor.

### **21.2 Setting Out**

Setting out of all control lines and associated survey lines shown on the Drawings or necessary for the setting out of the work under the Contract is the responsibility of the Contractor. Any existing survey lines on the Site or existing survey marks not listed in Item 11A of the Annexure to the Supplementary Conditions of Contract shall not be relied upon by the Contractor. Where the Contractor establishes additional survey marks, full details of such marks shall be submitted to the Superintendent.

### **21.3 Relocation of Survey Marks**

If the Contractor wishes to relocate an existing survey mark, the Superintendent shall first be notified in writing at least 5 days prior to such relocation. The notice shall include a description of the proposed method for coordinating and levelling the new survey mark. If another authority's survey mark is involved, the Contractor shall also obtain written approval from the other authority and shall submit a copy of such approval to the Superintendent.

### **21.4 Identification Markers**

The Contractor shall place identification markers at least at every 500 metres along each control line and adjacent to each tangent point. Such markers shall show the chainage and any other relevant information and the lettering shall be at least 50 mm high.

### **21.5 Accuracy**

Unless stated otherwise in Item 11B of the Annexure to the Supplementary Conditions of Contract, the accuracy of survey marks listed in Item 11A of the Annexure to the Supplementary Conditions of Contract shall be considered to be  $\pm 10$  mm in all 3 dimensions.

## **22 CONTRACTORS' REPORTS**

### **22.1 General**

Where so stated in Item 12 of the Annexure to the Supplementary Conditions of Contract, the Contractor shall submit daily and/or weekly reports

## **19 USE OF PROPRIETARY, TRADE OR BRAND NAMES**

Although materials, plant, equipment or other items may be referred to in the Contract by a proprietary trade or brand name, etc., such a reference does not relieve, limit or exclude any of the Contractor's obligations or liabilities with regard to the warranties, performance guarantees or defects liability requirements specified under the Contract.

That is, even though "Brand X" may be mentioned by name in the Contract, if the Contract requires a warranty period of say 12 months, whereas Brand X offers only 6 months, the Contractor is responsible for defects occurring within the full 12 month period. In some cases the period can be longer if, for example, the warranty period for the items begins just before the Date of Practical Completion.

In practice, the differences in warranty periods can cause difficulties and the Superintendent should be proactive in recognising potential problems.

## **20 WORKSHOP DRAWINGS**

The drawings supplied by the Principal usually lack sufficient detail for fabrication or erection and are supplemented by the "workshop drawings" prepared by the Contractor, its subcontractors or its consultants.

The Contractor must submit copies of the workshop drawings to the Superintendent at least 3 weeks before any work on the relevant items is commenced.

Note that a direction by the Superintendent as to the suitability of the drawings does not shift responsibility for the accuracy, adequacy, safety, etc. of the drawings from the Contractor to the Superintendent – the drawings have only been "deemed suitable" – that is, there is no apparent reason why they are unsuitable, but this may not prove to be the case and this remains the Contractor's risk.

## **21 SURVEY MARKS**

This clause has been significantly expanded from the original clause in the November 1996 version.

### **21.1 Survey Marks Provided by the Principal**

Reference should be made to Clause 28 Setting Out the Works of the GCoC. This defines a Survey Mark and addresses setting out, care of survey marks and errors in setting out. The Annexure to the SCoC (Item 11A) lists the survey marks which the Principal has supplied and on which the Contractor can rely under the Contract.

### **21.2 Setting Out**

Any survey lines or survey marks listed in Item 11A (and only those) can be relied upon by the Contractor, but the Contractor is responsible for the accuracy of any setting out that is based on the original survey marks or lines. The Contractor must provide the Superintendent with full details of all the additional survey marks which it established in the course of its set out. The Superintendent must ensure he obtains the detail at the earliest possible time.

### **21.3 Relocation of Survey Marks**

It may be necessary, in carrying out the work under the Contract, for the Contractor to relocate an existing survey mark. The Contractor must give the Superintendent at least 5 days written notice of its intention to move the mark and, if the survey mark in question belongs to a body not a party to the Contract (e.g. Department of Natural Resources and Mines), the Contractor must first obtain written approval from such other body and give a copy to the Superintendent.

### **21.4 Identification Markers**

This clause states the minimum requirements for identification markers along control lines and at tangent points.

### **21.5 Accuracy**

The accuracy of the survey marks provided by the Principal, and consequently the degree of accuracy to which the Contractor is entitled to rely on them, is understood to be  $\pm 10\text{mm}$  in all 3 orthogonal directions unless stated otherwise at Item 11A of the Annexure to the SCoC.

to the Superintendent in a format approved by the Superintendent.

If the Contractor fails to comply strictly with the provisions of Clause 22, the Principal may suspend payments under Clause 42 of the General Conditions of Contract until the Contractor does comply.

## **22.2 Daily Reports**

The daily report shall be an accurate recording of all site activities and events. Content of the daily reports shall include but not be limited to the following —

- (a) a workforce report listing staff and labour personnel and the Current Program activities on which labour was used;
- (b) a subcontract report listing sub-contract staff and labour personnel and the Current Program activities on which labour was used;
- (c) a plant and equipment report listing all constructional plant utilised, the Current Program activities on which the plant and equipment was used and a listing of all idle plant and equipment and reasons for being idle;
- (d) deliveries and quantities of materials delivered; and
- (e) significant and unusual events.

Daily reports shall be submitted to the Superintendent by 11.00am on the following working day.

## **22.3 Weekly Report**

The weekly report shall be a brief summary of the daily reports plus details of safety matters, industrial matters, weather conditions and lost time.

Weekly reports shall be submitted to the Superintendent by noon on Tuesday of the week following the period to which the report refers.

# **23 PUBLIC UTILITY PLANT**

## **23.1 Affected Public Utility Plant**

Where used in the Contract ‘public utility plant’ means any railway, monorail, tramway, viaduct, aqueduct, conduit, water channel, pipeline (water, stormwater, gas, sewerage or otherwise), fixed mechanical conveyor, tower, pole, cable (electrical, fibre optic, telecommunications or otherwise), electrical installation or telecommunications plant that is on, in, over, under or adjacent to the Site; however, the terms do not include Constructional Plant.

All public utility plant affected by the work under the Contract (“affected utilities”), whether identified in the Tender Documents or not, shall be relocated as necessary in accordance with the requirements of the Authority responsible for such public utility plant (“responsible Authority”).

## **23.2 Responsibilities**

As from the Date of Acceptance of Tender, the Contractor shall be responsible for arranging and coordinating all outstanding work associated with relocation of affected utilities.

The Contractor shall ensure that the specific relocation and/or replacement requirements of each responsible Authority are met.

The Principal will bear the direct cost of the relocation and/or replacement of affected utilities but not the cost of the Contractor’s supervision and overheads.

## **23.3 Location**

For all public utility plant identified on, in, over, under or adjacent to the Site, the Contractor shall establish and maintain, up to the Date of Practical Completion, reference markers identifying the type of utility, size, alignment, depth and emergency contact telephone number of the responsible Authority.

## **23.4 Public Utility Plant Identified During the Contract**

Where public utility plant, additional to that stated in the Tender Documents, is identified during the Contract as an affected utility, the following procedure shall be adopted —

- (a) the Contractor shall immediately advise the Superintendent and the responsible Authority of the newly identified affected utility;
- (b) the Contractor shall request and obtain from the responsible Authority an estimate of cost to relocate the affected utility and a program for completion of the relocation;
- (c) the Principal will arrange for payment to the relevant Authority for the necessary relocation;
- (d) the Contractor shall revise its program of work to accommodate the program of the responsible Authority and shall coordinate completion of the relocation by the responsible Authority.

Should the procedures in Clause 23.4 result in the Contractor incurring additional costs, then the Contractor’s entitlement will be determined under

## **22 CONTRACTOR'S REPORTS**

### **22.1 General**

This clause has expanded since the 1996 version in that the daily and weekly reports have been included in separate clauses and these requirements have been amended.

This clause provides for the Contractor to provide a considerable amount of extremely important information. It is not uncommon that variations and contractual claims rely heavily on contract records for their verification and/or quantification.

The Superintendent has the obligation of ensuring that the Contractor submits these forms and the Superintendent should further ensure that there is good correlation between these forms and the daily site diaries. This issue should be audited early in the construction period. If there is not appropriate correlation then this issue should be addressed straight away and not left to a later time when the records of previous periods are much harder to obtain.

### **22.2 Daily Report**

The daily reports contain considerable information and the Contractor has to allocate resources to this task. It is often the case that the task, particularly in regard to subcontractors, is not done well with the resulting detrimental effect for the Principal that there may be contractual claims where the records are required but are non-existent or inadequate.

The time for the reports has changed to 11:00am on the following working day.

### **22.3 Weekly Report**

The weekly report shall be a brief summary of the daily report plus other details of:

- Safety matters;
- Industrial matters;
- Weather conditions; and
- Lost time.

Note particularly, this is another place for the Contractor to advise of delays, lost time, etc. If weekly meetings are held, the matters of delay and lost time from these reports can be summarised in the site meeting minutes.

The weekly report must be to hand by noon on Tuesday of the following week.

These reports are so important that if the Contractor does not provide them, then the matter should be reported to the Principal.

## **23 PUBLIC UTILITY PLANT**

### **23.1 Affected Public Utility Plant**

This clause gives a wide (but not necessarily exhaustive) list of services or installations (Public Utility Plant – PUP) that might be considered "utilities". Note that the definition specifically excludes Constructional Plant. As an example of this, a fixed mechanical conveyor or pipeline, while fitting the definition of a "utility" would be excluded if it were being used as Constructional Plant.

Note that there is a requirement to comply with the requirements of the "responsible Authority".

### **23.2 Responsibilities**

This clause provides for the Contractor to be responsible for arranging and co-ordinating all outstanding work associated with relocation of affected utilities. This, on some contracts, is a very major responsibility and could be a major cost item. Typically the Principal has had significant involvement with utilities during the planning, tender and award stages. While there are important obligations on the Principal to disclose information during the tender process (refer to Clause 20 of the Conditions of Tendering) the Contractor and the Principal should ensure that there is an effective exchange of information in this regard after award. In particular, the Principal should advise the Contractor of information in its possession that would affect the Contractor's obligations. This is a serious onus on the Principal and should be discharged early in the Contract period. The Superintendent should co-ordinate this information flow. There is no separate schedule item for this co-ordination and the Contractor's costs are included in other items or the lump sum generally. In order to avoid any claims of misrepresentation, the Principal must be thorough in its advice to the Contractor.

Clause 40 of the General Conditions of Contract. Should the procedures in Clause 23.4 result in the Contractor incurring a delay, then the Contractor may claim an extension of time for Practical Completion under Clause 35.5 of the General Conditions of Contract.

### **23.5 Damage and Repair**

The Contractor shall be responsible for any damage to any public utility plant caused by the work under the Contract and the Contractor shall make good any such damage at its own cost. The Contractor shall make arrangements directly with the responsible Authority for any repairs which may be necessary to public utility plant damaged by the work under the Contract and shall have no claim against the Principal for any loss or delay occasioned by any such damage. The Contractor shall notify the Superintendent of any such damage to public utility plant.

The Contractor shall be responsible for any damage caused to the work under the Contract by any fault that may develop in any public utility plant during the period of the Contract.

### **23.6 Disruption to Public**

The Contractor shall ensure that disruption in disconnecting, relocating and reconnecting public utilities to individual land owners and/or occupiers is kept to a minimum. The Contractor shall consult with all affected land owners and/or occupiers to arrange for a mutually acceptable time for such works at least 7 days before the anticipated event.

The Contractor shall identify and consult with any land owner and/or occupier with special requirements regarding continuity of supply of any public utility and shall take all measures necessary to satisfy such requirements.

### **23.7 Contractors' Negotiations**

All negotiations between the Contractor and the responsible Authority shall be confirmed in writing by the Contractor and copies of all such correspondence to and from the responsible Authority shall be promptly forwarded to the Superintendent by the Contractor.

### **23.8 Contractors' Obligations**

Nothing contained in Clause 23 shall in any way limit or exclude any of the Contractor's obligations or liabilities under Clauses 15, 16 or 17 of the General Conditions of Contract.

## **24 SITE INFORMATION**

For the purposes of Clause 24 —

'Site Information' means any document, information, data, report, material, core or sample, whatever its form, regarding the Site or its surroundings or regarding the subsurface conditions (including topographical, geological, environmental and hydrological conditions) or subsurface services at the Site or its surroundings.

## **25 MAINTENANCE OF EXISTING AND COMPLETED WORKS**

From the Date of Acceptance of Tender up to the Date of Practical Completion the Contractor shall, where so stated in Item 13 of the Annexure to the Supplementary Conditions of Contract, carry out maintenance activities specified below at its own cost. Where specific maintenance activities are specified elsewhere under the Contract however (eg in MRS11.16 *Landscape Works*), the provisions of the specific requirements shall apply.

Applicable maintenance activities are —

- (a) maintain existing and new site vegetation and plantings including grassed areas by, without limitation, watering, weeding, mulching, spraying and fertilising;
- (b) mow any grassed areas within the Site within one week of the height of such grass exceeding 200 mm, and trim any trees or shrubs likely to cause a safety problem for road users;
- (c) ensure that all culverts, channels, table drains, catch drains and other waterways and subsoil drains within the Site are kept clear of any obstructions;
- (d) maintain the existing pavement within the Site to no lesser standard than that existing at the time possession of the Site was granted to the Contractor and ensure its safety for all road users;
- (e) maintain the completed pavement that is part of the Works;
- (f) maintain existing and new route, ramp and intersection lighting within the Site; and
- (g) maintain pavement markings within the Site.

The Contractor shall not be responsible for repairs to road infrastructure required because of collateral road crash damage or vandalism.

Notwithstanding the provisions of Clause 44 of the General Conditions of Contract, if the Contractor fails to comply with any obligation imposed on the Contractor by Clause 25, the Superintendent may, after the Superintendent has given reasonable notice

### **23.3 Location**

This clause clearly identifies the Contractor's responsibility for establishing and maintaining reference markers with respect to all identified PUP, with the aim of preventing damage or minimising the cost and disruption resulting from damage to PUP services.

### **23.4 Public Utility Plant Identified During the Contract**

The Contractor has obligations to ensure that any adverse affects on unknown PUP are mitigated. The clause provides for the steps the Contractor and the Principal must take in this regard.

The Contractor may incur additional direct costs and indirect costs, and it may incur a delay to the Date of Practical Completion. The Contractor may claim under Clauses 35.5 and 40.5 of the GCoC.

### **23.5 Damage and Repair**

The Contractor has the responsibility to pay for and organise repairs to PUP damaged by work under the Contractor. The Contractor must also notify the Superintendent of any such damage.

### **23.6 Disruption to the Public**

Disruption to the Public Utility Plant has the potential to cause major inconvenience and/or cost to the residents and commercial enterprises. In order to minimise disruption, this clause stresses the need for consultation with all potentially affected parties and specifies a minimum period of 7 days, if not a mutually acceptable and longer notice, to mitigate disruptive affects, especially to parties with special requirements for continuity of services (e.g. hospitals and emergency services).

### **23.7 Contractor's Negotiations**

The Contractor has the obligation to supply to the Superintendent copies of its communication with the responsible Authority. The Superintendent should ensure that it does in fact receive such documentation in a timely manner.

### **23.8 Contractor's Obligations**

This clause clearly states that compliance with the requirements of Clause 23 does not, in any way, limit or exclude any of the Contractor's obligations with regard to Clauses 15, 16 and 17 of the GCoC (e.g. Protection of People and Property; Care of the Work and Reinstatement of Damage; and Damage to Persons and Property Other Than the Works, respectively).

## **24 SITE INFORMATION**

Initially, in the November 1996 version, "Site Information" was defined very succinctly as any information made available by the Principal to the Contractor prior the Date of Acceptance of Tender and which related to the site and may include the sub-surface conditions. The clause made a provision for a claim for latent conditions in the event that the Contractor encountered conditions which differed in a material and substantial way for those described in the Site Information.

A subsequent version of the SCoC (December 1999) expanded on this clause to a considerable extent with the inclusion of definitions, exclusion of warranties by the Principal, cautions that the Contractor used Site Information at its own risk, extension of time and cost, etc.

However, both the February 2002 and the January 2004 versions have reverted to an even shorter clause than the original and it now consists solely of a broad definition of Site Information. The rationale is that the more detail and constraints are provided, the easier it is for a Contractor to attempt to base a claim for a latent condition under Clause 12 of the GCoC if an exception can be found. The definition is simple and makes no representations or limitations, leaving the Contractor to make its own assumptions and interpretations.

