



### Moberly Project construction continues; Expansion High Level Review undertaken

#### Heemskirk Consolidated Limited

ASX: HSK  
ABN 18 106 720 138

#### Shares on issue:

562,635,912

#### Unquoted securities:

Options: 4,728,645  
Employee shares: 1,461,808  
Partly paid (to 1c, 24c unpaid): 100,000  
Partly paid (to 1c, 49c unpaid): 1,500,000

#### Share price range during quarter:

4.5c to 7.5c

#### For further information, please contact:

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### KEY POINTS

- 🔥 Construction completion of Moberly Project agreed with contractor
- 🔥 First commercial sales expected Q3 CY 2017
- 🔥 Expansion High Level Review undertaken
- 🔥 Indicative, non-binding, conditional takeover proposal received

### COMPANY UPDATE

Heemskirk Consolidated Limited (ASX: HSK), ("Heemskirk" or the "Company") is pleased to announce the following update.

#### Updated Project schedule

The Company had anticipated construction completion of the Moberly silica sand project (the "Project") in Golden, British Columbia, Canada during Q3 CY 2017<sup>1</sup>. Following an engineering review, various refinements and modifications were identified in the issued for construction drawings, requiring redesign prior to completion of the steel design and equipment installation. This has resulted in the following update to the Project schedule:

- Construction completion has been agreed with the construction contractor, Maple Reinders Inc by 30 June 2017 and the Company is in the process of executing the supporting documentation.
- A staged commissioning plan has been developed commencing during Q2 CY 2017 and is anticipated to be complete during Q3 CY 2017.
- The Company is in negotiations with various potential offtakers and anticipates entering into supply contracts during Q2 CY 2017.
- The Company has advanced its planning for the production and operation phase, including refining its supply and logistics arrangements.
- First commercial sales of silica are expected during Q3 CY 2017.

<sup>1</sup> Refer to the Company's quarterly report released to ASX on 27 October 2016



## **Funding**

Heemskirk remains funded for the budgeted construction costs of the Project through to 30 June 2017, subject to the satisfaction of relevant covenants and utilisation requirements as provided under the Debt Facility Agreement with Taurus Funds Management (“Taurus”).

As part of the Taurus facility, the Company is required to:

- Make interest payments from August 2017;
- Commence principal repayments from November 2017; and
- Set aside US\$3 million (A\$4 million<sup>2</sup>) in a debt service reserve account in November 2017.

As a result of the updated schedule and payments required to Taurus, the Company is currently reviewing its cash flow requirements following construction completion. It is likely that additional short-term funding will be required in the vicinity of A\$5 million -A\$10 million during Project commissioning and early production phases as well as for commencement of Stage 2 studies.

The Company is currently examining potential funding solutions, including discussions with Taurus.

## **Project expansion case**

As noted in the 2016 Annual Financial Report<sup>3</sup>, Heemskirk remains confident that the commercial rationale for an expansion of the Project remains sound. This is supported by the strong market outlook as detailed in the Market Insight section below. It is noted that the Taurus facility includes US\$15 million for expansion<sup>4</sup>.

The Company has recently commissioned its engineering contractor, Morrison Hershfield, to review the expansion of the Project and produce a high-level report of its findings (“Expansion High Level Review”).

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<sup>2</sup> Based on USD/AUD exchange rate of 1.33

<sup>3</sup> Page 9 of the Company’s Annual Financial Report, as released to the ASX on 24 November 2016.

<sup>4</sup> As part of the US\$40 million two-tranche secured debt facility, draw down of the US\$15 million is contingent upon various conditions including approval from Taurus, completion of detailed technical evaluation and design, permitting, demonstration of full project funding and committed off-take arrangements.

