Australian Gas Networks

Attachment 3

APA – Natural Gas to Mount Barker Headworks Summary Report

June 2018

Report
Natural Gas to Mt Barker - Headworks Summary

Revision 3.0

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1 INTRODUCTION

1.1 Project Background

Throughout the second half of 2015, APA Group, on behalf of Australian Gas Networks Ltd (AGN) commenced investigations into the feasibility of reticulating gas in the Mount Barker region, and has undertaken concept planning work to assess the technical and financial feasibility of extending its natural gas network to the area of Mount Barker and surrounds.

The concept work undertook a detailed desktop analysis of a number of routes for a transmission pipeline to Mt Barker from both Adelaide and Murray Bridge; selected a preferred route to use in a high level screening economic analysis; and selected two potential routes (Routes E and F) to proceed to the Pre-FEED Phase of the project.

The sections below detail the Pre-FEED assessment of Routes E and F, and the ultimate selection of Route G, a modified alignment of Route F that commences at the Riverland Pipeline System (RLP).

1.1.1 Pre-FEED Phase

The Pre-FEED Phase was undertaken between July and November 2016, and its scope included:

- Route Optimisation;
  - Developing potential locations for a city gate connection to the SEA Gas Pipeline,
  - Determine an end point location for a city gate at Mt Barker,
  - Based on the preferred location for the new SEA Gas City Gate, review of Routes from the Concept stage, and any other options, and develop a preferred route to Mt Barker.
- Determine the potential gas demand for the following locations;
  - Monarto South,
  - Callington,
  - Kanmantoo,
  - Littlehampton Bricks,
  - Developers of new subdivisions within Mt Barker.
- Develop a strategy for addressing issues associated with the current LPG reticulations;
- Firm up design issues such as;
  - Initial and potential future demand,
  - High level design parameters for the pipeline and above ground facilities,
  - Location of intermediate offtake points along the pipeline for future connections
- Conduct a preliminary risk assessment to identify potential threats to cost and schedule;
- Engagement with key stakeholders, including DSD, ESCOSA, Mt Barker council and developers of new subdivision estates in Mt Barker;
- Defining the FEED Phase scope, cost, schedule, the preferred method of delivery, governance structure and project team.

1.1.2 Pre-FEED Route Refinement

The Concept Route Options Study was a high level desktop study to, amongst other things, define two potential route options that could be progressed to field studies during a Pre-FEED Phase which would then select one to go forward into a full FEED study.

High level analysis of capital cost, length, terrain, design and constructability, operational issues, environment and community issues, and future loads found it was preferable to construct an extension west from Murray Bridge, rather than south-east from Adelaide. The two routes selected were nominated as Routes E and F.

Route E commenced north of Murray Bridge at a Main Line Valve location on the SEA Gas Pipeline, and provided for gas to be sourced from the SEA Gas Pipeline via a new metering station.

Route F commenced within the Murray Bridge township, again via a new meter station connection the SEA Gas Pipeline, but required a hot tap onto the SEA Gas Pipeline as there is no existing connection available at this location.

Early in the Pre-FEED work, a third route option was identified, termed Route G. Route G commences between Routes E and F, on the northern fringe of Murray Bridge, connecting into the southern end of the RLP. It also passes through Monarto South before joining the Route E alignment east of the South-Eastern Freeway. This route had a number of advantages over the other two, the main one being that connecting into the RLP, enables forecast demand in the early years of the project to be fulfilled at relatively low cost, and additional security of supply for the RLP is developed by adding significant linepack volumes. An option to connect to SEA Gas in future years is maintained in the event of high growth in Murray Bridge or Mount Barker

Preliminary field inspections of Routes E and G (Route F not being proceeded with in favour of Route G) were undertaken to ground truth major constraints, and undertake preliminary desktop geotechnical, environmental, cultural heritage and landowner related studies. The objective of this work was to identify any road blocks with routes E and G, and refine a preferred route for the FEED Phase. While a specialist land consultant was used to advise on the routes from a landowner perspective, no contact with landowners was made during this phase. An experienced construction adviser also participated in the field inspections to advise on constructability issues through the topographically challenging western half of the routes.

A number of sub-options were examined for Route G, both north and south of the Monarto Zoo, which represented a major constraint to this route. The Pre-FEED finally selected route G.7, which was then approved as the preferred route for the FEED Phase.

1.1.3 FEED Phase Approval

The FEED Phase was approved to commence by the project client, AGN, on 17th November 2016.

1.2 Current Project Status

At the end of November 2017, the FEED project is approximately 54% complete, with the transmission pipeline Engineering and Design scope 71% complete and Procurement scope 61% complete.

1.2.1 Transmission Pipeline

The status of the Pipeline is:

- A Petroleum Survey Licence PSL 37 was granted to Australian Gas Networks Limited on 30 November 2016. It has recently been renewed for another 12 months;

- Notices of Entry have been issued to landowners potentially affected by the pipeline route;
- The pipeline alignment has been defined with enough detail to commit to a detailed alignment survey to finalise the draft alignment, and use this to commence environmental and cultural heritage surveys;
- Engineering design for the facilities was completed to IFT status at the end of May;
- Purchasing activities have seen most packages issued, returned and/or had a preferred supplier selected. There are as a minor number of packages still to be issued for pricing.
- Procurement activities, being the tenders for Linepipe, Pipeline Construction and Facilities Fabrication (Skids) and Installation have status as follows:
  - Linepipe – the FRQ package is ready to be issued; tender list is agreed, and Confidentiality Agreements in place,
  - Pipeline and Facilities – Commercial Terms Sheets have been prepared, with the intention of providing AGN the opportunity to comment on these prior to finalising the Agreement documents to be issued with the Tenders.

See Section 2 for further details.

1.3 Purpose of this Report

This Report is prepared to provide a summary of the headworks (transmission pipeline and reticulation trunk mains) components of the overall FEED project, to support the submission of the project by AGN to the Australian Energy Regulator.

1.4 FEED Scope

The overall objectives for the FEED Phase are to define the project, in as much detail as possible, for which capital expenditure will be sought from AGN, such that AGN has all relevant information to make a Final Investment Decision (FID).

The major elements of the FEED Phase are categorised as:

- Pipeline;
- Reticulation;
- Commercial and Marketing;
- Stakeholder Engagement.

This report only considers the pipeline and trunk reticulation components of the FEED, being the major headworks required on the project.[1]

1.4.1 Pipeline objectives

- Develop the design of the pipeline and facilities for tendering of fabrication, construction and major equipment and materials supply;
- Utilise the tendered prices and FEED work to update the accuracy of the cost estimate to approximately +/- 10%;
- Further identify major issues affecting the project, and resolve them to the extent possible;
- Achieve or have substantially advanced all regulatory approvals;

[1] Refer to AGN Business Case section 2.4.2 for a description of cost derivation for reticulation mains, meters and services

- Define and develop the implementation methodology and plan.

1.4.2 Reticulation objectives

- Plan and develop a cost estimate for the reticulation trunk main that will transport gas from the Mt Barker Delivery Station through the township to the new residential developments
- Take account of the need service the commercial centre of Mt Barker, in order to acquire as much commercial gas load as possible.

2 TRANSMISSION PIPELINE & FACILITIES

2.1 General Description and Design Basis

The transmission pipeline is a Class 600, DN 150 pipeline commencing at Murray Bridge and terminating at Mt Barker, South Australia.

A high level description of its design parameters is shown in Table 1 below.

Table 1 Pipeline Design Basis

Item	Parameter
General	
Design Life - Pipeline - Stations	60 years (TBC) 25 years (piping &equipment)
Maximum demand - Mt Barker -Monarto South - Kanmantoo	7,400 m^3/hr 1,100 m^3/hr 250 m^3/hr
Maximum demand ramp-up (m^3/hr) - Mt Barker	Yr1 - 420, Yr 5 – 2,000, Yr 10 – 3,800, Yr 20 – 6,150, Yr 30 - 7,400
- Monarto South	Yr 1 – 0, Yr 5 – 210, Yr 10 – 210, Yr 20 – 630 Yr 30 – 1,100
- Kanmantoo	Yr 1 – 0, Yr 5 to Yr 30 - 164
Pipeline	
Pressure rating	ANSI Class 600
MAOP	10.2 MPa
Minimum pressure at inlet to Mt	4,000 kPa

