



Learner Guide 1

RIICWM401D Supervise civil works

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1.1 INTRODUCTION

Welcome to this unit **RIICWM401D: Supervise Civil Works**.

Throughout this unit we will be looking at the requirements for:

- Planning for work based activities.
- Preparing for tasks and activities.
- Initiating work.
- Monitoring work.
- Adjusting work activities.
- Reporting on civil works tasks.



This unit is a general civil works supervision unit and should be used in conjunction with specialist units targeted at specific skills and knowledge areas within the civil works career field.



1.1.1 CIVIL WORKS

Civil works covers a number of areas including:

Types Of Civil Works:	
Road And Pavement Construction And Maintenance.	• Flexible pavement construction. • Rigid pavement construction. • Stabilisation of materials. • Pavement maintenance.
Bituminous Surfacing.	• Asphalt paving and compaction. • Application of bituminous spray treatment. • Application of polymer modified binders. • Selection and use of bituminous emulsions. • Application of slurry surfacing. • Pavement profiling, using a profiler. • Manufacture and delivery of hot mix asphalt. • Manufacture of cold mix. • Manufacture of polymer modified binders. • Manufacture of bituminous emulsion. • Manufacture of slurry surfacing.
Civil Structures.	• Civil concrete structure construction. • Civil steel structure construction. • Civil timber structure construction. • Civil masonry, crib and gabion construction. • Inspection of civil structures. • Maintenance of civil structures.

Civil works can also include tunnel construction and demolitions.

1.1.2 CIVIL WORKS TASKS

The tasks involved in civil construction will include, but are not limited to the following:

Types of Civil Works Tasks:	
Site preparation.	Extraction.
Load and haulage.	Placement and distribution.
Surface finishing.	Line, grade and level control.
Water application.	Compaction.
Sediment control.	Installation of underground services.

1.2 COMPLIANCE DOCUMENTATION



Documentation is essential to all aspects of every worksite.

From environmental plans through to extraction plans, documentation exists that outlines what to do, when to do it and how it is to be done.

Compliance documentation is the name given to the documents that require you to undertake tasks in a particular way or to meet a given standard.

Every civil construction worksite will have site-specific requirements that will be outlined during your initial induction.

Staff should be notified of changes to compliance documentation during tool box meetings, staff newsletters or other established forms of communication used on the site.



As a civil construction supervisor, you will be working extensively with compliance documentation, both in your work activities and for the work activities of those people you are supervising.





The range of compliance documents on your worksite may include:

- Legislative, organisational and site requirements and procedures, e.g. for Occupational Health & Safety/Work Health & Safety (OHS/WHs), environmental protection, licensing requirements, personnel/workers training records.
- Site specific policies and procedures.
- Codes of Practice.
- Employment and Workplace Relations

legislation.

- Australian Standards.
- Australian guidelines and specifications.
- Manufacturer's guidelines and specifications, e.g. machinery pre-start checklists, service requirements, vehicle operators' manuals, vehicle specifications (operating capabilities and limits).
- Equal Employment Opportunity and Disability Discrimination legislation.



1.2.1 INTERPRET COMPLIANCE DOCUMENTATION



When interpreting compliance documents for others, ensure you are giving the other person detailed information as to what is expected of them.

As a supervisor on a civil construction site, you must be able to interpret compliance documentation for yourself and for members of your team.

When interpreting documents it is vital that you understand the difference between words such as should, consider and must.

Should	<i>Should</i> indicates a preferred course of action. If you take a different course of action you will need to be able to justify this in the event of an accident or incident.
Consider	<i>Consider</i> means that you have a choice of actions and need to select the action that will give the best and safest result for the particular circumstances.
Must, Requires, Mandatory	<i>Must, Requires</i> and <i>Mandatory</i> all mean that the action is a legal requirement and MUST be complied with.

Your statutory compliance requirements and procedures must be met.

These statutory requirements and procedures are the minimum level of performance, responsibilities and duties that are set by local, state and federal government.

Each statutory compliance requirement will change between states, between sites and between tasks completed on the site.



It is essential that each supervisor inform themselves of the requirements that must be met for each particular task and location.

While some of the compliance requirements may be similar, such as compliance with OHS/WHs requirements, others will vary greatly depending on the environmental conditions, work processes and tasks being undertaken.

1.3 ADMINISTRATIVE REQUIREMENTS



Each organisation has different expectations of the supervisory staff regarding the administrative requirements that need to be completed.

These requirements, procedures and tasks will vary depending upon the level of your duties and your site responsibilities.

Most organisations will have specific familiarisation training that is undertaken when you start supervisory roles.

This training will detail exactly what level of administrative tasks are expected of you and how these tasks are to be completed.

1.3.1 CONTRACT REQUIREMENTS



Civil works are always conducted under contract.

