

0136 GENERAL REQUIREMENTS (CONSTRUCTION)

1 GENERAL**1.1 RESPONSIBILITIES****Objectives**

General: Provide labour, materials, plant and equipment to construct the Works as documented.

Location

Description: ~~[complete/delete]~~

Type of contract

Quality system: ~~[complete/delete]~~

Method of payment: ~~[complete/delete]~~

Special requirements: ~~[complete/delete]~~

Performance

Requirements: ~~[complete/delete]~~

Design

Designer: ~~[complete/delete]~~

Authority requirements: ~~[complete/delete]~~

1.2 PRECEDENCE**General**

Worksections and standards:

- Requirements of other worksections of the specification override conflicting requirements of this worksection.
- The technical requirements of the worksections override conflicting requirements of their referenced documents.
- The requirements of referenced documents are minimum requirements.

1.3 CROSS REFERENCES**General**

Requirement: Conform to the following:

- *0152 Schedule of rates – supply projects.*
- *0161 Quality (Construction) and/or 0167 Integrated management.*
- *1102 Control of erosion and sedimentation (Construction).*
- *1112 Earthworks (Roadways).*
- *1195 Boundary fences for road reserves.*
- *1351 Stormwater drainage (Construction).*

Cross referencing

Within the text:

- Worksection titles are indicated by *Italicised* text.
- Clause titles are indicated by **BOLD** text.

1.4 REFERENCED DOCUMENTS**Standards**

General: The following documents are incorporated into this worksection by reference:

Australian standards

AS 1319-1994	Safety signs for the occupational environment
AS 1348-2002	Glossary of terms - Roads and traffic engineering
AS/NZS 1680	Interior lighting
AS/NZS 1680.2.4-1997	Industrial tasks and processes

AS 2670	Evaluation of human exposure to whole body vibration
AS 2670.1-2001	General requirements (ISO 2631-1:1985)
AS 2670.2-1990	Evaluation of human exposure to whole-body vibration - Continuous and shock-induced vibration in buildings (1 to 80 Hz)

Austrroads

AP-C87-2010 Glossary of Austrroads terms.

Intergovernmental Committee on Surveying & Mapping

ICSM QA Specification G71 Road construction surveys

1.5 INTERPRETATION

Abbreviations

General: For the purposes of this worksection the following abbreviations apply:

- AS: Australian Standard.
- BCA: Building Code of Australia.
- CAD: Computer Aided Design.
- ICSM: Intergovernmental Committee on Surveying & Mapping
- NATA: National Association of Testing Authorities.
- NZS: New Zealand Standard.
- RMS: Root mean square.
- TBS: To Be Supplied.

Definitions

General: For the purposes of this contract the definitions given in AS 1348, AP-C87 and the following apply:

- Authorities: Includes Agencies.
- Documented: Documented, as documented and similar terms mean contained in the contract documents.
- Geotechnical site investigation: The process of evaluating the geotechnical characteristics of the site in the context of existing or proposed construction.
- Give notice: Give notice, submit, advise, inform and similar expressions mean give notice (submit, advise, inform) in writing to the Superintendent.
- Manufacturers' and suppliers' recommendations: Recommendations, instructions, requirements, specifications (and similar expressions) provided in written or other form by the manufacturer relating to the suitability, use, installation, storage and or/ handing of a product.
- Obtain: Obtain, seek and similar expressions mean obtain (seek) in writing from the Superintendent.
- Permanent marks: Survey control marks that are permanent by nature and are uniquely defined in the state control survey. Also known as State survey marks (SSM) or Bench marks (BM).
- Principal: Principal has the same meaning as Owner, Client and Proprietor and is the party to whom the Contractor is legally bound to construct the Works. The primary obligation of the Principal is to make payments to the Contractor.
- Professional engineer: A person who is listed or eligible for listing on the National Professional Engineers Register (NPER) and has appropriate experience and competence in the relevant discipline at the relevant time.
- Proprietary: Identifiable by naming manufacturer, supplier, installer, trade name, brand name, catalogue or reference number.
- Provide: Provide and similar expressions mean supply and install and include development of design beyond that documented.
- Registered testing authority:
 - . An organisation registered by NATA to test in the relevant field; or
 - . An organisation outside Australia registered by an authority recognised by NATA through a mutual recognition agreement; or
 - . An organisation recognised as being a Registered Testing Authority under legislation at the time the test was undertaken.

