



6 April 2017

## **Frieda River Feasibility Study Addendum Update**

**Highlands Pacific Limited (ASX: HIG) has received the final report from mining industry consultant Behre Dolbear Australia Pty Ltd (BDA), which conducted an independent peer review of the Frieda River Feasibility Study and Addendum documentation prepared by Frieda River project manager PanAust Ltd.**

PanAust, a wholly owned subsidiary of Chinese Government owned Guangdong Rising Assets Management Co Ltd (GRAM), released its initial Frieda River Feasibility Study in May 2016 (See Highlands Pacific ASX announcement "Frieda Study Received, 19 May 2016).

BDA subsequently conducted a peer review which made reference to a number of shortcomings and omissions in the Feasibility Study (See see ASX release entitled "Frieda River Feasibility Study Review Received", released on 19 January 2017.).

GRAM/PanAust then carried out additional work the results of which were released in an Addendum. (See ASX release of 3 March 2017 entitled "Frieda River Feasibility report Addendum (January 2017)".

The final BDA report, which is not binding on the parties, concludes that the Feasibility Study and January 2017 Addendum update work together provide a study of a standard that could be provided to lenders for consideration of finance.

Highlands Pacific remains of the view that while the Frieda River project is a valuable asset with the potential to generate significant returns for investors, the study still does not meet the standards required by the joint venture agreement and is therefore incomplete in a number of key areas.

"We are continuing to work towards a resolution of these matters with PanAust, including an agreement regarding ongoing funding of project development," said Highlands CEO Craig Lennon.

In its ASX release of 3 March 2017, Highlands provided a summary of the Addendum. Highlands also provided an update on Mineral Resources and Ore Reserves in an ASX announcement released on 24 March 2017, entitled "Frieda River Resource and Reserve Update - March 2017".

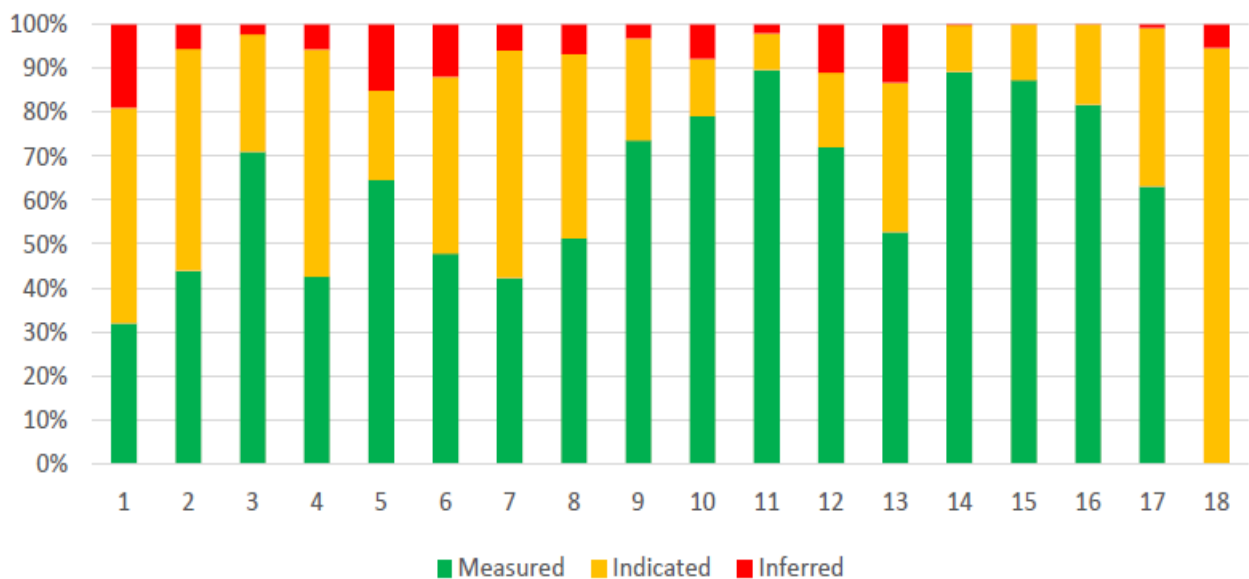
The information on the following pages is provided for completeness and has been extracted from the January 2017 Addendum. The Tables and Figures highlight the changes from the May 2016 Feasibility Study to the January 2017 Addendum.