Depending upon your level of responsibility you may need to have a very detailed knowledge of the contract, or if you are a front line supervisor you may need to have a general knowledge of what is required and how it is required to be delivered.

Your duty statements will detail what level of contract management you will need to have.

Interpretation of the project contract requirements and procedures should be very straightforward.

You are required to follow all requirements and procedures. The procedures that are involved with the contract will detail how to complete these tasks.





Most large civil construction projects will have a representative from the contracting body onsite to monitor how the contracted organisation (your company) is managing the project.

It is this person that will need to be spoken with if problems arise with the contract.

Never approach this surveillance officer unless you have the authority to deal directly with them.



Always use your own line management system to bring problems to the attention of your supervisors first. It is a good idea to always ensure variations to the contract procedures and requirements are documented before they are implemented.

Remember, the contract is a legally binding document that states how a task must be completed.

If the surveillance officer changes these requirements in the field, ask for written confirmation of the changes before implementing the changes.

This is particularly important on sites where there is more than one surveillance officer.

For details on the contract, speak with the site contract manager.



This person will be the main contact for any issues with the contract.

Alternatively you can speak with the site quality assurance manager.

All procedures and policies that relate to the contract should be contained in the contract management policies and procedures manuals.

1.4 ACCESS AND SHARE TASK INFORMATION AND REQUIREMENTS

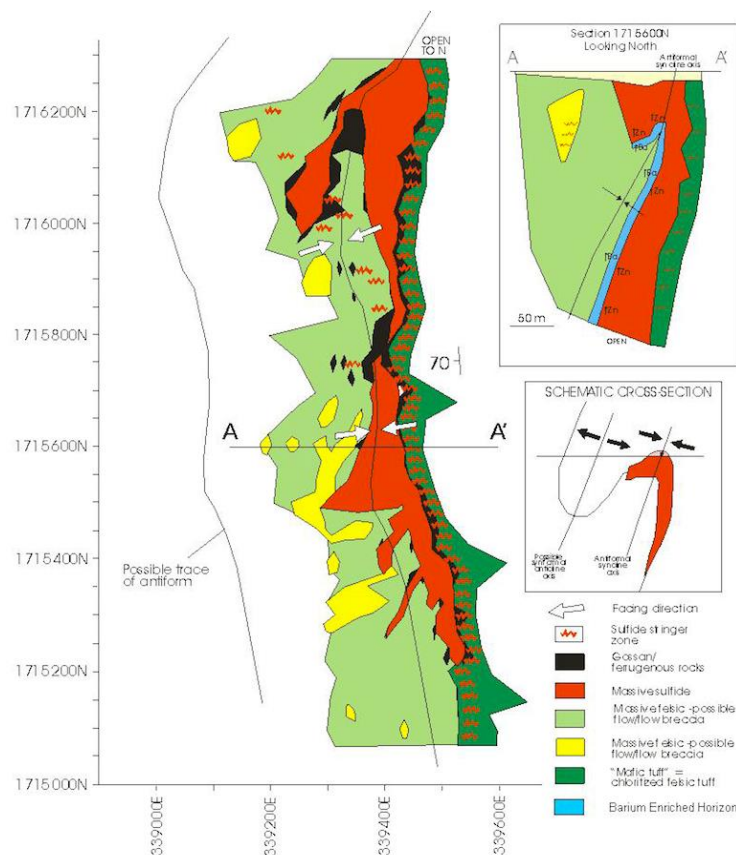
Each task on a civil works program will have specific information and requirements that must be known and met.

As a supervisor it is your responsibility to know and understand the organisational and site operational requirements and to be able to share these requirements with the members of your team.



1.4.1 SITE GEOLOGICAL AND GEOTECHNICAL DATA

This data could include rock and soil types and characteristics.



Knowing the type of soil and rock you are dealing with allows you to determine the correct machinery, resources and work methods to achieve the required tasks.

Information on geological and geotechnical factors that affect the site also allows for better time management and project management by understanding how long it will take to complete tasks.



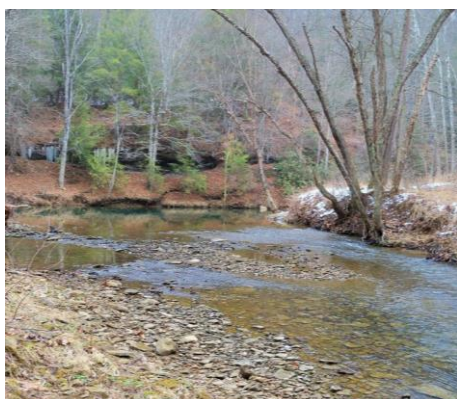
1.4.1.1 ROCK AND SOIL TYPES

Identification of the different types of rock and soil is essential to the successful completion of most civil construction projects.