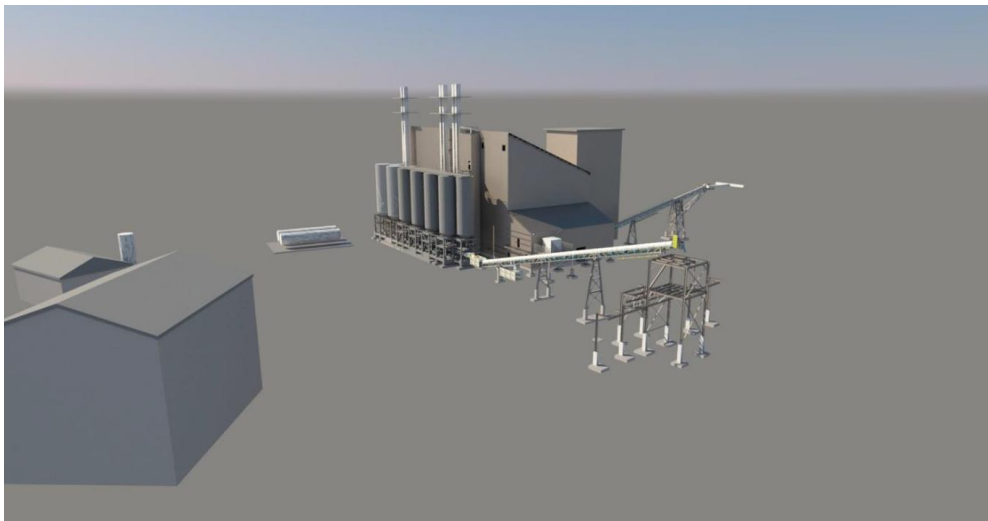


The Expansion High Level Review investigated potential bottle neck areas for expansion of capacity from 300,000 Mtpa (metric tonnes per annum) to 600,000 Mtpa.

Morrison Hershfield preliminary estimates are that the capital cost of the expansion is approximately C\$18 million<sup>5</sup>. This includes a mine road upgrade and extension, 15% for permitting and fees and 15% buffer for contingency costs but excludes feasibility study and engineering costs, working capital and financing costs.

The capital cost to double plant capacity from the expansion is materially less than the capital cost of the original project (currently anticipated at approximately C\$37 million through to construction completion in June 2017). As a result, the Company anticipates that the expansion has the potential to be materially value accretive for Heemskirk shareholders.

The next step for the Company is to commission a feasibility study to prove up the expansion case. This would determine the economics of the expansion and produce detailed designs and costings. Current expectations are that the expansion could be underway in 2018 and completed in 2019.



***Morrison Hershfield rendering of plant expansion (looking South).***

<sup>5</sup> Cost estimates provided in the report are high-level estimates provided without a detailed design / scope of work, nor cost-consultant / contractor involvement, and represent only order-of-magnitude opinion of probable costs. Significant deviations in final project costs can only be realised after a scope of work is designed, contractors provide competitive quotations, and the project is complete such that hidden or latent defects are found and included.



### Taurus takeover offer

Heemskirk remains in constructive discussions with Taurus about its conditional takeover proposal (the “Proposal”). This includes negotiations with Taurus around funding arrangements and the terms and conditions of the Proposal, including the structure of the private company making the Proposal (Northern Silica Corporation) and the associated rights of any shareholders who may wish to take up equity in that entity.

The Company has appointed an Independent Expert to assess the Proposal, BDO Corporate Finance (East Coast) Pty Ltd (“BDO”), a member of one of the largest full service accounting and advisory firms. In determining the value of the Company, BDO will rely on the findings of an Independent Technical Expert to review the Moberly Project. The Company has appointed CSA Global Pty Ltd (“CSA Global”), a leading international mining industry consultant. The BDO and CSA Global reports will be included in any Target Statement to be issued by the Company.

The Directors expect to be able to form an opinion on the Proposal in the coming days and provide a recommendation to shareholders shortly thereafter. In the meantime, the Company reiterates that shareholders do not need to take any action in response to the Proposal at this time.

### Market Insight

In our Quarterly reports over the past year, Heemskirk has consistently pointed to improving market conditions for North American hydraulic fracturing sand (“frac sand”) demand. Following the rebound in oil and gas prices, the prospects for companies supplying frac sand in North America have improved significantly. This has been demonstrated by the average increase of 233% in the share prices of North American publicly-traded sand companies in 2016:

Example Company	Ticker	Share price (US\$ <sup>6</sup> )		
		4/01/2016	30/12/2016	Change
Fairmount Santrol Holdings	NYSE:FMSA	2.43	11.79	385%
US Silica Holdings	NYSE:SLCA	19.70	56.68	188%
Emerge Energy Services	NYSE:EMES	4.43	12.31	178%
Select Sands Corp	TSXV:SNS	0.31	0.86	172%
Hi-Crush Partners	NYSE:HCLP	5.82	19.80	240%
	<b>Average</b>			<b>233%</b>

<sup>6</sup> Source: S&P Capital IQ.