Item	Parameter
Barker delivery station	
Diameter	DN150
Wall thickness	5.56 mm, 7.11 mm
Material	API 5L, PSL2 X52
Coating	Dual layer FBE – 600 µm
Depth of Burial	R1, R2 900 mm normal 600mm rock Roads – 1200mm Water – 1200, 1500 Rail - 2000
Future connections / offtakes	Mainline size tee and buried valve at: SEA Gas, Monarto Rd Murray Bridge Monarto South, location TBC Kanmantoo, location TBC
Location Class (nominal)	R1, R2 Secondary location classes as identified during FEED
Design Temperature - max - min	Below ground , 60°C, Above ground, 65°C -10°C
Corrosion control	Impressed current system
Easement width	15m in private land
Stations	
Murray Bridge	
Facilities	Pig Launcher Compound size to allow for future metering and gas quality monitoring, and back flow prevention to Murray Bridge.
Outlet pressure - max - min	10,200 kPa 7,500 kPa

Item		Parameter
Valve for Potential SEA Gas Connection		
Facilities (High level - required for site selection)		Filtration, pressure regulation Gas heating only if required Telemetry and communications
Mainline Valve		
Valve		Typical mainline valve
Bypass		Above ground bypass
Main pipeline vent		Permanent vent located within the easement distant from the MLV
Mt Barker		
Facilities		Pig Receiver Filtration, metering, gas heating, pressure regulation, controls and control hut Provision of a flange and valve for a future long term strategic supply to Adelaide.
Inlet pressure	- min	4,000 kPa,
Outlet pressure	- max - min	420 kPa 250 kPa
Outlet temperature	- max - min	30 °C 2 °C
Monarto South and Kanmantoo Offtakes		
Facilities		Filtration, gas heating, pressure regulation, controls and control hut
Inlet pressure	- min	4,000 kPa
Outlet pressure	- max - min	420 kPa 250 kPa
Outlet temperature	- max - min	30 °C 2 °C

2.2 Pipeline

2.2.1 Pipeline Alignment

The Pre-FEED alignment G.7 has been further developed during the FEED phase and is currently defined as Rev 0.3. This is 39.7 km in length, passing to the north and west of the Monarto Zoo, then along the Old Princes Hwy, Highland Road and across country to the northern fringe of Kanmantoo.

From there it proceeds generally west; with some deviations from a straight line between Dawsley Creek and west of the Adelaide-Melbourne rail line to accommodate landowner and topographical constraints.

APPENDIX A: shows this alignment pictorially.

2.2.2 Status of Alignment Development

The alignment topography and geotechnical characteristics are generally described below:

- The eastern section is generally flat to gently undulating farming country, with isolated outcrops of rock. (20 km)
- The western section, from KP 20 is more into the eastern Adelaide Hills, with steep slopes and much rock (20 km). Approximately 10 km of drill and blast rock trenching is allowed for in the cost estimate.
- An initial alignment inspection has been undertaken and early construction planning undertaken by an experienced pipeline construction consultant. This has provided a detailed estimate (at FEED stage) of likely pipeline contractor construction costs, which has been used in the interim FEED cost estimate (refer Section 3.1). This assessment has also included a drill and blast cost estimate from an experienced Australian drill and blast contractor.

Alignment Status is as follows:

- Landowner discussions have progressed to the point of verbal/general acceptance of the pipeline route without any firm commitments made by any landowner. The next step is, following detailed alignment, environmental and CH surveys, to obtain written approval to the surveyed and final alignment, including the construction footprint, by way of an option agreement with each landowner;
- The construction footprint, allowing for vehicle access, logistics and transport, and work spaces along the alignment has been partially complete. Particular emphasis has been given to the constrained western half, and this is particularly well defined. No to little consultation with landowners has occurred regarding specific construction techniques and/or lateral access to the pipeline ROW;
- The next activities will be Alignment survey, then geotechnical, environmental and cultural heritage surveys to develop a final FEED design alignment;
- Engineering design of the alignment will then follow with the AS 2885 Preliminary SMS following finalisation of the alignment.

2.3 Facilities

The facilities design status is as follows:

- Facilities will be installed at the following locations:
  - Murray Bridge – offtake connection to the Riverland pipeline System at Murray Bridge, pig launcher, provision for metering.