- Data from the 2016 Ekwai and Koki resource, geotechnical and metallurgical drilling program has led to an amended open-pit design, updated mine plan and production schedule.

| Mine Plan Comparison                | Feasibility Study<br>May 2016 | Addendum<br>Jan 2017 |
|-------------------------------------|-------------------------------|----------------------|
| Tonnes (Mt)                         | 700                           | 714                  |
| Copper grade (%)                    | 0.50                          | 0.51                 |
| Gold grade (g/t)                    | 0.29                          | 0.28                 |
| Waste Mined (Mt)                    | 470                           | 511                  |
| Total material mined (Mt)           | 1170                          | 1225                 |
| Strip ratio (waste/ore)             | 0.67                          | 0.72                 |
| Measured Resource (Mt: % of total)  | 462:66                        | 407:57               |
| Indicated Resource (Mt: % of total) | 130:19                        | 243:34               |
| Inferred Resource (Mt: % of total)  | 108:16                        | 64:9                 |
| Recovered copper metal (kt)         | 2900                          | 3020                 |
| Recovered gold metal (koz)          | 4160                          | 4160                 |

**Mill Feed value per annum by Mineral Resource category**

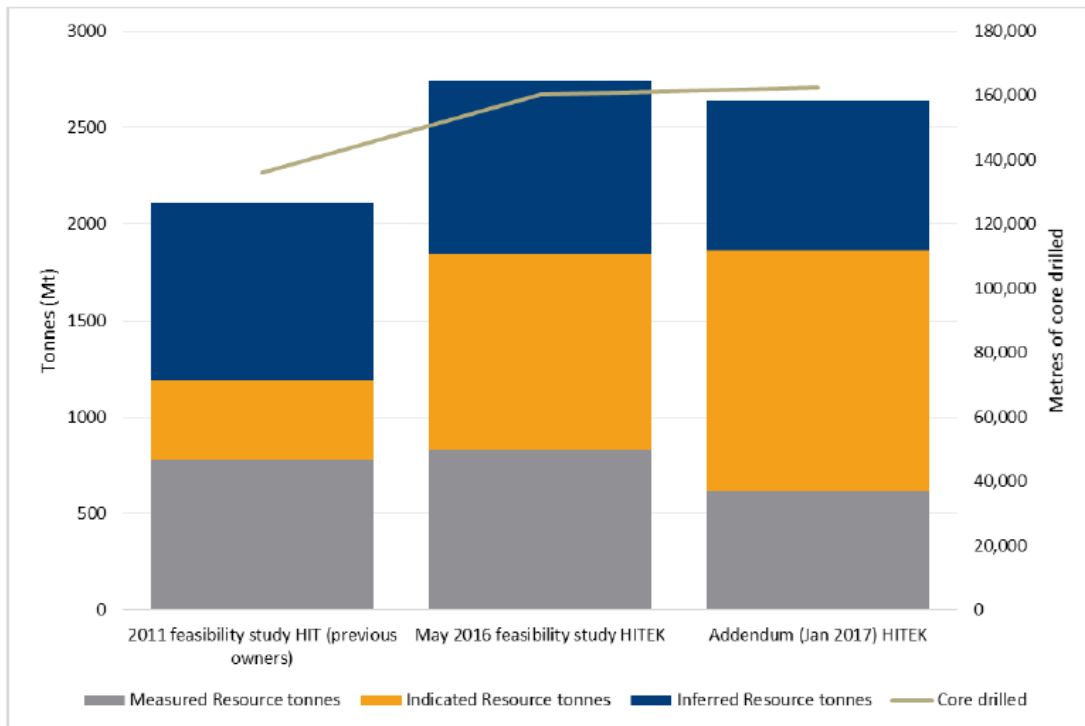




- Estimated total Horse-Ivaal-Trukai, Ekwai and Koki (HITEK) Measured, Indicated and Inferred Mineral Resource tonnes reduced marginally while contained copper increased.

