



PLUTO LNG TRAIN 2

SR Number : 26221-100-SR5-C00Z-00001 (C091)

Title: Port Facility / Heavy Haul Route Modifications

1.0 GENERAL

The scope of work includes modification works inside and outside of the Port of Dampier which is managed by the Pilbara Port Authority (PPA), required for safe transportation of the Pluto Train 2 modules from the QUBE facility to the Pluto Project site. The ocean vessel will unload THE modules (weight up to 4500 Tons with dimension 68m L x 30m W, 32m H) at QUBE Dampier facility from where the modules will be transported on Self-Propelled Modular Transporters (SPMTs) to the site. Refer to Figure 1.

2.0 SCOPE OF WORK

SUBCONTRACTOR is required to perform modification works which include but not limited to the following:

- Widening of the roads by removing materials from both sides of the road in some locations or by adding fill material in other locations.

In some locations, the road will be widened by removal of rock and material from the side of the road. It is estimated that approx. 2-3 meters of rock and material is required to be removed from the side of the road.

In other locations the side of the road will be widened by adding fill material at one side of the road to obtain 2.5 meters of extra width of road. It is estimated that approx. 1,200 cubic meters of structural fill material are required to complete this task. SUBCONTRACTOR is required to install structural fill material required to widen the road as per Project, PPA and Development Western Australia (DWA) specifications.

- Leveling/grading the road in some identified locations.

The access ramp to QUBE facility has a slope of 8% which is compatible with the transport arrangement proposed but the transition from the horizontal plane of the wharf to the access ramp is too extreme for the transport arrangements planned. SUBCONTRACTOR is to fill where required to allow movement of the SPMTs through this gradient change. The SUBCONTRACTOR will be required to install approx. 1,000 cubic meters of structural fill material in this area.

- Relocation of existing transformer and adjacent structures

The electrical transformer and the adjacent structure are obstacles for the movement of the SPMTs and may be removed and relocated to an approved area. CONTRACTOR will

obtain approval from PPA because this transformer supply power to the port and wharf area. SUBCONTRACTOR will be required to prepare an isolation plan to disconnect the transformer and safely isolate the cables prior to commencement of the work. Additionally, an approved lifting plan will be obtained prior to lifting the transformer and the adjacent structure. Some minor civil works will be performed to level the area after the removal of the transformer and the adjacent structure, and to remove the gravel at the opposite side of the road.

- Temporary removal of existing PPA security gate and adjacent fencing to be able to pass the modules. This involves installing temporary fencing to maintain security that will be approved by PPA.

SUBCONTRACTOR is required to remove the port security gate and adjacent fence. The gate is designed to be easily removed in the case of a big load entering or leaving the port. The U posts holding the gates are bolted and can be removed. CONTRACTOR will acquire approval from PPA and an alternate security plan in place.

- Temporary removal of other obstacles along the haul road and re-installation at the end of the module transport program (e.g. fences at ammonia pipe crossings, removal of traffic signs, lighting poles, Armco barriers and other barriers at various locations of the route).

On the ammonia pipe crossings, SUBCONTRACTOR is required to remove fence and fenders at both sides of the road and add extra fill material at both sides of the road to achieve approximately 1 meter of extra road width. It is estimated that approx. 1,800 cubic meters (each crossing) of structural fill material are required to complete this task.

- The above items may include engineering design, securing permits , and supply of materials to be done by the SUBCONTRACTOR.
- The fill material and execution of the work will be as per related approved Project Specifications, Regulatory requirements, and inspected by the CONTRACTOR Civil Field Engineer upon completion.

SUBCONTRACTOR will be required to provide all necessary tools, equipment and materials required to complete the scope of work.

SUBCONTRACTOR may be required to perform engineering design and securing other work permits as directed by CONTRACTOR.

CONTRACTOR will attain from local authorities all the necessary permits (e.g. works approvals, development approvals) required to complete the scope.

CONTRACOTR will ensure that all required permits from Woodside, PPA, DWA, and City of Karratha are obtained prior to executing the work defined in this document.

CONTRACTOR will ensure all relevant approvals within PPA vested areas are obtained including Development and Construction Approvals, as well as heritage and vegetation clearing approvals, as required.

3.0 SCHEDULE

- Award January 2023
- Modification Work June to November 2023



Figure 1 – Heavy Haul Transport Route