- Monarto South – offtake valve, pressure regulation and gas heating for supply to industrial customers
- Main line valve with pipeline vent
- Kanmantoo – small offtake, pressure regulation and gas heating for supply to 1 industrial and a small number of residential customers.
- Mt Barker – pipeline end point – city gate station with pressure regulation, metering and gas heating.
- SEA Gas Connection – offtake valve for future connection to the SEA Gas Pipeline (to be utilised dependent upon Murray Bridge and Mount Barker growth)

- The locations of all facilities (Murray Bridge, Monarto South, Kanmantoo and Mt Barker) have been defined, for FEED purposes – Appendix B shows these locations;
- Design of all disciplines apart from Civil and Structural, has been completed to IFT status, including HAZOP;
- 3D models completed to either 40% or 30% status.

2.4 Procurement

A range of procurement and purchasing packages have been prepared with the intention of issuing requests for pricing to the market, in order to obtain up to date pricing for major equipment and materials items, and also the major construction contracts.

2.4.1 Purchasing

For major equipment and materials items, where APA has a standard panel or stand-alone agreement with a range of suppliers, the Purchasing team issued requests for pricing to these suppliers, and then an evaluation was prepared jointly by Engineering and Purchasing to select a preferred supplier.

The major items in this category that have been issued to the market and pricing obtained were:

- Dry Gas Filters
- Water Bath Heaters
- Meters
- Control valves and regulators
- Main Line valve
- Hot tap fittings and services
- Actuated valves
- Manual valves

The intent is to use these prices in the detailed cost estimate for the pipeline as part of FEED completion. They have not been used in the interim FEED capital cost estimate, which was prepared as an update of the Pre-FEED estimate using the final preferred alignment and more accurate construction cost data.

2.4.2 Major Contracts

Three major items were selected to go out to specific tender, that is not using standard APA suppliers or panel. These are:

- Linepipe Supply;
- Pipeline Construction;

- Facility (skids) Fabrication and Installation.

These three contracts represent the majority of the capital expenditure for the transmission pipeline, and it was decided to run a full scale tender process for each. They have yet to be issued to suppliers and contractors for tender.

The major risk on this project is Rock, and the pipeline construction agreement places all rock risk with the contractor, which is APA's standard approach, and is also AGN's requirement.

2.5 Stakeholder Engagement

Appendix D provides a brief overview of the stakeholders, and engagement activities undertaken with them, from January 2017 up to this current point as part of the FEED for the Mt Barker Pipeline only. The FEED design of the pipeline is the major component of the overall NGTMB FEED project, and consequently represents the majority of stakeholder engagement activities undertaken.

The stakeholder engagement process was undertaken in the normal manner followed by APA in development of pipeline projects such as this, and is consistent with state legislation.

2.6 Remaining FEED Work

2.6.1 Access and Approvals

- Undertake detailed alignment survey to define the Rev 0.3 alignment on a metre-by-metre basis and allow for finalisation of a construction work area / footprint;
- Undertake specialist surveys (e.g. ecological, cultural heritage and geotechnical) on the detailed alignment;
- Undertake land valuations and finalise option and easement documentation
- Other elements of the Access and Approvals Scope, such as;
  - Cultural Heritage and Environmental Management Plan,
  - Native Title formal assessment,
  - Pipeline Licence application,

2.6.2 Engineering and Design

- Issue final purchasing packages and perform evaluations;
- Finalise the engineering design on the final approved alignment, including the AS 2885 Preliminary SMS;
- Finalise and prepare all deliverables associated with the tenders for the Pipeline construction and facilities fabrication and installation.

2.6.3 Procurement

The major Procurement remaining work is:

- Issue and evaluate the remaining packages not yet issued for pricing.
- Issue the Linepipe RFT following finalisation of the alignment;
- Assemble the packages for Pipeline Construction, Facilities Fabrication and Installation, and issue the RFT;

- Arrange site visits for each of the Pipeline Construction and Facilities Fabrication and Installation contracts during the tender period.

2.6.4 Cost Estimation

Undertake an updated capital cost estimate for the project, using all purchasing package responses and the finalised costs from the 3 major tenders.

This activity will be completed by Infrastructure Development project estimators, for whom pipeline capital cost estimation is a routine activity.

3 RETICULATION TRUNK MAINS

3.1 Mount Barker

3.1.1 Design Parameters

The major design parameters used for the Mt Barker reticulation trunk mains were:

- Gas demand details provided by Networks Commercial, showing the ramp up of gas demand at Mt Barker and the intermediate load centres of Kanmantoo and Monarto Sth.
- This demand translated to a gas flow rate at the 30 year planning horizon used, and interim years such as 10 and 20 years.
- Technical parameters such as the limitation on gas velocity
- Temperature limitations (maximum and minimum) on polyethylene pipe, resulting in certain lengths of steel pipe being specified at the outlet of the Mt Barker City Gate.