- Required: Required by the documents, the Local Council or statutory Authorities.
- If required: A conditional specification term for work which may be shown in the documents or be a legislative requirement.
- Superintendent: Superintendent has the same meaning as Contract Administrator or Principal's representative. The Superintendent may be party to the contract or appointed by the Principal to administer the contract. The powers, duties and authorities of the Superintendent are covered in the contract. These can be changed in writing at any time during the contract.
- Supply: Supply, furnish and similar expressions mean supply only.
- Tests:
 - . Completion tests: Tests carried out on completed installations or systems and fully resolved before the date for practical completion, to demonstrate that the installation or system, including components, controls and equipment, operates correctly, safely and efficiently, and meets performance and other requirements. The Superintendent may direct that completion tests be carried out after the date for practical completion.
 - . Pre-completion tests: Tests carried out before completion tests.
 - . Production tests: Tests carried out on a purchased item, before delivery to the site.
 - . Site tests: Tests carried out on site.
 - . Type tests: Tests carried out on an item identical with a production item, before delivery to the site.
- Tolerance: The permitted difference between the specified value and the upper limit and the lower limit of dimension, value or quantity.
- Verification: Provision of evidence or proof that a performance requirement has been met or a default exists.

1.6 SUBMISSIONS

Acceptance criteria

General: All submissions will be subject to the approval of the Superintendent.

Alternative construction

Detailed working drawings: If a tender based on the use of alternative material, design or method of construction is accepted, prepare and submit detailed working drawings, design calculations and specifications for the alternative, together with details of necessary alterations to this worksection.

Certification: Prepare and certify design and construction documents by a Professional Engineer experienced in that type of design.

Submission: Submit documents at least four weeks before construction of the relevant part of the work is scheduled to commence. Do not commence work on that part without approval. This is a **HOLD POINT**.

Costs: Pay the cost of submissions and evaluations and tests of proposed alternatives, whether subsequently accepted as a variation or not. The costs will be calculated at the current charge-out rates of the relevant consultant(s).

Substitution: If alternatives to the documented products, methods or systems are proposed, submit sufficient information to permit evaluation of the proposed alternatives, including the following:

- Reasons for the proposed substitutions.
- Statement of the extent of revisions to the contract documents.
- Statement of the extent of revisions to the construction program.
- Statement of consequent alterations to other parts of the Works.
- Statement of cost implications including costs outside the contract.
- Evidence that the performance is equal to or greater than that specified.
- Evidence of conformity to a referenced document.
- Essential technical information, in English.
- Samples.

Availability: If the documented products or systems are unavailable within the time constraints of the construction program, submit evidence.

Criteria: If the substitution is for any reason other than unavailability, submit evidence that the substitution:

- Is of net enhanced value to the Principal.
- Is not prohibited by the Contract documents and is as effectual as the identified item, detail or method.

Execution details

Construction management: Prepare the following for submission:

~~[complete/delete]~~

Materials

Product certification: Submit evidence of product conformance with relevant product certification schemes.

Product data: For proprietary equipment, submit the manufacturer's product data as follows:

- Technical specifications and drawings.
- Type-test reports.
- Performance and rating tables.
- Recommendations for installation and maintenance.

OHS: Hazardous materials storage and procedure to counteract spillages.

To be supplied: Nominated TBS items program.

Type tests

Requirement: Provide all test results and survey records promptly if requested.

Working drawings

Working documentation: Provide 2 sets of CAD working drawings and any supporting calculations before the scheduled commencement of the work concerned.

Approval to proceed: Do not commence work until a set of working drawings has been returned with written authorisation to proceed. The Superintendent's written authorisation to proceed does not relieve the Contractor of the responsibilities for the design (where applicable) and construction of the Works in conformance with the Contract.

Revisions: Promptly attend to any required revisions to drawings or calculations and resubmit 4 sets of the revised drawings and calculations.