| Mineral Resource Comparison           | Feasibility Study<br>May 2016 | Addendum<br>Jan 2017 |
|---------------------------------------|-------------------------------|----------------------|
| Measured Resource (Mt)                | 829                           | 620                  |
| Indicated Resource (Mt)               | 1018                          | 1240                 |
| Inferred Resource (Mt)                | 895                           | 780                  |
| Total M+I+I Resource (Mt)             | 2742                          | 2640                 |
| Total M+I+I Cu grade (%)              | 0.42                          | 0.44                 |
| Total contained Cu (Mt)               | 11.5                          | 11.5                 |
| Total M+I+I Resource gold grade (g/t) | 0.23                          | 0.23                 |
| Total contained Au (Moz)              | 19.7                          | 19.3                 |

**HIT (2011) and HITEK Mineral Resource tonnes by classification**





- Total Proved and Probable Ore Reserve tonnes increased by 13% to 686Mt along with contained copper.

| Ore Reserve Comparison             | Feasibility Study<br>May 2016 | Addendum<br>Jan 2017 |
|------------------------------------|-------------------------------|----------------------|
| Proved Ore Reserve (Mt)            | 469                           | 413                  |
| Probable Ore Reserve (Mt)          | 139                           | 272                  |
| Total Ore Reserve (Mt)             | 608                           | 686                  |
| Total Ore Reserve Cu grade (%)     | 0.49                          | 0.50                 |
| Total Ore Reserve Gold grade (g/t) | 0.27                          | 0.28                 |

*This Ore Reserve is reported on a 100% ownership basis.*

*May include minor computational errors due to rounding.*

*The Frieda River Ore Reserve is estimated at commodity prices of US\$3.30/lb copper and US\$1,455/oz gold subject to a floating value-based cut-off grade. The representative average copper only cut-off grade is 0.21% copper.*

- Scheduled mill feed tonnes and contained copper increased.

| HITEK Mill Feed (Addendum Jan 2017) | Classification | Tonnes (Mt) | Copper (%) | Gold (g/t) |
|-------------------------------------|----------------|-------------|------------|------------|
| HIT mill feed                       | Measured       | 407         | 0.54       | 0.33       |
|                                     | Indicated      | 204         | 0.45       | 0.20       |
|                                     | Inferred       | 43          | 0.35       | 0.11       |
| Ekwai mill feed                     | Indicated      | 18          | 0.61       | 0.40       |
|                                     | Inferred       | 6           | 0.51       | 0.29       |
| Koki mill feed                      | Indicated      | 21          | 0.58       | 0.31       |
|                                     | Inferred       | 15          | 0.51       | 0.27       |
| Total mill feed                     |                | 714         | 0.51       | 0.28       |

Compared with the May 2016 Study outcome, the Project post-tax net present value (7.8% real discount rate) increased to US\$1,130 million from US\$820 million (+38%) using unchanged consumables and metal prices assumptions. This NPV has been calculated to a start date of 30 June 2018, not present date.



