

77 King St. W., Suite 4010 P.O. Box 159 Toronto-Dominion Centre Toronto, ON, M5K 1H1 Canada

GRANITE ANNOUNCES ACQUISITION OF US\$122.8 MILLION PORTFOLIO IN THE UNITED STATES AND LEASING UPDATE

September 15, 2017, Toronto, Ontario, Canada – Granite Real Estate Investment Trust ("Granite") (TSX: GRT.UN / NYSE: GRP.U) announced today that it has agreed to acquire a portfolio in the United States consisting of approximately 2.2 million square feet of gross leasable area in three properties at a purchase price of US\$122.8 million (the "Acquisition").

Two of the properties are located in Monroe, Ohio, 30 miles north of Cincinnati and the third in Olive Branch, Mississippi, 27 miles southeast of Memphis. The properties are located in two central U.S. logistic markets that are experiencing rapid growth in tenant demand, rental rates and absorption. In addition, the Cincinnati properties continue to build on Granite's presence within the fast growing e-commerce quadrant bounded by Cincinnati, Columbus, Indianapolis and Louisville.

These modern properties, with an average age of less than six years, are 100% occupied, have a flexible design and multiple enhanced features including excess truck and trailer storage, cross dock capabilities and clear heights of 32 feet. There are five diverse, non-auto related tenants with a weighted average lease term of approximately 4.9 years.

Michael Forsayeth, Granite's CEO, commented that "Granite has recently increased its focus to thoughtfully deploy its balance sheet and recycle its property portfolio. The acquisition of this U.S. portfolio is a significant step that is consistent with Granite's strategy to accelerate growth and diversify. Pro-forma, this acquisition will further reduce Granite's Magna concentration from 70.2% of gross leasable area to 65.5%."

The Acquisition is subject to customary closing conditions and closing is anticipated to take place in October 2017. The Acquisition represents an in-going yield of approximately 6.1% and will be immediately accretive to funds from operations and adjusted funds from operations. Granite expects to fund the purchase through a combination of cash on hand and a drawdown of its unsecured credit facility.

Granite also announced significant progress in the re-positioning and re-leasing of its Novi, Michigan property which was vacated by Magna in March 2017. Granite has re-leased 71% of the building (216,830 square feet) for a lease term of 20 years with occupancy expected to commence in January 2018.

ABOUT GRANITE

Granite is a Canadian-based REIT engaged in the ownership and management of predominantly industrial, warehouse and logistics properties in North America and Europe. Granite owns approximately 30 million square feet in over 90 rental income properties. Our tenant base includes Magna International Inc. and its operating subsidiaries as our largest tenants, in addition to tenants from other industries.

OTHER INFORMATION

Copies of financial data and other publicly filed documents about Granite are available through the internet on the Canadian Securities Administrators' Systems for Electronic Document Analysis and Retrieval (SEDAR) which can be accessed at www.sedar.com and on the United States Securities and Exchange Commission's Electronic Data Gathering, Analysis and Retrieval System (EDGAR) which can be accessed at www.sec.gov. For further information, please see our website at www.granitereit.com or contact Michael Forsayeth, Chief Executive Officer, at 647-925-7600, Ilias Konstantopoulos, Chief Financial Officer, at 647-925-7540 or John De Aragon, Chief Operating Officer, Co-Head Global Real Estate, at 647-925-7505.

FORWARD LOOKING STATEMENTS

This press release may contain statements that, to the extent they are not recitations of historical fact, constitute "forward-looking statements" or "forward-looking information" within the meaning of applicable securities legislation, including the United States Securities Act of 1933. as amended, the United States Securities Exchange Act of 1934, as amended, and applicable Canadian securities legislation. Forward-looking statements and forward-looking information may include, among others, statements regarding the intention of Granite and the vendors to complete the Acquisition on the terms and conditions described herein, the date on which closing of the Acquisition is expected to occur, the impact of the Acquisition on Granite's funds from operations and adjusted funds from operations, and Granite's plans, goals, strategies, intentions, beliefs, estimates, costs, objectives, economic performance, expectations, or foresight or the assumptions underlying any of the foregoing. Words such as "may", "would", "could", "will", "likely", "expect", "anticipate", "believe", "intend", "plan", "forecast", "project", "estimate", "seek" and similar expressions are used to identify forward-looking statements and forward-looking information. Forward-looking statements and forward-looking information should not be read as guarantees of the closing of the Acquisition on the terms and conditions described herein, the impact of the Acquisition on Granite's funds from operations and adjusted funds from operations, or other events, performance or results and will not necessarily be accurate indications of whether or the times at or by which such closing of the Acquisition, impact of the Acquisition on Granite's funds from operations and adjusted funds from operations, or other events or performance will be achieved. Undue reliance should not be placed on such statements. Forward-looking statements and forward-looking information are based on information available at the time and/or management's good faith assumptions and analyses made in light of its perception of historical trends, current conditions and expected future developments, as well as other factors management believes are appropriate in the circumstances, and are subject to known and unknown risks, uncertainties and other unpredictable factors, many of which are beyond Granite's control, that could cause actual events or results to differ materially from such forward-looking statements and forward-looking information. Important factors that could cause such differences include, but are not limited to, the risks set forth in the annual information form of Granite REIT and Granite GP dated March 1. 2017 (the "Annual Information Form"). The "Risk Factors" section of the Annual Information Form also contains information about the material factors or assumptions underlying such forward-looking statements and forward-looking information. Forward-looking statements and forward-looking information speak only as of the date the statements and information were made and unless otherwise required by applicable securities laws, Granite expressly disclaims

any intention and undertakes no obligation to update or revise any forward-looking statements or forward-looking information contained in this press release to reflect subsequent information, events or circumstances or otherwise.

granitereit.com