Soil and rock types may include:		
Rock Types:	Metamorphic	Rocks are heavy and hard.
	Igneous	Rocks are volcanic and can be hard, but may also be very light
	Sedimentary	Rocks and shales could peel out when cut and removed.
Soil Types:	Sandy	Soils will require a lot of stabilisation
	Clay	Soils are harder to work with due to the physical hardness of the soil and the ability of these soils to hold water for long periods of time.

Soil and rock types will have been identified during the site engineering surveys. Interpretation of this data allows for successful planning and preparation on the worksite.

1.4.2 SITE HYDROLOGICAL DATA



This data is the information relating to water on, in, near or under your site.

It will include surface water and ground water but could also include rivers, creeks, dams, dry waterbeds, wetlands and other areas where water is or could be.



The hydrological data is used to ensure correct drainage of the site, for protection of the waterways and water dwelling flora and fauna.

Having an understanding of what the water on the site is doing allows you to anticipate drainage issues and erect erosion and sediment controls before drainage becomes a problem.

1.4.3 SITE METEOROLOGICAL DATA



This data includes rainfall, humidity, temperature, wind and night conditions such as frosts and fogs. Having a good understanding of this data allows you to plan your daily activities more successfully.

On civil construction worksites, meteorological data can have a huge impact on the tasks and activities that are undertaken.

To access meteorological data use a reputable website, such as www.bom.gov.au.

1.4.4 ENGINEERING SURVEY PRINCIPLES AND DATA

Engineering surveys are a very important aspect of supervising civil works. Without appropriate surveys for setting out works, monitoring progress and for conforming completed components, the job will be made much more difficult.



A lot of civil works tasks rely on accurate survey and level points to achieve the work targets. For example:

Drainage pipes must be surveyed to ensure they are in the right place and allow the water to have the correct fall.

Embankment construction uses survey to ensure that the fill layers are placed correctly.

Construction of structures such as dams and bridges rely on engineering survey to meet strict conformance requirements.

Site engineering survey data is used in monitoring the progress of the job. Survey and levelling reports contribute to part of the lot records. These are also used as a historical record for the project.

1.4.4.1 LARGE STRUCTURES AND INFRASTRUCTURE WORKS



In the case of large structures that may have a design life long beyond the duration of the project such as pavements, dams and bridges, survey data can prove valuable where defects and faults may occur in the future.

Survey data for large infrastructure works is monitored after the end of the works to assess the need for maintenance or to indicate potential problems.

This is most evident where changing conditions may occur such as in the case of dams that may not have water to full capacity all the time, during drought conditions or following spill over events.

The survey data provides an ongoing record of the integrity and stability of the structure.



1.4.5 MATERIAL PROPERTIES AND TEST RESULTS

Sources of materials should be identified before work commences.

Often this identification will be done while engineering surveys are being completed or will be done by the purchasing or procurement department if materials need to be purchased.

Interpretation of these results and requirements will allow you to ensure the correct materials are being used in the correct manner for the required results.



1.4.6 ROAD GEOMETRY



Road geometry is the phrase used to describe the shape, slope and gradient of the road.

The slope and gradient of the road will be expressed as either a percentage or a comparison i.e. 500:1 meaning for every 500 metres along the road, the road will rise for 1 metre.

Road geometry will be determined by the engineers and designers and will be contained in the specifications.

You will need to identify the geometry from the plans and relay the geometry requirements to the grader or other plant operators.

Road geometry is an important aspect of road building as it is the geometry that determines how water is drained off the surface, how vehicles will drive around curves in the road and the general safe usability of the road.



1.4.7 TYPES OF ASPHALT



Asphalt is a common product used for surfacing and maintaining roads or areas where high traffic (both vehicle and pedestrian) may occur.

The most common type of asphalt used in civil construction is dense graded asphalt.

This is also known as hot mix, AC (asphalt concrete), and BC (bitumen concrete).

Application of the asphalt is done at temperatures over 70 degrees Celsius. Asphalts must be placed and compacted hot to ensure that the product can be worked correctly and so that the performance is kept at a high level.

As the asphalt cools down, it hardens which significantly reduces the workability of the product.

Layer thickness is important. Usually, asphalt is placed in layers so that the correct compaction can be achieved.



The asphalt mix design will account for different characteristics and different applications. Asphalt may have bitumen or polymer binders. The correct mix design must be applied to the task to reduce the risk of defects and failure and to correctly meet specification requirements.

When using any asphalt products, it is important to know and understand the safety requirements for working with hot products. Bitumen and asphalt burns can be very severe, so everyone must be aware of the handling requirements.

1.4.8 SITE HAZARDS, CONSTRAINTS AND CONDITIONS

These could include known hazards, constraints and conditions or the hazards that have the potential to occur.