Authorised variations: Obtain written authorisation for the variation from the Superintendent to proceed. Submit 2 sets of revised working drawings.

Work-as-executed drawings

Submission: Provide marked up and certified work-as-executed drawings for the whole of the Contract before issue of the Final Certificate.

Contract drawings: Digital contract drawings supplied by Superintendent at no cost for mark up.

Roadworks: Mark up in red and certify all changes to the contract drawings and actual values of all levels, signed by the surveyor.

Bridgeworks: Mark up in red and certify all changes to the contract drawings, including variations to levels, dimensions, concrete, reinforcement, prestressing and other materials, all non-conformances accepted without rectification, suppliers and model numbers of bearings and proprietary joints and type of barrier railings installed where both steel and aluminium alternatives are detailed.

Public utilities: Record as required by the worksections.

1.7 INSPECTION

Notice

General: Give notice so that inspection may be made of the following:

Summary of HOLD POINTS

Clause title/Item	Requirement	Notice for inspection	Release by
Submissions	Alternative construction details	4 weeks before work commences	<i>Principal Certifying Authority</i>
Signage	Submit details	1 week before purchase	<i>Principal Certifying Authority</i>
Survey control	Submit relocation	1 week	<i>Principal Certifying Authority</i>
Survey control	Procedure to protect pegs	1 week before site work	<i>Principal Certifying Authority</i>
Environmental planning	Dust control details	1 week before site work	<i>Principal Certifying Authority</i>
Utilities and Authorities	Confirmation of relocation	3 working days before new work	<i>Principal Certifying Authority</i>
Site facilities	Positioning of services	1 week before installing services	<i>Principal Certifying Authority</i>

Summary of WITNESS POINTS – Off-site activities

Clause title/Item	Requirement	Notice for inspection
Items to be supplied (TBS) by the Principal	Notice of time of delivery	2 working days
Pipe culverts supplied by the Principal	Notice of time of delivery	30 working days

Summary of WITNESS POINTS – On-site activities

Clause title/Item	Requirement	Notice for inspection
Storage of fuels and chemicals	Approval for toxic chemicals	1 week
Utilities and Authorities	Conflict with drawings	1 week
Protection of services	Notice to divert	3 working days
Programming utility adjustments	Notice of date of completion of associated work	3 weeks
Adjoining works	Notice of commencement of works	1 week

2 PRE-CONSTRUCTION PLANNING

2.1 CONTRACT ADMINISTRATION

Insurance

Requirement: Provide evidence of currency for Workers Compensation Insurance, Insurance of the Works or Public Liability Insurance.

[Superintendent's representative: \[complete/delete\]](#)

3 CONSTRUCTION REQUIREMENTS

3.1 GENERAL

Contractual relationships

Contractual responsibilities: Responsibilities and duties of the Principal, Contractor and Superintendent are not altered by requirements in the referenced documents.

Directions: All instructions are directed to the Contractor unless noted otherwise.

Approvals: Obtain all approvals from the Superintendent unless noted otherwise.

Current editions

General: Use referenced documents (including test methods) which are the editions, with amendments, current 3 months before the closing date for tenders, except where other editions or amendments are required by statutory Authorities.

~~Site copies: [complete/delete]~~

Drawings

Contract documents: The issued drawings which form part of the Contract documents are bound in a separate volume.

Contract documents

General: Layouts of service lines, plant and equipment shown on the drawings are diagrammatic only, except where figured dimensions are provided or calculable.

Before commencing work:

- Obtain measurements and other necessary information.
- Coordinate the design and installation in conjunction with all trades.

Spot levels: Documented spot levels take precedence over documented contour lines and ground profile lines.

Inspections

Concealment: If notice of inspection is required for parts of the Works that will be concealed, advise when the inspection can be made before concealment.

Light level requirements: To AS/NZS 1680.2.4.

Adjoining works

Adjoining works: Make sure that there are smooth junctions with the existing or adjoining work.

Adjoining property owners: Give notice to all adjoining property owners of the commencement of the Works.

Materials

Manufacturers' or suppliers' recommendations: Provide, including select, if no selection is given, transport, deliver, store, handle, protect, finish, adjust and prepare for use, manufactured items in conformance with the current written recommendations and instructions of the manufacturer or supplier.

