

MEDIA RELEASE

Additional \$20 million of funding for Research & Innovation projects in the Built Environment sector

- The Government is committing an additional \$20 million of BETA catalyst funding to sustain Research & Innovation efforts under Phase 2 of the BETA programme.
- The Construction Technology Innovation Laboratory (CTIL) exemplifies a long-term collaborative model for R&I and how progressive firms making significant investments in R&I can build long-term capabilities and a competitive advantage.

Singapore, 13 July 2022 – Mr Tan Kiat How, Senior Minister of State in the Ministry of Communications and Information and the Ministry of National Development announced that the Built Environment Technology Alliance¹ (BETA) programme will be extended into Phase 2 with an additional \$20 million of BETA Catalyst Funding to support industry-led Research & Innovation (R&I) efforts from progressive and committed BE alliances.

2 Launched in 2020, Phase 1 of the BETA programme was led by progressive, needle-moving Built Environment (BE) sector firms that were ready to commit resources and pursue promising technological advancements in key construction domains (see **Annex B** for List of Projects Awarded under BETA Phase 1).

3 An example is a project undertaken by the Construction Technology Innovation Laboratory (CTIL) that was launched by Woh Hup (Private Limited) and the Singapore Institute of Technology (SIT) in January 2021. The project "Innovative Construction

¹ BETA is a collaborative Built Environment (BE) R&I platform that brings together stakeholders across BE value chain to catalyse industry-led projects, co-create ideas and translate the results into economic value. Its aim is to draw in committed stakeholders who recognise the value of, and who are willing to invest in R&I to build new capabilities. Funding was secured in June 2020 from the National Research Foundation (NRF) as part of the government's Research, Innovation and Enterprise (RIE) 2020 Cities of Tomorrow strategy.

Technologies for Deep Foundation and Excavation" which comprises three sub-projects, seeks to develop an ensemble of underground construction technologies. This project is undertaken by Woh Hup in collaboration with its three value-chain partners – NatSteel Holdings Pte Ltd, TTJ Design & Engineering Pte Ltd and SEN SG Pte Ltd (see **Annex C** for details).

4 "We are constantly exploring innovative solutions that can translate into improvements in the construction process. We have partnered SIT in several research projects prior to setting up CTIL but there are limitations to what we can achieve on our own. We believe that the CTIL provides a common platform to better engage industry experts and like-minded partners to work collaboratively to develop capabilities and bring forth positive transformation of the BE sector," said Woh Hup's Executive Director, Mr Yong De-Rhong.

⁵ "SIT is delighted at the opportunity to work with industry leaders like Woh Hup, NatSteel, TTJ Design & Engineering, and SEN SG, to pull together the industry and SIT's expertise to address key industry challenges for building structures and underground works, and translate such innovations into practical solutions for on-site adoption," said SIT President, Professor Chua Kee Chaing.

6 "This project exemplifies a long-term collaborative model for R&I, that will show the way forward for the rest of the industry. Woh Hup recognises that transformation requires the success of all players, as each construction project is dependent on the collective expertise of a long and complex value-chain of partners and today's Research Project Agreement (RPA) signing ceremony formalises their mutual partnerships on this project. The Building & Construction Authority (BCA) hopes to encourage more forward-looking firms to adopt the same mindset and model when embarking on R&I," said BCA CEO, Mr Kelvin Wong.

7 Progressive firms that make significant investments in R&I can build long-term capabilities and a competitive advantage. For example, this project is expected to deliver

savings in a critical and relatively under-researched segment of underground civil engineering works as well as improve productivity and on-site safety. The construction cost associated with basement works can range between 4.5% - 20% of a project's total development cost. In public infrastructure projects, the cost of underground works can easily exceed 50% of the total cost. The research being carried out could have a deep impact on the BE sector by transforming the way we build.

8 Industry transformation is vital to ensure the resiliency of the BE sector. BCA will continue to press on, together with industry partners to leverage new R&I and technologies to enable the industry to emerge stronger.

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About BCA

The Building and Construction Authority (BCA) champions the development and transformation of the built environment sector, in order to improve Singapore's living environment. BCA oversees areas such as safety, quality, inclusiveness, sustainability and productivity, all of which, together with our stakeholders and industry partners, help to achieve our mission to transform the Built Environment sector and shape a liveable and smart built environment for Singapore. For more information, visit www1.bca.gov.sg.