

Date: 2 Mar 2021

**Project Title:** Snowy 2.0 – Future Generation Joint Venture

**Project Description:** Salini Impregilo, Clough and Lane trading as Future Generation Joint Venture (Future Gen) is a main contractor of Snowy 2.0 EPC Project. The Project is a pumped hydro project that will increase the generation capacity of the Snowy Mountains Scheme by up to 2,000MW and at full capacity will provide approximately 350,000MW/h of energy storage. The project includes all activities associated with the requirements for the Snowy 2.0 Pumped Hydro-electric Scheme.

**Opportunity Title:** Future Generation Joint Venture (FGJV) would like to engage a transport contractor on a personnel labour hire / dry hire agreement to manage the delivery of the Oversize Overmass (OSOM) precast concrete tunnel segments from the point of manufacture at the Polo Flat segment factory in Cooma NSW to the installation site locations at Lobs Hole, Tantangara, Marica & Talbingo in the KNP.

These sections will be delivered using FGJV's (PBS) performance-based vehicle fleet of Scania G 500 A 6x6 HZ prime movers (16 in total) and purpose-built B-triple trailers (42 in total). There are 130,500 individual concrete segments weighing 6.5t each (2.6cu in of concrete) which make 14500 tunnel rings in total. This operation will be running 24/7 and is estimated to take approximately 3.5 years.

**Opportunity Description:** Vendor's Scope of Work includes:  
To provide a suitably qualified team of skilled personnel in sufficient quantity, to carry out the 24 hours, 7 day a week concrete segment delivery operation safely, from the Polo Flat segment factory to the site locations at Tantangara, Lobs hole, Marica & Talbingo which will include truck drivers, schedulers & management staff.

Safely & efficiently coordinate and schedule the segment delivery operations in consultation with the dispatch team from Polo Flat Segment Factory to site in accordance with National Heavy Vehicle Regulator (NHVR) Mass Management System standards, the relevant FGJV Transport management plans, Standard operating procedures as well as state and government legislation listed in this document.

To coordinate the OSOM vehicle permitting in accordance with the FGJV management plans, standard operating procedures, Traffic control plans and in consultation with the relevant road authorities and stakeholders listed in this document.

Safely & efficiently coordinate the personnel shift rostering which includes RNR and leave scheduling in accordance with the relevant FGJV management plan and government fatigue management legislation.

Safely & efficiently coordinate and schedule all relevant maintenance activities for the FGJV Scania G 500 prime mover truck fleet, in consultation with the nominated maintenance team, as per OEM recommendations and NHVR Maintenance Management guidelines to maximize performance and availability.

To safely coordinate and schedule all relevant maintenance activities for the FGJV PBS B triple trailer fleet, in consultation with the nominated maintenance team, as per the OEM recommendations and NHVR Maintenance Management standards to maximize asset performance and availability.

To explain in detail what measures they will take to maintain the overall lifecycle of the FGJV PBS vehicles so that they remain in excellent working condition?

To safely coordinate heavy vehicle salvage and recovery operations for the FGJV PBS heavy vehicle fleet in consultation with the nominated towing contractor and tyre contractor.

To explain in detail how the subcontractor manages their staff training qualifications, driver infringements and NCR's.

To explain how they intend to operate safely in the remote alpine conditions to avoid incident, equipment damage and segment damage which includes methodology around specialized load restraint.

To attend Provide a detailed operational weekly lookahead as well as a weekly & monthly operational report to FGJV management as requested.

To comply with all relevant FGJV Management plans, Standard operating procedures listed in this document.

To comply with FGJV's (COR) Chain of Responsibility procedure and in accordance with (HVNL) Heavy Vehicle National Law.

To comply with all state & national government legislation and guidelines listed in this document.

To provide FGJV with an overview on what the subcontractor thinks they may require in relation to personnel, facilities, supplies, equipment, scheduling tools & additional training to complete the delivery operation safely, without incident or delays and on budget.

### Requirements:

FG JV requires Vendor:

- to provide evidence of similar experience in the Business Industry
- to provide evidence of the required government or industry certifications, licenses, associations and/or insurances to deliver the opportunity.
- to comply with all Safety and Environmental Management requirements for the Project. Site Specific Environmental Management Plans will be prepared by FGJV and approved by the NSW Department of Planning, Industry and Environment (DPIE). The Subcontractor must comply with these plans once approved by DPIE.
- to demonstrate an exemplary safety record and a documented management system for tracking safety performance
- to be financially viable and can demonstrate commercial value.
- to demonstrate a strong commitment to training and retaining a local workforce
- to have an excellent track record in employing and progressing the careers of Indigenous people
- to progressively finding ways to develop the careers of women, veterans, and people with disabilities.
- Treat the environmental they are working in with respect and consideration.

### General Information:

FGJV will consider all ICN Registrations where:

- The business demonstrates through their response a clear capability against the key requirements.
- The business completes a response to all Future Gen questions and/or Future Gen documentation
- The businesses ICN profile is up to date and complete.
- The registration is complete prior to any closing date.
- The business operates in Australia and is a registered Australian business.

### Local & Regional Content:

FGJV strongly encourages businesses who have head offices and/or dedicated premises with the appropriate Local Government approvals from the following regions:

- Snowy Monaro Regional Council Local Government Area.
- Snowy Valleys Council Local Government Area.
- Furthermore, Future Gen strongly encourages Aboriginal and Torres Strait Islander businesses to submit applications.