Proprietary items/systems/assemblies: Assemble, install or fix in conformance with the current manufacturers' or suppliers' recommendations

Project modifications: Advise of activities that supplement, or are contrary to, manufacturers' or suppliers' recommendations.

Sealed containers: If materials or products are supplied by the manufacturer in closed or sealed containers or packages, bring the materials or products to point of use in the original containers or packages.

~~Materials sources policy: [complete/delete]~~

3.2 PROJECT SPECIFIC REQUIREMENTS

Site access

~~Contractor's access to site: [complete/delete]~~

~~Public access to site: [complete/delete]~~

Working area

~~Designated areas: [complete/delete]~~

Working areas: Restrict construction working areas and areas for temporary site facilities such as the storing of materials, use of plant and erection of sheds, to areas documented on the drawings. Do not work or occupy areas outside of the designated areas.

Security: Take security measures for the safe-keeping of any plant, equipment, tools, materials or other property. Submit proposals for any boundary security fencing for approval.

Temporary fencing: Provide and maintain temporary fencing and warning signage during the contract to prevent unauthorised entry into the property.

Existing fencing: Reinstate the existing fencing and remove temporary fencing before the date of practical completion.

~~Date for possession of the site: [complete/delete]~~

Site restraints

~~Special site conditions: [complete/delete]~~

~~Reports supplied for information only: [complete/delete]~~

Status: Reports supplied for information only can not be relied upon as contractual.

3.3 WORK NOT IN CONTRACT

Work by others

Program precautions: Coordinate the Works with simultaneous and/or adjacent work by others and liaise with other Contractors and Authorities to avoid disruption, delays and possible conflict.

Access: If required, by the Superintendent, allow free access for completion of any work by others.

~~Work by others: [complete/delete]~~

Items to be supplied (TBS) by the principal

TBS by Principal: To **Items to be supplied by Principal schedule**.

TBS: Items listed in Annexure A are supplied, delivered and unloaded by the Principal free of cost to the Contractor at nominated points.

Time of delivery: Give notice of the required time of delivery for TBS items. This is a **WITNESS POINT**.

Damaged or defective: Give notice of any TBS item found damaged or defective within 2 days of taking delivery of such item. If the Contractor does not report damage or defect it is deemed that the TBS item was free from damage or defect when received and the Contractor is responsible for any replacement or making good as directed by the Superintendent.

Storage: Store, protect and insure of all TBS Items received.

Pipe culverts supplied by the Principal

Time of delivery: Give 30 days notice of the time delivery. This is a **WITNESS POINT**.

Supplied: Pipe culverts are supplied by the Principal at no cost to the Contractor for the actual length laid of pipe culvert required under the contract.

Additional pipe culverts: If any pipe culverts are required in addition to those supplied, it is the responsibility of the Contractor to supply at no cost to the Principal.

Program: Complete works by the programmed dates listed in **Annexure A** to

Relocation/alteration to services (by Principal) Schedule.

3.4 SITE INVESTIGATION

Geotechnical and environmental reports

General: The geotechnical and environmental site investigation report provided is for information only. The provided geotechnical information, including information on contaminants, is information on the nature of the ground at each tested part. It is not a complete description of conditions existing at or below ground level.

~~Geotechnical information: [complete/delete]~~

Contractors responsibility: Examine and assess the following:

- Geotechnical information and the site to determine the impact on the construction of the Works.

- The in situ moisture content likely at the actual time the work is carried out.

3.5 SIGNAGE

General

All signs: Submit all safety and project signs for approval before sign manufacture or purchase. This is a **HOLD POINT**.

Safety signs

Requirement: Provide appropriate regulatory, hazard, emergency information and fire signs to AS 1319.

Location: Display safety signs at prominent locations around the working areas and temporary site facilities including:

- Mandatory signs for personal protective equipment such as eye, head and foot protection.
- DANGER signs such as 'DANGER, Construction Site. No Unauthorised Access'.

~~–[complete/delete]–~~

Advertising signs

Advertising: No advertising is permitted on the site other than the following:

- Approved project signs.
- Manufacturer's name or names of owner on items of construction plant.
- Contractor's mail box.