Hazard identification should be an activity that is undertaken by every member of the team, but as a supervisor it is your responsibility to ensure you and your team are undertaking regular hazard identification actions.

Constraints and conditions are those factors that will or may impact on the activities.

The impact could be through actions that need to be taken, areas that need to be avoided or resource and material choices.



1.4.9 SITE CULTURAL AND HERITAGE INFORMATION



This data is the information that relates to the history of the area in which you are working.

Often when the local population object to the construction of the project, they will use cultural, environmental or heritage grounds.

Cultural and heritage data may form some of the constraints and conditions on the site that affect what resources are used, the areas where access needs to be restricted and other factors.

A cultural and heritage officer may be appointed to work on some large sites.

This person is then able to assess the cultural and heritage value of any objects found on the site.

As a supervisor you need to be aware of the impact the cultural and heritage data can have on the conditions in which your team is working.



1.4.10 CIVIL CONSTRUCTION SEQUENCING



Knowing the sequence of work activities allows you to plan effectively. For example:

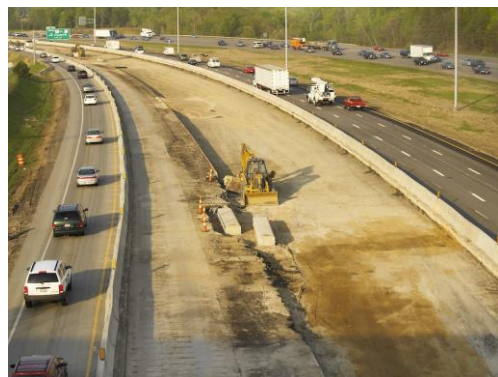
Earthworks:

1. Mark out the work area.
2. Clear and grub – which is vegetation removal.
3. Topsoil removal.
4. Creation of contours, drains or next step in the construction process.

Roadwork Construction:

Would follow the earthworks steps, but then include:

1. Formation of drain lines or contours.
2. Cut and fill to the needed level.
3. Compaction activities.
4. Pavement layers.



Drainage:

Would include the steps for earthworks then:

1. Form drain lines.
2. Form out the area to be worked in – that is build the frame to hold the drain system.
3. Lay pipes, box drains or culverts.
4. Back fill.
5. Landscape appropriately.

1.4.11 QUANTITY CALCULATION

As a supervisor, you may be required to complete a variety of calculation tasks to determine quantities for materials required on the worksite.

The most common calculations will be for:

- Area.
- Volume.
- Percentage.
- Grade.
- Resource consumption figures.



Area

Area = Length x Width
(usually in square metres).

For example, a section **4m** wide and **20m** long would have the following area:

Area = 4m x 20m

Area = 80m²

If you were given an area, and you know one of the dimensions (e.g. width or length), you can work out the other factor.

Volume

Another common calculation is for volume. This is calculated by multiplying length x width x depth or height. That is, depth if it is hole or height if it is a pile.

Volume = Length x Width x Depth
(in cubic metres).

For example, a trench **20m** long, **4m** wide and **0.5m** deep would be calculated in the following manner:

Volume = 20m x 4m x 0.5m
Volume = 40m³

Tonnage Requirements



Once you have determined the volume of materials required, you will be able to work out the tonnage requirements, or tonnage usage.

To do this, multiply the volume required (in cubic metres) by the common materials weight in tonnes.

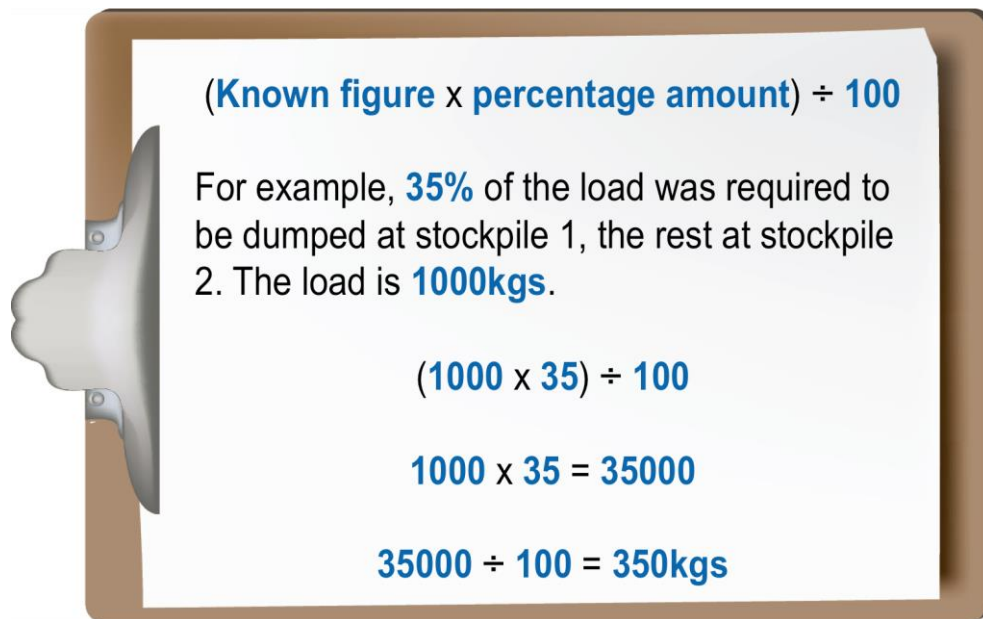
The weights for common materials are shown in the table below.