3.1.2 Design development and outcome

The design of trunk mains to service the development estates throughout the east, south and west of Mt Barker, as well as the CBD, was undertaken using APA's standard greenfields network design processes).

Five design scenarios were produced each comprising a combination of steel pipe downstream of the city gate, and various diameters of polyethylene pipe running to the various demand centres.

The preferred initial design is approximately 5 km of steel and polyethylene main along Bald Hills, Hartman, Sims and Paech Rds past the Aston Hills development to Glen Lea, and 3.2 km of polyethylene main from the corner of Bald Hills and Springs Rds to the Mt Barker CBD.

This design is preferred as it:

- optimises the trunk main design for the greater Mount Barker area, including existing customers in the CBD and new planned development areas
- minimises route constraints
- prioritises all development areas the same, and
- achieves lowest cost per km, while maintaining appropriate minimum pressures.

The cost estimate in Section 4 includes a further 5.4 km of trunk reticulation to service future residential developments in Mount Barker. This estimate is based on a review of possible alignments, forecast demand and existing benchmark domestic unit mainlaying costs.

3.2 Monarto South and Kanmantoo

The cost estimate in Section 4 includes approximately 10 km of trunk reticulation mains for Monarto South and Kanmantoo. These were designed based on a review of possible alignments, demand surveys and existing benchmark I&C unit mainlaying costs. The final designs, and costs, will be confirmed as part of the FEED finalisation.

3.3 Further work required

The next steps in defining the capital cost of the trunk mains in Mt Barker are:

- Field Survey of the proposed alignment
- Geotechnical survey of the selected alignment to define rock
- Tendering of selected alignment to determine accurate construction cost
- Cost estimate after tendering.

Costs for future Mount Barker, Monarto South and Kanmantoo trunk reticulation will be estimated based on the initial Mt Barker trunk reticulation tendered costs.

4 INTERIM FEED UPDATED CAPITAL COST ESTIMATE

An updated capital cost estimate was submitted to AGN which reflected the alignment selection and design work done up to March 2017.

4.1 Pipeline

The pipeline alignment had been firmed up in discussions with landowners, and constructability issues considered, to arrive at the current alignment, Revision 0.3 as described in Section 2.32.

The pipeline alignment length had increased considerably over the Pre-FEED length, with a resulting increase in pipeline cost.

The updated interim pipeline capital cost estimate also included a detailed assessment of the alignment by a pipeline construction consultant, to review and assess construction methodologies, estimate pipeline contractor costs, and determine a construction footprint based on access points and transport logistics.

4.2 Trunk Reticulation

The provisional alignments for the trunk main reticulation had been selected to service the growth areas to the south and west of the Mt Barker township, and to the CBD area.

Design work had confirmed the material and diameters for the Mt Barker trunk mains, allowing the initial Pre-FEED cost estimate to be updated to take account of both these factors.

Preliminary costs for trunk mains in Kanmantoo and Monarto South were based on standard I&C unit mainlaying rates, with a 20% contingency.

4.3 Interim Capital Cost Estimate

Table 2 below shows the overall updated project capital cost estimate presented to AGN, and shows an increase of $8.7 million over the Pre-FEED estimate which did not consider trunk reticulation requirements for Mount Barker future residential development, Monarto South and Kanmantoo.

Table 2 Updated Capital Cost Estimate* Presented to AGN, April 2017

	Total (Apr 17) $m	Total Pre-FEED $m	Change
Pipeline			
Land and Approvals	4.3	2.7	1.6
Materials	2.9	3.4	-0.5
Construction	11.8	9.8	2.0
Facilities	1.6	1.6	0.0
EPCM	2.8	2.3	0.5
Contingency (10.4%)	2.4	4.0	-1.6
Pipeline Total	**25.8**	**23.8**	**2.0**
- Offtake Facilities **	2.2	2.2	0.0
- Reticulation trunk mains			
• Mount Barker CBD & Glen Lea	4.4	1.2	3.2
• Monarto South***	1.6	-	1.6
• Kanmantoo***	0.9	-	0.9
• Mount Barker future estates***	1.0	-	1.0
TOTAL PROJECT COST	**35.9**	**27.2**	**8.7**