The Project economic evaluation using Wood Mackenzie price forecasts averaging US\$3.30/lb copper, US\$1,455/oz gold and US\$80/bbl Brent crude oil yielded a:

- Post-tax net present value of US\$7.1 billion (0% real discount rate, Start date 30 June 2018)
- Pre-production capital cost of US\$3.6 billion
- Project internal rate of return (real) of 11.4%
- Payback period (post commencement of production) of six years.
- Life of mine average C1 cash cost (after by-product credits) of US\$0.69/lb copper (US\$0.62/lb for first five years after initial ramp-up)
- Life of mine average all-in sustaining cost of US\$1.22/lb copper (US\$1.40/lb for first five years after initial ramp-up).

| Key financial and performance metrics (first five years post ramp up) | Feasibility Study<br>May 2016 | Addendum<br>Jan 2017 |
|---|-------------------------------|----------------------|
| C1 Cash Cost <sup>(a)</sup> (US\$/lb Cu)                              | 0.66                          | 0.62                 |
| All in sustaining cost <sup>(b)</sup> (US\$/lb Cu)                    | 1.46                          | 1.40                 |
| Total on-site operating costs (US\$/t processed)                      | 15.31                         | 15.14                |
| Annual net profit after tax <sup>(c)</sup> (US\$ million)             | 440                           | 500                  |
| Av Cu recovery (%)  | 83                            | 82                   |
| Av Au recovery (%)  | 65                            | 64                   |
| Av annual Cu in concentrate (ktpa)                                    | 190                           | 200                  |
| Av annual Au in concentrate (kozpa)                                   | 260                           | 280                  |
| Total payable Cu metal (kt)   | 910                           | 970                  |
| Total payable Au metal (koz)  | 1260                          | 1350                 |
| Total mill feed (mt)  | 210                           | 205                  |
| Total waste mined (mt)  | 150                           | 190                  |
| Strip ratio (waste/ore)   | 0.7/1                         | 0.9/1                |

Note: US\$3.30/lb copper, US\$1,455/oz gold, US\$23/oz silver

(a) C1 cash cost: Brook Hunt convention for the reporting of direct cash costs comprising: mine site, product transportation and freight, treatment and refining charges and marketing costs; based on payable metal content.

(b) All-in sustaining cost (AISC): the C1 cash cost plus royalties, corporate support and shared services costs; and sustaining capital; and lease principal and interest charges.

(c) PNG corporate tax rate of 30%



| Key financial and performance metrics (life of mine)   | Feasibility Study<br>May 2016 | Addendum<br>Jan 2017 |
|--|-------------------------------|----------------------|
| C1 Cash Cost <sup>(a)</sup> (US\$/lb Cu)               | 0.69                          | 0.69                 |
| All in sustaining cost <sup>(b)</sup> (US\$/lb Cu)     | 1.23                          | 1.22                 |
| Total on-site operating costs (US\$/t processed)       | 14.79                         | 14.22                |
| Annual net profit after tax <sup>(c)</sup> (US\$M)     | 270                           | 270                  |
| Post tax NPV at a real discount rate of 7.8% (US\$M)   | 820                           | 1130                 |
| Post tax NPV <sub>0</sub> (US\$M)                      | 6670                          | 7090                 |
| Pre-production capital cost (US\$M)                    | 3605                          | 3600                 |
| Sustaining capital over LOM (US\$M)                    | 2320                          | 2390                 |
| Project IRR (real) (%)                                 | 10.8                          | 11.4                 |
| Payback period (post start of production) (years)      | 6                             | 6                    |
| Av Cu recovery (%)                                     | 84                            | 84                   |
| Av Au recovery (%)                                     | 65                            | 65                   |
| Av annual Cu in concentrate (post ramp-up) (ktpa)      | 175                           | 175                  |
| Av annual Au in concentrate (post ramp-up) (kozpa)     | 250                           | 240                  |
| Total payable Cu metal (kt)                            | 2790                          | 2910                 |
| Total payable Au metal (koz)                           | 4030                          | 4020                 |
| Total mill feed (mt)                                   | 700                           | 715                  |
| Total waste mined (mt)                                 | 470                           | 510                  |
| Strip ratio (waste/ore)                                | 0.7/1                         | 0.7/1                |
| Project implementation duration <sup>(d)</sup> (years) | 6                             | 6                    |
| Project construction duration (years)                  | 4                             | 4                    |
| Production period (mine life) (years)                  | 17                            | 18                   |

Note: US\$3.30/lb copper, US\$1,455/oz gold, US\$23/oz silver

(a) C1 cash cost: Brook Hunt convention for the reporting of direct cash costs comprising: mine site, product transportation and freight, treatment and refining charges and marketing costs; based on payable metal content.