Common Material Weights:			
Bronze	8.5t / cubic metre	Lead	11.4t / cubic metre
Clay	1.9t / cubic metre	Lime (stone)	2.6t / cubic metre
Coal	864kg / cubic metre	Sand, beach, dry	2.0t / cubic metre
Concrete	2.4t / cubic metre	Sand, beach, wet	2.3t / cubic metre
Earth	1.9t / cubic metre	Sand, river, wet	1.5t / cubic metre
Granite	2.6t / cubic metre	Shale	2.6t / cubic metre
Gypsum	2.3t / cubic metre	Terracotta	1.8t / cubic metre
Iron Ore	5.4t / cubic metre	Zinc	7.0t / cubic metre

Note: Clay is more cohesive and harder to excavate, push and spread than topsoil.

Percentage

A percentage of a known figure is relatively easy to determine.



(Known figure x percentage amount) ÷ 100

For example, **35%** of the load was required to be dumped at stockpile 1, the rest at stockpile 2. The load is **1000kgs**.

$$(1000 \times 35) \div 100$$

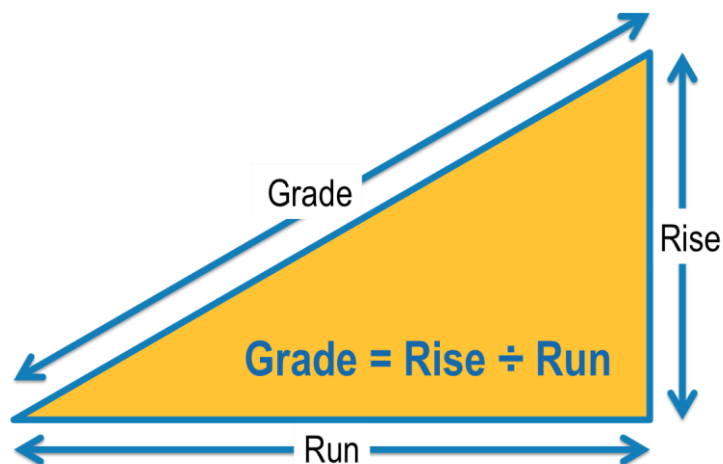
$$1000 \times 35 = 35000$$

$$35000 \div 100 = 350\text{kgs}$$

Therefore 350 kg would be left at stockpile 1, while 650kgs would be in stockpile 2, (simple subtraction of 350 from 1000).

Grade

Grade is generally calculated using levelling equipment. The basic formula for grade is **rise over run**. That is, how high the road rises compared to a known distance.



There are other calculations that may be required depending on the type of work activity being performed, such as resource consumption figures.

Resource Consumption



Resource consumption, including required supply rates, refers to how much material is used or consumed and how quickly it can be resupplied, either from another location on the worksite or from an external supplier.

It is important to know supply times from external suppliers as there may be a delay to the works if materials are not available when needed.

Daily production figures will often be used as a guideline to work out consumption rates. Be aware, however, that not all materials are consumed at the same rate and supply rates may differ from worksite to worksite.

If you are unsure about how to correctly calculate any of these quantities or interpret resource consumption figures, your manager will be able to help you.

Different civil works applications will also use different formulas for determining calculations.



1.4.12 ESTIMATION PRINCIPLES

On civil construction sites you will need to use different estimation techniques on occasions.

The principle of estimation is to attempt to make an educated guess as to what amounts, distances or other unit of measurement is required.

Commonly materials or time are the main factors that will require estimation.



1.4.13 TASK SPECIFICATIONS



This information is how the activity is to be completed, based on your client's requirements. It can be conveyed in site or task drawings, plans and documents.

Project specifications may give an acceptable range of data, but they may also be highly specific in what must be achieved.

When interpreting and sharing this information with members of your team, ensure you are just as clear and detailed about what must be achieved and how the requirements are to be met.

1.4.14 CONTRACTORS AND OTHER ORGANISATIONS

Different contractors and other organisations will have an impact on the activities undertaken on the site.

As a supervisor it is important that you understand the roles these others will play in the construction project and how their activities will impact the activities of your team.