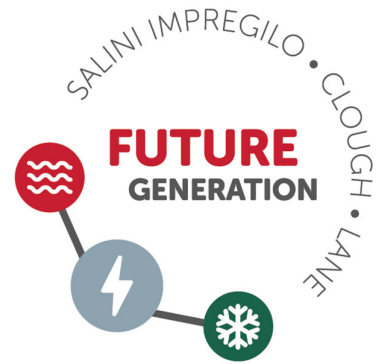
### Notes:

FGJV will obtain ongoing reporting from ICN on a regular basis.

FGJV will review all registrations, noting that any incomplete registration will be excluded from consideration.

Further involvement may range from a request for a follow up meeting; request to prequalify, through to request for tender.

Submitting a registration of interest does not guarantee that the supplier will be selected for prequalification or tender opportunities.



S2-FGJV-TT-SOW- XXX Rev. A

**Future Generation JV – Snowy 2.0  
Job Description – Segment Transportation SOW**

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Document Revision Table		
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## 1.0 PROJECT DESCRIPTION

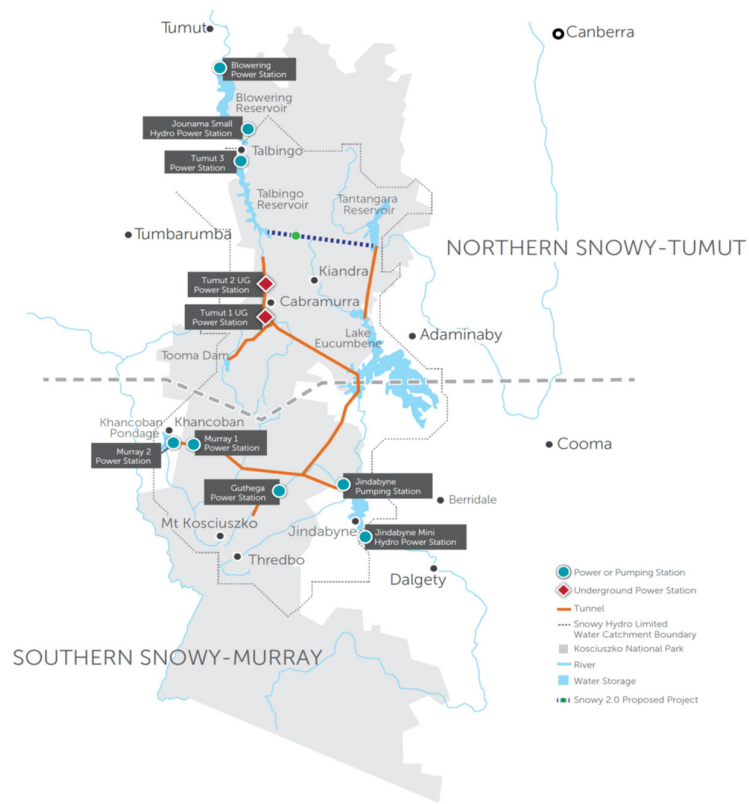
Salini Impregilo, Clough and Lane have formed Future Generation Joint Venture (the Contractor) to provide the EPC package for SHL on the Snowy 2.0 Project (the Project).

The Project is a pumped hydro project that will increase the generation capacity of the Snowy Mountains Scheme by up to 2,000MW and at full capacity will provide approximately 350,000MW/h of energy storage. The project includes all activities associated with the requirements for the Snowy 2.0 Pumped Hydro-electric Scheme.

Intake and outlet structures will be built at both Tantangara and Talbingo Reservoirs, which are in the Kosciusko National Park (KNP) in southern NSW. Approximately 27km of concrete lined tunnels will be constructed to link the two reservoirs and a further 20km of tunnels will be required to support the facility. The power station complex will be located almost one-kilometre underground.

The Project will deliver one of the largest pumped hydro schemes in the world and underscores the importance of the Snowy Scheme's role in the National Electricity Market (NEM).

Future Generation was conceived to deliver an integrated engineering, procurement, and construction management service for the Project. The joint venture is backed by the combined experience of Salini Impregilo, Clough and Lane, through their experience in the infrastructure, mineral, oil and gas sectors throughout Australia and the world.