(b) All-in sustaining cost: the C1 cash cost plus royalties, corporate support and shared services costs; and sustaining capital; and lease principal and interest charges.

(c) PNG corporate tax rate of 30%

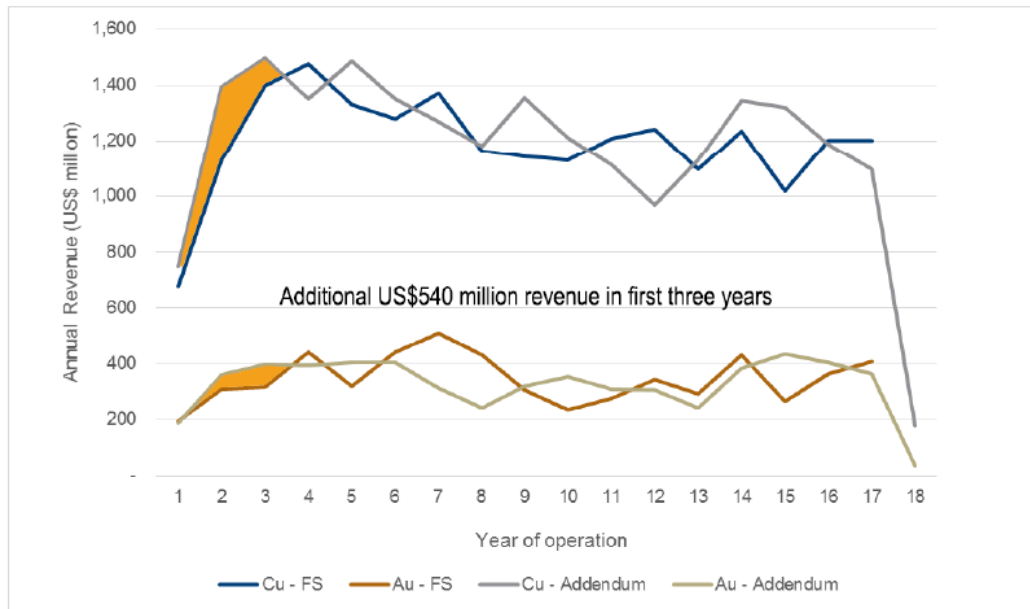
(d) Implementation is the period from Partial Notice to Proceed including engineering, procurement, mobilisation, construction, operational readiness, commissioning and operations ramp-up. The construction period commences at Full Notice to Proceed.



| Copper Price Sensitivity                             | Addendum <sup>(a)</sup><br>Cu price<br>(US\$/lb) | Cu price<br>(US\$/lb) |      |      |      |      |
|--|--|-----------------------|------|------|------|------|
|  | 3.30   | 2.50                  | 2.75 | 3.00 | 3.25 | 3.50 |
| AISC (US\$/lb Cu)                                    | 1.22   | 1.21                  | 1.21 | 1.22 | 1.22 | 1.23 |
| Annual NPAT (US\$M)                                  | 270  | 80                    | 140  | 200  | 260  | 320  |
| Post tax NPV at a real discount rate of 7.8% (US\$M) | 1130   | -345                  | 95   | 575  | 1030 | 1485 |
| Post tax NPV <sub>0</sub> (US\$M)                    | 7090   | 3750                  | 4710 | 5820 | 6870 | 7960 |
| Project IRR (real terms) (%)                         | 11.4   | 6.6                   | 8.2  | 9.7  | 11.1 | 12.5 |
| Payback period (post production) (years)             | 6  | 9                     | 7    | 6    | 6    | 5    |

a) Wood Mackenzie prices with corresponding operating costs

### Revenue Variance by year of operation





| Pre-Production Capital Cost Estimate (US\$M) | Feasibility Study<br>May 2016 | Addendum<br>Jan 2017 |
|--|-------------------------------|----------------------|
| Direct costs                                 | 2310                          | 2310                 |
| Indirect and Owner's costs                   | 1270                          | 1270                 |
| Contingency                                  | 430                           | 430                  |
| Total  | 4010                          | 4000                 |
| Less leasable component                      | 405                           | 400                  |
| Total (less leasable)                        | 3605                          | 3600                 |