## **25 MAINTENANCE OF EXISTING AND COMPLETED WORKS**

It is important for the Superintendent and Contractor to carry out an inspection of the existing works, preferably soon after the Date of Acceptance of Tender or at least at the time of possession of the site. Note that, where specific maintenance activities are detailed elsewhere in the Contract (e.g. under MRS11.16 Landscape Works) the requirements of such a specification take precedence over the general Contract requirements.

It is recommended that the Superintendent take periodic photographs of works to be maintained, particularly as described in Clauses 25(d), (e) and (g) where earthworks or new materials may be carted over existing roads etc.

in writing to the Contractor, have the maintenance work carried out by other persons and the reasonable cost incurred by the Principal in having the work so carried out may be recovered by the Principal as a debt due from the Contractor to the Principal. The rights given by this paragraph are in addition to and without prejudice to any other right or remedy.

## **26 ADVERTISING ON SITE**

### **26.1 Project Signs**

Within 28 days after the Date of Acceptance of Tender, the Contractor shall supply and erect the number of project signs stated in Item 14A of the Annexure to the Supplementary Conditions of Contract. The signs shall be of a size and/or type as stated in Item 14B of the Annexure to the Supplementary Conditions of Contract, shall contain the words and graphics as shown on the Drawings or as directed by the Superintendent and shall be located as directed by the Superintendent.

Unless directed otherwise by the Superintendent, the Contractor shall remove the project signs at completion of the Contract and transport them to the location stated in Item 14C of the Annexure to the Supplementary Conditions of Contract

### **26.2 Contractor's Advertising**

If the Contractor wishes to erect a sign describing the names of the project and the Contractor, the Contractor shall submit details of the sign (size, wording, graphics and location) to the Superintendent for consideration. The size of any such sign shall not be greater than 3 metres x 2 metres.

Any such sign approved by the Superintendent shall be removed from the Site within 14 days after the Date of Practical Completion or at such other time as directed by the Superintendent.

All expenses incurred in the provision, erection, relocation (if necessary) and removal of such signs shall be borne by the Contractor.

### **26.3 Other Advertising**

No other advertising shall be permitted on the Site other than the names of the manufacturer and/or owner painted on items of Constructional Plant.

## **27 CONSIDERATION OF OTHERS**

### **27.1 Adjoining Work**

Further to Clause 27.2 of the General Conditions of Contract, the Contractor acknowledges that —

- (a) when it commences work, prior contractors may not have completed their works and may be doing so at the same time as the Contractor is executing the work under the Contract; and
- (b) contractors may be executing work on other contracts which may interface with the work under the Contract.

The Contractor agrees that it will be responsible for co-ordination of its work with that of other contractors so as not to disrupt, impede or adversely affect those other contractors in the execution of their work and the Contractor shall indemnify the Principal for any liability it may incur to other contractors as a result of the Contractor's failure to comply with this Clause 27.1 or with Clause 27.2 of the General Conditions of Contract.

### **27.2 Adjoining Private Land**

In performing the work under the Contract the Contractor shall not enter or permit its Constructional Plant and equipment (including that of any subcontractor) to enter private land adjoining the Site without first obtaining the written approval of the land occupier and the land owner (where these are not the same person). The Contractor shall submit a copy of this written approval to the Superintendent upon request.

Notwithstanding the granting of such approval of entry, the Contractor shall comply with the following conditions relating to private land adjoining the Site —

- (a) privacy of the land owner/occupier shall be paramount;
- (b) the land owner/occupier shall be notified in advance when entry onto private land is required for any purpose;
- (c) vehicles shall be driven at a maximum speed of 20 kilometres per hour when in close proximity to any dwellings;
- (d) where a permanent access structure to private land is to be constructed under this Contract, the Contractor shall maintain access for others across the Site at all times.

The Contractor shall, by the action of the entering on to the private land, be deemed to have indemnified the Principal against any claims which may arise from such entry or subsequent operations on the land.

Upon completion of work on private land, the Contractor shall forward to the Superintendent a statement signed by the land owner/occupier to the effect that the land owner and occupier are satisfied

## **26 ADVERTISING ON SITE**

### **26.1 Project Signs**

The Superintendent should ensure that the Contractor does in fact comply with this clause and erect the project signs as specified in the Annexure to the SCoC. The requirement in the second paragraph regarding removal is not specific as to what constitutes "completion of the Contract". The parties should decide on a more definite date.

### **26.2 Contractor's Advertising**

Later versions of the SCoC (from December 1999 onwards) state the maximum permitted size and, unlike Clause 26.1, require that any such sign be removed within 14 days of Practical Completion.

## **27 CONSIDERATION OF OTHERS**

### **27.1 Adjoining Work**

Interaction and co-operation between the prior and adjoining Contractors are extremely important, particularly in major, multi-contract projects. Note that the Contractor is to indemnify the Principal for any liability it might have to other contractors as a result of failure by the Contractor to comply with this clause and Clause 27.2 of the GCoC. This co-ordination needs to be monitored closely in order that the Superintendent can assess any exposure of the Principal.

### **27.2 Adjoining Private Land**

The clause contains quite specific obligations on the Contractor to ensure that the rights of adjoining land owners or occupiers are treated with proper respect. Note that the Contractor must obtain written consent from both the land owner and occupier before entering onto private land and that, on completion of the work, a written statement must be provided to the Superintendent in regard to any repairs of damage, etc. The Superintendent should take care to ensure that these obligations are properly discharged in order to protect the Principal from later claims.

that any damage to the land which may have arisen from the Contractor's operations has been adequately repaired or otherwise compensated by the Contractor. All costs associated with work on private land shall be borne by the Contractor.

## **28 INDUSTRIAL MATTERS**

Further to Clause 14 of the General Conditions of Contract, the Contractor shall comply with and shall ensure that its subcontractors comply with the provisions of the Industrial Awards and Agreements that from time to time are applicable to the performance of the work under the Contract. Without limiting the generality of the foregoing, the Contractor shall ensure that its subcontractors enter into an agreement to comply with the provisions of the said Industrial Awards and Agreements prior to their employment on the Site.

The Contractor warrants that the labour rates and conditions upon which the Contract Sum has been calculated are based on the provisions of the applicable Industrial Awards and/or Agreements.

Nothing in Clause 28 shall entitle or have the result of entitling the Contractor to any additional payment in the event that there is any increase in labour costs.

## **29 WEATHER PROTECTION**

Further to Clause 16 of the General Conditions of Contract, the Contractor shall undertake whatever measures are necessary to ensure the work under the Contract is not adversely affected by inclement weather.

The Contractor shall take all necessary, reasonable precautions to protect the work under the Contract against the effects of inclement weather, and in particular to prevent otherwise suitable materials from becoming unsuitable as a result of moisture entry during construction.

The Contractor accepts all risks from damage to the Works, Constructional Plant and Temporary Works by inclement weather and its effects.

The Contractor shall reinstate any part of the work under the Contract affected by inclement weather in a timely manner after the event.

Construction operations shall be so designed as to obviate ponding of rain water on or within the work under the Contract.

To achieve this requirement, all excavations shall be adequately drained or, if practicable, protected to minimise water entry. Where a suitable outlet cannot be constructed to excavations, the Contractor shall take such other measures as are necessary to remove

water from the excavation. Excavations shall be backfilled as soon as practicable after the work for which the excavation was made is completed.

At the completion of each day's operations, and at such other times when rainfall is imminent, the surface of the construction shall be graded so as to provide adequate falls transversely and, where practicable, longitudinally to permit shedding of surface water without ponding or scouring. The graded area shall be rolled to provide a smooth dense surface in this regard.

Nothing in Clause 29 shall in any way limit or exclude the Contractor's obligations or liabilities under Clause 16 of the General Conditions of Contract.

## **30 EXCAVATION ADJACENT TO ROAD UNDER TRAFFIC**

Clause 30 applies to excavation works close to roads still being used by passing traffic.

Where an excavation within 1 metre of a lane under traffic exceeds 150 mm in depth, backfilling to within 150 mm of the adjacent pavement level shall be completed within 48 hours of the commencement of the excavation. Alternative arrangements may be approved by the Superintendent, but only where it can be shown that the excavation is adequately supported against partial or complete collapse.

In all cases, once commenced, excavations within 1 metre of roads under traffic shall be completed and backfilled to final levels in as short a time frame as practical to permit safe and unhindered passing of adjoining traffic. The Superintendent may direct the Contractor to backfill the excavation at its cost if the Contractor does not attempt to expedite the return of traffic to its previous status where this is practical.

Any excavation that presents a danger to adjacent traffic shall be substantially highlighted to passing motorists by adequate traffic control devices.

## **31 OFFICE ACCOMMODATION FOR THE SUPERINTENDENT**

Where so stated in Item 15A of the Annexure to the Supplementary Conditions of Contract, the Contractor shall provide office accommodation for the exclusive use of the Superintendent for the duration of the Contract.

The size of such accommodation and any amenities required to be provided by the Contractor shall be as stated in Item 15B of the Annexure to the Supplementary Conditions of Contract.

## **28 INDUSTRIAL MATTERS**

The Contractor must warrant that the Contract Sum was arrived at by allowing for payment of labour rates and other conditions which comply with the relevant Industrial Awards and/or Agreements.

Not only must the Contractor pay its own labour force in accordance with the industrial awards, but it is also responsible for ensuring that all its subcontractors likewise comply. The purpose of this is to ensure that all of the workforce receives its proper remuneration, for which the Principal has paid, and that progress on the Works is not disrupted by industrial action by members of the workforce seeking proper payment.

However, it should be noted that the compliance with Clause 28 of SCoC does not entitle the Contractor to reimbursement of additional costs incurred if there is an increase in labour costs. Any such entitlement must be found elsewhere.

## **29 WEATHER PROTECTION**

This clause makes it very clear that the Contractor is responsible for taking all reasonable measures to protect the work under the Contract from damage resulting from the effects of inclement weather and, where total protection is impossible, for mitigating the consequent effects.

The second paragraph is particularly applicable where soft and/or wet material is being replaced as "unsuitable". The quantities of such materials can increase due to wet weather and poor Contractor's protection. The subsequent allocation of responsibility or liability for replacement costs can be difficult to determine (i.e. whether material which has been unsuitable and must be replaced, would have been unnecessary had the Contractor taken proper and reasonable protective measures). The use of photographs and adequate records can be of great assistance to the Superintendent and Contractor in this regard.

## **30 EXCAVATION ADJACENT TO ROAD UNDER TRAFFIC**

The clause imposes obligations on the Contractor to restore the level difference between pavement under traffic and adjacent excavations to a maximum of 150mm within 48 hours of exceeding the 150mm depth differential. However, this requirement may be amended if the Superintendent approves proposed measures to prevent collapse of the pavement. This has significant safety implications and such approval should not be given without careful consideration. Note also that the Superintendent may order the immediate backfilling of an excavation (at the Contractor's cost) where the Contractor does not expedite work to overcome the hazard.

## **31 OFFICE ACCOMMODATION FOR THE SUPERINTENDENT**

This clause, by reference to Items 15A and 15B of the Annexure to the SCoC, specifies the size of onsite accommodation to be provided for the exclusive use of the Superintendent for the duration of the Contract.

**32 HAULAGE OF PLANT AND MATERIALS**

The Contractor shall ensure that vehicles carrying plant and material over State-controlled roads and Local Government controlled surface streets shall comply with the vehicle weight limit requirements set out in the *Transport Operations (Road User Management) Act*, and with any other vehicle weight limit requirements imposed by duly constituted Authorities on whose roads such vehicles operate.

The Contractor shall, prior to commencement of work on the Site, submit evidence to the Superintendent that the approvals of the relevant Authorities have been obtained for the haulage of plant and materials over surface streets along nominated routes.

The Contractor shall be responsible for the rectification of any damage to surface streets attributable to its operations. If the Contractor fails to rectify the damage, the Superintendent may, after giving reasonable notice, arrange for the necessary rectification work to be carried out and the cost incurred shall be a debt due from the Contractor to the Principal.

Access for Constructional Plant to and from operational roads on or off the Site shall be subject to any restrictions stated in Item 16 of the Annexure to the Supplementary Conditions of Contract.

Failure of the Contractor to comply with the requirements of Clause 32, will be a substantial breach of contract for the purposes of Clause 44.2 of the General Conditions of Contract.

**33 VEHICLES WITH EXCESS AXLE LOADS WITHIN THE SITE**

The operation of vehicles with excess axle loads shall be limited to their use in association with the construction of sections of embankment. Such operations shall be limited to vehicles which are loaded within the Site only.

Vehicles with excess axle loads will not be permitted to travel along or across any existing pavement or over any concrete structure without the approval of the Superintendent in writing. Caution shall be exercised in relation to the operation of such vehicles over drainage or other structures.

The operation of vehicles with excess axle loads on sections of road under construction shall cease when trimming of the subgrade is complete.

The Contractor shall make good any damage which, in the opinion of the Superintendent, has resulted

from the operation of vehicles with excess axle loads.

Nothing in Clause 33 shall in any way limit or exclude the Contractor's obligations or liabilities under Clauses 16 and 17 of the General Conditions of Contract.

Failure of the Contractor to comply with the requirements of Clause 33, will be a substantial breach of the Contract for the purposes of Clause 44.2 of the General Conditions of Contract.

**34 PROTECTION OF BITUMINOUS SURFACES**

The Contractor shall not carry out any of the following activities on any bituminous surface, including asphalt, or on any other surface on which bitumen is to be placed —

- (a) the refuelling of plant;
- (b) the use of plant or equipment which leaks fuel or oil;
- (c) the mixing of cutter or flux oils with bitumen; and
- (d) any other activity which may result in the spillage of any solvent.

**35 TEMPORARY FILLING OF WATERWAYS**

Unless otherwise stated in Item 17 of the Annexure to the Supplementary Conditions of Contract, the Contractor shall not construct any temporary filling of any waterway during execution of the Contract.

Where temporary filling is permitted —

- (a) immediately work has been completed in the area, any disturbance (not associated with the Works) of the banks of any waterway shall be restored to a condition equivalent to that pertaining when the Contractor was granted possession of the Site; and
- (b) prior to the Date of Practical Completion, the Contractor shall remove from the waterway all materials used in the construction of any Temporary Works.

**36 USE OF EXPLOSIVES****36.1 Application**

For the purposes of Clause 36, "the Act" shall be the Queensland *Explosives Act 1952*.

## **32 HAULAGE OF PLANTS AND MATERIALS**

The Contractor must comply with all relevant legislation and restrictions (eg load limits on roads and bridges) when bringing materials, plant or equipment onto the site. Note that the Contractor must provide the Superintendent with evidence that necessary approvals have been obtained before any haulage commences and it is important that the Superintendent makes sure that sufficient and satisfactory evidence is provided.

The importance of these provisions is demonstrated by the fact that failure to comply with Clause 32 is held to be a substantial breach of Contract for the purposes of Clause 44.2 of the GCoC.

## **33 VEHICLES WITH EXCESS AXLE LOADS WITHIN THE SITE**

This clause imposes considerable constraints on the use of vehicles with excess axle loads within the site and prohibits their use outside the site. Even within the site the use of roads may still be subject to the "Transport Operations (Road User Management) Act". The Contractor is required to obtain the Superintendent's approval, in writing, to subject any pavements, concrete structure, drainage or other structures to excess axle loads. The Contractor is required to make good any damage which, in the opinion of the Superintendent, has resulted from the excess axle loads. The use of "before and after" photographs is strongly recommended to assist in such decisions.

Note that, as with Clause 32, failure to comply with the requirements of Clause 33 is regarded as a substantial breach of Contract pursuant to Clause 44.2 of the GCoC.

## **34 PROTECTION OF BITUMINOUS SURFACES**

This clause simply lists prohibited activities which, if carried out, would damage the bitumen. The list should not be taken to be exhaustive or exclusive and other activities which could damage the bitumen surface may be stopped by the Superintendent.

## **35 TEMPORARY FILLING OF WATERWAYS**

In general, the Contactor is not permitted to cause an obstruction in a waterway by placing temporary filling. However, in special circumstances this may be permitted but only if noted in Item 17 of the Annexure to the SCoC. The Principal may or may not have obtained the relevant permit from the appropriate Authority (eg EPA) and both the Contractor and Superintendent should verify the status of any such permit before filling commences. While approved in principle by the Principal, it may be necessary for the Contractor to make application for the permit. In either case, the Contractor is responsible for compliance with the permit conditions.

When temporary filling has been permitted, Items (a) and (b) specify the requirements for remediation of the site on completion.

## **36 USE OF EXPLOSIVES**

### **36.1 Application**

All work under the Contract which involves the use of explosives must comply with the Explosives Act 1952 (the Act) and the further requirements of Clause 36.

All work under the Contract which involves the use of explosives shall conform to the requirements of Clause 36.