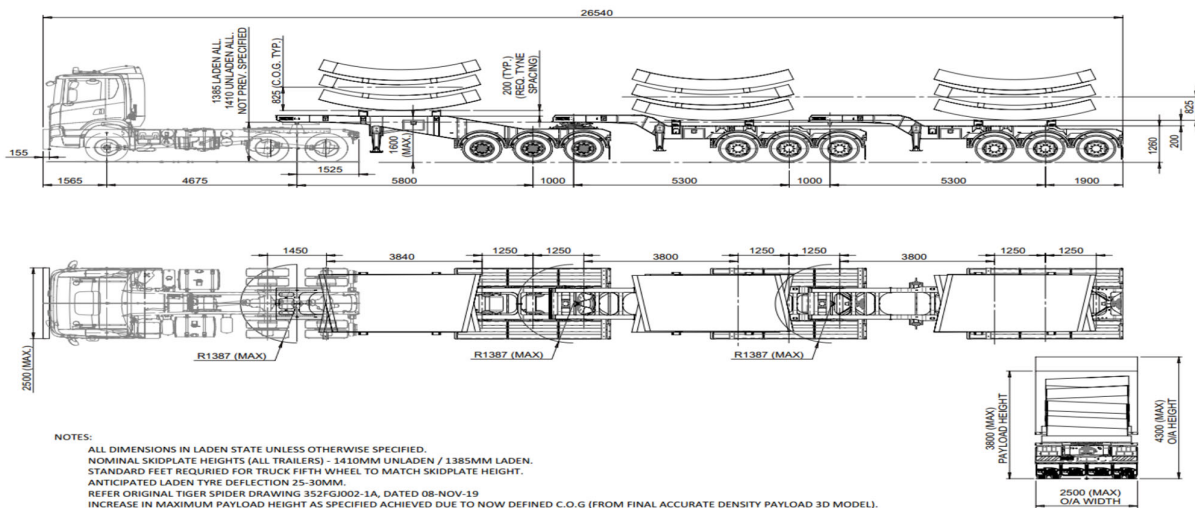
**Figure 1 - Project Layout**

## 2.0 SUBCONTRACTOR SCOPE OF WORKS

### 2.1 Scope Brief

Future Generation Joint Venture (FGJV) would like to engage a transport contractor on a personnel labour hire / dry hire agreement to manage the delivery of the Oversize Overmass (OSOM) precast concrete tunnel segments from the point of manufacture at the Polo Flat segment factory in Cooma NSW to the installation site locations at Lobs Hole, Tantangara, Marica & Talbingo in the KNP.

These sections will be delivered using FGJV's (PBS) performance-based vehicle fleet of Scania G 500 A 6x6 HZ prime movers (16 in total) and purpose-built B-triple trailers (42 in total). There are 130,500 individual concrete segments weighing 6.5t each (2.6cu in of concrete) which make 14500 tunnel rings in total. This operation will be running 24/7 and is estimated to take approximately 3.5 years.