There has been no change to the project contingency. Frieda River Limited selected a 12.5% contingency amount on the basis that continued de-risking of the Project Implementation will be achieved prior to Full Notice to Proceed. On the above basis a contingency of US\$430 million equating to 12.5% of direct and indirect costs excluding design growth is included in the estimate.

There is an overall increase in sustaining capital of US\$70 million, of which US\$67 million is associated with the changes to the ISF sustaining capital program.

**For further information, please contact:  
Joe Dowling, Stockwork Corporate  
Communications  
0421 587755**





**ASX Code: HIG**

**PoMSox Code: HIG**

**Shares on Issue: 936 million**

**Performance Rights: 17 million**

**Directors**

Ron Douglas (Chairman)

Craig Lennon, Managing Director

Mike Carroll

Dan Wood

Bart Philemon

**Management**

Sylvie Moser, CFO & Co.Sec

Ron Gawi, GM Port Moresby

Leslie Nand, GM Exploration Projects

**Investor and Media Enquiries to:**

Joe Dowling - 0421 587755

**Website:**

[www.highlandspacific.com](http://www.highlandspacific.com)

**About Highlands Pacific Limited**

Highlands Pacific is a mining and exploration company registered and incorporated in PNG and listed on the Australian and Port Moresby stock exchanges. Highlands has a long history of successful exploration and project development in PNG. The Company was formed in 1997 and has since established an impressive suite of projects providing investors with leveraged exposure to copper, nickel and gold. Its major assets are interests in the producing Ramu nickel cobalt mine and the Frieda River copper gold project, with exploration in progress at the highly prospective Star Mountains tenements. Highlands also has exploration territory on Normanby Island (Sewa Bay), at the south eastern tip of PNG. Through the efforts of its highly experienced staff, the Company is committed to the responsible development of mining projects for the benefit of all its stakeholders, including shareholders, landowners, business partners and the broader PNG community.

**Star Mountains Prospects\***

The Star Mountains exploration tenements, which include Nong River EL1312, Mt Scorpion EL1781, Munbil EL2001 and Tifalmin EL1392, are located approximately 20km north of the Ok Tedi mine, in the West Sepik Province, PNG. They lie within the highly prospective New Guinean Orogenic Belt, which hosts the Grasberg, Ok Tedi, Porgera and Hidden Valley mines, as well as the Frieda deposit. The joint venture with partner Anglo American substantiates the world class potential and has enabled an extensive exploration program to be commenced in 2015.

**Ramu Nickel Cobalt Mine**

The producing Ramu nickel cobalt mine is located 75km west of the provincial capital of Madang, PNG. Highlands 8.56% interest in Ramu will increase to 11.3% at no cost to Highlands after repayment of its share of the project debt. Highlands also has an option to acquire an additional 9.25% interest in Ramu at fair market value, which could increase the company's interest in the mine to 20.55%, if the option is exercised.

**Frieda River Copper/Gold Project\***

The Frieda River copper gold project is located 175kms north-west of the Porgera gold mine and 75km north-east of the Ok Tedi mine. Highlands has a 20% interest in the project and Frieda River Limited (FRL) (a wholly owned subsidiary of PanAust Limited which in turn is a wholly owned subsidiary of Guangdong Rising Assets Management Co. Ltd.) 80%.

\* Subject to the right of the Independent State of Papua New Guinea to acquire up to a 30% equity interest in any mining development in the country.