Project work signs

Requirement: Supply, install, maintain and remove all project work signs.

~~Project works signs: [complete/delete]~~

~~Acceptable sign layouts: [complete/delete]~~

Site possession: Install all project works signs no later than one week from receiving the notice of possession of site.

~~Removal of signs after practical completion: [complete/delete]~~

3.6 SURVEY CONTROL

Road construction survey: To ICSM QA Specification G71 Road construction surveys.

Supplied survey setting out information

Certification: Before commencing the Works, check the digital design model provided for discrepancies between the digital design model and the drawings.

Provision of marks: The Superintendent will provide permanent marks as shown on the drawings and establish bench marks related to the level datum.

Transfer of marks: Transfer permanent survey marks clear of the operations before any of the given survey marks on the base lines or the various control lines are affected by the Works. This is a **WITNESS POINT**.

Relocation of survey control: Submit request for relocation of survey control, establishment of recovery pegs, or setting out or levelling. If no notice is provided and a control mark is disturbed or destroyed, then the cost of re-establishing the control is borne by the Contractor. This is a **HOLD POINT**.

Protection: Protect all supplied survey marks. The Contractor is responsible for any costs associated with re-establishing marks.

Set out pegs

Recovery pegs: Provide and fix adequate recovery pegs in suitable locations adjacent to the elements of work.

Removal: Unless otherwise directed, remove all pegs and profiles at practical completion.

Survey equipment

Requirement: Use electronic total stations and ancillary equipment for survey tasks in conformance with the following:

- Electromagnetic distance measuring device (EDM): Standard deviation for error < 5 mm + 5 ppm.
- Horizontal and vertical circles: Angular measurement standard deviation for error < 3 seconds of arc.
- One second of arc minimum count.
- Diametrical vertical circle reading and automatic tilt compensator.
- Capability to electronically record and store field data such as horizontal and vertical angles, distances, point notation, target and instrument heights.
- Calibration procedure and calibrated at all times.
- Calibrate immediately after any repairs.

Laser and global positioning construction control systems

Horizontal and longitudinal alignment control requirements:

- Offset pegs on one side of the road formation.
- Offset pegs 500 mm from the surface design edge of subgrade.
- Clearly mark chainages on the pegs.
- Spacing between pegs < 50 m on the straights and < 20 m on curves including all curve tangent points.
- Place pegs vertically.
- Tolerance: ± 25 mm to the exact horizontal location.
- Protect from disturbance. Submit procedure. This is a **HOLD POINT**.

Removal: Remove all pegs at practical completion.

3.7 SITE COMMUNICATIONS

Site meetings

Representation: Provide representation, including any Subcontractors that may be required to attend regular site meetings.

Meeting agenda: Include performance measures, coordination of program and work under the contract and resolution of any questions regarding the intent or interpretation of the documents.

~~Meeting time: [complete/delete]~~

Minutes: Site meetings will be chaired and minuted by the Superintendent. Copies of the minutes will be issued to all present at the meeting and others concerned with the matters discussed.

3.8 ENVIRONMENTAL PLANNING

Protection of the environment

~~General: [complete/delete]~~

~~Environmental assessment and planning: [complete/delete]~~

~~Project specific environmental requirements: [complete/delete]~~

Erosion and sedimentation control: To *1102 Control of erosion and sedimentation*.

Work outside working hours: Submit for approval any works required outside of normal working hours. Do not use any plant, machinery or equipment that would cause or is likely to cause a nuisance to the public.

Dust control: Minimise dust from disturbed areas. Submit dust control strategy before commencing excavation/earthworks operations. This is a **HOLD POINT**.

Removal of material: Dispose of material off-site to the requirements of the relevant Authorities.

Keep roads clean of soil: If required, keep roads clean of soil, provide the following:

- Wheel washes and rumble grids at all main road crossings.
- Sweep roads at least once a day where construction vehicles are travelling off the site.
- Cover all loads of soil being taken off site for disposal.

Drainage of Works

Stormwater control: To *1351 Stormwater drainage (Construction)*.