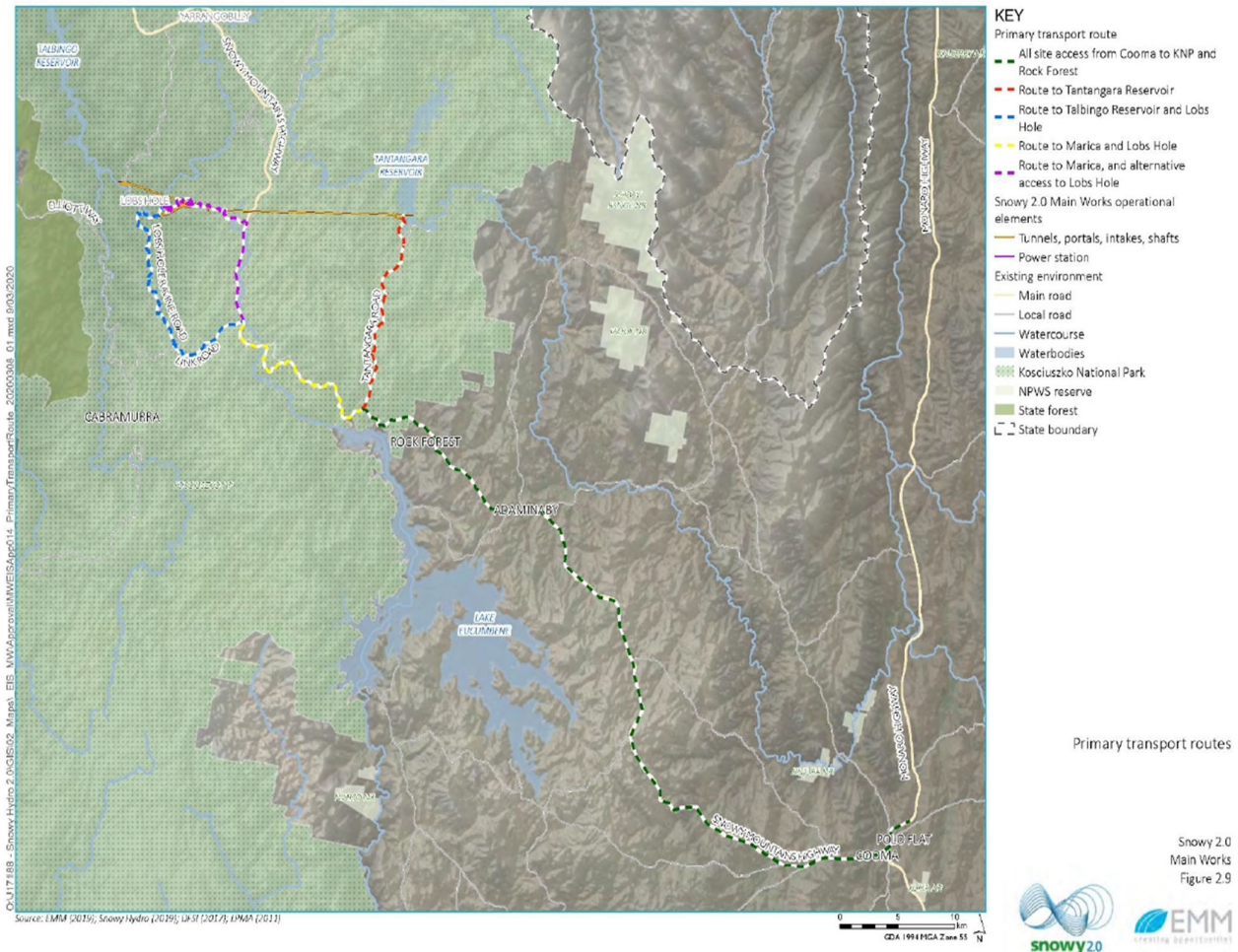




**SCANIA G 500 A6x6HZ**



<b>General</b>	
<b>Type</b>	
Wheel configuration	6x6
Chassis height	High
Steering wheel position	right hand
<b>Dimensions</b>	
Chassis width	2500 mm
Axle distance	3850 mm
Dimension JA/BEP L020 (Bodywork Exchange Parameters)	2225 mm
<b>Weights</b>	
GTW technical	16000 kg
<b>Engine</b>	
<b>Engine</b>	
Fuel	Diesel
Engine stroke volume	13 litres
Emission level	Euro 6
Engine type	DC13 165 500 hp Euro 6 /Japan Emission 2016



Polo Flat segment factory has a building for the casting and curing of the segments, uncovered storage areas for raw materials and segments, vehicle parking areas and associated offices and workshops.

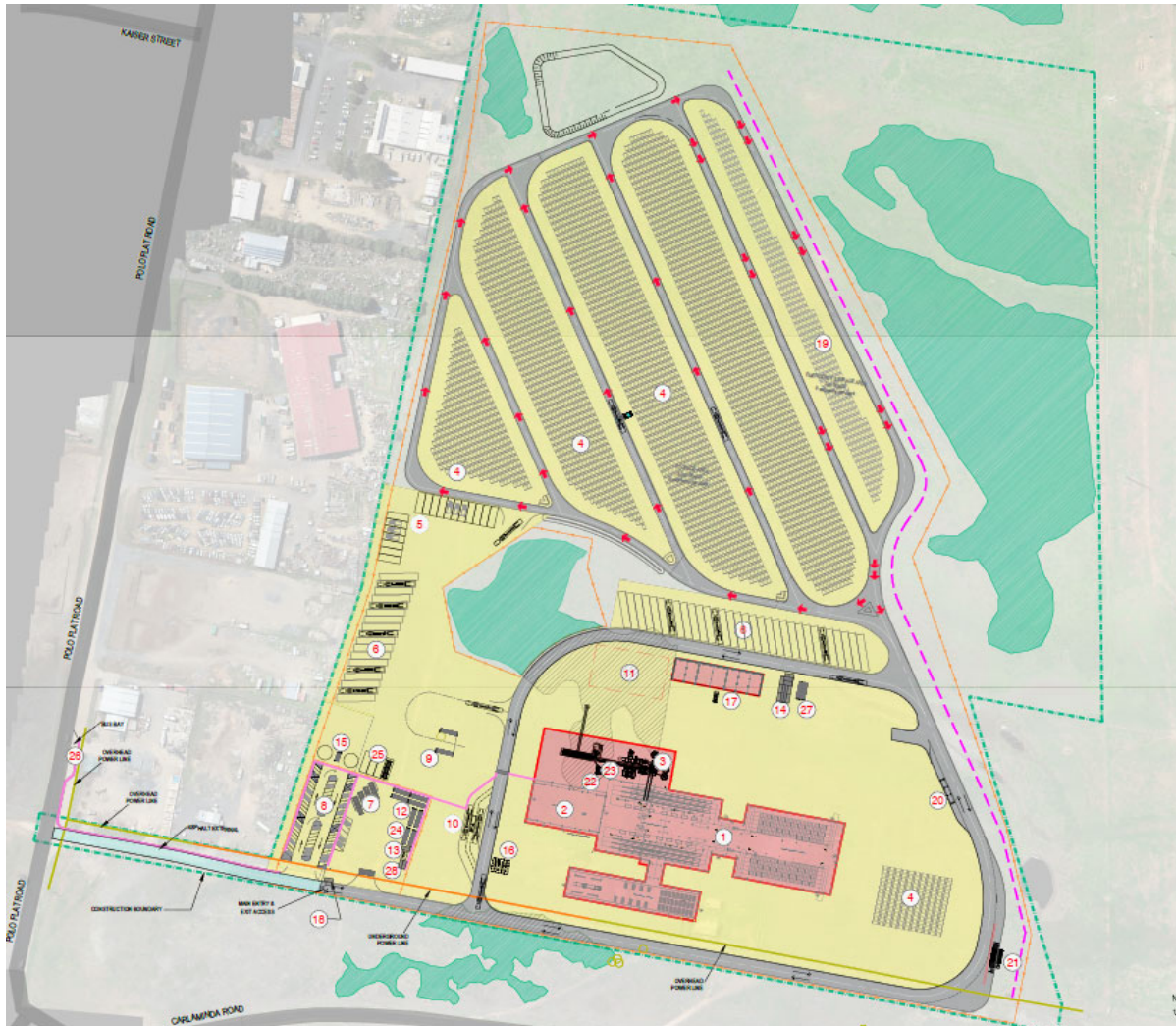
Material inputs to produce the segments will include, but not be limited to, aggregates, sand, cement, and rebar steel. Completed segments will be transported to the TBM launch sites for Exploratory Works and Main Works within Kosciuszko National Park.