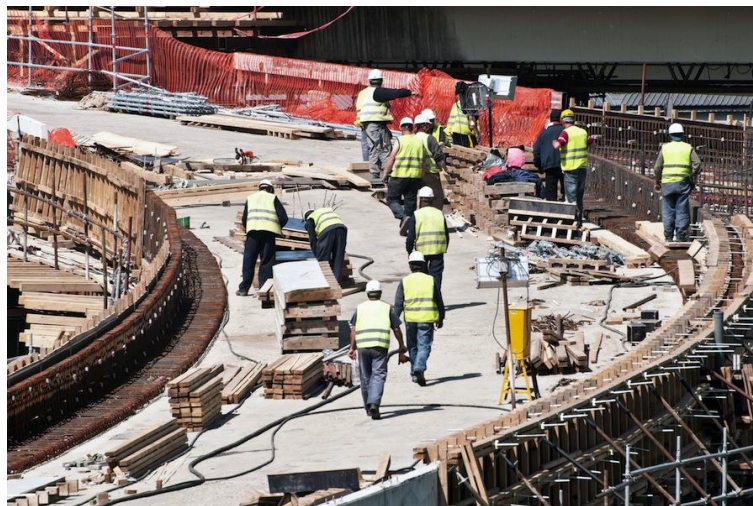


On most projects there are various teams working on different stages of the project, with each team relying on the others to complete tasks on time so the next task can start on time.

Without a good working relationship between the various work teams, it can be extremely difficult to achieve a good end result without a significant amount of stress and anxiety.

1.4.15 COORDINATION, TIMING AND BUDGETING

Coordination, timing and budgeting requirements need to be managed on a worksite to ensure all actions and activities are within the required costs and timeframes. Budgeting is a constant factor with all civil construction projects to ensure the project finishes within the financial constraints.



1.5 PREPARE JOB PLAN IN CONJUNCTION WITH TEAM MEMBERS

Job plans are used in order to complete the tasks assigned to your team. There are a number of aspects to be considered when creating a job plan.



1.5.1 TASK REQUIREMENTS

Task requirements should include:

-  Monitoring requirements.
-  Personnel/workers performance requirements.
-  Resources and material requirements, including plant and equipment.
-  Operational techniques that are required to complete the tasks correctly to the required standards.

Operational techniques will vary greatly from task to task and site to site due to the varying specifications and site requirements.

Flexibility in the application of techniques is essential to ensuring you are achieving the best possible results.

By selecting and assigning the most appropriate plant, equipment and personnel/workers to completing the tasks you will have better end result.



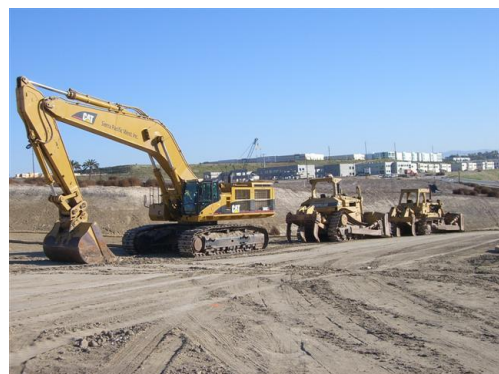
When evaluating which people should be working where, look at the strengths, skills, competencies and abilities of each person and assign them to tasks they are able to complete.

Sometimes it is necessary to assign a person to a task they are not yet competent in completing, so that they can develop the skills required.

If you need to do this, ensure you have a competent person assisting them to ensure the task is completed adequately.

Assigning plant and equipment to tasks is a straightforward process of ensuring best fit between the task and the available equipment, plant or machinery.

Knowing the capabilities of each item of plant or equipment that is being used on the site will allow you to select the most appropriate item to use in the civil works construction tasks.



1.5.2 COMMUNICATION REQUIREMENTS



Communication requirements could relate to internal or team communications and also external communications to suppliers, testing agents, surveillance officers, media or community liaison personnel/workers.

How communications must be conducted will be detailed in your organisational communications plan and procedures.

1.5.3 REPORTING REQUIREMENTS

Reporting requirements will impact how you conduct tasks and activities.

Knowing these requirements allows you to plan for time to complete the reports or for time to collect and collate the information required to go into the reports.



1.5.4 RISK ASSESSMENTS AND MANAGEMENT REQUIREMENTS



Conducting risk assessments on the tasks and activities is essential to ensure the health and wellbeing of your team members.

How these assessments are to be conducted will be determined by the organisational policies and procedures.

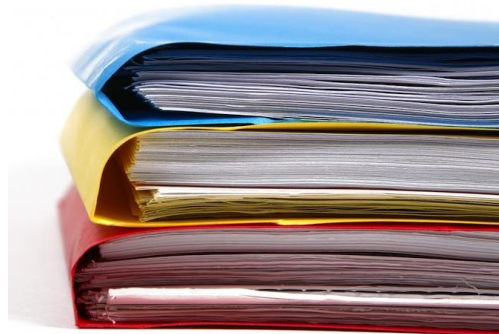
Each site will have specific requirements that must be met and procedures that must be adhered to.