### **36.2 Compliance with Laws and Standards**

When using and handling explosives the Contractor shall comply with the provisions of —

- (a) the Act and subordinate legislation;
- (b) the relevant Local Government By-laws ("the By-laws");
- (c) the current Standards Australia explosives standards, with the exception that parallel, parallel-series and series-parallel electric circuits shall not be used;
- (d) the Main Roads Specification MRS11.55 *Use of Explosives in Roadworks*; and
- (e) the National Association of Australian State Road Authorities' (now Austroads) publication *Explosives in Roadworks - Users' Guide* for guidance when developing explosive work procedures and processes.

Should any conflict of requirements occur between any of the above documents, preference shall be given to the document listed first above.

### **36.3 Contact with Authorities**

The Contractor shall contact the responsible Local Government, Police and other Emergency Service Authorities in order to ascertain their requirements in relation to the following matters —

- (a) permit requirements;
- (b) permitted hours of blasting;
- (c) prohibited methods of blasting;
- (d) the type and maximum amount of explosive per blast;
- (e) supervision requirements;
- (f) flyrock control;
- (g) traffic control;
- (h) safety requirements;
- (i) misfire procedure; and
- (j) public liability insurance requirements.

### **36.4 Times for Blasting**

The Contractor shall not, without prior written approval of the Superintendent, carry out any blasting outside the hours and days stated in Item 18A of the Annexure to the Supplementary Conditions of Contract. Where no such hours and/or

days are stated, blasting shall not be carried out before 7.30 a.m. or after 5.00 p.m. Monday to Friday, or at any time on Saturdays, Sundays and public holidays. This restriction shall apply irrespective of any extensions to the above times and days permitted by the By-Laws.

### **36.5 Traffic Management**

Where the public will be permitted to pass through the blasting site, the Contractor shall prepare a Traffic Management Plan, in accordance with Clause 12.2, for this purpose and include in that Traffic Management Plan —

- (a) traffic guidance scheme to be implemented during blasting operations; and
- (b) provision for emergency vehicles.

No blasting operations shall be carried out until the Superintendent has given a direction under the provisions of Clause 8.4 of the General Conditions of Contract that the Traffic Management Plan is suitable.

The conditions under which traffic will be permitted to be stopped to allow for blasting operations shall be as stated in Item 18B of the Annexure to the Supplementary Conditions of Contract. Where no such conditions are stated, traffic shall only be stopped under Police control and the first vehicle stopped shall not be delayed for longer than 10 minutes except in the case of a misfire or where Police decide to delay the traffic for safety reasons.

### **36.6 Environment**

The Contractor shall make provision for —

- (a) measurement of vibration and air blast at 3 separate locations at each blasting site;
- (b) minimising the effect of blasting by —
  - (i) using the lowest charge appropriate to the task;
  - (ii) reducing the number of holes fired on the same delay;
  - (iii) delaying secondary blasts;
  - (iv) reducing the maximum instantaneous charge by using delays with sequential timing;
  - (v) optimising the length of sub drilling by using air blast and vibration data previously obtained on the Site;
  - (vi) stemming blast holes with suitable material;

### **36.2 Compliance with Laws and Standards**

This clause lists several additional standards and By-laws, etc., that must be complied with and, in the event of a conflict of requirements, it nominates the Act as taking precedence.

Note that Item (c) prohibits the use of parallel, parallel-series and series-parallel electric circuits, contrary to what is permitted under the Standards Australia explosives standard.

### **36.3 Contact with Authorities**

The clause gives an apparently comprehensive list of organisations who must be contacted and the requirements which must be ascertained. While the responsibility rests with the Contractor, the Superintendent is well advised to make adequate enquiries to ensure that the Contractor has in fact determined all of these requirements. Blasting can be both a significant safety issue and one which causes strong community concern.

### **36.4 Times for Blasting**

This clause gives the Superintendent the authority to vary the permitted hours for blasting from those specified in either Item 18A of the Annexure to the SCoC or the clause.

Note that the limitations in the Contract documents take precedence over hours that might be permitted under the By-Laws. The Contractor may seek the Superintendent's permission, in writing, to vary the hours, but it is suggested that the Superintendent should only agree to this under exceptional circumstances (eg a particular safety issue) and not without first consulting appropriate Authorities and addressing community issues.

### **36.5 Traffic Management**

Where traffic must pass through a site subject to blasting, the Contractor must incorporate into proposed methods of handling the situation in its Traffic Management Plan, which must comply with Clause 12.2 of the SCoC. Blasting may not commence until the Superintendent has given a direction that the Plan is deemed suitable.

Note that Item 18B of the Annexure may contain special conditions relating to traffic control, but otherwise Police must be used and the maximum delay to traffic must not exceed 10 minutes unless there has been a misfire or there is some other safety concern.

### **36.6 Environment**

The clause requires the Contractor to carry out vibration and blast air pressure monitoring at three separate locations for each blasting site, and states a number of accepted methods which must be implemented to minimise the effects of blasting. The Contractor is also directed to adopt the recommendations in the nominated NAASRA publication.

Both the Contractor and the Superintendent should be aware that blast air pressure effects can be felt at considerable distances, depending on cloud cover and climatic inversions, and that the effects can frequently be perceived to be much greater than they are in fact. It is a frequent cause of complaint, and strict compliance with recommended practice should be enforced.

- (vii) using low energy detonating cord; and
- (c) taking into account the matters set out in Clause 9.4.6 of the National Association of Australian State Road Authorities publication *Explosives in Roadworks - User Guide* in relation to minimising the effect of noise and airborne shock waves.

### **36.7 Safety Precautions**

The Contractor shall take all precautions necessary to prevent injury to persons and/or damage to property occurring as a result of the use of explosives.

The Contractor shall provide a procedure for dealing with a blasting accident.

### **36.8 Blasting Mats**

The Contractor shall employ blasting mats for all blasting operations.

### **36.9 Reporting**

The Contractor shall provide the Superintendent on a weekly basis with a record of all blasting operations carried out on Site during that week. The report shall include details of —

- (a) date, time and location of the blast;
- (b) the blast design and actual charges used;
- (c) the measurement of vibration and air blast at all recorders;
- (d) any breach of safety or misfires; and
- (e) any other matters considered necessary by the Superintendent.

### **36.10 Hold Point**

In the event of any single misfire event, blasting accident, delay to traffic of more than the specified period or if the performance criteria for construction noise, vibration or air quality which relate directly to blasting activities on Site are exceeded, the Contractor shall immediately cease blasting activities until such time as the Superintendent has investigated the incident and provides the Contractor with permission to proceed.

### **36.11 Personnel**

The Contractor shall, at all times during blasting operations, employ on the blasting site the necessary experienced personnel required by MRS11.55 *Use of Explosives in Roadworks*.

To the extent that they are inconsistent, Clause 37 prevails over Clause 8.4 of the General Conditions of Contract.

## **37 DESIGN BY THE CONTRACTOR**

### **37.1 Application**

Clause 37 applies where the Contractor is required to design as well as construct and/or install part of the work under the Contract (either because the Principal specified that the work under the Contract was to include both design and construction and/or installation work or because the Principal accepted an alternative tender in which the Contractor offered both to design and construct and/or install a part of the work under the Contract).

The requirements of Clause 8.5 of the General Conditions of Contract also apply to the Contractor's design under Clause 37.

The Contractor shall carry out all design activities under a Quality System complying with AS 9001.

### **37.2 Definitions**

Unless the context requires otherwise, in Clause 37 and any other part of the Contract relating to work to be designed by the Contractor —

‘action of the Principal’ means any one or more of the following —

- (a) any design work carried out by or on behalf of the Principal or by others prior to the Date of Acceptance of Tender;
- (b) any direction as to suitability by the Superintendent under Clause 8.4 of the General Conditions of Contract;
- (c) any of the following things done by or on behalf of the Principal or the Superintendent, namely, any comment upon, response to, review or acceptance of, giving or withholding of permission to use (whether under Clause 37.9 or otherwise), consent to proceed with, direction or query in relation to or request to alter any designs, drawings or specifications (or any part thereof) submitted by the Contractor under Clauses 37.4 or 37.10 (a) or any reasons or supporting information submitted by the Contractor under Clause 37.10 (b);
- (d) any deemed permission to use a design drawing or specification as provided in Clause 37.11;
- (e) any approval by the Superintendent under Clause 37.4 of the termination of a Contractor's Designer's engagement or of the replacement of a Contractor's Designer;

### **36.7 Safety Precautions**

Blasting is an inherently dangerous operation and all mandatory precautions must be implemented. The Superintendent should take particular care to verify this.

### **36.8 Blasting Mats**

The use of blasting mats to prevent fly-rock is mandatory. However, in remote locations or some country roads, this may be impractical and costly. The Contractor may be able to obtain clearance from the WH&S officer not to have to use mats.

### **36.9 Reporting**

The clause gives details of the reports of all blasting activities which the Contractor must submit (in writing) to the Superintendent. Because of the potential for later claims for damage, injury or even latent conditions, it is essential that this requirement is vigorously enforced.

### **36.10 Hold Point**

If any untoward event related to blasting occurs (as listed in the clause, but not limited to these situations) the Contractor must immediately cease the blasting operations and the Superintendent should not permit the Contractor to continue with further blasts until he is satisfied that the problem has been identified, rectified, and will not happen again.

### **36.11 Personnel**

The Contractor must use only suitably experienced and qualified personnel to carry out blasting operations. A minimum level of competence is detailed in MRS11.55 Use of Explosives in Roadworks.

## **37 DESIGN BY THE CONTRACTOR**

In the original version of the SCoC (November 1996) this clause was "Reinforced Soil Structures". As from December 1999 it has been expanded in scope to cover all work designed by the Contractor, not just Reinforced Soil Structures (RSS).

### **37.1 Application**

The clause applies to all work where the Contractor is required to design elements of work under the Contract, not just fabricate/construct and install. Such a situation can arise where either the original Contract envisaged both design and construction or where the Principal has accepted, as an alternative to the original Contract, a design and construct proposal.

Note that Clause 37 prevails over Clause 8.4 Supply of Documents by Contractor where there is an inconsistency. Because of the design element, a Contractor carrying out such work is required to have, or use a consultant who has, a Quality System complying with AS9001.

### **37.2 Definitions**

The definitions contained in this clause address the terms which are relevant to the "design and construct" elements.

Note in particular "Defined Part" and "Principal's Requirements".

‘construction’ includes installation;

‘Contractor’s Construction Drawings’ means the drawings prepared by or on behalf of the Contractor which are necessary for the construction and/or installation of the Defined Part;

‘Contractor’s Construction Specifications’ means the specifications prepared by or on behalf of the Contractor which are necessary for the construction and/or installation of the Defined Part;

‘Contractor’s Design’ means the design for the Defined Part and includes —

- (a) the Contractor’s Construction Drawings, the Contractor’s Construction Specifications and all other drawings, specifications, manuals, designs (including systems designs) and other information, calculations, samples, models, patterns and the like; and
- (b) any new software and any customised, modified or extended parts of any existing software (including associated data and documentation),

required for the construction and/or installation of the Works or which the Contract requires the Contractor to create or cause to be created or to provide (in all forms, including electronic);

‘Contractor’s Designer’ means the consultants and/or employees engaged by the Contractor for the purpose of preparing the Contractor’s Design and providing required certificates, being the persons described in the Contractor’s tender or any replacement designer approved by the Superintendent pursuant to Clause 37.4;

‘Defined Part’ means that part of the work under the Contract which is to be designed and constructed by the Contractor, including all necessary interfaces with the balance of the work under the Contract;

‘Designer’s Deed of Covenant’ means the deed, in the form included in the tender documents (Form C6854) between the Principal, the Contractor and the Contractor’s Designer pursuant to Clause 37.4;

‘Principal’s Requirements’ means the written summary or outline of the Principal’s requirements for the Defined Part described in the documents stated in Item 19A of the Annexure to the Supplementary Conditions of Contract or that given by the Principal’s design if supplied.

### **37.3 Contractors’ Warranties**

The Contractor warrants that —

- (a) the Contractor’s Design will be carried out and completed with due skill and care and in accordance with the requirements of the Contract (including the Principal’s Requirements), and that —
  - (i) such design will be fit for its intended purpose and, without limiting the foregoing, suitable and adequate for the Site; and
  - (ii) construction and/or installation in accordance with such designs will comply with the standards and other requirements specified in the Contract;
- (b) it will apply for and obtain (or cause to be applied for and obtained) and will maintain, all certificates, licenses, consents, permits and other approvals of municipal, public or other statutory authorities necessary for —
  - (i) the execution of the Defined Part; and
  - (ii) the occupation and use of the Defined Part;
- (c) it will construct and/or install the Defined Part in accordance with the Contractor’s Design —
  - (i) in a proper and workmanlike manner; and
  - (ii) using material of the nature described in the Contract, or, failing any specific description, then of the best quality available which is of merchantable quality and fit for its intended purpose; and
- (d) the Defined Part will, when constructed and/or installed —
  - (i) be fit and adequate for the purpose for which it is intended and suitable for the Site; and
  - (ii) comply with all the requirements of the Contract, including, without limitation, the Principal’s Requirements, the requirements of all applicable laws and the requirements of all municipal, public or other authorities having jurisdiction with respect to the work under the Contract.

The warranties in Clause 37.3 shall remain unaffected, notwithstanding any action of the Principal. No action of the Principal nor the naming

### **37.3 Contractor's Warranties**

This clause spells out in detail the warranties which the Contractor must give in relation to the design of the work, obtaining all permits and approvals, methods and materials for construction and the fitness for purpose of the Defined Part and compliance with the Principal's Requirements. Items (A) to (F) detail actions of the Principal which do not lessen or relieve the Contractor of its obligations with regard to the Defined Part, particularly resulting from checking carried out by the Superintendent or the Principal.

of a Contractor's Designer in the Contract nor the engagement by the Contractor of a Contractor's Designer shall —

- A. relieve, limit or exclude any of the Contractor's liabilities or obligations under the Contract;
- B. result in the Principal or the Superintendent assuming any responsibility or liability for the adequacy, quality, suitability or fitness for purpose of the Defined Part or of the design of the Defined Part;
- C. result in the Principal or the Superintendent assuming any duty of care towards the Contractor;
- D. constitute an admission or acknowledgement by the Principal or the Superintendent that any design, drawing, specification, information or work is in accordance with the Contract;
- E. constitute an acknowledgement or representation by the Principal or the Superintendent that either of them has reviewed or checked any design, drawing specification, information or work submitted or done by or on behalf of the Contractor; or
- F. give rise to or be relied upon by the Contractor as a defence to any claim by the Principal against the Contractor arising out of or concerning any defect in the Defined Part or in the design of the Defined Part.

#### **37.4 The Contractor's Designer**

The Contractor shall engage the Contractor's Designer to assist the Contractor to carry out and complete the Contractor's Design and to assist the Contractor to discharge its other obligations under Clause 37. The Contractor shall procure the Contractor's Designer to complete and execute a Designer's Deed of Covenant within 14 days of the later of —

- (a) the Date of Acceptance of Tender; or
- (b) the date the Contractor's Designer is engaged by the Contractor,

and promptly after receiving the executed deed, the Contractor shall also execute the deed and deliver it to the Superintendent.

The Contractor shall not terminate the engagement of the Contractor's Designer without the prior written consent of the Superintendent.

If the Contractor's Designer fails to execute the Designer's Deed of Covenant within the period

prescribed by Clause 37.4 after being requested to do so by the Contractor, the Contractor shall, provided it has obtained the prior written approval of the Superintendent, terminate the engagement of that Contractor's Designer and shall nominate a further designer for the approval of the Superintendent. If the Superintendent approves the replacement designer, the provisions of Clause 37 shall apply with respect to that designer.

A Contractor's Designer is a subcontractor for the purposes of the General Conditions of Contract.

The Contractor shall ensure that —

- (i) the Contractor's Designer has professional indemnity insurance cover of not less than the sum stated in Item 19B of the Annexure to the Supplementary Conditions of Contract;
- (ii) the policy is maintained until the Final Certificate is issued under Clause 42.8 of the General Conditions of Contract and thereafter for the period stated in Item 19C of the Annexure to the Supplementary Conditions of Contract.

#### **37.5 The Contractor's Design**

The Contractor shall carry out and complete the Contractor's Design which shall —

- (a) be in accordance with the Contract;
- (b) be consistent with the Contractor's offer for the Defined Part (except to the extent that the Contractor's offer omits anything required by the Principal's Requirements or by any of the other Contract documents or provides for standards of finish, workmanship or materials of a lesser standard than that required by the Principal's Requirements or the other Contract documents, in which case the Contractor's Design shall be in accordance with the Principal's Requirements and the other Contract documents); and
- (c) be sufficient to enable the Contractor to construct and/or install and complete the Defined Part.