* Costs as at March 2017
** Facility costs include land purchase @ $0.1m / site, total $0.3m
*** Additional trunk reticulation was included in subsequent economic modelling compared to the headworks capex estimate of $34.4m provided in April 17

A fully detailed capital cost estimate will be prepared at the end of FEED, based on the firm materials and equipment pricing and the major pipe supply and construction tenders for both the pipeline and Mt Barker trunk reticulation. Trunk reticulation mains for Monarto South and Kanmantoo will be estimated based on the Mt Barker costs.

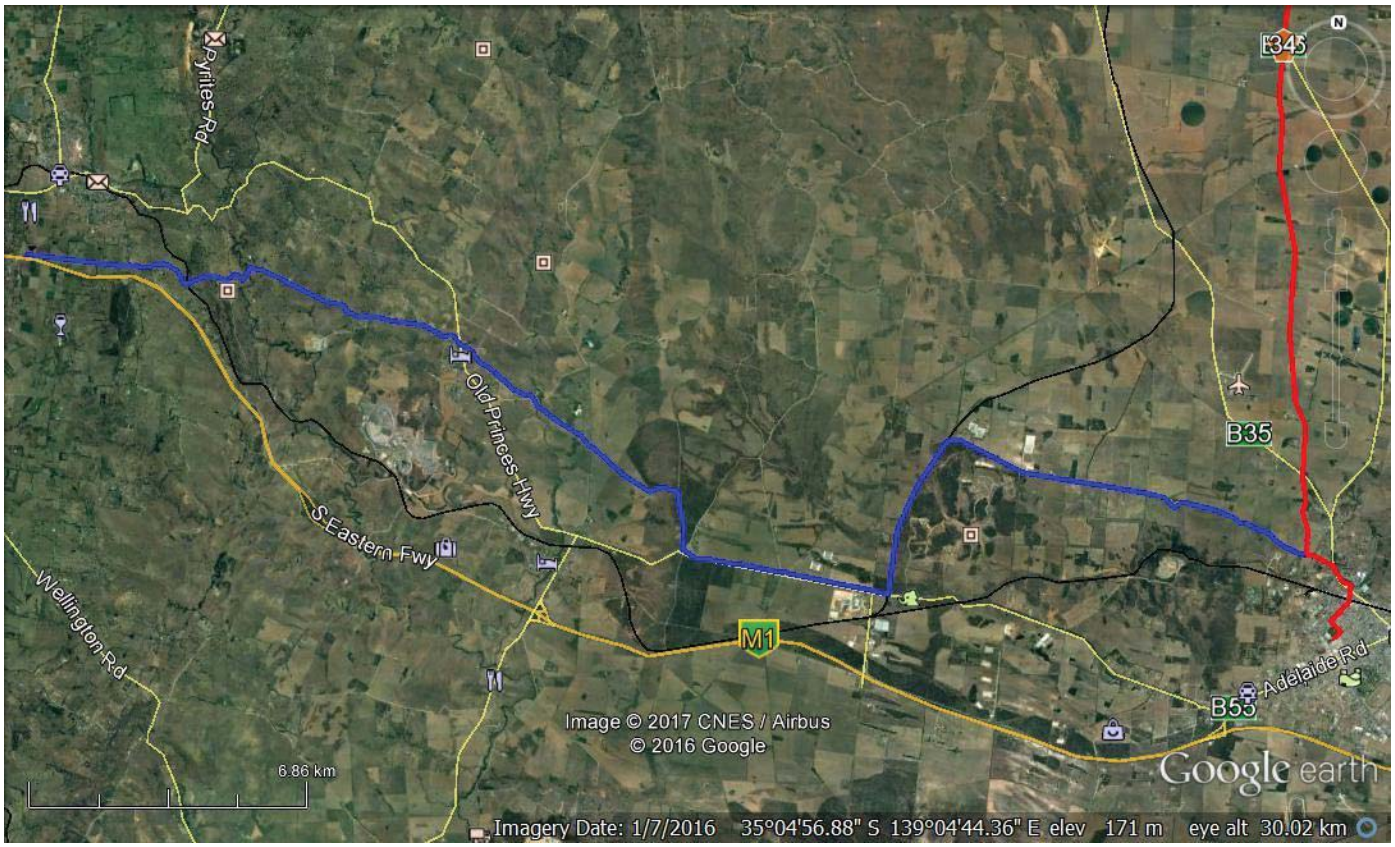
4.4 Operating Cost Estimate

As part of the economic modelling conducted to date, operational costs have also been estimated across the modelling horizon. These have been based on the recently completed Bundaberg Pipeline and include, inter alia:

- Routine operational and maintenance costs averaging $40,000 pa which includes items such as:
  - Pipeline patrols and easement vegetation maintenance
  - Management of third party works
  - DCVG surveys, coating and defect repairs and cathodic protection maintenance

  - Facilities and valve maintenance including replacement parts
  - Landowner liaison
  - Asset management and integrity management activities such as maintaining code compliance, auditing, DBYD fees etc, regulatory compliance activities
- Infrequent major operational activities at 10 or 20 year intervals such as:
  - Pipeline pigging every 10 years, and subsequent defect analysis.
  - Routine SIB capital expenditure such as meter and regulator replacement, E&I replacements (10 years) and line valve replacement (20 years)
- The costs of the infrequent and major expenditure items have been estimated as $592,000 in year 10 and $666,000 in year 20.

APPENDIX A: PIPELINE ALIGNMENT REV 0.3



APPENDIX B: FACILITIES LOCATION MAPS

Legend (applies to all maps)

	Pipeline alignment Rev 0.3
	Potential land purchase
	Potential facility compound

a) Murray Bridge

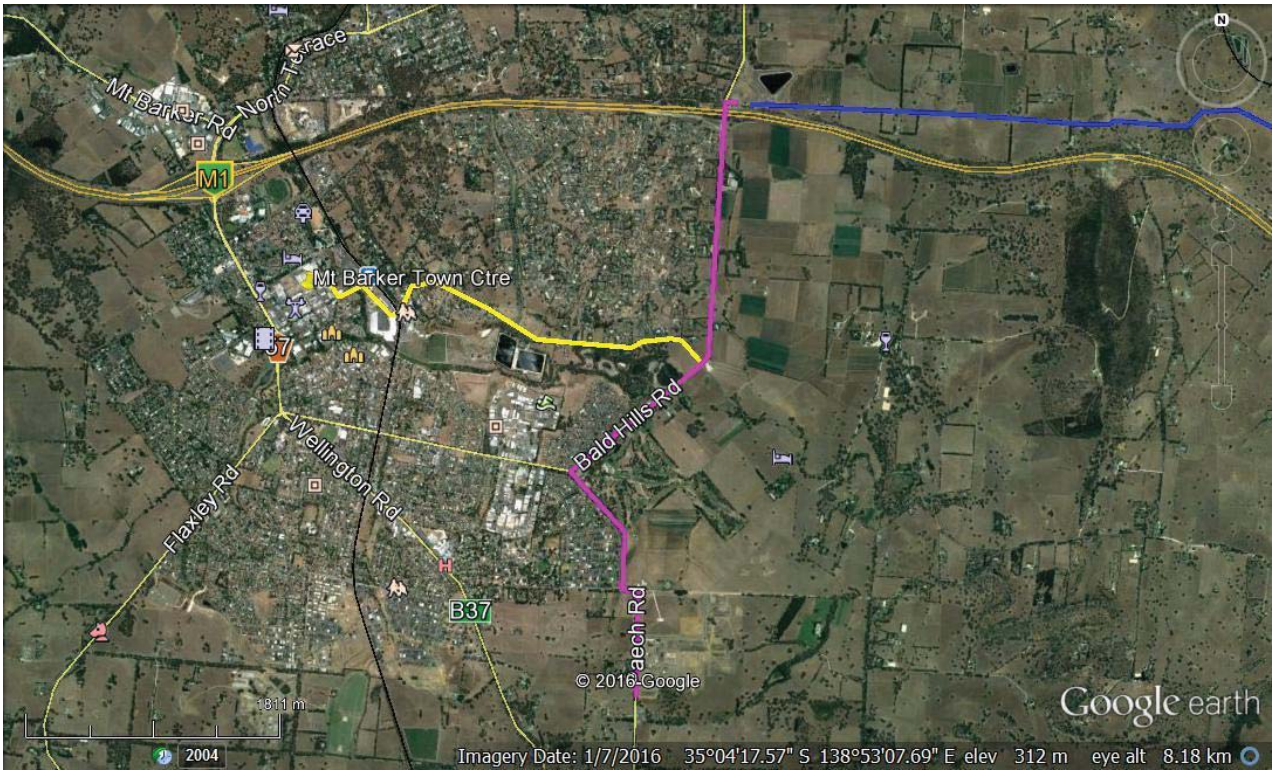
b) Valve Location for SEA Gas Connection