BTU Analytics, a provider of independent and fundamentals-based analysis to the North American oil and gas markets, says that producers plan to further increase proppant (sand) use in 2017.

In a recent report, BTU says: “As producers strive towards maximising overall recovery, one significant trend . . . is an increase in the amount of proppant used per well. In 2014 and 2015, low sand prices helped build proppant demand, and ultimate recovery rates materially benefitted from the additional material sent down hole. In 2017, producers plan to use even more proppant per lateral foot to continue driving recovery rates.”

Raymond James & Associates Inc. research recently stated that as “US onshore operators hone their skills to extract more oil and natural gas from onshore basin, “sand intensity” should fuel an unprecedented growth in proppant demand.”

The research arm of the news service group Bloomberg, known as Bloomberg Intelligence, says that US shale gas formation developers will lead a rebound in oilfield service activity in 2017. It says the frac sand market is leveraged to higher oil prices and has been supported by higher sand intensity per well, with longer laterals, more use of proppant per stage and higher stage counts. Bloomberg Intelligence analysts forecast that demand in 2017 is expected to come in at 48 million (imperial) tons due to a 30% increase in completions and a 10-20% growth in intensity. They forecast that 2018 demand is expected to reach 65 million tons.

In a separate report carried by the Bloomberg news service, it states that oilfield service companies supplying everything from sand to sophisticated robot rigs are seeking a new lease on life as North America’s fracking fortunes begin to turn. Bloomberg quotes one analyst as saying that ‘with West Texas Intermediate crude prices now up . . . from this year’s low, the industry is starting to use higher sand prices and the added activity . . . as an excuse to re-open conversations over how much they’ll be paid.’ Bloomberg goes on to quote US-based investment and merchant banking group Tudor Pickering Holt as saying that: “Robust demand for proppant is expected to expand over the next two years. Oil and natural gas wells in the US are now expected to swallow 120 million tons of sand in 2018, up from a previous forecast of 95 million tons.”

The ARC Energy Research Institute is based in Calgary, and specialises in the Canadian energy industry. Its recent report on the “not so obvious themes for 2017” opens by declaring that “fracking goes viral.” The Institute explains: “Multi-stage hydraulic fracturing as applied to horizontal wells has been the hottest oil and gas innovation in 100 years.



Technology genes never stay in a bottle, so proliferation beyond the US and Canada is inevitable.”

Underpinning what is already a favourable environment for frac sand demand in North American hydrocarbon production, the new US Administration has in recent days outlined its “Energy First” plan which aims to unlock US\$50 trillion in what it calls a “shale oil and gas revolution.” The new US Administration goes on to say that “sound energy policy begins with the recognition that we have vast untapped energy reserves right here in America.”

With first commercial sales expected in Q3 CY 2017 the Moberly Project is well positioned to take advantage of the forecast increase in proppant usage from CY 2017. Expected increase in demand in 2018 above previous forecasts also augurs well for the Company’s future expansion of the Project.

### ***Moberly Project – Construction Update***

Key activities during the quarter included:

- Installation of equipment in Process building continues;
- All specified equipment on site was rough set;
- Steel fabrication of main building continues;
- Mine dry and office were delivered and installed;
- Process building cladding and roof work commenced;
- Motor Control Centre equipment installation commenced;
- Motor Control Room was completed and heated to protect equipment during installation;
- Process building cladding and roofing continued; and
- Septic system was installed.



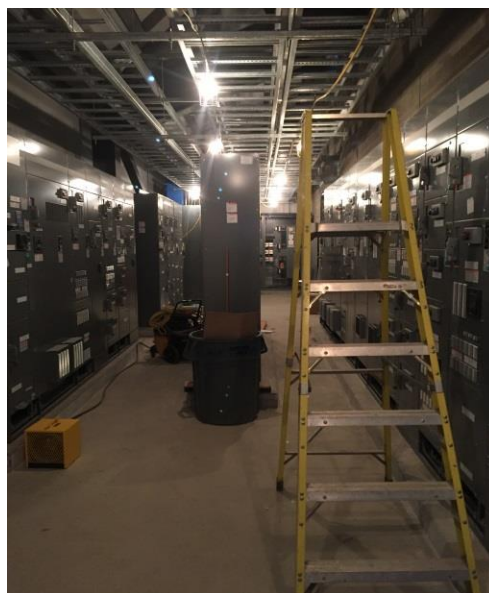
## Site progress photos



**Process building**



**Equipment in Process building**



**Motor Control Room equipment installed**



***Load out conveyor and Process building***

### ***Company Safety***

There were no lost time injuries (LTI) or medically treated injury (MTI) during the quarter. The Group LTI and MTI frequency rates are now at 12 and 24 respectively, compared to the end of the previous quarter where the MTI and LTI frequency rates were 15 and 31 respectively.