#### **37.4 Submission of Contractors' Construction Drawings and Specifications**

The Contractor shall, in accordance with the documentation program mentioned in Clause 37.12, submit to the Superintendent —

- (a) 6 copies of the Contractor's Design (including the Contractor's Construction Drawings and Contractor's Construction Specifications); and

### **37.5 The Contractor's Designer**

The issues of particular note are:

- (i) The Contractor's Designer must execute a Designer's Deed of Covenant within 14 days of either the Date of Acceptance of Tender or the date the Contractor's Designer is engaged by the Contractor;
- (ii) The Contractor must also execute the deed and deliver it to the Superintendent (This is important);
- (iii) The Contractor cannot terminate the engagement of the Contractor's Designer without the prior written consent of the Superintendent;
- (iv) If the Contractor's Designer fails to execute the Designer's Deed of Covenant within the prescribed 14 days, the Contractor must, with the prior written consent of the Superintendent, terminate the agreement and nominate another Designer for the Superintendent's approval; and
- (v) The Contractor's Designer is considered as a subcontractor for the purposes of the GCOC. The Contractor must ensure that its Designer has Professional Indemnity Insurance for an amount not less than that specified in Item 19B or the Annexure to the SCoC, and that this insurance is maintained for the period after the issue of the Final Certificate as stated in Item 19C of the Annexure.

### **37.6 Contractor's Design**

Note that, in 37.5(b), it states that the Contractor's Design must be consistent with the Contractor's offer for the Defined Part but if it omits anything required by the Principal's Requirements, or provides for a lesser standard of workmanship or materials etc, then the Contractor's Design must be in accordance with the Principal's Requirements and the other Contract documents.

- (b) a certificate from the Contractor's Designer (signed by a principal of the Contractor's Designer) that the Contractor's Design (including the Contractor's Construction Drawings and Contractor's Construction Specifications) complies with the requirements of the Contract and that the Contractor's Designer has, in preparing the Contractor's Design, complied with the requirements of the Contract relating to design.

### **37.7 No Obligations to Review or Check Drawings and Specifications**

Neither the Principal nor the Superintendent is required to review or check any of the Contractor's Design submitted by the Contractor under Clause 37.4 or 37.10 (a) or any reasons or supporting information submitted by the Contractor under Clause 37.10 (b) —

- (a) for errors, omissions or compliance with the Contract; or
- (b) for any other purpose whatsoever.

The Contractor acknowledges that in considering and responding to any Contractor's Design submitted by the Contractor (if any such consideration occurs or response is given), the Principal and the Superintendent will be relying upon —

- (i) the advice, skill and judgement of the Contractor and the Contractor's Designer;
- (ii) the Contractor's Designer's certificate provided under Clauses 37.4 and 37.10 (a);
- (iii) any reasons and supporting information given by the Contractor under Clause 37.10 (b); and
- (iv) the warranties given by the Contractor under Clause 37.3.

### **37.8 Permission to Use Required Before Construction**

The Contractor shall not commence construction of any part of the Defined Part unless and until the Contractor's Design (including the Contractor's Construction Drawings and Contractor's Construction Specifications) for that part have been submitted under Clause 37.4 or 37.10(a) and either —

- (a) the Superintendent has given the Contractor written permission to use the Contractor's Design for the construction and/or installation of the relevant part of the Defined Part; or
- (b) the Superintendent is deemed to have given permission to use the Contractor's Design for

the construction and/or installation of the relevant part of the Defined Part as provided in Clause 37.11.

### **37.9 Giving and Withholding Permission to Use**

Within 14 days after the submission by the Contractor to the Superintendent of —

- (a) a Contractor's Design (including the Construction Drawing or Contractor's Construction Specification) and the accompanying Contractor's Designer's certificate in accordance with Clause 37.4;
- (b) a resubmitted Contractor's Design and the accompanying Contractor's Designer's certificate in accordance with Clause 37.10 (a); or
- (c) reasons and supporting information in accordance with Clause 37.10 (b) concerning a Contractor's Design for which the Superintendent has previously withheld permission to use,

as the case may be, the Superintendent may, without being obliged to do so, either —

- (i) give the Contractor written permission to use the relevant Contractor's Design for the construction and/or installation of the Defined Part; or
- (ii) advise the Contractor in writing that such permission is not given and give the Contractor brief reasons for withholding permission.

### **37.10 Where Permission to Use is Withheld**

If the Superintendent advises the Contractor under Clause 37.9 (ii) that permission to use a Contractor's Design is not given, the Contractor shall either —

- (a) redo the Contractor's Design and resubmit it to the Superintendent together with an accompanying Contractor's Designer's certificate in accordance with Clause 37.4; or
- (b) submit written reasons and supporting information to the Superintendent stating why permission to use the Contractor's Design should be given.

### **37.6 Submission of Contractor's Construction Drawings**

This clause specifies the number of sets of documents to be provided to the Superintendent and the essential contents of the certificate to be provided by the Contractor's Designer to verify that its design complies with the requirements of the Contract. This is an important certificate and is sometimes slow in coming.

### **37.7 No Obligations to Review or Check Drawings and Specifications**

While the Principal and/or the Superintendent invariably will review or check the Contractor's Design for errors, omissions and general compliance with the Contract, neither is required to carry out any such checks. The clause also makes clear that the Principal and Superintendent will, in making any response to the Design as submitted, be relying on the skill and judgement of the Contractor's Designer and the Contractor's warranties etc, all as detailed in Items (i) to (iv).

### **37.8 Permission to Use Required Before Construction**

The Contractor is not permitted to commence construction of any part of the Defined Part unless and until the Contractor's Design for that part has been submitted and either:

- (a) The Superintendent has given written approval to use the Contractor's Design for the relevant part of the Defined Part; or
- (b) The Superintendent is deemed to have given permission. This deemed permission will occur if the Superintendent fails to respond within the prescribed 14 days (refer to Clause 37.11).

### **37.9 Giving and Withholding Permission to Use**

Items 37.9(a), (b) and (c) describe three sets of circumstances under which the Contractor will submit design documents to the Superintendent. Within 14 days of receiving such documents, the Superintendent may do, but is not obliged to do, either:

- (i) Give his written permission to use the relevant Contractor's Design for the construction and/or installation of the Defined Part; or
- (ii) Advise the Contractor in writing that permission is not given – and state brief reasons for withholding permission. As in all such matters, the Superintendent is bound by Clause 23 of the GCoC to be reasonable.

### **37.10 Where Permission to Use is Withheld**

If the Superintendent does not give his permission, as in 37.9(ii), the Contractor must either:

- (a) Redo the design and resubmit it, together with an appropriate Contractor's Designer's certificate; or
- (b) Submit written reasons and supporting information in support of its design, i.e. contesting the withholding of approval and requesting a review of the original decision.

**37.11 Deemed Permission to Use**

If within 14 days after submission by the Contractor to the Superintendent of —

- (a) a Contractor's Design and the accompanying Contractor's Designer's certificate in accordance with Clause 37.4;
- (b) a resubmitted Contractor's Design and the accompanying Contractor's Designer's certificate in accordance with Clause 37.10 (a); or
- (c) reasons and supporting information in accordance with Clause 37.10 (b) concerning a Contractor's Design for which the Superintendent has previously withheld permission to use,

as the case may be, the Superintendent has not responded to the Contractor as provided in Clause 37.9(i) or 37.9(ii), then upon the expiration of the relevant 14 day period, the Superintendent shall be deemed to have given permission to use the relevant Contractor's Design for the construction of the Defined Part.

**37.12 Documentation Program**

The Contractor shall, as part of the program which it is obliged to provide pursuant to Clause 33 of the General Conditions of Contract and Clause 8 herein, submit a documentation program to the Superintendent setting out the order in which and the times by which the Contractor's Design (including the Contractor's Construction Drawings and Contractor's Construction Specifications) will be completed.

The Contractor shall ensure that the program provides for the Contractor's Design to be prepared and supplied to the Superintendent within the time required by and at a rate consistent with the maintenance of progress of the Defined Part in accordance with the Current Program.

**37.13 No Departure From Contractor's Design**

The Contractor shall carry out and complete the Defined Part strictly in accordance with the Contractor's Design for which permission to use has been given under Clause 37.9 or been deemed to have been given under Clause 37.11.

The Contractor shall not depart from or change that Contractor's Design unless —

- (a) the departure or change is required by a variation direction given by the

Superintendent under Clause 40.1 of the General Conditions of Contract and —

- (i) the Contractor has prepared and submitted designs, drawings and specifications in relation to the departure or change, together with relevant Contractor's Designer's certificates, in accordance with Clauses 37.5 and 37.4; and
  - (ii) the Superintendent has under Clause 37.9 given the Contractor permission to use those designs, drawings and specifications for the construction and/or installation of the Defined Part or the Superintendent is deemed to have given such permission as provided in Clause 37.11; or
- (b) (in all other cases) the departure or change is not inconsistent with the Contract and will not materially affect the Defined Part and —
    - (i) the Contractor has prepared and submitted designs, drawings and specifications in relation to the departure or change, together with relevant Contractor's Designer's certificates, in accordance with Clauses 37.5 and 37.4; and
    - (ii) the Superintendent has under Clause 37.9 given the Contractor permission to use those designs, drawings and specifications for the construction and/or installation of the Defined Part or the Superintendent is deemed to have given such permission as provided in Clause 37.11.

No permission or deemed permission by the Superintendent in connection with a departure from or change to a Contractor's Design as contemplated by sub-paragraph (b) shall —

- A. constitute or be treated as a variation direction by the Superintendent under Clause 40.1 of the General Conditions of Contract;
- B. entitle the Contractor to any additional payment or any extension of time;
- C. affect the warranties in Clause 37.3; or
- D. have any of the consequences mentioned in subparagraphs (A) to (F) of Clause 37.3.

### **37.11 Deemed Permission to Use**

If, within 14 days of submission to the Superintendent of:

- (a) a Contractor's Design and accompanying Contractor's Designer's certificate;
- (b) a resubmitted Design and certificate (as per Clause 37.10(a)); or
- (c) reasons and supporting information (as per Clause 37.10(b));

the Superintendent has not responded to the Contractor as per Clause 37.9(i) or (ii) then, after the fourteenth day, the Contractor is entitled to act as though the Superintendent had given permission to use (deemed approval) and proceed to use the relevant Contractor's Design for the construction of the Defined Part.

Note that a slow response from the Superintendent has the potential to result in a claim by the Contractor if, at a later date, Superintendent refuses permission to use all or part of the design.

### **37.12 Documentation Program**

The Contractor is required to show as part of its construction program (refer to GCoC Clause 33 and SCoC Clause 8) a documentation program which shows the order and times when the Contractor's Design (including construction drawings and specification) will be completed.

The program must allow reasonable and realistic times for submission of the Contractor's Design to the Superintendent to allow proper consideration and progress of the Defined Part in accordance with the Current Program. That is, the Contractor must give the Superintendent adequate time for proper consideration of the design, such that any delay to the Contractor's program is avoided.

### **37.13 No Departure from Contractor's Design**

The Contractor must carry out the construction of the Defined Part strictly in accordance with the design which has been submitted and approved (or deemed to have been approved).

The Contractor may only depart from the approved design if:

- (a) The Superintendent has directed a variation under Clause 40.1 to the GCoC and the Superintendent has approved any designs, drawings, etc. relevant to the directed variation; and
- (b) (In all other cases). The change is not inconsistent with the Contract and will not materially affect the Defined Part and:
  - (i) The Contractor has submitted the necessary designs, drawings, specifications and certificates etc; and
  - (ii) Either the Superintendent has given permission to use the drawings etc or the Superintendent is deemed to have given permission to use (refer to Clause 37.11).

However, where permission or deemed permission regarding a change to the Contractor's Design arises from the conditions described in (b), then:

- A. The change is not to be treated as a variation direction under Clause 40.1 of the GCoC;
- B. The Contractor is not entitled to any consequent additional payment or extension of time;
- C. The Contractor's warranties detailed in Clause 37.3 are not affected; or
- D. The change has none of the consequences listed in sub-paragraphs (A) to (F) of Clause 37.3 (i.e. no actions of the Principal reduce or relieve the Contractor or liabilities or obligations, etc).

**37.14 Copyright**

The Contractor warrants that —

- (a) it and/or the Contractor's Designer owns the copyright in all of the Contractor's Design (including the Contractor's Construction Drawings and Contractor's Construction Specifications); and
- (b) it has the right and the authority to grant the licence mentioned in the next paragraph.

The Contractor hereby grants to the Principal an irrevocable royalty-free licence to use the Contractor's Design (including the Contractor's Construction Drawings and the Contractor's Construction Specifications) for the work under the Contract, for any subsequent operation, maintenance, repairs, additions or alterations of or to the Defined Part and for any other purpose. This licence will survive the breach, repudiation, recission, frustration, termination, completion or any other discharge of the Contract and any take-over of the whole or any part of the work under the Contract.

Where the Principal uses any of the Contractor's Design other than for the purposes of this Contract or the work under the Contract, it does so at its own risk.

**37.15 Conditions Precedent to Issue of Certificate of Practical Completion**

The Contractor shall, as a condition precedent to the issue of the Certificate of Practical Completion, hand over the following to the Superintendent —

- (a) all guarantees and warranties required by the Contract in relation to the Defined Part;
- (b) three sets of as-built Contractor's Construction Drawings and Contractor's Construction Specifications in a form and containing such details as may be required by the Superintendent;
- (c) a certificate from the Contractor's Designer (signed by a principal of the Contractor's Designer) certifying that the as-built Contractor's Construction Drawings and Contractor's Construction Specifications comply with the requirements of the Contract and the Contractor's Design.

**37.16 Ambiguities and Discrepancies**

The final paragraph of Clause 8.1 of the General Conditions of Contract shall apply to a Defined Part only where the ambiguity or discrepancy is in the Principal's Requirements. Where the ambiguity or discrepancy is —

- (a) in the Contractor's Design (including in or between any of the Contractor's Construction Drawings or the Contractor's Construction Specifications); or
- (b) between the Contractor's Design (including any Contractor's Construction Drawings or the Contractor's Construction Specifications) and the Principal's Requirements,

such ambiguity or discrepancy shall be at the Contractor's risk and the direction shall not entitle the Contractor to any extra payment or an extension of time.

**37.17 Latent Conditions**

Notwithstanding Clauses 12.3, 35.5 and 40.5 of the General Conditions of Contract, and without limiting Clause 12.4 of the General Conditions of Contract —

- (a) the Contractor shall not be entitled to any extension of time for any delay resulting from the Contractor's failure to carry out, after the Date of Acceptance of Tender, proper and adequate site investigations and surveys relating to the Defined Part (including, without limitation, geotechnical investigations regarding sub-surface conditions); and
- (b) where pursuant to Clause 12.3 of the General Conditions of Contract a valuation is to be made under Clause 40.5 of the General Conditions of Contract in relation to the Defined Part, regard shall not be had to the value of more work carried out, more Constructional Plant used or more cost incurred as a result of the Contractor's failure to carry out, after the Date of Acceptance of Tender, proper and adequate site investigations and surveys relating to the Defined Part (including, without limitation, geotechnical investigations regarding sub-surface conditions).

**38 SOFTWARE LICENCES**

Without limiting anything in Clause 13 of the General Conditions of Contract or anything in Clause 37 above, the Contractor shall ensure that the Principal obtains (whether by way of assignment or otherwise and without further cost to the Principal), a license enabling it to use any computer software supplied to the Principal under the Contract (whether it be proprietary software or software created, customised, modified or extended under or for the purposes of the Contract).

### **37.14 Copyright**

The Contractor warrants that it has proper ownership of the design and is entitled to grant the Principal a licence to use the Contractor's Design without payment of any royalty, but only for work under the Contract. If the Principal uses any of the Contractor's Designs outside of the Contract, then it does so at its own risk and the Contractor's warranties do not apply.

### **37.15 Conditions Precedent to Issue of Certificate of Practical Completion**

Before the Superintendent can issue the Certificate of Practical Completion, the Contractor must give to the Superintendent:

- (a) All guarantees and warranties that relate to the Defined Part;
- (b) Three sets of as-built Contractor's Construction Drawings and Contractor's Construction Specifications, in a form and containing the level of detail that the Superintendent (reasonably) requires; and
- (c) A properly signed certificate from the Contractor's Designer certifying that the as-built drawings and specifications comply with the requirements of the Contract and the Contractor's Design.

As a matter of practicality, it is often difficult to obtain all these at a time when Practical Completion would otherwise be given i.e. a road is opened for traffic. It is prudent for a Superintendent to consult with the Principal before granting any concession to these items to be delivered after he issues a Certificate of Practical Completion.