c) Monarto South

d) Kanmantoo

e) Mt Barker

APPENDIX C: RETICULATION TRUNK MAINS – MOUNT BARKER CBD AND GLEN LEA



Legend

	Pipeline alignment Rev 0.3
	Trunk main to growth areas
	Trunk main to Mt Barker CBD

APPENDIX D: STAKEHOLDER ENGAGEMENT SUMMARY

1 INTRODUCTION

This Appendix presents a brief summary of the stakeholder engagement activities for the Mt Barker Pipeline (MBP) component of the overall Natural Gas to Mt Barker (NGTMB) Project. This summary focuses only on the engagement undertaken with stakeholders impacted by the pipeline alignment and therefore does not include the customer engagement with potential customers connecting to the network.

It provides a brief overview of the stakeholders, and engagement activities undertaken with them, from January 2017 up to this current point as part of the Front End Engineering Design (FEED) for the Mt Barker Pipeline only. The FEED design of the pipeline is the major component of the overall NGTMB FEED project, and consequently represents the majority of stakeholder engagement activities undertaken. The overall FEED project is approximately 50% complete.

The stakeholder engagement process was undertaken in the normal manner followed by APA in development of pipeline projects such as this, and is consistent with state legislation.

2 STAKEHOLDERS SUMMARY

The MBP is a proposed pipeline approximately 40km long, from Murray Bridge to Mt Barker in South Australia. The stakeholder cohort associated with the pipeline comprises mostly landowners along the preliminary pipeline route, but also local government and state government bodies, local indigenous groups, mining tenement holders and developers of major subdivisional estates within the township of Mt Barker.

The table below provides a summary of the number and type of stakeholders.

Stakeholder Type	Number of	Comment
Alternative Contact	49	Individuals within government departments such as Department of Environment and Natural Resources, and other corporate bodies such as ARTC.
Lessee	2	Lessee of properties along the alignment
Manager	3	Managers of properties along the alignment
Registered Owner	156	Owners of properties along the alignment
Federal Government	2	Federal elected members
Local Government	7	Individuals in Murray Bridge and Mt Barker Councils
State Government	5	State elected members and individuals in Department of State Development
Native Title claim	1	
Tenement Holder	3	Mining tenement holders
Third Party	2	Eg local indigenous group
Total number of stakeholders	230	

Significant stakeholders contacted were:

- Federal and State Government elected members
- Local government mayors, CEOs and senior staff
- Monarto Zoo – represents a major influence on the development of the alignment
- 3 mining tenement owners near to the proposed alignment.
- Department of State Development – the regulatory body for gas transmission pipelines in South Australia.

3 SUMMARY OF COMMUNICATIONS WITH STAKEHOLDERS

The table below provides a summary of the number and type of communications that were undertaken with stakeholders.

Communication Type	Number of
Email	70
Letter - General	3
Letter - Regulatory	13
Meeting	83
Phone	102
Phone - No Answer	6
Visit (No Meeting)	29
Total Stakeholder contacts	**306**

The great majority of these contacts were with landowners, lessees or managers of properties along the proposed pipeline alignment, and related to:

- Informing the stakeholder of the proposed project, the legislation governing its development, and the Preliminary Survey Licence held by AGN which allows it to enter their land for the purposes of surveying the pipeline's potential route.
- Discussing proposed alignments with the stakeholder, and getting their input and feedback on criteria and factors affecting the proposed alignment across their properties.
- Providing further contacts within state government should they wish to take up any concerns or issues.

4 ONGOING COMMUNICATIONS

AGN is committed to ongoing interactions and communications with relevant stakeholders as the FEED project develops, and to ensuring the whole stakeholder body is kept informed of all relevant aspects as required by legislation.

As the project develops, AGN will continue to identify relevant stakeholders and add them to its consultation and engagement activities.