### ***Group Overheads***

Group overheads for the December quarter were A\$0.96m, compared to a budget of A\$0.83m. This includes unbudgeted expenses relating to the takeover proposal received during the quarter.





### ***Operations***

#### **Canada (100% owned)**

During the quarter, the business operated an administrative office in Calgary, Alberta and at the Moberly plant site in British Columbia.

#### **Production**

No industrial minerals were produced during the quarter. Production has been placed on hold to enable construction of the Moberly Project. During the quarter, 79Mt of S-12 (golf bunker sand) was sold from inventory.

#### **Exploration**

No exploration activity was undertaken at the Canadian operations during the quarter.

### ***Key Investments***

During the quarter, the Company disposed of 0.0605m shares in Almonty Industries, a TSX-listed tungsten producer, for net proceeds of A\$0.017m. The shares were received as part payment for the sale of Heemskirk's Los Santos Tungsten Mine to Almonty in April 2011. At 31 December 2016, the Company held 2.864m Almonty shares at a market value of C\$0.773m (A\$0.792m).

### ***Corporate***

Cash and cash equivalents:

- Cash and cash equivalents: A\$13.1m.

Other financial information and assets:

- At the end of the quarter, the Company held A\$0.842m in equity investments including 2.864m shares in Almonty Industries (TSXV:All) at C\$0.27 per share.
- Also during the quarter, the Company drew down US\$5m of the US\$25m debt facility. To date, the Company has drawn down US\$15m.
- Subsequent the end of the quarter, on 3 January 2017 Heemskirk announced the issuing of 1,576,215 options under the Debt Facility Agreement with Taurus Funds



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Management. The options are exercisable on or before 15 July 2020 at A\$0.0878. The issuing of these options follows an identical arrangement of issuing options on 3 May 2016 and 10 August 2016 under the Debt Facility Agreement.

Interest bearing liabilities:

- Taurus Funds Management Debt Facility: US\$15.8m
- Finance leases for equipment: A\$0.91m.

### ***The Moberly Project***

The Moberly Industrial Minerals Project is located near the town of Golden, in south-eastern British Columbia, about 260 kms west of Calgary, Canada. It is a high-quality silica project, with a granted mine lease and a freehold plant site.

The Moberly Project is scheduled to produce high-quality American Petroleum Institute (API) standard specification proppant (Mount Moberly White™).

With a 37.5 million tonnes JORC-compliant Measured and Indicated Mineral Resource at 70% high-purity silica or frac sand content, the Stage One Moberly Project has a nameplate production output capacity of 300,000 tonnes per annum.

The Moberly Project has a mine life of at least 35 years with a strong product demand. It is a simple, scalable project – with the attraction of import replacement supply for Western Canadian petroleum industry customers.

The Moberly silica operation has mined and processed high purity silica sand for a diverse number of industrial applications since 1983. Our SILWITE® products have a purity ranging from 99.15% to 99.55% SiO<sub>2</sub>, well exceeding the requirements for silica sand raw material in flint grade glass, ceramic and foundry grades. Our products have extremely low iron oxide content and therefore in these applications will not interfere with the colour of the ultimate end product.

### ***What is frac sand?***

Frac sand is a highly-valued and in-demand crush-resistant sand of specific particle size that is used by the oil and gas industry in the hydraulic fracturing process. It also has applications for other silica-based industrial minerals projects.



The term "frac sand" refers to industrial mineral sands that are used during the process of hydraulic fracturing, a method for extracting underground natural gas from shale gas formations. Frac sand is a "proppant" - a material used to help open the underground cracks from which natural gas is harvested during hydraulic fracturing. Proppants are introduced under pressure into a shale gas well, along with water and industrial fluids, to stimulate gas production.

North American frac sand production is dominated by supply from the mid-west of the United States of America and Texas. Moberly's new Canadian supply base will provide a long-term mine life contribution to the Canadian national and regional economies.