UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 14A
(Rule 14a-101)

Proxy Statement Pursuant to Section 14(a) of the Securities Exchange Act of 1934

Filed by the Registrant ☒
Filed by a Party other than the Registrant ☐

Check the appropriate box:

☐ Preliminary Proxy Statement
☐ **Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
☐ Definitive Proxy Statement
☒ Definitive Additional Materials
☐ Soliciting Material Pursuant to Section 240.14a-12

WHEELER REAL ESTATE INVESTMENT TRUST, INC.
(Name of Registrant as Specified in its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check all boxes that apply):

☒ No fee required.
☐ Fee paid previously with preliminary materials.
☐ Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)(l) and 0-11.

On November 18, 2026, Wheeler Real Estate Investment Trust, Inc. (the "Company") filed with the Securities and Exchange Commission (the "SEC") a Current Report on Form 8-K (the "8-K") disclosing its entry into note purchase agreements with unaffiliated investors, and other related matters.

The Company is filing this Form DEFA14A on Schedule 14A solely to update the Company's Definitive Proxy Statement (the "Proxy Statement") filed with the SEC on October 23, 2026, with the information contained in the 8-K. The following information supplements, and should be read in conjunction with, the Proxy Statement.

Item 1.01 Entry into a Material Definitive Agreement.

Note Purchase Agreements

As previously disclosed in a Current Report on Form 8-K filed with the Securities and Exchange Commission (the "SEC") on October 13, 2026 (the "Prior Form 8-K"), Wheeler Real Estate Investment Trust, Inc. (the "Company") entered into a Note Purchase Agreement (the "Initial Purchase Agreement") with an unaffiliated investor (the "Initial Note Investor"), pursuant to which the Company agreed to issue and sell to the Initial Note Investor a promissory note in the principal amount of $1,000,000 (the "Initial Note").

On November 17, 2026, the Company entered into additional Note Purchase Agreements on the same terms as the Initial Purchase Agreement (the "Additional Purchase Agreements", and together with the Initial Purchase Agreement, the "Purchase Agreements") with other unaffiliated investors (the "Additional Note Investors") providing for the issuance and sale of additional promissory notes in the aggregate principal amount of $7,295,000 (the "Additional Notes", and together with the Initial Note, the "Notes").

The Notes will be issued on a date that is no later than the 5th business day following the date on which all closing conditions (which include (i) the approval by the Company's stockholders of the issuance or potential issuance of more than 19.99% of outstanding shares of the Company's common stock, $0.01 par value per share ("Common Stock") pursuant to the Notes in accordance with Nasdaq Listing Rule 5635(d) (the "Stockholder Approval"), and (ii) the effectiveness of the registration statement covering the resale of all of the shares of the Company's common stock, par value $0.01 per share (the "Amortization Stock") issuable pursuant to the Notes) have been satisfied.

As of the date of this Current Report on Form 8-K, the Company has entered into Purchase Agreements for up to $8,295,000 in Notes.