

September 24, 2025

Worthington Enterprises, Inc.
200 West Old Wilson Bridge Road
Columbus, OH 43085

Re: Worthington Enterprises, Inc. 2025 Equity Plan for Non-Employee Directors

Ladies and Gentlemen:

We have acted as counsel to Worthington Enterprises, Inc., an Ohio corporation (the “Company”), in connection with the Company’s Registration Statement on Form S-8 (the “Registration Statement”) to be filed with the Securities and Exchange Commission (the “SEC”) on the date hereof in order to register (i) 1,000,000 common shares, without par value, of the Company (the “Common Shares”), that may be issuable and delivered under the Worthington Enterprises, Inc. 2025 Equity Plan for Non-Employee Directors (the “Plan”) and (ii) an indeterminate number of additional Common Shares that may become issuable under the terms of the Plan to prevent dilution resulting from any stock split, stock dividend, recapitalization or other similar transaction or adjustment affecting the Common Shares, in each case, under the provisions of the Securities Act of 1933, as amended (the “Act”), and the rules and regulations promulgated thereunder (the “Securities Rules”).

In connection with rendering this opinion, we have examined, to the extent deemed necessary, originals or copies, the authenticity of which has been established to our satisfaction, of: (a) the Registration Statement; (b) the Plan; (c) the Company’s Amended Articles of Incorporation, as currently in effect (the “Articles”); (d) the Company’s Code of Regulations, as currently in effect (the “Regulations”); and (e) certain corporate records of the Company, including resolutions adopted by the directors of the Company and the resolution approved by the shareholders of the Company. We have also relied upon such oral or written statements and representations of the officers of the Company and examined such certificates of public officials and authorities of law as we have deemed relevant as a basis for the opinion expressed herein.

In our examination of the aforesaid records, documents and certificates, we have assumed, without independent investigation, the authenticity of all records, documents and certificates examined by us, the correctness of the information contained in all records, documents and certificates examined by us, the genuineness of all signatures, the legal capacity of all individuals who have executed any of the aforesaid documents and certificates, the authority of all individuals entering and maintaining records, and the conformity to authentic originals of all items submitted to us as copies (whether certified, conformed, photostatic or by other electronic means) of records,

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documents or certificates. In rendering the opinion below, we have further assumed that each award under the Plan will be approved by the Board of Directors of the Company (or a duly authorized committee thereof) and that the agreement that accompanies each award under the Plan will be consistent with the terms of the Plan and will not expand, modify or otherwise affect the terms of the Plan or the respective rights or obligations of any of the participants thereunder.

We have relied solely upon the examinations and inquiries recited herein, and, except for the examinations and inquiries recited herein, we have not undertaken any independent investigation to determine the existence or absence of any facts, and no inference as to our knowledge concerning such facts should be drawn.

Based upon and subject to the foregoing and subject to the qualifications and limitations set forth herein, as of the date hereof, we are of the opinion that the Common Shares to be registered under the Act pursuant to the Registration Statement for issuance and delivery under the Plan, when issued, delivered and paid for, as appropriate, in accordance with, and for the consideration, if any, prescribed in, the Plan and in any award agreements entered into by participants in the Plan with the Company as contemplated by the Plan, will be validly issued, fully paid and non-assessable, assuming compliance with applicable securities laws. As used herein, the phrase “validly issued” means that the particular action has been authorized by all necessary corporate action of the Company and that the Company has the corporate authority to take such action under Chapter 1701 of the Ohio Revised Code (also known as the Ohio General Corporation Law), and the Articles and the Regulations.

Members of our firm are admitted to the Bar in the State of Ohio and we express no opinion as to the laws of any jurisdiction other than the laws of the State of Ohio, including the applicable provisions of the Ohio Constitution and the reported judicial decisions interpreting those laws, and the federal laws of the United States of America.

This opinion is based upon the laws and legal interpretations in effect, and the facts and circumstances existing, on the date hereof, and we assume no obligation to revise or supplement this opinion should any such law or legal interpretation be changed by legislative action, judicial interpretation or otherwise or should there be any change in such facts or circumstances.

This opinion is furnished by us solely for the benefit of the Company in connection with the offering of the Common Shares covered by the Registration Statement pursuant to the Plan and the filing of the Registration Statement and any amendments thereto.

Notwithstanding the foregoing, we consent to the filing of this opinion with the SEC as an exhibit to the Registration Statement and to the reference to us therein. By giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Act or the Securities Rules.

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Except in connection with the Registration Statement as aforesaid, no portion of this opinion may be quoted or otherwise used by any person without our prior written consent.

Sincerely,

/s/ *Vorys, Sater, Seymour and Pease LLP*

Vorys, Sater, Seymour and Pease LLP