Stormwater diversion: Provide effectual diversion of surface water and proper flushing for storm and subsoil water across and beyond the works at all times. Do not interrupt the flow of stormwater and drainage along existing gutters and water tables.

Pumping: Keep trenches and excavations dewatered at all times during construction, including maintaining any pumping equipment.

Timing: Complete all permanent retention basins, and temporary erosion and sedimentation control measures before commencing earthworks.

Blasting

Blasting is not permitted: If required, submit for approval to conform with *1112 Earthworks (Roadways)*.

Air quality

Exhaust gases: Ensure there is no health risk or loss of amenity due to the emission of exhaust gases to the environment.

Storage of fuels and chemicals

Storage: Safely store all fuel and chemicals and conform to the following:

- Minimise fuels and chemicals stored on site.
- Install bunds and take other precautions to reduce the risk of spills.
- Implement a contingency plan to handle spills.

Toxic chemicals: Do not use herbicides and other toxic chemicals without written approval. This is a **WITNESS POINT**.

3.9 NOISE AND VIBRATION CONTROLS

Limits on noise

Working hours: Operational hours of plant, including the entry and/or departure of heavy vehicles, is restricted to 7 am to 6 pm Monday to Friday, 8 am to 1 pm on Saturdays and at no times on Sundays or Public Holidays. Work outside of the hours specified is not permitted without approval.

Maximum noise levels: Avoid excessive noise and long periods of elevated noise that is reasonably anticipated to annoy or adversely effect the adjacent community.

Sound pressure threshold: Less than L₁₀ sound pressure level threshold, when measured at noise sensitive locations such as residential premises.

~~Assigned L₁₀ sound pressure level threshold: [complete/delete]~~

Noise suppression: Minimise noise nuisance including the following:

- Enclose noisy equipment.
- Provide noise attenuation screens.
- Maintain plant in good working order.
- Fit effective residential class silencers to all engine exhausts.
- Fit engine covers to all plant.

Damage

Responsibility for damage: Any damage and compensation payments resulting from non observance of the above requirements are the responsibility of the Contractor.

Limits on ground vibration

Levels: Make sure ground vibration levels transmitted from operating items of plant in the vicinity of residential premises do not exceed levels that are close to the lower level of human perception inside the premise or cause structural damage to the building.

Vibration limits: To AS 2670.1 and AS 2670.2.

~~Preferred and maximum weighted RMS values for continuous and impulsive vibration acceleration (m/s²) 1-80 Hz: [complete/delete]~~

~~Acceptable vibration dose values for intermittent vibration (m/s^{1.75}): [complete/delete]~~

~~Vibration assessment report: [complete/delete]~~

Responsibility for damage: Responsible for any damage and compensation payments as a result of non-observance of the above requirements, no claims will be considered by the Principal.

3.10 UTILITIES AND AUTHORITIES

Location

Drawings: The location of all existing utilities and services shown on the drawings are indicative only.

Verify: Before the commencing any excavation, ascertain and verify the location and depth of all Public Utility Mains and Consumer Services.

Contact: DIAL 1100 BEFORE YOU DIG is a free service, from anywhere in Australia, of locating underground pipe and cables. See www.dialbeforeyoudig.com.au.

Notify: If there is any conflict between the actual location or elevation of any item and the location or elevation of any item shown on the drawings, notify the Superintendent. This is a **WITNESS POINT**.

Protection of services and utilities

Precautions: Secure and protect existing gas, water or drainage pipes, sewers, electric conduits or other existing works both underground and overhead.

OHS: Comply with statutory requirements for maintaining safe working clearance to overhead electrical services.

Repair to existing: Repair any damage caused to existing water, gas or drainage pipes, sewers, electric conduit or other existing works or services to the satisfaction of the Superintendent and the relevant Authority.

Costs: If repairs are not acceptable, the Superintendent may arrange repairs and charge the Contractor.

Notice to divert services: Give notice if it is required to remove, divert or cut into any existing sewer, drainage pipe, gas or water main, service pipes, electric conduits or other existing works. Obtain direction for alterations to existing works. This is a **WITNESS POINT**.

Protection responsibility: The Contractor is responsible for the protection of any facilities and structures during the Contract period.

