

Alaska Gas Line Development Corporation
 Project Name: ASAP Pipeline
 AUTHORIZATION FOR EXPENDITURE
 \$10,725,000

<input checked="" type="checkbox"/>	CAPITAL	EXPENSE <input type="checkbox"/>
TITLE:	<u>ASAP Pipeline FY2015</u>	AFE # <u>15-001</u>
Start Date:	<u>June 15, 2014</u>	Original Authorization: <u>\$10,725,000</u>
Completion Date:	<u>June 30, 2015</u>	Rev # <u>0</u>
		TOTAL <u>\$10,725,000</u>

Budgeted – Yes/No	<input checked="" type="checkbox"/>	
	<input type="checkbox"/>	
	Prior	FY2015
EXPENDITURE FLOW (\$000s):	-	<u>\$10,725</u>

SUMMARY OF ESTIMATED COSTS	
Items/Description	Cost (\$000s)
(1.1) Program Management	\$1,500
(1.2) FY2015 Geotechnical Field Program	\$6,400
(1.3) FY2015 Access Roads Field Program	\$ 600
(1.4) FY2015 LiDAR/Ortho-Imagery	\$ 750
(1.5) FY2015 Route Revisions	\$ 500
Subtotal	<u>\$9,750</u>
Contingency	<u>\$975</u>
TOTAL	\$10,725

JUSTIFICATION:

(1) Scope of Work

Project funds are requested to complete the FEED level of design for the Pipeline portion of the project. This level of design is required to support the permitting effort during Open Season and supply ongoing support for the transition to the OBO. Work plans with the list of deliverables, schedules and cost estimate breakdowns as appropriate are attached for each task (1.1) through (1.5) summarized below.

(1.1) Pipeline Program Management \$1.5MM

The Baker project management team is to oversee and expedite the completion of the pipeline design along the ROW, working closely with the permitting and commercial teams. All designs and quantities from this work plan will be used in the continuing evaluation of the design and cost estimate.

(1.2) FY2015 Geotechnical Field Program \$6.40 MM

The Geotechnical Field program addresses the need to infill subsurface data gaps along the alignment. For the first time, ASAP will also start drilling in areas North of Livengood to address the data gaps caused by the inability to acquire subsurface data from either the North Slope producers or Alyeska Service Pipeline Co.

(1.3) FY15 Civil Field Work \$0.60 MM

The civil workplan has defined, via desktop exercise, the access road requirements for construction and operation of the ROW, Material Sites and other associated infrastructure. This work task is required to verify field conditions and make appropriate changes to the desktop study.

(1.4) FY15 LiDAR/Ortho-imagery \$0.75MM

With the alignment changes (V6), and the subsequent changes to the construction access roads and seismic fault crossing locations, and addition of camp pads, laydown yards and material sites, new Imagery and LiDAR is needed to further advance the design and siting of the project.

(1.5) FY15 Route Revisions \$0.50 MM

As a result of additional engineering, including more detailed fault delineations and advancement in knowledge of geo-hazards/geotechnical conditions, some route revisions are necessary. More detailed land ownership has also identified areas where the route needs to change to lessen the impact on private and other land owners.

(2) Review Process

Work plans are reviewed by the Project Management Team (PMT). Comments and revisions are and will be incorporated in the final approved work plans and associated cost elements.

(3) Options Considered

The work requires interaction and collation into the total pipeline engineering effort for consistent use in the development of the design. Baker, as the pipeline design contractor and the original developers of the engineering support documents and cost estimates for the project estimate, was considered the sole option to effectively develop this task and finalize the FEED results for pipe and ROW design, as well as regulatory oversight. The option of soliciting work from other contractors was considered but

rejected because the work product from any other vendor would have to be incorporated into the design work by Baker, potentially resulting in extra expense and schedule delay.

(4) Spend Comparison to Legislative Authorization and Current Year Fiscal Budget

The requested funds are in line with the 2015 fiscal year budgets and are in line with the legislative allocation.

(5) Risks of Delivery or Non-Delivery

- (5.1) To maintain the current schedule, the field work must begin immediately or else the seasonal window for fieldwork will not be fully available.
- (5.2) Environmental Permitting, which is also needed to maintain the current schedule, requires the final alignment data requirements and verification of all material sites and construction facilities along the alignment, as well as all planned permanent facilities.
- (5.3) The risk of doing FEED now is the possibility of changes to the current assumed design conditions and design process that may occur as a result of Open Season. Changes to the project design basis would result in significant rework to engineering resulting in additional cost and schedule.

(6) Cost Phasing

These efforts will start immediately and continue into FY 2015, ending with the end of FY2015. Additional work on some these items will be required in future years, with additional geotechnical investigations being the major one.

(7) Resources

The bulk of the required resources are provided by the Baker pipeline project team. Significant additional effort is required to deliver the field exploration programs using local Alaska contractors well-experienced in the terrain and climatic conditions. Additionally, a number of Subject Matter Experts (SMEs) will be used to supply specialty services for review and approval of the field data and conclusions on behalf of the PMT.

(8) Cost Contingencies

Budgets for the FEED have been built up by each discipline with no contingency included for the contractors. A 10% cost contingency has been added for all items, to be retained by AGDC for potential increases as a result of unknown requirements.

(9) Risks of Delivery and Mitigation

(9.1) AGDC has made a decision to support the continuing ASAP design efforts in FY2015. The schedule requires concurrent tasking of work that is interdependent on results. The mitigation to this situation is sound project management and effective project communications.

(9.2) Permits – Major regulatory permits will be submitted to the resource agencies to reflect project changes since the original successful submittals, as well as further advance additional needed permits.

For instance, the Army Corp of Engineers Section 404 Wetlands Permit must be finalized using the updated engineering route data for site specific locations. The acquisition of field data, including the orthoimagery, civil access road information, and subsurface data, directly mitigates the risk of regulatory delay that could result from the lack of needed information. In addition, the field information reduces the risk of alignment changes and/or supporting infrastructure relocation and resultant resubmittal of amended permits due to new information. It is always difficult to ensure timely permit approvals, although this is mitigated through the experienced ERL team coordinating with the required engineering support efforts in concert with timely route data.

AGDC RECOMMENDATION/APPROVAL	
Originator:	
Title:	Date:
Financial Authority:	
Title:	Date:
BOD Approval:	
Title:	Date: