



## FBR Executes Binding United States Agreement with CRH Ventures Americas, Inc.

- FBR executes binding suite of agreements for United States Demonstration Program with CRH Ventures Americas, Inc. and exclusive Option to trigger a United States joint venture.
- Once Option exercised, joint venture commences with CRH Americas, Inc. establishing a US\$40m rolling loan facility and the joint venture executing a binding conditional purchase order for 20 Hadrian X<sup>®</sup> units.
- Two further conditional purchase orders of 39 and 40 Hadrian X<sup>®</sup> units to be placed subject to meeting utilisation and gross margin metrics on Hadrian X<sup>®</sup> units delivered under preceding orders, followed by options for a further 200 Hadrian X<sup>®</sup> units.
- These agreements further CRH's commitment to innovating for a more sustainable construction environment, where robotics extend the capabilities and longevity of construction workers.
- CRH subsidiaries to become the exclusive concrete block suppliers to the United States joint venture.

**Thursday, 18 January 2024** - Robotic technology company **FBR Limited (ASX: FBR)** ('FBR' or 'the Company') is pleased to advise that it has executed a binding suite of agreements with CRH Ventures Americas, Inc. ('CRH Ventures'), a subsidiary of CRH plc ('CRH'), one of the largest concrete block suppliers in the United States. Affiliates of CRH Ventures and FBR have executed a Demonstration Program agreement to jointly construct up to 10 houses in the United States with FBR's Hadrian X<sup>®</sup> construction robot, while FBR has granted CRH Ventures an exclusive Option to enter into an exclusive joint venture for the supply of Wall as a Service<sup>®</sup> in the United States following the successful achievement of the milestones of the Demonstration Program. This venture is the result of significant collaboration between industry leaders, driving innovation in construction for a better-built future. Robotics is seen as playing a key part in re-shaping construction sites to create safer, more efficient and sustainable environments.

### **Demonstration Program and Option Agreements**

Affiliates of CRH Ventures and FBR have executed a Demonstration Program agreement to test and evaluate the use of the Hadrian X<sup>®</sup> to supply Wall as a Service<sup>®</sup> in the United States. FBR will provide one Hadrian X<sup>®</sup> built to Australian specifications to complete the test builds. Under the Option agreement, CRH Ventures has paid for an Option for further collaboration with FBR pending the success of the Demonstration Program aimed at constructing up to 10 houses in Florida. Upon execution of the Demonstration Program and Option Agreements, 10% of the US\$2.0 million Option fee became payable immediately; 40% will be payable upon completion of a Factory Acceptance Test; 30% will be payable upon completion of a Site Acceptance Test in the United States; and the remaining 20% will be payable immediately upon the completion of the Demonstration Program. Milestone payments are non-refundable.

The Hadrian X<sup>®</sup> unit will pass its Factory Acceptance Test upon the completion of a test build at FBR's premises in Perth at an effective lay rate of at least 285 blocks per hour, using only a tablet to control the Hadrian X<sup>®</sup> and a crew of no more than three people.

The Hadrian X<sup>®</sup> unit will pass its Site Acceptance Test upon the completion of a test build outdoors with the same requirements as the Factory Acceptance Test at an agreed location in Florida, and confirmation from an independent structural engineer that the constructed walls of the test build are consistent with the design and meet applicable building standards.

Upon the successful completion of the Site Acceptance Test, an affiliate of CRH Ventures, and Fastbrick Americas Engineering LLC ('Fastbrick Americas Engineering'), a subsidiary of FBR, will conduct a Demonstration Program in Florida consisting of the construction of the external walls of between five and 10 single storey houses using concrete blocks supplied by an affiliate of CRH Ventures. Fastbrick Americas Engineering is responsible for entering into contracts for five of the houses in the Demonstration Program, while an affiliate of CRH Ventures is responsible for entering into contracts for up to five houses in the Demonstration Program, subject to timing requirements.

The Demonstration Program will be deemed complete when FBR completes construction of its five houses and any houses contracted by an affiliate of CRH Ventures.

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### Joint Venture

FBR has granted CRH Ventures an exclusive Option to trigger the commencement of a joint venture for the supply of Wall as a Service<sup>®</sup> using Hadrian X<sup>®</sup> construction robots in the United States, wherein they would be granted 49% of the equity in a newly formed joint venture entity.

CRH Ventures may exercise the Option at any time after commencement of the Option Agreement and before the date that is 45 calendar days after completion of the Demonstration Program, or it may choose to waive its exclusivity over the Hadrian X<sup>®</sup> in the United States prior to the expiry of the Option period.

As needed, FBR and CRH Ventures will fund the starting and ongoing working capital requirements of the joint venture in proportion with their equity holdings, excluding the costs incurred by CRH Americas to finance the joint venture's acquisition of Hadrian X<sup>®</sup> units for the joint venture (detailed below). Each party will be entitled to two Director nominations.

After commencement of the joint venture, FBR at its cost will as soon as practicable swap out the first Australian-spec Hadrian X<sup>®</sup> unit with a United States-spec Hadrian X<sup>®</sup> unit, title to which will be transferred to the joint venture at no cost to the joint venture.

Neither CRH Ventures or its respective affiliates will compete with the joint venture's business or support competing robotic bricklaying technologies or businesses in the United States.

### Funding for expansion

Upon commencement of the joint venture, CRH Americas, an affiliate of CRH Ventures, will provide a US\$40 million rolling loan facility to the joint venture for the sole purpose of purchasing Hadrian X<sup>®</sup> units from FBR under three conditional purchase orders, described in further detail below.

Interest payable quarterly on the loan will be the average 3-month USD SOFR rate plus 150 basis points for the first purchase order; plus 300 basis points for the second purchase order; and plus 400 basis points for the third purchase order.

The loan will be drawn down in discrete tranches on a per machine basis, with each loan tranche to be repaid over a 12-year period with standard quarterly payments of principal and interest. In addition, the joint venture will have a cash sweep of 100% of the annual excess cash flow to repay the loan facility.

### Path to 300 Hadrian X<sup>®</sup> robots in the United States

Upon commencement, the joint venture will issue a binding but conditional purchase order for 20 Hadrian X<sup>®</sup> units at US\$2.0m each plus applicable sales tax (plus compounded increases to US CPI) to be supplied as follows.

The first three Hadrian X<sup>®</sup> units in this order will be delivered as soon as they are available. A non-refundable deposit of US\$1.1 million per unit will be payable immediately, with the remainder of the purchase price for each unit payable upon delivery of each unit to the joint venture and successful completion of a Site Acceptance Test.

The remaining 17 Hadrian X<sup>®</sup> units in this order will be supplied in four instalments of three units, and one instalment of two units. The obligation to supply each additional instalment will be triggered by the joint venture achieving an average 30% gross margin and an average 75% utilisation rate for at least six months on all units except the three most recently delivered units, and an average 30% gross margin and 50% utilisation rate for at least two months for the three most recently delivered units. Gross margin excludes joint venture overhead and corporate costs and depreciation of Hadrian X<sup>®</sup> units and refers only to direct revenues and costs incurred at site.

The joint venture may then issue another binding conditional purchase order for a further 39 Hadrian X<sup>®</sup> units within one month after it first achieves an average 30% gross margin and an average 75% utilisation rate for all units in the

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fleet except the three most recently delivered units for at least 12 months, and an average 30% gross margin and an average 50% utilisation with the three most recently delivered units for at least two months.

Subject to meeting the same requirements with the existing fleet as described above, the joint venture may then issue a further binding conditional order for an additional 40 Hadrian X<sup>®</sup> units.

Each of the above conditional orders will again be supplied in instalments of three Hadrian X<sup>®</sup> units under the same terms and subject to the same requirements as the preceding purchase order.

If the joint venture does not issue the purchase orders within one month following the achievement of the required metrics, the joint venture's exclusivity rights will terminate and FBR will not have any restrictions on selling or supplying Hadrian X<sup>®</sup> robots to anyone in the United States.