The Concrete Batching Plant (CBP) and Precast Building (which contains a casting room and curing chamber) will be located at the southern end of the site. Open storage areas for segments will be located to the north of the building on the northern part of the site.

Site Offices and workshops are in the south-western corner of the Site.

Vehicle ingress and egress to the Site shall be provided through a new access road which will connect to Polo Flat Road. The access road will be constructed within an existing road reserve on the southern boundary of the site.

Polo Flat Segment Factory



Location – Polo Flat road & Carlaminda road road Cooma NSW.

<b>Delivery Route</b>
Polo Flat Road to Monaro Highway B23
Monaro Highway B23 to Snowy Mountains Highway B72
Snowy Mountains Highway B72 through Adaminaby to Tantangara road.
Snowy Mountains Highway B72 to link Load KNP.
Link Road KNP to Ravine road Lobs Hole
Snowy Mountains Highway B72 to Marica.

Figure 1: Route from Polo Flat Rd To Monaro Highway (B23)

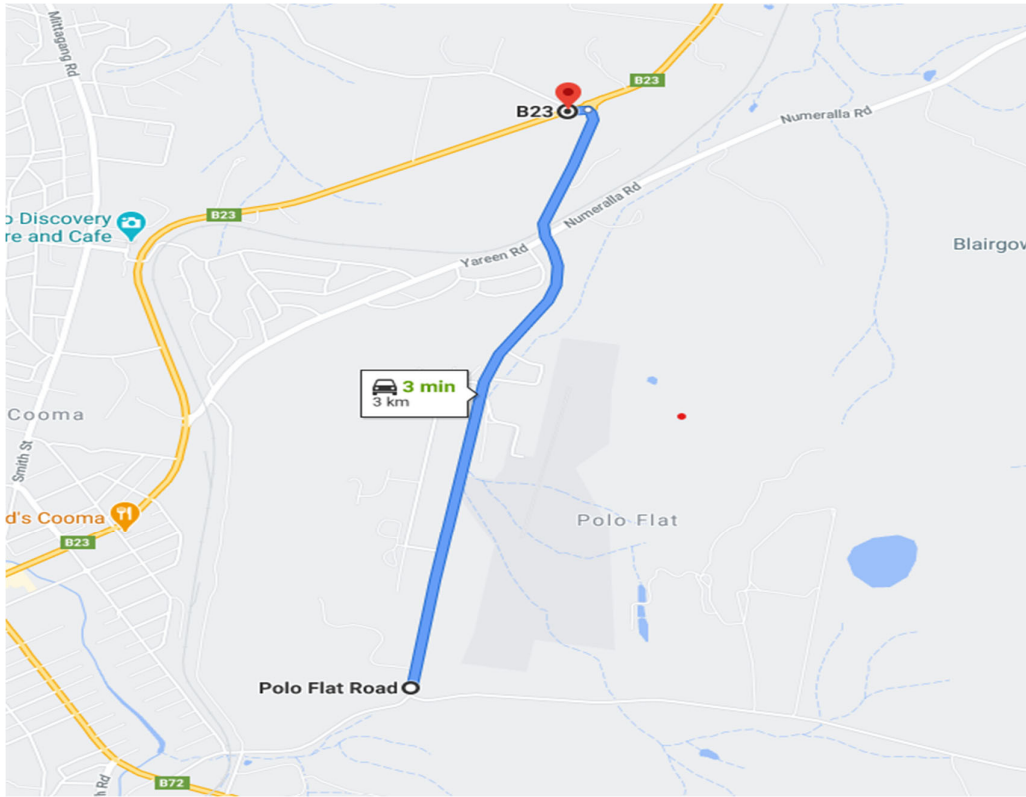


Figure 2: Route from Monaro Highway (B23) To Snowy Mountains Highway (B72)