1.5.5 OHS/WHs REQUIREMENTS

These will work closely with the risk assessment and management process.

Ensure you know the OHS/WHs requirements for the tasks your team members are undertaking to ensure you are able to inform the team as to what is required of them.

Each site will have slightly different requirements and it is essential you identify and apply these in accordance with the needs of the site.



1.5.1.1 HARMONISATION OF WORK HEALTH & SAFETY LEGISLATION

In response to industry calls for greater national consistency, the Commonwealth, states and territories have agreed to implement nationally harmonised Work Health & Safety (WHS) legislation to commence on 1 January 2012.

While not all states and territories have actually implemented the model WHS legislation as of the start of 2012, it is important to be aware of these changes, as all states and territories will eventually implement them.



Harmonisation aims to develop consistent, reasonable and effective safety standards and protections for all Australian workers through uniform WHS laws, regulations and codes of practice.



Key Elements Of The Work Health & Safety Legislation

The following key elements of the WHS legislation will impact the way you do your job, and the responsibilities of your workplace:

- 1** There is a primary duty of care requiring **persons conducting a business or undertaking (PCBU)** to ensure, so far as is **reasonably practicable**, the health and safety of **workers** and others who may be affected by the carrying out of work.
- 2** A requirement that **officers** of corporations and unincorporated bodies exercise **due diligence** to ensure compliance.
- 3** **Workers** must exercise reasonable care that their acts or omissions do not adversely affect the health and safety of persons at a workplace.

The legislation also outlines requirements for:

- The reporting requirements for notifiable incidents.
- Licences, permits and registrations (e.g. for persons engaged in high risk work or users of certain plant or substances).
- Provision for worker consultation, participation and representation at the workplace.
- Provision for the resolution of health and safety issues.
- Protection against discrimination.



Many specific details relating to WHS will be negotiated within the workplace in accordance with the legislation.

It is important that you speak with your Health and Safety Representative or supervisor for more information on how these elements will effect your day-to-day operations, or if you have any concerns relating to health and safety.

A list of common WHS terms and their definitions can be found in Appendix 1A.

1.5.6 ENVIRONMENTAL REQUIREMENTS



The protection of the environment is a task that needs to be undertaken by all members of the site.

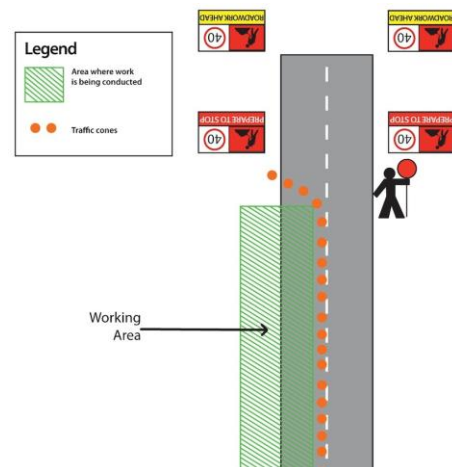
You will need to know the environmental protection requirements so you are able to create job plans that adhere to these requirements.

Each site will have slightly different requirements and it is essential you identify and apply these in accordance with the needs of the site.

1.5.7 TRAFFIC MANAGEMENT REQUIREMENTS

Traffic management requirements could include contracting a traffic management company or having your own trained staff undertaking traffic management.

Traffic management plans account for signage requirements, site access or isolation needs and activities being undertaken.



The design and creation of traffic management plans is a specialised area that requires additional training.

On some worksites these plans may need to be submitted to an authorising body, such as the RTA for approval before they can be used.

Each traffic management plan will differ, so always double check that you are using the correct plan or drawing before passing on the information to your team members.

1.5.8 QUALITY REQUIREMENTS

Each civil construction activity will have quality requirements.

These requirements will be outlined in the task or site specifications. You must know and apply these quality requirements to the task.

Some of the common quality requirements include testing of materials and tasks, compactions, scheduling, and inspection by Quality Assurance (QA) staff.

If you are unsure of the quality management requirements on your worksite speak to your quality assurance manager or site QA officer.



1.5.9 TASK RESOURCE REQUIREMENTS

The following are examples of Task Resource Requirements:

Task Resource Requirements:	
Personnel/workers requirements	Do you have enough trained and competent people to complete the tasks in the timeframe given to you?
Plant, machinery and equipment requirements	Do you have access to the machinery needed to complete the tasks?
Coordination requirements	This is how each component of the plan will work together to achieve the end result.