### **37.16 Ambiguities and Discrepancies**

The Principal only has liability for the result of an ambiguity or discrepancy with regard to a Define Part, as described in the final paragraph of Clause 8.1 of the GCoC, where the ambiguity or discrepancy is in the Principal's Requirements.

Where the ambiguity or discrepancy is in the Contractor's Design, including in or between the Contractor's Design and the Principal's Requirements, then any direction given by the Superintendent to resolve the situation is at the Contractor's risk and the Contractor is not entitled to extra payment or an extension of time.

As with all matters arising from Clause 8.1 of the GCoC, the ambiguity or discrepancy must be genuine.

### **37.17 Latent Conditions**

In spite of what is stated in Clause 12.3, 35.5 and 40.5 of the GCoC which might indicate otherwise, and without limiting the time bar provisions of Clause 12.4 of the GCoC:

- (a) The Contractor will not be entitled to any extension of time for any delay resulting from its failure to carry out after the Date of Acceptance of Tender proper and adequate site investigations and surveys relating to the Defined Part; and
- (b) Where it is recognised that there is a valid claim for a latent condition under Clause 12.3 of the GCoC with regard to the Defined Part, no allowance will be made for extra costs incurred by the Contractor (i.e. valued under Clause 40 of the GCoC) as a result of its failure to carry out adequate site investigations (including geotechnical investigations) after the Date of Acceptance of Tender. That is, the Contractor's entitlement to compensation for the cost effects of a latent condition will be withdrawn if it has not carried out i.e. proper and adequate site investigations that may well have identified the purported latent condition and minimised the cost to overcome it.

The provisions in Clause 37.17 are consistent with the requirements of Clause 12 of the GCoC to make reasonable enquiries i.e. to actually inspect cores, road reports, etc.

## **38 SOFTWARE LICENCES**

This clause requires the Contractor to provide the Principal with a licence to allow the Principal to use any software supplied to it by the Contractor under the Contract without compromising any of the warranties provided under Clause 13 of the GCoC. The software and the licence must be provided at no cost to the Principal and the licence must apply to "off the shelf" standard software and software specially created and modified for use under the Contract.

This clause is intended to ensure that the Principal can, via the software, have access to the Contractor's designs as provided under Clause 37 of the SCoC. The software should be checked as soon as received in order to avoid delays at a later date.

**39 BONUS FOR EARLY COMPLETION**

In Clause 39 —

‘bonus amount’ means any amount stated in Item 20B of the Annexure to the Supplementary Conditions of Contract to be a bonus amount and which represents the bonus payment available for early completion of eligible works;

‘bonus completion date’ means any date stated in Item 20B of the Annexure to the Supplementary Conditions of Contract to be a bonus completion date and which represents the latest date by which the Contractor shall complete any eligible works in order to claim the bonus amount;

‘eligible works’ means any part of the Works stated in Item 20B of the Annexure to the Supplementary Conditions of Contract to be the subject of a bonus for early completion

Notwithstanding any other requirements of the General Conditions of Contract or the Supplementary Conditions of Contract, where so stated in Item 20A of the Annexure to the Supplementary Conditions of Contract, the Contractor shall be entitled to a bonus amount for achieving Practical Completion of any eligible works by the bonus completion date.

Under no circumstances will the bonus completion date be extended during the Contract.

The Contractor shall not have any claim against the Principal for any loss of the bonus amount or for any compensation for loss of the opportunity to receive the bonus amount where a breach, act or omission of the Principal or the Superintendent or their agents or employees prevents the Contractor from bringing the eligible works to Practical Completion by the bonus completion date.

Notwithstanding any other requirements of the General Conditions of Contract or the Supplementary Conditions of Contract, any bonus amount payable to the Contractor shall not be subject to any adjustment pursuant to Clause 3.1 of the Supplementary Conditions of Contract.

**40 WORK ON OR ADJACENT TO QUEENSLAND RAIL PROPERTY****40.1 General****40.1.1 Application of Clause 40**

Clause 40 applies where the Contractor is required to work in, on, over, under or adjacent to operations or property owned, operated or controlled by Queensland Rail.

Nothing in Clause 40 shall in any way limit or exclude any of the Contractor’s obligations or liabilities under the rest of the Contract.

**40.1.2 Clause 40 Enforceable by Queensland Rail**

Clause 40 is separately and severally binding —

- (a) as between the Principal and the Contractor; and
- (b) as between Queensland Rail and the Contractor,

and may be enforced against the Contractor by the Principal or Queensland Rail or both, but the obligations and liabilities of the Principal and Queensland Rail under Clause 40 are several only and not joint or joint and several.

With respect to sub-paragraph (b), Clause 40 —

- (i) has been included in the Contract and agreed to by the Principal acting as agent for Queensland Rail; and
- (ii) has been agreed to by the Contractor in consideration of Queensland Rail permitting the Contractor to carry out any work in, on, over, under or adjacent to operations or property owned, operated or controlled by Queensland Rail.

**40.1.3 No Contract Between Principal and Queensland Rail**

Clause 40 does not impose any obligations as between the Principal and Queensland Rail and —

- (a) neither of those parties is the agent of the other (except as provided in sub-paragraph (i) of Clause 40.1.2); and
- (b) neither of them warrants to the Contractor the due performance of the other under the Clause 40.

Further, the Regional Manager Infrastructure and the Site Protection Supervisor are not —

- (i) employees, agents or consultants of the Principal or the Superintendent; and
- (ii) are not authorised to give any directions or make any agreements that would alter or amend the Contract or constitute a variation within the meaning of Clause 40.1 of the General Conditions of Contract.
- (iii) are not authorised to give any directions or make any agreements that would alter or amend the Contract or constitute a variation

## **39 BONUS FOR EARLY COMPLETION**

The clause contains details of how a bonus may be incorporated into a Contract, the conditions which apply and the definitions of relevant terms. Such a bonus is only included in particular contracts where there is a perceived real benefit to the Principal if the project is completed in a shorter period than is prescribed. It is normally considered appropriate for the Principal to pay the Contractor the Contract Sum (plus variations) for the work under the Contract.

Item 20A of the Annexure to the SCoC indicates whether, in fact, a bonus is payable for the project. The eligible works, bonus amount and bonus completion date (if applicable) are shown in Item 20B.

Note that the operation of Clause 39 is independent of any liquidated damages (as may be prescribed in Item 14 of the Annexure Part A of the GCoC) in respect of Clause 35.6 of the GCoC if it fails to complete by the Date for Practical Completion, as amended during the Contract.

The eligible works may be defined as only part of the Works, or a Separable Portion, not necessarily all of the work under the Contract.

Note also that the bonus completion date must be a specified date, e.g. 30 June 2005, although it may be calculated as, say, 4 weeks before the Date for Practical Completion as that date is stated at the Date of Award. Clause 39 states categorically that the bonus completion date will not be extended during the Contract. That is, if extensions of time extend the Date for Practical Completion, those extensions do not result in any extension of the bonus completion date. Variations, wet weather, design errors, etc, which result in Extensions of Time are therefore not taken into account and have no impact on the bonus completion date.

Given that these provisions are clearly explained in Clause 39, it is usually not appropriate to include a bonus for early completion on projects where there most likely will be significant variations or extensions to the Date for Practical Completion. Such extensions increase the time period between the bonus completion date and the (amended) Date for Practical Completion.

The clause also states that the Contractor will not have any claim against the Principal for the Contractor's failure to receive the bonus, even if the Contractor was prevented from completing the eligible works prior to the bonus date as a result of a breach, act, omission, etc, of the Principal, Superintendent or their agents.

## **40 WORK ON OR ADJACENT TO QUEENSLAND RAIL PROPERTY**

This is a very long and detailed clause, most sections of which are, in the main, self-explanatory. Furthermore, the construction of roadworks in close proximity to Queensland Rail (QR) installations occur on only a small proportion of Main Roads Contracts. This User Guide therefore only comments on the major or unusual issues in the clause. It is recommended that, if work involves QR, this clause and Clause 41 be studied in detail. Assistance in interpreting the import of the clauses should be sought from Principal Manager (Contracts) if the reader is in any doubt.

The Superintendent should note carefully all the different time requirements for notices and ensure that the Contractor's Construction Program (ref Clause 8 of SCoC) is consistent with these provisions.

### **40.1.1 Application of Clause 40**

This text defines the scope of the application of Clause 40 as virtually any activities by the Contractor on or adjacent to property owned or controlled by QR. Note, however, that while Clause 40 imposes other or additional obligations on the Contractor, nothing in Clause 40 limits or removes any other obligations or liabilities which the Contractor has under other provisions of the Contract.

### **40.1.2 Clause 40 Enforceable by Queensland Rail**

Note that Clause 40 is binding between the Principal and the Contractor and also between QR and the Contractor, either or both of which can enforce its requirements on the Contractor. However, the obligations and liabilities of the Principal and QR are several only, not joint or joint and several.

The Principal acts as agent for QR, and the Contractor agrees to this agency agreement, which makes Clause 40 binding between the Contractor and QR, in consideration of QR permitting the Contractor to have access to property owned or controlled by QR for the purpose of carrying out work under the Contract.

within the meaning of Clause 40.1 of the General Conditions of Contract.

#### **40.1.4 Definition of Terms**

Unless the context requires otherwise, in Clauses 40 and 41 —

‘Operating Railway’ means the existing railway which is in operation and includes but is not limited to fixed structures, installations, buildings and the like, as well as rollingstock and other equipment operating on the track;

‘Operating Track’ means a railway track over which trains and other track-mounted equipment may be operating;

‘Project Manager’ means the person appointed by Queensland Rail as a representative for the Regional Manager Infrastructure to oversee and coordinate the works;

‘Protection Officer’ means the person appointed by Queensland Rail to protect the safe operation of the Operating Railway;

‘Queensland Rail’ means the body corporate of that name existing pursuant to the *Transport Infrastructure Act 1994* and having its offices at Railway Centre, 305 Edward Street, Brisbane;

‘Regional Manager Infrastructure’ means the Regional Manager Infrastructure in the Queensland Rail Infrastructure Services Group responsible for the area in which the Works are located, or a duly appointed representative;

‘Site Protection Supervisor’ means the person appointed by Queensland Rail to oversee and advise the Contractor on all railway safety requirements associated with the Works;

‘Track Closure’ means the closure of a section of the Operating Track to all rail traffic other than construction related rail traffic;

‘Track Possession’ means the period within a Track Closure when the Contractor is authorised to carry out work over, under or adjacent to the closed Operating Track;

‘Work Site’ means each separate location where part of the work under the Contract is to be carried out over, under or adjacent to the Operating Railway.

The terms ‘Protection Officer’ and ‘Site Protection Supervisor’ are generic terms for employees of Queensland Rail who are appointed to perform the functions required by Clause 41. The actual Queensland Rail organisational name for the officers performing these functions may vary from time to

time or from one geographical location to another and, unless specifically defined elsewhere in Clause 41, it is the Contractor’s responsibility to ensure that the Contractor’s Safety Liaison Representative is familiar with and makes use of the actual names as may be required in the interests of the safety of the Contractors’ construction methods.

#### **40.1.5 Safety Training**

The Contractor shall ensure that all staff, employees, subcontractors and all other persons for whom the Contractor is responsible —

- (a) are fully informed of the dangers and procedures while working near existing railway tracks and Overhead Line Equipment; and
- (b) have attended a Queensland Rail safety induction course (including electrification safety where relevant) and are issued with a Queensland Rail safety induction card.

Persons not holding a Queensland Rail safety induction card will not be permitted to work on any Queensland Rail property and will not be permitted to enter any part of Queensland Rail’s property not open to the general public. This requirement shall also apply to visitors, vendors and suppliers to the site and may only be waived by the Protection Officer if the visitors, vendors and suppliers are attended by a responsible employee of the Contractor or the Superintendent who is the holder of a Queensland Rail Safety Induction Card.

#### **40.1.6 Safety Clothing**

The Contractor shall ensure that all employees, visitors and other personnel employed or present on Queensland Rail property in areas generally excluded from the public are at all times wearing orange shirts or safety vests. Where work is to be carried out at night, reflectorised orange safety shirts or vests in accordance with Queensland Rail’s requirements shall be worn.

The requirements to wear safety clothing shall not generally apply to drivers delivering materials or equipment to Site except where such drivers are required or likely to get out of the delivery vehicle in a location adjacent to the Operating Railway.

The Contractor shall ensure that no red or green clothing, including hats and safety helmets, is worn by any employee, visitor or other personnel while on Queensland Rail property in areas generally excluded from the public.

#### **40.1.3 No Contract Between Principal and Queensland Rail**

Note that:

- (i) Neither the Principal nor QR warrants to the Contractor the performance of the other under Clause 40; and
- (ii) The Regional Manager Infrastructure and the Site Protection Supervisor (QR employees) are not employees, agents, etc or the Principal or Superintendent and are not authorised to give any directions or make agreements which would alter the Contract or constitute a variation under Clause 40.1 of the GCoc. However, note that in some circumstances, e.g. a safety issue, the Site Protection Supervisor can direct the Contractor to stop work (ref Clause 40.2.8 of the SCoC).

#### **40.1.4 Definition of Terms**

Note that "Project Manager" is defined as a different person to the Contractor's Project Manager as in Clause 4.2 of the SCoC.

#### **40.1.5 Safety Training**

Note that special training of all persons for whom the Contractor is responsible is required before they can work on QR property (i.e. they must hold a Queensland Rail safety induction card).

#### **40.1.6 Safety Clothing**

QR prohibits the wearing of red or green clothing, including hats and safety helmets, while on restricted access QR property. This is to avoid possible confusion regarding safety issues for QR personnel.

**40.1.7 Work Authorisation**

All work which could affect the safety of Queensland Rail operations and/or property shall be carried out by the Contractor to the satisfaction of the Project Manager.

All such work may be subject to constant supervision by a Protection Officer and shall be carried out only at times authorised by the Project Manager.

When the Works or any part thereof are located adjacent to a railway track with Overhead Line Equipment, Clause 41 will also apply and Clause 40 shall be read in conjunction with that clause.

The Contractor shall advise the Project Manager and the Superintendent at least four weeks in advance of the date on which such work is planned to commence. The Project Manager will determine the need for Protection Officers and will advise the Contractor which work will require Protection Officers.

**40.2 Construction Methods****40.2.1 General**

The Contractor shall execute the work under the Contract in such manner as not to impede, obstruct, interfere with, or endanger in any way the operations and/or property of Queensland Rail.

The safe operation of rail traffic shall take precedence over all Contract work and nothing shall be done or suffered to be done by the Contractor, its subcontractors or the agents or employees of either of them which will endanger or delay rail traffic.

**40.2.2 Environmental Management Plan (Construction)**

The Environmental Management Plan (Construction) shall ensure that all work undertaken by the Contractor on Queensland Rail property has minimal impact on the environment and is in accordance with all relevant State Government legislation and Local Authority regulations. In doing so, the Contractor shall comply with the *Environmental Protection Act 1994* and its Environmental Protection Policies.

Specific account shall be taken of the *Environmental Guidelines for Construction and Building Sites and Environmental Guidelines for Noise from Blasting*.

No construction work will be permitted on Queensland Rail property until the written approval of the relevant sections of the Environmental Management Plan (Construction) has been given by the Project Manager.

**40.2.3 Site Protection Supervisor**

No operation which, in the opinion of the Site Protection Supervisor, could affect in any way the Queensland Rail operations and/or property shall be performed unless a Protection Officer is in attendance.

The Contractor shall advise the Site Protection Supervisor and the Superintendent at least 48 hours (in addition to non-working days) in advance, stating the period or periods for which Protection Officers are required.

The Site Protection Supervisor will arrange for the services of a Protection Officer for the period or periods required.

The number of Protection Officers employed at any time shall be at the discretion of the Site Protection Supervisor.

**40.2.4 Construction Procedures**

Details of construction procedures, together with details of all falsework and formwork to be used over or adjacent to railway tracks, shall be submitted to the Project Manager and the Superintendent. Work shall not commence until construction procedures, falsework and formwork details are authorised by the Project Manager.

**40.2.5 Track Clearances**

All types of plant, fixed or mobile, used about or in connection with any work shall be so operated that no portion of the plant is at any time closer than 3.0 metres to the centreline of any railway track (measured horizontally), except as provided hereunder.

All temporary buildings, shelters, barriers, falsework, formwork and the like shall be erected only at locations and in a manner approved by the Project Manager. No portion of any such building, shelter, barrier, falsework, formwork and the like shall be closer than 3.0 metres to the centreline of any railway track (measured horizontally), except as provided hereunder.

If it is necessary at any time to operate plant or erect falsework or formwork or any other temporary structure closer to the centreline of the railway track than 3.0 metres (measured horizontally), such closer operation of erection shall be permitted only to such extent and at such times and for such periods as have been authorised by the Project Manager, and a Protection Officer shall be in attendance.