Liaison

Contractor responsibilities: Liaise with the service Authorities contractors as follows:

- Make appropriate allowances in the program for coordination with service Authorities.
- Make appropriate allowances in the program for the provision of installation by service Authorities during the works.
- Reinstatement, make good and backfill service trenches to the requirements of the service Authorities.
- Do not stop work due to operations by service Authorities without written notice.
- Do not interfere with the operations of service Authorities or their contractors on or near the site.
- Allow service Authorities to work on or near the site.

Limitations to work methods: Confirm, and include within work method procedures, any limitations with the relevant Authority, such as vibrations in the vicinity of underground and overhead facilities.

Relocation of services

Relocations of services by the Contractor: Arrange all relocations or alterations to the **Relocation/alteration to services (by Contractor) schedule**.

~~Timing of Contractor relocations of services: [complete/delete]~~

Relocations of services by the Principal: Relocations and expected program to **Relocation/alteration to services (by Principal) schedule**. Confirm relocation/alteration to services before commencement of works. This is a **HOLD POINT**.

Additional adjustments: If required by an Authority, provide additional adjustment to plant.

Maintenance responsibility: The Contractor is not responsible for the maintenance of any facilities installed or constructed by the various Authorities or structures and other facilities constructed by others (except where such structures and facilities form part of the Contract).

Utility relocation: Do not move utilities due to equipment or method of operation without approval from the relevant Authority.

Programming and duration of utility adjustments

Notice of date of completion: Give notice of the expected date of completion of each of the necessary parts of the Works required before each of the utility services listed in this worksection can be relocated. This is a **WITNESS POINT**.

Timing: Do not proceed with final trimming or subsequent parts of the work in any area of the work until the adjustment of all utilities within that area is complete.

Delays due to work by Authorities: If required, allow Authorities to remove, relocate, or work on their facilities before continuing the Works.

~~Allowance for utility adjustments: Program the following utility adjustments: [complete/delete]~~

Extension of time: The Contractor is entitled to extensions of time if the utilities have not been relocated by these dates and this causes delay to the Contract. The Contractor has no right to monetary compensation or to any claim for damages because of any loss attributable to such delays.

3.11 SITE FACILITIES

General

Requirement: Provide and maintain temporary site facilities for personnel, including the office for the Superintendent, and the necessary temporary utility services. Remove or restore at practical completion.

Facilities required: Provide, equip and maintain temporary ablution facilities, dressing rooms, tool houses and other facilities required by any Industrial Ordinance, Award or Agreement for use of workers employed by the Contractor, or the Contractor's sub-contractors. Remove them at practical completion.

Latrines: Provide temporary latrine accommodation for use of the workers, suitably enclosed and screened and in conformance with the requirements of the Local Authority.

Sewer: Make a temporary connection to an existing sewer where one is available. Cap temporary sewer connection at practical completion.

Site facility design: Before erecting site facilities, submit a proposal for positioning of all units, services including septic or sewer, rubbish collection and storage areas for approval. Obtain approval from the local Authorities prior to submission. This is a **HOLD POINT**.

Office for Superintendent

Requirement: Provide, equip, maintain and remove at practical completion, an office, including toilet facilities, for the sole use of the Superintendent and staff. Conform with the following:

Prefabricated building	<ul style="list-style-type: none"> - Minimum inside dimensions: 6 × 3 x 2.4 m high exclusive of toilet facilities. - Weatherproof, adequately insulated and well ventilated.
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	<ul style="list-style-type: none"> - Provide two opening type windows fitted with insect-proof screens and an external door fitted with a cylinder night lock with two keys. - Floor area: Approved vinyl flooring. - Walls and ceiling: Painted to the approval of the Superintendent.
Furniture and fittings	<ul style="list-style-type: none"> - One reference table of minimum size 1.5 × 0.9 m. - One desk, with lockable drawers, of minimum size 1.5 x 0.9 m. - Three office chairs and one stool all with padded seats, swivel base and adjustable height. - Two 1.2 m² pin boards fixed to the walls. - One 0.75 kW reverse cycle air conditioner.
Prefabricated toilet facilities	<ul style="list-style-type: none"> - Weatherproof and well ventilated, and connected to the temporary sewerage system. - Minimum of one partitioned w.c. cubicle with door and latch. - Separate wash area with minimum of one wash basin connected with hot and cold running water. - Lockable external door with two keys.
Electricity	<ul style="list-style-type: none"> - Lighting to the office and toilet facilities. - Two double power points to the office.
Telephone and data service	<ul style="list-style-type: none"> - Two telephone lines connected to the office with one line fitted with a telephone hand set. - Provide a second line for a facsimile machine supplied by the Superintendent. - Provide data telecommunication service connection to access emails and download drawings etc.