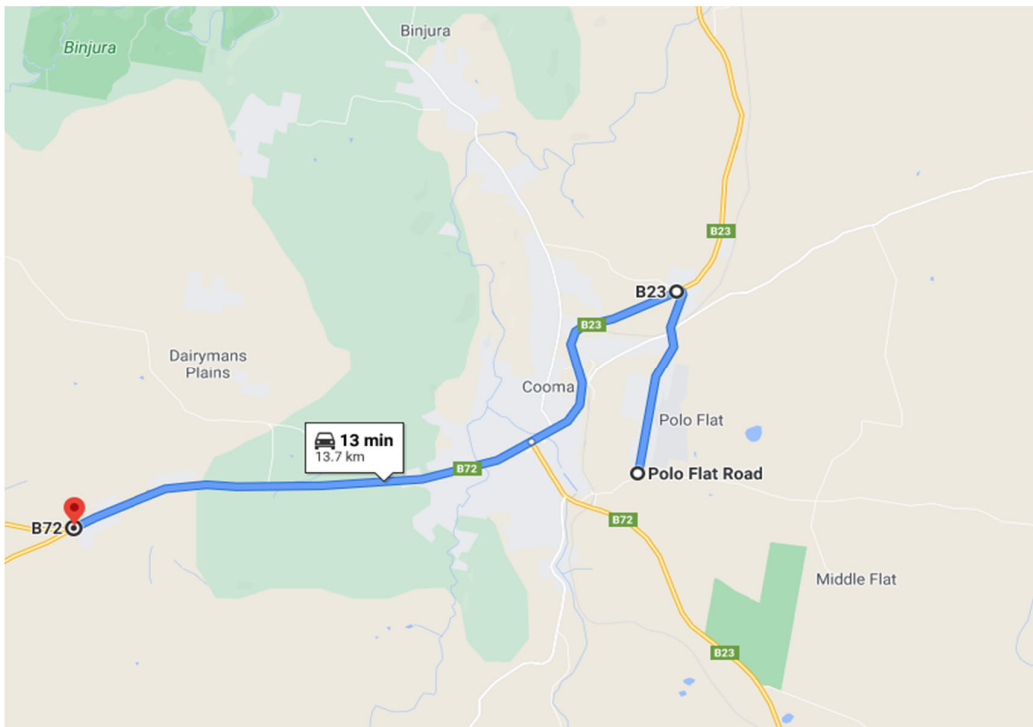
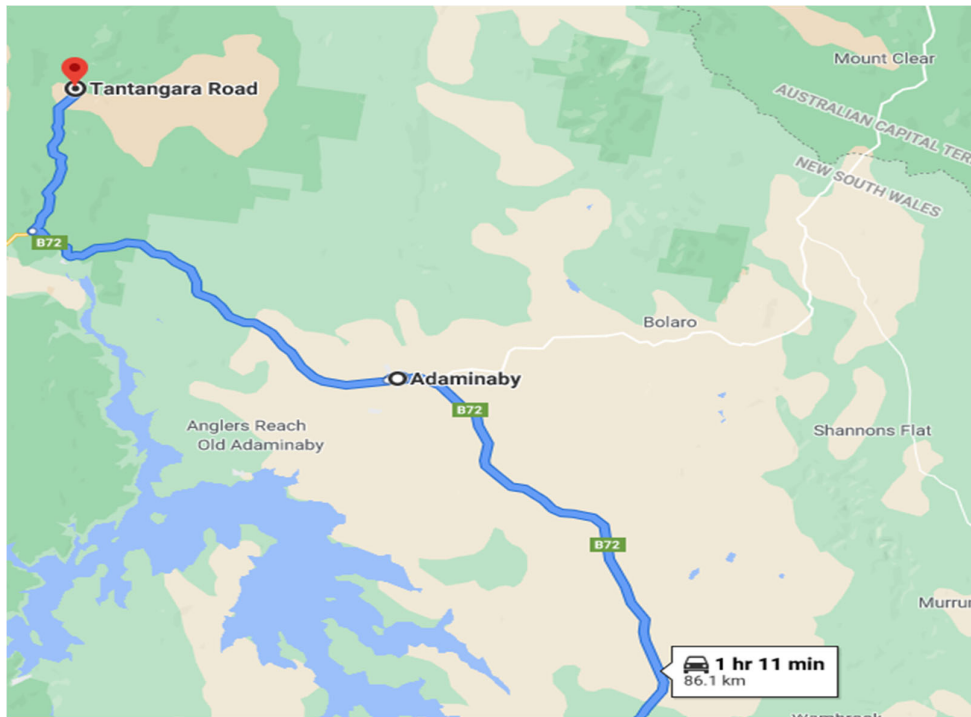
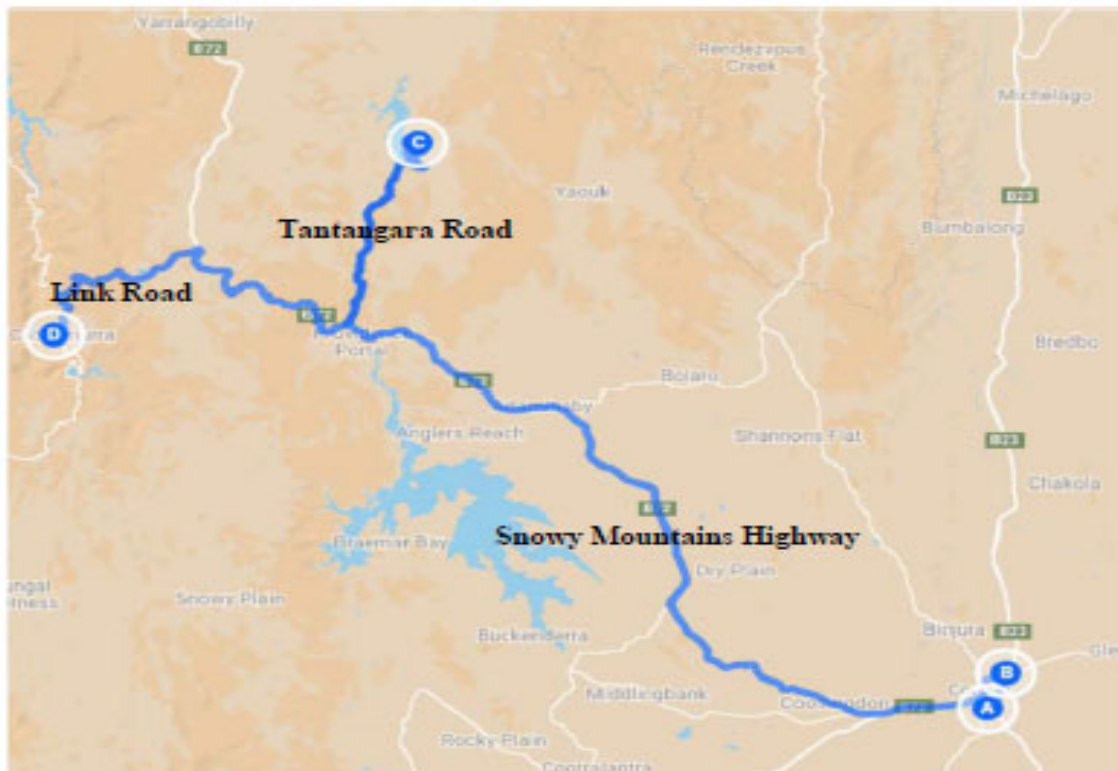