All work on or inside Queensland Rail property shall be supervised by a Protection Officer, unless

#### **40.1.7 Work Authorisation**

The Contractor must give the Project Manager (QR) at least 4 weeks advance notice of its intention to carry out work adjacent to a rail track and the Project Manager QR will determine if Protection Officer (QR) are required to be in attendance.

### **40.2 Construction Methods**

#### **40.2.1 General**

Note that the safe operation of rail traffic takes precedence over Contract work, and the Contractor (including subcontractors) is not permitted to do anything which would endanger or delay rail traffic.

This provision may have significant impact on the Contractor's entitlement to claim for delays if work is interrupted under this clause by matters not revealed to the Contractor at the time of tendering.

#### **40.2.2 Environmental Management Plan (Construction)**

No construction work will be permitted on QR property until the Project Manager (QR) has given written approval.

Note that no time interval is given within which the Project Manager (QR) must give such approval, therefore it should be within a "reasonable" time. The Superintendent may need to be proactive to advise what Project Manager (QR) what time frame is considered reasonable.

#### **40.2.3 Site Protection Supervisor**

The requirements of this clause overlap to some extent with those of Clause 40.1.7. Under Clause 40.2.3 the Contractor is required to give the Site Protection Supervisor and the Superintendent at least 48 hours notice of the need for Protection Officers.

This clause applies to work which could affect QR operations and/or property, whereas Clause 40.1.7 relates to work which could affect the safety of operations or property.

This difference in assessment may, to some degree, be subjective but there is a large difference in the notice required (48 hours compared to 4 weeks) and the Contractor and Site Protection Supervisor should try to establish clear distinctions to avoid disagreement and delay.

#### **40.2.4 Construction Procedures**

Work may not commence until construction procedures, including details of falsework and formwork, are authorised by the Project Manager (QR). Again, in the absence of prescribed times, reasonable times must apply.

#### **40.2.5 Track Clearances**

Note the clearance limits for building, falsework etc and the need for attendance by a Protection Officer.

otherwise approved by the Project Manager. Work further than 3.0 metres horizontally from the track centreline, but at a higher level where objects could fall within 3.0 metres horizontally of the track centreline, shall be supervised by a Protection Officer.

The Contractor shall erect and maintain throughout the Contract period an approved high visibility tape or other barrier 3.0 metres horizontally from the track centreline to indicate the limits of the safe work area.

All falsework and formwork erected over the railway tracks shall provide a minimum of 4.3 metres vertical clearance above the railway tracks for non-electrified lines. When working on or adjacent to electrified lines, the Contractor shall also comply with Clause 41.

For work being carried out below rail level, all personnel shall be at least 3.0 metres horizontally clear of the track centreline during the passage of any train through the worksite unless approved overhead protection barriers are provided.

#### **40.2.6 Track Possessions**

Work which could involve undermining the track, damaging the track, blocking the track with rock or spoil, blasting and other operations which could prevent the safe operation of trains shall be carried out only during approved Track Possessions.

The Contractor shall schedule such work for the Track Possession periods available and shall ensure adequate personnel and equipment are on hand to complete the work and make the track available for train operations within the total Track Possession period.

The Project Manager will not give the Contractor approval to commence work for which the Track Possession has been arranged until the Contractor has satisfied the Site Protection Supervisor that the proposed procedures are suitable and that adequate plant and labour are on hand to complete the work within the allotted period.

The Contractor may not have the whole of the period of any Track Closure available for its exclusive use for the carrying out of work. Prior, concurrent or concluding activities by Queensland Rail may restrict the time available to the Contractor.

All costs associated with the provision of Track Possessions as well as any costs associated with the withholding of approval or the provision of additional or backup plant or labour shall be borne by the Contractor.

#### **40.2.7 Delays to Trains**

Where the operations of Queensland Rail trains are delayed by more than five minutes as the result of any breach, act or omission of the Contractor or its employees, agents or subcontractors, the cost of such delays shall be recoverable by Queensland Rail from the Contractor.

The cost of delay shall be calculated for the train standing at the point of obstruction and trains delayed further along the line in either direction. The maximum number of trains to be taken into account in determining the cost of any delay will be four. Without limiting the amount recoverable by Queensland Rail and as an indication only of the order of costs that may be involved, the cost of delay per train per hour or part thereof is as stated in Item 21A of the Annexure to the Supplementary Conditions of Contract.

These costs will be subject to review and amendment by Queensland Rail as considered necessary, in conjunction with any revision of freight charges or fares generally. The cost of delay per train will be determined at the rates applicable at the time of delay.

If the delay is such that alternative transport arrangements are necessary for passengers or freight, the full cost of providing the alternative transport will be recoverable by Queensland Rail from the Contractor in addition to the costs shown in Item 21A of the Annexure to the Supplementary Conditions of Contract.

#### **40.2.8 Stopping Work**

If the Contractor is executing any work in a manner which in the opinion of the Protection Officer could endanger Queensland Rail operations and/or property, the Protection Officer shall have the right to instruct the Contractor to stop such work. If such instructions are not carried out, the Protection Officer shall have power to stop immediately all work which could endanger Queensland Rail operations and/or property until adequate safety measures are implemented.

#### **40.2.9 Removal of Contractor's Employee**

Should any employee of the Contractor disobey an instruction given by the Protection Officer, the Protection Officer may request the Superintendent to order the Contractor to remove that employee from the Works.

#### **40.2.6 Track Possessions**

Work which could potentially adversely affect the safe operation of trains may only be carried out during approved Track Possessions. However, note that the Contractor may not have exclusive use of the track during any such period of Track Closure. Other activities by QR may restrict the time available to the Contractor in which to carry out its planned work.

The Contractor is responsible for the costs associated with Track Possessions, including additional backup plant or labour.

#### **40.2.7 Delays to Trains**

The Contractor is liable to QR for the cost of any delay to QR trains in excess of 5 minutes arising from any breach, act or omission. Note that the delay costs shown in Item 21A of the Annexure to the SCoC are indicative only and that additional charges can be applied if alternative transport management for passengers or freight is required. The cost of delays could therefore be very high.

#### **40.2.8 Stopping Work**

The Protection Officer has the authority to instruct the Contractor to stop work if, in his opinion, the Contractor's work could endanger QR operations or property.

Note that, as stated under Clause 40.1.3, such instructions do not constitute directions which constitute a variation under Clause 40.1 of the GCoC.

#### **40.2.10 Temporary Level Crossings**

If access across railway tracks is required by the Contractor and is considered necessary by the Project Manager, Queensland Rail will provide, maintain and remove at the expense of the Contractor temporary level crossings to enable the Contractor to gain access to the work area.

The location of any access across railway tracks shall be authorised in writing by the Project Manager.

Approach earthworks to such crossings shall be constructed by the Contractor at the Contractor's expense to details provided by Queensland Rail.

The Contractor shall advise the Project Manager and the Superintendent at least four weeks in advance of the date when such access will be required, but the Principal and Queensland Rail will not be responsible for any delay in the construction of the crossing and the Contractor shall have no claim against the Principal or Queensland Rail in respect of any such delay.

#### **40.2.11 Excavation Near a Railway Track**

The Contractor shall give the Project Manager at least two weeks notice of any intention to excavate adjacent to or under railway tracks. Excavations adjacent to or under railway tracks shall be carried out by methods authorised by the Project Manager.

The Contractor shall be responsible for the costs of any track supports.

Where required by the Contractor and considered necessary by the Project Manager, the construction and installation of track supports will be carried out, at the Contractor's cost, by Queensland Rail. The Contractor shall be responsible for the construction and installation of any shoring required.

The Contractor shall be responsible for the safety of excavations within Queensland Rail property and shall cover and/or protect any such excavations with barriers and lights as necessary.

Excavations on Queensland Rail property shall not be backfilled until the methods and material proposed have been submitted to and approved by the Project Manager.

#### **40.2.12 Blasting**

The Contractor shall give the Project Manager at least two weeks notice of any intention to excavate by blasting and shall furnish full details of the location thereof and the proposed methods as well as the name and permit number of the licensed shotfirer.

Such blasting shall be carried out only at locations authorised by the Project Manager and at times authorised by the Site Protection Supervisor. A Protection Officer shall be in attendance.

Blasting will not be permitted near any structures, fixtures, foundations and the like, the stability or integrity of which, in the opinion of the Project Manager or Site Protection Supervisor, may be endangered by blasting.

The Contractor shall provide screens, barriers, mats and the like to limit the effects of blasting.

The Contractor will be held responsible for any loss, damage or injury sustained by the public or by workers (whether employees of the Contractor, the Principal, Queensland Rail or any other authority) and for any damage to property of any description whatsoever caused directly or indirectly by such blasting.

#### **40.3 Relocation or Alteration of Railway Services**

The Contractor shall advise the Project Manager and the Superintendent, in writing, at least six weeks before the date, that any alterations to Queensland Rail services such as signalling, telecommunications or power supply systems will be required.

The cost of any such work shall be borne by the Contractor.

#### **40.4 Work Areas on Railway Land**

Notwithstanding the provisions of Clause 27.1 of the General Conditions of Contract, 2 weeks before work commences on Queensland Rail property, the Contractor shall advise the Project Manager in writing of the areas of railway land required by the Contractor for carrying out the work under the Contract. The Contractor shall not commence work on any railway land until the extent and limits of all work areas on railway land have been authorised by the Project Manager.

The Contractor shall erect safety fences and any other necessary protective measures to ensure that the Contractor's possession of such areas does not interfere with or endanger in any way whatsoever members of the public, Queensland Rail agents or employees and Queensland Rail operations or property.

The Contractor shall ensure that existing public access is maintained throughout the construction to a standard at least equal to that existing prior to the start of construction.

#### **40.2.10 Temporary Level Crossings**

If the Contractor requires a temporary level crossing to carry out work under the Contract, at least 4 weeks notice must be given to the Project Manager (QR) and the Superintendent. All associated costs will be borne by the Contractor, and QR will not be responsible for any delay in the construction of the crossing.

#### **40.2.11 Excavation Near a Railway Track**

This clause requires the Contractor to give the Project Manager (QR) at least 2 weeks notice of any intention to excavate adjacent to or under railway tracks. The Contractor is responsible for the costs of any track supports, including shoring. Note that there could again be overlap with Clause 40.1.7, which requires 4 weeks notice for work which could affect the safety of QR operations or property, which could well apply to excavations close to or under track.

#### **40.2.12 Blasting**

This clause contains comprehensive limitations and obligations relevant to blasting operations by the Contractor on or adjacent to QR property. These are in addition to those in Clause 36 of the SCoC.

### **40.3 Relocation or Alteration of Railway Services**

Note that 6 weeks notice is required (to be given to both the Superintendent and the Project Manager (QR)) of any alterations required to services such as signalling, telecommunications or power systems. All related costs are the Contractor's responsibility.

### **40.4 Work Areas on Railway Land**

Even though possession of the site may be given to the Contractor under Clause 27.1 of the GCoC, the Contractor must give the Project Manager (QR) at least 2 weeks notice of the area of QR land it requires for work under the Contract. Work may not commence until the extent and limits have been approved by the Project Manager (QR).

The Contractor is responsible for any safety fences or other protective measures that are necessary.

#### **40.5 Demolition of Existing Structure**

Demolition work shall not commence until full details of proposed demolition methods and of the types of plant and equipment to be used have been submitted to and authorised by the Project Manager.

The demolition work shall be carried out in such a manner that no material falls on Queensland Rail tracks or other Queensland Rail installations.

If there is a possibility of material falling on Queensland Rail tracks or other Queensland Rail installations, the Contractor shall provide protection to such tracks and/or installations as approved by the Site Protection Supervisor.

Demolition shall be carried out only at times authorised by the Project Manager, and a Protection Officer shall be in attendance.

#### **40.6 Removal and Re-erection of Fencing**

If it is necessary to remove any fences along the railway boundary as part of the Works, or where other fences are removed temporarily or disturbed, all such fences shall be replaced or repaired by the Contractor, and left, at the time of the completion of the Works, in the same order and condition as they were at the commencement of the Works.

Following removal of any fence along the railway boundary, the Contractor shall erect suitable barricades along the boundary at all times when work at that location is not in progress and until the fence is re-erected or replaced.

The Contractor shall keep the fence stockproof at all times when access is not required.

#### **40.7 Removal of Buildings and Cleaning Up**

Upon completion of work on Queensland Rail land, the Contractor shall remove all buildings, offices, workshops, temporary structures, plant, materials, surplus earth, and rubbish and other construction items and shall restore the site to its original condition.

#### **40.8 Liabilities of Contractor**

The cost of the Site Protection Supervisor, Protection Officers and any other Queensland Rail employees necessary for the protection of Queensland Rail operations and/or property, or for the isolation of overhead Line equipment, together with all other expenses incurred by Queensland Rail in safeguarding its operations and property during the course of the Works, shall be borne by the Contractor.

Queensland Rail will advise the Contractor of the estimated cost of the above requirements and the Contractor shall provide an order to Queensland Rail for this amount at least 2 weeks before such work is required. Actual costs, whether more or less, will be subsequently charged to the Contractor.

The Contractor shall be responsible for the cost of any damage to the rollingstock and other property of Queensland Rail and for any injury or damage to any person or property caused by or arising from the operations of the Contractor in carrying out the Works, or in any way howsoever associated with the Works. In addition, the Contractor shall be responsible for the costs of any and all alternative arrangements and/or additional expenses which Queensland Rail may find necessary arising out of such damage by the Contractor in the carrying out of the Works, or in any way whatsoever associated with the Works.

#### **40.9 Indemnity**

The Contractor shall indemnify and hold harmless Queensland Rail, its agents and employees from and against all actions, proceedings, claims, demands, costs, losses, damages and expenses which may be brought against or made upon Queensland Rail, its agents and employees, or which Queensland Rail, its agents and employees may pay, sustain or be put to by reason of, in consequence of or in connection with the Works and the Contractor shall release and discharge Queensland Rail, its agents and employees from any such action, proceeding, claim, demand, cost, loss, damage or expense arising out of the provisions hereto which, but for the provisions hereof, might be brought against or made upon Queensland Rail, its agents and employees either by the Contractor or any other persons, firm, partnership, company or corporation, save and except any action brought due to an act or omission of Queensland Rail.

Clause 49 of the General Conditions of Contract will apply in respect of any payment made under this clause.

#### **40.10 Insurances**

The Contractor shall, at its expense, on or before entering into and/or upon the construction and execution of any work on Queensland Rail land, effect and maintain current at all times during the life of the Contract in the joint names of the Principal, Queensland Rail and the Contractor, a public risk insurance policy with a company licensed to carry on business in the State of Queensland for a sum of not less than that stated in Item 21B of the Annexure to the Supplementary Conditions of Contract to cover

#### **40.5 Demolition of Existing Structures**

Demolition work may not commence until approval of the proposed method has been given by the Project Manager (QR). The period of notice is not stated, but as this is potentially a safety issue, the 4 weeks requirement of Clause 40.1.7 could be expected to apply.

#### **40.8 Liabilities of the Contractor**

Several clauses refer to the provision by QR of Protection Officers and other personnel to supervise work by the Contractor. Some state specifically that incurred costs are the Contractor's responsibility, but most are silent in this regard.

This clause states unequivocally that all such costs incurred by QR in safeguarding its operations and property are to be borne by the Contractor. QR will give the Contractor an estimate of the cost and the Contractor must give QR a purchase order (or similar authorisation) at least 2 weeks before the work is to be done. QR will charge the Contractor for the actual cost incurred, not as estimated. The Contractor is also responsible for any damage to rolling stock or other property, personal injury and any alternative arrangements.

#### **40.9 Indemnity**

This clause gives details of the indemnities which the Contractor must provide. It is drafted in "legal" terminology and the Principal may need specialist assistance to determine if the indemnity provided by the Contractor conforms.

The provisions of Clause 49 Further Goods and Services Tax Requirements of the GCoC apply to any payments made under the clause.

#### **40.10 Insurances**

A Memorandum Of Understanding is currently (that is, as of April 2006) being negotiated between QR and DMR which would remove the need for additional insurance when working adjacent to QR land. At the time of writing this User Guide, the MOU has not been signed by QR and as such the following provisions still apply.

Before commencing any work on QR land, the Contractor is required to take out and maintain, for the duration of the Contract, a public risk insurance policy in the joint names of the Principal, QR and the Contractor.

The sum insured is to be not less than that stated in Item 21B of the Annexure to the SCoC.