Charges: Pay all charges resulting from the supply, erection, installation, maintenance, cleaning and removal of the office, toilet facilities, electricity and telephone services.

Alternative site facilities: Submit proposal with full details for the use of alternative site facilities in existing buildings adjacent to, or in close proximity to, the Works.

Water supply

Temporary water supply: Provide temporary water supply for site facilities and for carrying out the Works.

Approvals: Obtain all approvals from the appropriate Authority for temporary water supply.

Removal: Remove on completion of the contract the temporary water supply service, except that to the Superintendent's office.

Electrical service

Temporary electricity supply: Provide any temporary electricity supply required for site facilities and for carrying out the work under the contract.

Approvals: Obtain all approvals from the appropriate Authority for temporary electricity supply.

Removal: Remove on completion of the contract the temporary electricity supply service, reticulation and lighting except that to the Superintendent's office.

First aid

Requirement: Provide, equip and maintain an adequate First Aid Treatment Centre on the site with an experienced First Aid person available at all times when work is in progress.

Signage and location: Clearly mark the First Aid facilities and make accessible to all personnel at all times.

Minimum provisions: To the current statutory requirements.

Chain wire fence

Fence: Provide a 1.83 m high galvanized chain wire mesh perimeter fence to *1195 Boundary fences for road reserves*.

Gate: Provide a galvanized tubular steel vehicular access gate, for the temporary site facilities as documented or as directed.

Hessian covering: Cover the mesh fence with a suitable hessian or shade cloth screen for its full height.

Removal: Remove all galvanized fence, screen material and gate at practical completion.

~~Other fencing: [complete/delete]~~

4 MEASUREMENT AND PAYMENT**4.1 MEASUREMENT****General**

Payments made to the Schedule of Rates: To *0152 Schedule of rates – supply projects*, this worksection, the drawings and **Pay items** 0136.1, 0136.2 and 0136.3.

Methodology

The following methodology will be applied for measurement and payment:

- No separate measurement and payment will be made for compliance with the requirements of this worksection except as specified in the pay item below.
- Deductions for nonconforming work: Where deductions for nonconforming work are given in the worksections, the nominated deductions will be applied to the rates given in the Pay Items for that item of work.

4.2 PAY ITEMS

Pay items	Unit of measurement	Schedule rate scope
0136.1 Site Establishment	Lump sum	All costs associated with site establishment. To include all documented facilities, site security, fencing, signage, etc.
0136. 2 Office for Superintendent	Lump sum	All costs associated with the provision of the documented facilities.
0136.3 Items from Superintendent	Each Calculate for each type and quantity of each type of item/material.	All costs associated with receiving, storing and handling items to be supplied from Superintendent.

5 ANNEXURE A**5.1 ITEMS TO BE SUPPLIED BY PRINCIPAL****Items to be supplied by Principal schedule**

Purpose in works	Material type	Location	Approx. quantity available	Cost as a rate excl GST	When available	Worksection clause

5.2 RELOCATION/ALTERATION TO SERVICES (BY CONTRACTOR)**Relocation /alteration to services (by Contractor) schedule**

Type of utility or service	Owner	Location	Requirement

5.3 RELOCATION /ALTERATION TO SERVICES (BY PRINCIPAL)**Relocation /alteration to services (by Principal) schedule**

Type of utility or service	Owner	Location	Requirement	Timing

5.4 CONTACTS**Contacts schedule**

Authority	Name	Position	Phone number	Fax number
Water and sewerage				
Electricity				
Gas				
Telephone				
Telstra				
Optus				