Figure 3. Route from Monaro Highway to Tantangara.



### Heavy Vehicle Staging Areas.

FGJV will have 2 heavy vehicle staging areas between Cooma and the site locations in the KNP. The staging areas will include large hardstand sealed yards with toilets, crib facilities, security gatehouse, and wheel wash units. Staging area 1, (Rock Forrest) is located approximately 13km past Adaminaby on the Snowy Mountains Highway and will be used as a staging area for heavy vehicles in the case of site closures, road closures, accidents, incidents and or heavy weather events. Staging area 2 (Ravine Road Interchange) is located on Ravine Road in the KNP. This will be used as a heavy vehicle staging area, bus interchange and security gatehouse.



## 2.2 Description of Scope and deliverables

The Subcontractor is required to submit its best proposal in a detailed schedule of rates for the execution of the following scope of work:

- To provide a suitably qualified team of skilled personnel in sufficient quantity, to carry out the 24 hour, 7 day a week concrete segment delivery operation safely, from the Polo Flat segment factory to the site locations at Tantangara, Lobs hole, Marica & Talbingo which will include truck drivers, schedulers & management staff.
- Safely & efficiently coordinate and schedule the segment delivery operations in consultation with the dispatch team from Polo Flat Segment Factory to site in accordance with National Heavy Vehicle Regulator (NHVR) Mass Management System standards, the relevant FGJV Transport management plans, Standard operating procedures as well as state and government legislation listed in this document.
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- To explain in detail how the subcontractor manages their staff training qualifications, driver infringements and NCR's.
- To explain how they intend to operate safely in the remote alpine conditions to avoid incident, equipment damage and segment damage which includes methodology around specialized load restraint.
- To attend Provide a detailed operational weekly lookahead as well as a weekly & monthly operational report to FGJV management as requested.
- To comply with all relevant FGJV Management plans, Standard operating procedures listed in this document.
- To comply with FGJV's (COR) Chain of Responsibility procedure and in accordance with (HVNL) Heavy Vehicle National Law.
- To comply with all state & national government legislation and guidelines listed in this document.

To provide FGJV with an overview on what the subcontractor thinks they may require in relation to personnel, facilities, supplies, equipment, scheduling tools & additional training to complete the delivery operation safely, without incident or delays and on budget.

### 2.3 Detail of Government Legislation

The subcontractor is required to comply with the following relevant transport management legislation:

<b>GOVERNMENT LEGISLATION</b>
<i>Heavy Vehicle national law act 2012 (QLD)</i>
<i>Heavy Vehicle Fatigue management national regulation (QLD)</i>
<i>Heavy vehicle (General national regulation)</i>
<i>Heavy vehicle (Mass, dimension and loading) national regulation</i>
<i>Heavy Vehicle (vehicle standards) National regulation</i>
<i>Environmental planning and assessment regulation 2000 (EP&amp;A Regulation).</i>
<i>Roads Act 1993</i>
<i>Dangerous Goods (Road and rail transport) act 2008</i>
<i>Road transport Act 2013</i>
<i>Transport Administration Act 2013</i>
<i>Road Rules 2014</i>
<i>National Parks and Wildlife Act 1974 (NPW Act)</i>
<i>Protection of the Environment operations Act 1997</i>
<i>Australian code for the transport of Dangerous Goods by Road and Rail, Edition 7.5</i>

### 2.4 Detail of Guidelines

The subcontractor will comply with and consult with the following guidelines:

<b>GUIDELINES</b>
Roads and Maritime Services (RMS) QA Specification G10 – Traffic Management.
RMS Traffic control at worksites manual (Version 56, 2018)
Roads occupancy manual (Roads and maritime services RMS) 2015
Additional access conditions Oversize and Overmass heavy vehicles and loads (RMS, May 2019)
Australian Standards 1742 parts 1-14 Manual of uniform traffic control devices.
Australian Standards 1742. 3-2009 Traffic control devices for works on roads.
AGTM 02-08 Guide to traffic management part 2: Traffic Theory 2015
AGTM 06-07 Guide to traffic management part 6: Intersections and crossings – General 2013.
AGRD 04-09 Guide to road design Part 4: Intersections and crossings – General, 2009.
AGPT05-11 Guide to pavement technology Part 5 Pavement evaluation and treatment Design
NHVR Guidelines to Mass Management
NHVR Guidelines to Maintenance Management