The clause gives other details regarding the specific requirements of the insurance cover and any policy issued must be perused in detail (particularly by the Principal) to ensure that it complies fully. Although not stated in this clause, this public risk insurance is additional to any other obligations to affect insurance which the Contractor has under other provisions of the Contract (in particular Clause 18 Insurance of the Works of the GCoC). Where the Principal has Principal Arranged Insurance (PAI) the Principal should seek specialist advice on insurances required under this clause. **Manager (Risk Mitigation Services) should be contacted for his advice.**

the legal liability of the insured or any of them, arising out of or in connection with either directly or indirectly the performance of this Contract for —

- (a) injury to or death of any person whatsoever, including any agent or employee of the Principal, Queensland Rail or the Contractor;
- (b) loss of or damage to any property whatsoever, including the property of the Principal, Queensland Rail or the Contractor;
- (c) any accident howsoever caused, including any accident arising out of or in consequence of the running of Queensland Rail trains through, under and during the construction of the Works.

The Contractor shall ensure that policies of insurance effected under this clause shall include provisions that will —

- (i) require the insurer, wherever the insurer gives an insured party, other than the Principal and Queensland Rail, a notice of cancellation or other notice concerning the policy, at the same time to inform the Principal and Queensland Rail in writing that the notice has been given;
- (ii) provide that any cancellation of the policy by the insurer shall not take effect until 30 days after the notice under sub-paragraph (i) of this clause was given to the Principal and Queensland Rail;
- (iii) provide that a notice of claim given to the insurer by one insured party shall be accepted by the insurer as a notice of claim given by each of the insured parties;
- (iv) provide that a breach of or failure to observe and fulfil any obligations of disclosure or good faith or the terms of the policy by any party comprising the insured shall not prejudice the rights of the remaining parties comprising the insured; and
- (v) require the insurer, wherever there is a failure to pay a premium, to give notice in writing thereof forthwith to the Principal and Queensland Rail.

The Contractor shall, whenever required by the Principal or Queensland Rail, make available for inspection by the Principal or Queensland Rail (as applicable) the policies of insurance effected by the Contractor for the purposes of complying with these conditions and the receipts for payments of current premiums.

## **41 WORK ADJACENT TO OVERHEAD LINE EQUIPMENT**

### **41.1 General**

#### **41.1.1 Application of Clause 41**

Clause 40.1 applies where the Contractor is required to work adjacent to, under or over electrified railway tracks, and covers safety aspects of work adjacent to Overhead Line Equipment.

Clause 40.1 shall be read in conjunction with Clause 40.

Nothing in Clause 41 limits any of the Contractor's obligations or liabilities under the rest of the Contract, but if there is any inconsistency or discrepancy between the requirements of Clause 41 and any other Contract requirements, the requirements of Clause 41 shall prevail.

#### **41.1.2 Clause 41 Enforceable by Queensland Rail**

Clause 411 is separately and severally binding —

- (a) as between the Principal and the Contractor; and
- (b) as between Queensland Rail and the Contractor,

and may be enforced against the Contractor by the Principal or Queensland Rail or both, but the obligations and liabilities of the Principal and Queensland Rail under Clause 41 are several only and not joint or joint and several.

With respect to sub-paragraph (b), Clause 411 —

- (i) has been included in the Contract and agreed to by the Principal acting as agent for Queensland Rail; and
- (ii) has been agreed to by the Contractor in consideration of Queensland Rail permitting the Contractor to carry out any work adjacent to, under or over electrified railway tracks.

#### **41.1.3 No Contract Between Principal and Queensland Rail**

Clause 411 does not impose any obligations as between the Principal and Queensland Rail and —

- (a) neither of those parties is the agent of the other (except as provided in sub-paragraph (i) of Clause 41.1.2); and
- (b) neither of them warrants to the Contractor the due performance of the other under the Clause 411

## **41 WORK ADJACENT TO OVERHEAD LINE EQUIPMENT**

As for Clause 40, comment in this User Guide has been limited to points of particular importance.

### **41.1.1 Application of Clause 41**

Note that, whereas Clause 40 states that it does not limit or exclude obligations or liabilities under the rest of the Contract, Clause 41 states that, where there is an inconsistency with any other Contract requirement, Clause 41 is to prevail.

This provision has to be read in conjunction with Clause 1 Order of Precedence of Documents SCoC. This clause would be unlikely to have precedence over provisions in higher ranked documents.

### **41.1.2 Clause 41 Enforceable by Queensland Rail**

This clause is virtually identical to Clause 40.1.2 – refer to these comments.

### **41.1.3 No Contract Between Principal and Queensland Rail**

This clause is virtually identical to Clause 40.1.3 – refer to these comments.

Further, the Project Manager, the Traction Power Engineer, the Electric Control Operator, the Nominated Person, the Protection Officer and the Site Protection Supervisor are not —

- (i) employees, agents or consultants of the Principal or the Superintendent; and
- (ii) are not authorised to give any directions or make any agreements that would alter or amend the Contract or constitute a variation within the meaning of Clause 40.1 of the General Conditions of Contract.

#### **41.2 Work Adjacent to Overhead Line Equipment**

None of the components of the Overhead Line Equipment have any protective covering and are potentially dangerous and shall not be approached by persons either directly or indirectly with any item of material or equipment.

Overhead Line Equipment shall always be regarded as energised with 25,000 volts of electricity unless an isolation has been carried out and a permit to work has been issued.

If, in the opinion of a Protection Officer or the Site Protection Supervisor, any activity of the Contractor is considered dangerous or contravenes any of the requirements of Clause 41, then the Protection Officer or the Site Protection Supervisor shall have the authority to direct that such activity cease immediately.

#### **41.3 Definitions**

Unless the context requires otherwise, in Clause 41 —

‘Contractor’s Safety Liaison Representative’ means the person appointed by the Contractor to fulfil that role;

‘Electrical Engineer’ means the person for the time being holding the position of or performing the duties of the Electrical Engineer or Traction Power Engineer in the Infrastructure Division of Queensland Rail responsible for the area in which the work is located, or a representative of that person;

‘Electric Control Operator’ means the person for the time being in charge of the electric control room having control of the electricity supply to the Overhead Line Equipment and who is responsible for switching operations and Isolations;

‘Electrical Section’ (or ‘Electrical Subsection’, which is a part of an Electrical Section) means a

length of Overhead Line Equipment which may be Isolated from all other lengths of Overhead Line Equipment;

‘Isolated’ means disconnected from all possible sources of electricity supply by means of visible breaks or a length of insulation of value appropriate to the voltage of the Overhead Line Equipment;

‘Isolation’ means the action or arrangement whereby an Electrical Section of the Overhead Line Equipment is Isolated from all possible sources of electricity supply and earthed so that the equipment is no longer energised with electricity at the Work Site;

‘Nominated Person’ means a Queensland Rail appointee authorised to issue and cancel “Permits to Work” for particular equipment;

‘Overhead Line Equipment’ means the arrangement of conductors, suspended over or adjacent to the Operating Railway, for supplying electricity to electric trains, together with the associated foundations, structures, fittings, insulators and other attachments by means of which the conductors are suspended or registered in position;

‘Permit to Work’ means the permit known as a “Form C \_ Permit To Work On Or Near To Overhead Line Equipment” which is issued to the Contractor subsequent to Isolation of the Overhead Line Equipment by Queensland Rail;

‘Safety Clarification Advice’ means the written advice of the Electrical Engineer given to the Contractor stating the conditions under which the Contractor may carry out specific work in the vicinity of the Overhead Line Equipment without requiring an Isolation.

#### **41.4 General Requirements**

All enquiries and correspondence to Queensland Rail which are associated with the works shall be directed to the Project Manager other than where expressly provided otherwise in Clauses 40 and 41 or in an emergency.

The Contractor shall at all times be responsible for work performed near the Overhead Line Equipment.

The Contractor shall be responsible for ensuring that all employees, subcontractors' employees, suppliers and other invitees of the Contractor are fully informed of the dangers of working adjacent to the Overhead Line Equipment and for ensuring compliance with Clause 41.

#### **41.2 Work Adjacent to Overhead Line Equipment**

Note that a direction by the Protection Officer or Site Protection Supervisor does not constitute a variation under Clause 40.1 of the GCoC (refer to Clause 41.1.3(ii)).

#### **41.4 General Requirements**

Overhead lines operate at a voltage of 25,000 volts and consequently extreme care must be taken when working in the vicinity. This clause contains specific safe working practice procedures and these should be fully understood. It empowers the Protection Officer or Site Protection Supervisor to direct the Contractor to immediately cease work where the requirements of Clause 41 are not being met, and reinforces that the Contractor has no basis for claim on loss of time as a result of such a direction.

The Contractor shall ensure that —

- (a) nothing is fixed to, attached to or allowed to make contact with the Overhead Line Equipment without first obtaining the approval in writing of the Project Manager;
- (b) materials, plant, tools or equipment such as, but not limited to, electrical extension lead, metal tape, metal-reinforced tape, rope and wire shall not under any circumstances be used in a position where it may fall, be thrown or be blown into contact with the Overhead Line Equipment;
- (c) caution is used in the handling of water hoses, and water jets so that contact is not made with the Overhead Line Equipment or the electrical equipment mounted under or on top of stationary or passing electric trains.

The Contractor shall ensure that all persons for whom the Contractor is responsible **do not attempt to remove** objects such as string, rope, wire and the like from the Overhead Line Equipment or from its immediate vicinity, **nor approach** such objects, but such persons shall immediately report the matter to a Protection Officer or the Site Protection Supervisor. If none of these are immediately available in an emergency situation, the Electric Control Operator shall be contacted immediately on the telephone number stated in Item 21C of the Annexure to the Supplementary Conditions of Contract.

The Contractor shall ensure that all persons employed or present on the Work Site for whom the Contractor is responsible are aware of this procedure.

Wherever a vehicle, plant or equipment is to be used on or near to an Operating Track and any part of the vehicle, plant or equipment or its load is likely to approach within 2.75 metres of the Overhead Line Equipment, the Contractor shall, unless approved otherwise in accordance with Clause 41, ensure that an Isolation has been obtained and a Permit to Work issued.

The Contractor shall ensure that all employees, subcontractors, suppliers and other invitees of the Contractor are fully informed of any electrical hazards which may be encountered and the limits of work which will apply during an Isolation. During an Isolation, the Contractor shall ensure that care is taken to prevent contact with any part of the Overhead Line Equipment in order to prevent damage. Should any damage be caused to the Overhead Line Equipment, the Contractor shall immediately inform a Protection Officer or the Site Protection Supervisor or, in the absence of these, the Electric Control Operator.

If, in the opinion of a Protection Officer or the Site Protection Supervisor, the Contractor contravenes Clause 41, the Contractor acknowledges that the Protection Officer or the Site Protection Supervisor shall be authorised to direct the Contractor to take immediate steps to comply with Clause 41 and, in the event of such directions not being carried out, the Protection Officer or the Site Protection Supervisor shall be authorised to direct the Contractor to immediately stop all work at the Work Site until the Contractor has complied with such directions. The Contractor acknowledges and agrees that the Contractor shall not be entitled to claim for any cost, loss or damage, nor for any extension of time, as a result of any such direction.

#### **41.5 Contractor's Safety Liaison Representative**

The Contractor's Safety Liaison Representative shall have the following responsibilities —

- (a) safety of the Contractor's employees, plant and equipment during the execution of work over, under or adjacent to the Overhead Line Equipment;
- (b) coordination and programming of all of the Contractor's work which may require Isolations;
- (c) receiving safety clarification advices from the Project Manager, and receiving and relinquishing Permits to Work from and to the Nominated Person;
- (d) receiving any other directions from the Project Manager, the Site Protection Supervisor or the Protection Officers on matters relating to the Overhead Line Equipment and ensuring that all plant and equipment are operated and all employees of the Contractor act in accordance with such directions.

The Contractor shall ensure that —

- (i) the Contractor's Safety Liaison Representative is present on Site at all times while work is being undertaken over, under or adjacent to Overhead Line Equipment;
- (ii) if the Contractor's Safety Liaison Representative leaves the Site at any time while work is being undertaken, a competent relief representative is appointed to perform the functions of the Contractor's Safety Liaison Representative and such appointment is notified to the Site Protection Supervisor prior to the Contractor's Safety Liaison Officer leaving the Site;

**41.5 Contractor's Safety Liaison Representative**

The Contractor is required to appoint and have on site, at all times while work is being undertaken in the vicinity of Overhead Line Equipment, a Safety Liaison Representative. This person, and any assistants/relief representatives must hold a current "Green Card" as issued by QR.

- (iii) where the Contractor is carrying out work at more than one Work Site, the Contractor shall appoint one or more assistant representatives with the same powers and functions as the Contractor's Safety Liaison Representative provided that the Contractor's Safety Liaison Representative retains final responsibility to ensure compliance with Clause 41.

The Contractor's Safety Liaison Representative and all assistant and relief representatives shall be required to attend the appropriate training course nominated and conducted by Queensland Rail and to produce a current safety training course completion card (called a Green Card) suitably endorsed and issued by Queensland Rail.

#### **41.6 Electrification Safety Basic Awareness Training**

The Contractor shall ensure that all employees of the Contractor and all persons for whom the Contractor is responsible for safety, including employees of the Principal and the Superintendent, are fully informed of the dangers of and procedures to be adopted while working over, under or adjacent to the Overhead Line Equipment. The Contractor shall ensure that all such persons have, prior to commencing work on Site, attended a "Electrification Safety Basic Awareness" training course conducted by Queensland Rail and can produce a current safety training course completion card (called a Yellow Card) suitably endorsed and issued by Queensland Rail.

The requirement to hold such Yellow Cards shall apply to visitors to the Site and to drivers delivering materials or equipment to the Site unless otherwise authorised and under the conditions directed by the Site Protection Supervisor.

Protection Officers shall be entitled to exclude from Site any person not holding or able to produce a certificate of attendance at such "Electrification Safety Basic Awareness" training courses. Such persons shall not be permitted to work on railway property in the vicinity of the Overhead Line Equipment. The Contractor acknowledges and agrees that the Contractor shall not be entitled to claim for any cost, loss or damage, nor for any extension of time, as a result of any such exclusion from the Site.

#### **41.7 Work Procedures**

The Contractor shall ensure that no work which requires persons, material, tools, plant or equipment to approach or which has the potential to approach closer than 2.75 metres to the Overhead Line

Equipment at a Work Site shall be undertaken unless either —

- (a) an Isolation has been obtained and a Permit to Work issued by the Nominated Person to the Contractor's Safety Liaison Representative; or
- (b) the Project Manager has given the Contractor's Safety Liaison Representative a Safety Clarification Advice.

#### **41.8 Approvals and Safety Clarification Advice**

If the Contractor desires to work within 2.75 metres of the Overhead Line Equipment without the need for an Isolation, the Contractor shall apply to the Project Manager for special approval. Such applications shall be in writing and shall contain details of the proposed work methods, the plant and materials to be used, the location of the work, and the anticipated timing and duration of the work.

The Contractor shall submit such applications for special approval to the Project Manager no later than 14 days prior to the date the Contractor intends commencing work or any temporary work.

Where special approval is given by the Project Manager for work to be carried out without an Isolation, such approval shall be in the form of a Safety Clarification Advice issued by the Project Manager to the Contractor's Safety Liaison Representative and shall define the physical limits of the work, the time and duration to which the approval relates, and any other conditions that the Project Manager considers necessary. The Contractor shall ensure that the Contractor's Safety Liaison Representative is fully informed of the details of each Safety Clarification Advice.

The Project Manager may first require temporary works to be carried out, including but not limited to—

- (a) the placement or erection of ropes, temporary fences, warning tapes and/or warning notices to define the limit beyond which no part of a person or any tools or equipment shall be allowed to project towards the Overhead Line Equipment; and
- (b) the provision and erection of temporary screens approved by the Project Manager.

The placement or erection of temporary work shall be carried out by the Contractor only after receipt by the Contractor's Safety Liaison Representative of a Permit to Work or a Safety Clarification Advice in respect of such temporary work. The temporary work shall be constructed to the satisfaction of the Project Manager, and the Contractor shall obtain the

#### **41.6 Electrification Safety Basic Awareness Training**

All persons for whom the Contractor is responsible must attend a basic electrification safety training course and hold a "Yellow Card" issued by QR. Protection Officers are entitled to exclude from the site, any person who does not hold a "Yellow Card" and the Contractor has no basis of claim for consequent cost or loss of time.

#### **41.7 Work Procedures**

This clause sets distance limits, which must be observed, and procedures for working in closer proximity.

#### **41.8 Approvals and Safety Clarification Advice**

The Contractor may wish to work within the prescribed 2.75m of Overhead Line Equipment without having the line de-energised (isolated). This may be permitted, subject to submission of a written proposal detailing work methods, location, etc to the Project Manager (QR).

Note that the Contractor must give the Project Manager (QR) at least 14 days notice of requiring such an approval. The cost of any temporary work necessary to gain the approval is the Contractor's responsibility.

approval of the Project Manager before any further work may commence closer than 2.75 metres to the Overhead Line Equipment.