The tranche volumes, timelines and performance metrics are intended to set a base expansion rate for the joint venture. The parties may at any time agree to accelerate the payment and delivery of Hadrian X<sup>®</sup> units to the joint venture, if reasonably required to enable the joint venture's services to meet the needs of the market. If, for any reason, the joint venture fails to issue the purchase order in the required time frame, the exclusivity held by the joint venture for the use of the Hadrian X<sup>®</sup> in the United States will convert to non-exclusive.

After supply of the first 100 Hadrian X<sup>®</sup> units, the joint venture will be granted 40 options to purchase an instalment of five Hadrian X<sup>®</sup> units at the lesser of US\$2.5m each (CPI adjusted) or the price charged by FBR's applicable third-party manufacturer. If the joint venture does not exercise the options for at least 20 Hadrian X<sup>®</sup> units per year all remaining options shall immediately terminate.

FBR will reserve a percentage of its annual global Hadrian X<sup>®</sup> manufacturing capacity for Hadrian X<sup>®</sup> units that are ordered for the benefit of the joint venture as follows.

Hadrian X global annual manufacturing capacity (units per year)	Reserved percentage on the incremental capacity
0-30	75%
30-60	50%
>60	25%

FBR will provide fixed price Hadrian X<sup>®</sup> maintenance and repair services and personnel training services to the joint venture at a rate of US\$220,000 per Hadrian X<sup>®</sup> per year, indexed to US CPI from 31 December 2023.

### **Concrete block supply**

CRH shall have the right to supply concrete blocks to the joint venture on an exclusive supplier basis for a minimum of seven years in territories where CRH produces concrete block. Depending on the block, the purchase price of concrete blocks supplied by CRH per square foot will either be based on the price charged to CRH's Best Customer for the same or most similar structural/non-cosmetic concrete block product at the applicable block plant, or on a 'Cost Plus' basis, applying the Best Customer margin at the applicable block plant. Pricing updates will take place biannually.

To the extent that local CRH block plants do not have adequate capacity to supply the required types or volumes of concrete blocks in that region, CRH block suppliers shall have the right to source such concrete blocks and materials from a third party at market prices with no markup and capped delivery rates. If CRH block suppliers refuse or fail to supply concrete blocks and associated construction materials to the joint venture on the agreed basis, the joint venture may source concrete blocks and associated construction materials from third parties in its discretion.

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Delivery costs will be limited to the cost to deliver concrete blocks to the applicable site from the closest CRH block plant in the applicable state.

FBR Managing Director and Chief Executive Officer, Mike Pivac commented:

*"The agreements with CRH Ventures and its affiliates are another significant step in FBR's commercialisation journey and demonstrate a clear path to scale and profitability with the commencement of the joint venture. We have set a clear strategy for the Company to enter the United States market, and we will be doing so with the assistance of one of the largest concrete block manufacturers in the country. We are excited to arrive in a new international market to showcase the capabilities of our technology and commence our scaling plan with the financial and operational support of one of the world's leaders in building materials production."*

*Eduardo Gomez, Head of CRH Ventures, expressed optimism about the partnership, stating, "This collaboration exemplifies CRH's dedication to pioneering sustainable construction solutions. By leveraging FBR's cutting-edge robotics, we aim to redefine how homes are built, contributing to a more efficient and eco-friendly future."*

**Ends**

**For more information please contact:**

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**About FBR Limited**

FBR Limited (ASX: FBR) designs, develops and builds dynamically stabilised robots to address global needs in a safer, more efficient and more sustainable way. These robots are designed to work outdoors using the company's core Dynamic Stabilisation Technology® (DST®).

The first application of DST® is the Hadrian X®, a bricklaying robot that builds structural walls faster, safer, more accurately and with less wastage than traditional manual methods. The Hadrian X® provides Wall as a Service®, FBR's unique commercial offering, to builders on demand.

To learn more please visit [www.fbr.com.au](http://www.fbr.com.au)

**About CRH Ventures**

CRH Ventures is the venture capital unit of CRH, the global leader in building materials solutions. With access to a \$250M Venturing and Innovation Fund, CRH Ventures partners with and invests ambitiously and strategically in ConTech and ClimateTech start-ups across the entire construction value chain.

To learn more please visit [www.crhventures.com](http://www.crhventures.com)