1.5.10 ACTIVITY SCHEDULING

Every plan will consist of many small parts that must be achieved in a set order to gain the end result. Activity scheduling is an art form that a supervisor should develop.



1.5.11 MATERIAL DELIVERY SCHEDULING



Just-in-time deliveries are the most commonly used method of material delivery on a civil construction worksite.

This is a system of material ordering and delivery that has very little waiting time.

The advantage to just-in-time deliveries is less material wastage and loss and smaller storage areas required.

The disadvantage of a just-in-time system is the chance that a material is not able to be delivered when you need it.

Good communications are required with suppliers to minimise the likelihood of supply problems.

Material quality and delivery procedures will be determined by the site requirements.

It is important to apply site procedures at all times.



1.5.12 SUB-CONTRACTOR SUPPORT REQUIREMENTS



Often sub-contractors can be used to supply deficiencies within the available people, plant, equipment and machinery.

If you are using sub-contractors you must have the support structures in place to ensure efficient use of the sub-contractor. These support structures could include contracts, supervisory staff, materials or other requests made by the sub-contractor.

1.5.13 WASTE DISPOSAL REQUIREMENTS

Each civil construction project will create waste materials.

Sometimes this waste material can be reused onsite. Other times it will need to be disposed of.

In your plan you must know the waste materials that will be created and what you will do with them.



1.5.14 DRAFTING AND ADMINISTERING JOB PLANS



Drafting and administering job plans is a process of documenting the plan in a manner that is accessible to anyone who may need to use it and distributing the plan to those people who need to be aware of what is required of them.

Job plans are living documents. They need to have the flexibility to change if required.

While plans should not be changed on a whim, they do need to be able to adjust to unforeseen circumstances such as breakdowns. Having a backup plan is a good idea.

Work planning techniques are highly individual. What works for one person or one team, may not work for another.

It is a task that must be practiced with a willingness to adjust processes until you are able to find a combination of factors that suit your planning style and the needs of your work team.



1.5.15 CONSULTING WHEN CREATING PLANS



When creating a job plan, try to include relevant team members in the process. This will allow you to draw on a great variety of experiences that can make the planning process easier to complete.

Relevant team members could include:

- Other managers, supervisor or leading hands.
- Suppliers.
- Sub-contractors.
- Team members doing the tasks and activities.
- Supervisors or managers of external teams you need to

coordinate with.

By consulting with others while you are creating a job plan you are:

- Developing and strengthening your team by showing them you value their experiences and judgement.
- Allowing for the various contractors and other teams to place their priorities and tasks into the plan.
- Allowing for greater commitment to the plan and the timeframes.



APPENDIX 1A – WORK HEALTH & SAFETY COMMON TERMS AND DEFINITIONS

Person Conducting a Business or Undertaking (PCBU)	A 'person conducting a business or undertaking' (PCBU) replaces the term 'employer'. A PCBU includes all employers, sole traders, principal contractors, unincorporated associations, partnerships and franchisees. Volunteer organisations that also employ people will be PCBUs. A PCBU's primary duty of care is to ensure the health and safety of everyone in the workplace, so far as is reasonably practicable.
Officers	An 'Officer' is a person who makes, or participates in making, decisions that affect the whole or a substantial part of a corporation. This includes Health and Safety Representatives (HSR).
Workers	'Worker' replaces the term 'employee'. It is defined broadly to mean a person who carries out work in any capacity for a PCBU. A 'worker' covers employees, contractors, sub-contractors (and their employees), labour hire employees, outworkers, apprentices, trainees, work experience students and volunteers.
Reasonably Practicable	Reasonably Practicable is defined as action that is, or was at a particular time, reasonably able to be done to help ensure health and safety based on the following factors: - Chances of the hazard or risk occurring (likelihood). - The degree of harm (consequence). - The knowledge of persons involved in the situation relating to the hazard or risk and methods of eliminating or controlling it. - The availability and suitability of ways to eliminate or control the hazard or risk. - The costs involved in taking action to eliminate or control the hazard or risk including consideration of whether the cost involved is inconsistent to the level of risk.
Due Diligence	The Work Health and Safety Act 2011 (the WHS Act 2011) imposes a specific duty on officers of corporations to exercise due diligence to ensure that the corporation meets its work health and safety obligations. In short, they have a responsibility to ensure that the PCBU is doing everything it should to ensure health and safety. The duty requires officers to be proactive in ensuring that the corporation complies with its duty. Due diligence may be demonstrated through the following courses of action: - Acquiring knowledge of health and safety issues. - Understanding operations and associated hazards and risks. - Ensuring that appropriate resources and processes are used to eliminate or minimise risks to health and safety. - Implementing processes for receiving and responding to information about incidents, hazards and risks. - Establishing and maintaining compliance processes. - Verifying the provision and use of the resources mentioned in 1-5.