The cost of all temporary work shall be borne by the Contractor.

A Safety Clarification Advice shall be issued to the Contractor's Safety Liaison Representative only in response to an application by the Contractor and, where issued, shall apply only to the specific work which is the subject of that particular application. Each and every instance, distinguished by a differing Work Site or by a differing work method, where the Contractor desires to work within 2.75 metres of the Overhead Line Equipment without the need for an Isolation, shall be the subject of a separate application by the Contractor.

The Contractor's Safety Liaison Representative shall be responsible for ensuring that all persons performing such work are informed of and comply with the details of the work methods and that such persons are informed of the hazardous consequences of non-adherence to the Contractor's proposals and to the specific Safety Clarification Advice issued by the Project Manager.

#### **41.9 Limits of Isolation**

The location and length of the Electrical Section affected by an Isolation will vary from instance to instance, depending on the nature and location of the work to be carried out during the Isolation and on the arrangement of the Overhead Line Equipment at the Work Site requiring the Isolation.

Where, at the Work Site, there is more than one Operating Track which has Overhead Line Equipment, an Isolation may not necessarily apply to all of the Operating Tracks concurrently, including any connections of the Overhead Line Equipment between separate Operating Tracks.

The length of Electrical Section over which the Isolation applies at a Work Site may be different to the length of Operating Track affected by any concurrent Track Closure. If a concurrent Track Closure has not been arranged, then the Operating Track may still have non-electric trains or track-mounted equipment passing through the Work Site during the Isolation.

#### **41.10 Duration of Isolation and Permit to Work Times**

The duration of an Isolation and the period during which an Isolation may be available are generally as stated in Item 21D of the Annexure to the Supplementary Conditions of Contract.

The duration of an Isolation includes the time necessary for work to be carried out by Queensland Rail, including the times required to issue and cancel the Permit to Work.

The approved commencement time for any Isolation shall be considered to be approximate only and the actual commencement times will depend on Queensland Rail's requirements at the time.

Notwithstanding any delay by Queensland Rail in commencing the Isolation or in issuing the Permit to Work, the cancellation time for the Permit to Work shall not be varied unless approved by the Project Manager.

Queensland Rail reserves the right at any time to cancel a Permit to Work in an emergency situation.

#### **41.11 Notification of Program Requirements for Isolation**

Before Queensland Rail gives consideration to arranging Isolations and issuing Permits to Work, the Contractor shall notify the Project Manager of the Contractor's requirements for Isolations and Track Closures.

The minimum period for notification of the Contractor's requirements for Isolations shall be six weeks unless approved by the Project Manager or unless concurrent Track Closures are required, in which case the minimum periods for notification prior to the proposed dates for such Track Closures shall be as determined by the Project Manager.

Within 14 days of receipt of notification of the Contractor's requirements for Isolations, the Project Manager shall advise the Contractor whether or not the requested dates are acceptable to Queensland Rail. If the Project Manager advises that any of the dates are not acceptable to Queensland Rail, then the Contractor shall submit a revised Track Closures and Isolations program specifying alternative dates, subject at all times to the minimum notification requirements of Clause 41.11.

#### **41.12 Formal Application for Permits to Work**

Subject to the Contractor's compliance with the program notification requirements of Clause 41.11, the Contractor shall make formal written application to the Project Manager for the issue of a Permit to Work, giving not less than 14 days notice prior to the date of the required Isolation.

The Contractor shall ensure each application for a Permit to Work shall state —

- (a) the name of the Contract;

#### **41.9 Limits of Isolation**

This clause explains that:

- (i) The extent of an isolation will vary, depending on the nature of the work to be carried out and the configuration of the electrical equipment at the location to allow an isolation;
- (ii) At a particular site there may be more than one set of overhead lines. An isolation may not necessarily de-energise all sets of lines concurrently; and
- (iii) The length of track over which the electrical isolation applies may be different from the length of track to which a concurrent Track Closure applies. Where there is no Track Closure, it is possible that non-electrical rail traffic could still pass through the work site.

#### **41.10 Duration of Isolation and Permit to Work Times**

The duration and period of potential isolations are generally given in Item 21D of the Annexure to the SCoC. Note that the approved commencement time is approximate only, depending on QR requirements at the time, and that QR can cancel the Permit to Work (issued for Isolation) at any time, if there is an emergency.

#### **41.11 Notification of Program Requirements for Isolation**

The Contractor must give the Project Manager (QR) a minimum of 6 weeks notice of its requirements for Isolations – different if concurrent Track Closures are required, although the clause does not indicate whether, in this case, the notification period would be more or less. The Superintendent and Contractor should clarify this point with the Project Manager.

The Project Manager (QR) is to respond within 14 days of receiving a request for Isolations, and advise whether the requested dates are acceptable to QR.

If proposed dates are not acceptable to QR, then the Contractor must re-submit with alternative dates for QR's consideration. However, note that the minimum notification requirements still apply. That is, 6 weeks notice is required from the date of submission of the amended request. The Contractor has no basis for a claim in respect of time lost in this process.

#### **41.12 Formal Application for Permits to Work**

This clause sets out the requirements for the formal application for the Permit to Work. As noted previously, unless an application for a concurrent Track Possession is made, non-electric trains or track mounted equipment could still use the track.

Note that the Project Manager (QR) is only obliged to "endeavour" to give the Contractor at least 24 hours notice that a Permit to Work is not granted. This is very short notice for a Contractor to cancel a planned complex activity. Furthermore, QR reserves the right to retract an approval and require the Contractor's Safety Liaison Representative to surrender a Permit to Work, in which case all work must cease immediately.

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- (b) the date of the application;
- (c) the date on which the Permit to Work is required;
- (d) the name of the Contractor's Safety Liaison Representative and the place where the person may be contacted at all times;
- (e) the required time of commencement and time of cancellation of the Permit to Work;
- (f) The line/s on which the Overhead Line Equipment is to be isolated and earthed;
- (g) the structure numbers or location between which the work is to be carried out;
- (h) whether it is intended that personnel or equipment touch the overhead wiring;
- (i) the nature of work to be performed for which the Permit to Work is required, and the types of plant and equipment to be used, including details on the closest distance between the Overhead Line Equipment and the work to be performed; and
- (j) any other relevant information.

Where necessary, the Contractor shall also make or have made application for a Track Possession. The Contractor acknowledges that, unless a Track Possession is in effect, non-electric trains or other track-mounted equipment may still travel over the Operating Track.

The Contractor shall be responsible for the accuracy of all information stated on the application for a Permit to Work and for delivery of the application to the Project Manager.

If a Permit to Work is not granted, the Project Manager shall endeavour to give the Contractor at least 24 hours notice of such advice, except that Queensland Rail shall at all times reserve the right to retract an approval or require the Contractor's Safety Liaison Representative to surrender a Permit to Work.

### **41.13 Issue of Permit to Work**

Following isolation and earthing of the Overhead Line Equipment, a Permit to Work shall be issued by the Nominated Person to the Contractor's Safety Liaison Representative. The Permit to Work will state —

- (a) the person to whom the Permit to Work is issued;
- (b) the date and the time for commencement and required time for surrender of the Permit to Work;

- (c) the Operating Track and the Overhead Line Equipment affected by the Isolation; and
- (d) the working limits within which the Overhead Line Equipment has been Isolated and to which the Permit to Work applies.

The issue of the Permit to Work will be accompanied by verbal explanations from the Nominated Person concerning the working limits, the locations of local earths and the locations of any adjacent Overhead Line Equipment which have not been Isolated.

### **41.14 Receipt of Permit to Work and Commencement of Work**

The Contractor shall ensure that —

- (a) upon receipt of the Permit to Work from the Nominated Person, the Contractor's Safety Liaison Representative endorses the Permit to Work by signing in the appropriate space on the Permit to Work;
- (b) the Contractor's Safety Liaison Representative fully informs the Contractor's employees and subcontractors, and any other personnel for whom the Contractor is responsible who are likely to be at the Work Site during the Isolation, concerning the working limits, the locations of local earths and the locations of any adjacent Overhead Line Equipment which have not been Isolated;
- (c) the Contractor's Safety Liaison Representative, or any relief representative as provided for under Clause 41.5, retains personal possession of the Permit to Work at all times during the Isolation, and remains at the Work Site for the duration of the work, or for such other period required by the Project Manager in an emergency situation, until such time as the Permit to Work has been surrendered; and

no preparatory or other work is carried out within 2.75 metres of the Overhead Line Equipment until the requirements of paragraphs (a) and (b) of Clause 41.14 have been complied with, irrespective of the time for commencement of the Permit to Work nominated by the Contractor on the application for that Permit to Work.

### **41.15 Relief of the Contractor's Safety Liaison Representative**

The Contractor shall ensure that —

- (a) if the Contractor's Safety Liaison Representative leaves the Work Site for which a Permit to Work has been issued, the

**41.13 Issue of Permit to Work**

This clause details the procedure for the issue of a Permit to Work by the Nominated Person (QR).

**41.14 Receipt of Permit to Work and Commencement of Work**

This clause details the procedure to be followed by the Contractor's Safety Liaison Representative and the obligations of this person.

Contractor's Safety Liaison Representative is relieved by a competent relief representative as provided for in Clause 41.5 and that such relief representative is fully informed of the information and requirements contained in the Permit to Work;

- (b) the Permit to Work is handed to, signed by and kept in the personal possession of the relief representative who shall remain at the Work Site until such time as such relief representative is further relieved or such other period as the Project Manager may require in an emergency situation; and
- (c) the transfer of the Permit to Work to a relief representative is carried out in the presence of the Nominated Person or, if the Nominated Person is not available, in the presence of the Project Manager, the Site Protection Supervisor or a Protection Officer.

#### **41.16 Surrender of Permit to Work**

At the completion of the work for which the Permit to Work was issued but not later than the cancellation time shown on the Permit to Work, or at any other time directed by the Project Manager in an emergency situation, the Contractor shall ensure that —

- (a) all plant, equipment and materials are removed and all personnel have moved clear of a distance of 2.75 metres from the Overhead Line Equipment;
- (b) the Contractor's Safety Liaison Representative, or the relief representative in possession of the Permit to Work, completes the "Clearance" statement on Part 3 of the Permit to Work and surrenders the Permit to Work to the Nominated Person; and
- (c) under no circumstances shall the Contractor's Safety Liaison Representative or the relief representative, as the case may be, leave the Work Site without first surrendering the Permit to Work to the Nominated Person.

#### **41.17 Delays to Completion of Work Within an Isolation**

The Contractor shall be liable for all costs incurred by Queensland Rail for any delay in the re-energisation of the Overhead Line Equipment caused by the non-return of the Permit to Work at or before the cancellation time shown on the Permit to Work.

#### **41.18 Costs of Queensland Rail**

The Contractor shall, to the extent stated in Item 21D of the Annexure to the Supplementary Conditions of

Contract, pay all costs incurred by Queensland Rail in connection with Isolations.

The Contractor shall pay all costs incurred by Queensland Rail in connection with Safety Induction Courses and/or Electrical Safety Basic Awareness Training.

The Contractor shall pay without deduction all moneys due and owing to Queensland Rail pursuant to Clause 41 not later than 30 days from the date of Queensland Rail's invoice.

### **42 PERSONAL INFORMATION**

#### **42.1 Private Personal Information**

The Department of Main Roads is required to comply with Information Standard 42, which contains eleven Information Privacy Principles.

"Personal information" means information or an opinion (including information or an opinion forming a part of a database,) whether true or not, and whether recorded in a material form or not, about an individual whose identity is apparent, or can be reasonably be ascertained, from the information or opinion.

The Contractor may collect personal information of members of the community during the course of the Contract including as part of community liaison and in maintaining a complaints register.

The Contractor shall, in performing its obligations under this Contract —

- (a) protect personal information against loss, unauthorised access, use, modification or disclosure and against misuse;
- (b) not use personal information other than for the purpose of performing this Contract unless required or authorised by law;
- (c) not disclose personal information without the written agreement of the Superintendent unless required or authorised by law and the Contractor shall immediately notify the Superintendent if it becomes aware that disclosure of personal information is, or may be, required or authorised by law;
- (d) ensure that only the Contractor's authorised personnel have access to personal information;
- (e) ensure that its employees, agents and subcontractors keep any personal information obtained from members of the community in accordance with these requirements; and

#### **41.15 Relief of the Contractor's Safety Liaison Representative**

It is imperative that the Contractor's Safety Liaison Representative is on site at all times when a Permit to Work is in effect.

This clause defines the procedures to be followed for transfer of the responsibilities to the Contractor's relief representative.

#### **41.16 Surrender of Permit to Work**

A Permit to Work shows a cancellation time, or in effect the time beyond which the Permit become invalid. The Permit may also be cancelled at an earlier time if the Contractor is not complying with the requirements or in the case of an emergency.

This clause details the procedures which must be followed in such situations.

#### **41.17 Delays to Completion of Work Within an Isolation**

The Contractor is responsible for all costs incurred by QR if the Contractor fails to return to Permit to Work at or before the cancellation time on the Permit.

#### **41.18 Cost of Queensland Rail**

This clause states the Contractors obligation to pay QR's costs for Isolations (refer to Item 21D of the Annexure) and for safety induction and training. The Contractor is required to pay such costs within 30 days of receipt of QR's invoice.

However, the Contractor is also liable for delay costs as specified in Clause 41.17.

### **42 PERSONAL INFORMATION**

#### **42.1 Private Personal Information**

This clause notes that in the course of carrying out work under the Contract, particularly in relation to community liaison and/or gaining access through private property, the Contractor may gather personal information regarding members of the community.

It is imperative that such information be kept secure and the Superintendent is advised to become familiar with Information Standard 42, which can be accessed via the website quoted.

Note that Clause 42.1(c) says that the Contractor shall not disclose personal information without the written agreement of the Superintendent, unless required or authorised by law. It is strongly recommended that the Superintendent exercise extreme caution in giving the Contractor any written authority to release information unless it is a legal requirement or unless legal advice is obtained beforehand.

In regard to the requirement for the Superintendent to destroy information, this should be approved carefully. If there is potential litigation, e.g. a claim or personal injury matter, the Superintendent should seek legal advice before destroying documents.

(f) comply with other privacy and security measures reasonably required by the Superintendent from time to time.

The Contractor shall forward all personal information collected to the Principal after the Certificate of Practical Completion is issued and shall destroy all such information after it is confirmed that the Principal has received it and prior to the issue of the Final Certificate.

For further information in relation to Information Standard 42 – Privacy, please visit [www.mainroads.qld.gov.au](http://www.mainroads.qld.gov.au).

## **42.2 Personal Information of employees**

The information collected on Form C6852.3 is used to ensure compliance with the state government policy entitled *State Government Building and Construction Contracts – Structured Training Policy (10% Training Policy)*. The Department of Employment and Training administer this policy. Contractors are required to forward completed forms to the Department of Employment and Training and a copy to the superintendent. This information will not be disclosed by Main Roads to external organisations without the consent of the person or unless required by law.

The Contractor may be required to submit personal information of the staff of the Contractor and its subcontractors to the Superintendent and/or the Principal.

From time to time the Principal may conduct, or engage the services of a contractor to conduct, onsite recording of images for the purposes of evaluation of work performance undertaken on the worksite, the assessment of payment claims by the Contractor and training Main Roads' personnel in road construction.

The Contractor agrees to assist the Principal where necessary where onsite recording of images is conducted, including advising its employees and subcontractors that their personal information will be collected through such recording, and the purposes for which it will be collected.

The Principal and/or the Superintendent will take all reasonable steps to ensure that any personal information of the Contractor, subcontractor or their staff obtained is protected against loss, unauthorised access, use, modification or disclosure, including disclosure other than for the purposes set out above.

## **43 ADDITIONAL CLAUSES**

Additional project-specific clauses to these Supplementary Conditions of Contract may be

included in Item 22 of the Annexure to the Supplementary Conditions of Contract.

Where this is the case, the additional clauses shall apply under the Contract as if they were included in these Supplementary Conditions of Contract.

## **42.2 Personal Information of Employees**

The Contractor is required to collect and submit information regarding its training program to verify compliance with the State Government's 10% Training Policy. A copy of the completed forms (C6852.3) is to be given to the Superintendent and care should be taken to ensure that these returns are submitted regularly and on time as required. As with Clause 42.1, it is important that any personal information regarding the Contractor's employees and its subcontractors' employees not be disclosed except where required by law or with the consent (preferably in writing) of the person(s) concerned.

## **43 ADDITIONAL CLAUSES**

Individual projects may have very specific requirements which are not adequately addressed in either the GCoC or SCoC, and which are consequently covered in Item 22 of the Annexure to the SCoC. Although contained in the Annexure, such clauses have the same status under the Contract as if they were incorporated into the body of the SCoC.