## 2.5 Detail of Reference Documents

GENERAL	
Document Number	Document Title
S2-FGJV-ENV-PLN-0022	Environmental Management Strategy
S2-FGJV-LOG-PLN-0006	Traffic Management Plan
S2-FGJV-HSA-PLN-0003	Emergency Plan (Bushfire)
S2-FGJV-ENV-PLN-0039	Worker Recreation Management Plan
S2-FGJV-SA-PLN-0002	Emergency Response Management Plan
S2-FGJV-QUA-PLN-0001	Health and Safety Management Plan
S2-FGJV-HSA-PLN-0005	Security Management Plan
S2-FGJV-QA-PLN-0001	Quality Management Plan
S2-FGJV-PLT-PRO-0001	Plant & Equipment Management Plan
S2-MON-TP-TRA-PRO-001	SOP- B Triple Operations
S2-FGJV-HAS-PLN-0015	Fatigue Management Plan
S2-MON-TP-TRA-PRO-003	SOP-Heavy Vehicle Salvage & recovery

## 3.0 PLANNING ACTIVITY

The Works are required to be performed against the following preliminary dates and duration, which will be confirmed once an agreement has been reached:

- **Start Date:** 01/04/2021.
- **Finish Date:** 01/01/2024.
- **Total Duration:** 1005 Days

## 4.0 BID DELIVERABLES

### 4.1 Tender Submission

Tenderers shall provide the following information.

- 1) Company Details.
- 2) Revised and detailed bill of quantities.
- 3) Revised and detailed program of work.
- 4) Commercial offer.
- 5) Inclusions & Exclusions.
- 6) Updated responsibility matrix (refer to Appendix B)
- 7) Organisation chart for the Project including CV.
- 8) Detailed list of machinery if required.
- 9) Hourly rate for variations (machinery & personnel).
- 10) Provide Work Pack(s) and Method Statement(s) that describe the job to be performed.

## 5.0 DEVIATIONS & CLARIFICATIONS

If Subcontractor seeks any relaxation waiver or query of any requirement within this Scope of Work, they must complete a Technical Deviations List.

Subcontractor must clearly identify all elements of the proposed relaxation, waiver, or query in accordance with any applicable part of this SOW and shall detail any resulting technical, commercial and/or schedule impact.

If not otherwise stated, by submitting a bid, the Subcontractor confirms it is compliant with the conditions of this document and the ones which reference is made.

## 6.0 HEALTH, SAFETY & ENVIRONMENT

Subcontractor shall comply with all Safety and Environmental Management requirements for the Project. Site Specific Environmental Management Plans will be prepared by FGJV and approved by the NSW Department of Planning, Industry and Environment (DPIE). The subcontractor must comply with these plans once approved by DPIE.

All vehicles need to be fitted with In Vehicle Monitoring System, as per FGJV requirements.

Attend weekly coordination meeting in relation to Health, Safety and Environmental.

Incident reporting within the FGJV timeline requirements to the FGJV Supervisor and HSE Advisor.

Weekly reporting of HSE activities on the FGJV reporting template.

Work under the FGJV HSSE plans, work instructions, procedures and PTW requirements for the project.

Have trained, experienced and competent HSE personnel at the regulatory requirements for high-risk construction works of 1:50 on site.

Submit all SWMS/JHA to the FGJV Site HSE Manager for review and approval prior to the start of works.

## 7.0 RISK MANAGEMENT

Subcontractor must prepare a risk management plan that complies with ISO 31000:2018 Risk management principles and guidelines and with FGJV Risk Management Assessment Framework.

The Subcontractor shall consider different sources of risks in the risk assessments but not limited to such as Health and Safety, Environmental, Quality, Labour shortage, Access Issues, Reputation, Cost, Planning Issues, Natural Disasters, Construction issues etc.

Subcontractors must document the identified risks and their risk mitigations into a risk register and review them on a regular basis.

Subcontractor shall identify a risk representative within its site who will be responsible to review these risks on a regular basis.

## 8.0 QUALITY SYSTEM & INSPECTION

Subcontractor shall be responsible for the performance of all quality control and acceptance testing as specified under the Contract, including the provision of suitably qualified personnel, testing equipment and facilities.

- Subcontractor is required to comply with FGJV quality management system in place in compliance with ISO 9001 standard.
- Activities cannot be commenced without FGJV QA/QC approval.
- The Subcontractor shall provide FGJV with all the documents and records related to the activities under their scope and directly linked with the construction/sub-construction packages certification.
- Subcontractor's PQP can be submitted to SHL for information by FGJV.
- The Subcontractor shall ensure a minimum 'quality' staffing to cover all the activities provided by the contract.
- The subcontractor shall provide and maintain at all stages of the work a Quality Control Register to identify the status of inspections, sampling and testing of the work, and all certificates. This register shall always be permanently updated as current and submitted for review to QA/QC at least on a bi-weekly basis, unless otherwise specified.
- Subcontractor shall attend a bi-weekly meeting with QA/QC to discuss the outcomes of the monthly quality report and all other issues raised within this period.

## 9.0 HR/IR E7 REPORTING REQUIREMENTS