UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

AMENDMENT NO. 3 TO FORM S-1 REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

BENTLEY SYSTEMS, INCORPORATED (Exact name of registrant as specified in its charter)

Delaware (State or other jurisdiction of incorporation or organization)

7372

(Primary Standard Industrial Classification Code Number)

95-3936623 (I.R.S. Employer Identification Number)

685 Stockton Drive Exton, PA 19341 (610) 458-5000

(Address, including zip code and telephone number, including area code, of registrant's principal executive offices)

David R. Shaman David R. Shaman
Chief Legal Officer and Corporate Secretary
Bentley Systems, Incorporated
685 Stockton Drive
Exton, PA 19341
(610) 458-5000
(Name, address, including zip code and telephone number, including area code, of agent for service)

Richard A. Fenves Jonathan R. Ozner Simpson Thacher & Bartlett LLP 425 Lexington Avenue New York, NY 10017 (212) 455-2000

Gregory S. Bentley David J. Hollister 685 Stockton Drive Exton, PA 19341 (610) 458-5000

Richard A. Kline Sarah B. Axtell Goodwin Procter LLP 601 Marshall Street Redwood City, CA 94063 (650) 752-3100

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. \Box

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer \square

Accelerated filer \square

Non-accelerated filer \boxtimes

Smaller reporting company \square Emerging growth company ⊠

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. \Box

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered ⁽¹⁾	Proposed Maximum Offering Price per Share ⁽²⁾	Proposed Maximum Aggregate Offering Price ⁽²⁾	Amount of Registration Fee ⁽³⁾
Class B Common Stock, par value \$0.01 per share	12,360,991	\$19.00	\$234,858,829	\$30,484.68

- Includes 1,610,991 shares of our Class B common stock that the underwriters have an option to purchase.
- Estimated solely for the purposes of calculating the registration fee in accordance with Rule 457(a) under the Securities Act of 1933, as amended. (2)
- Previously paid. (3)

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE:

This Amendment No. 3 to the Registration Statement on Form S-1 is being filed solely for the purpose of filing exhibits as indicated in Part II of this Amendment No. 3. Accordingly, this Amendment No. 3 consists only of the facing page, this explanatory note, Part II of the Registration Statement, the signature pages to the Registration Statement and the filed exhibits. The prospectus is unchanged and has been omitted

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution

The following table sets forth all expenses to be paid by the Company in connection with this registration statement and the issuance and sale of our Class B common stock being registered hereby (other than underwriting discounts and commissions). All amounts shown are estimates except for the SEC registration fee, the FINRA filing fee, and The Nasdaq Global Select Market initial listing fee:

	Amount to be Paid
SEC registration fee	\$ 30,485
FINRA filing fee	35,729
The Nasdaq Global Select Market initial listing fee	295,000
Printing expenses	350,000
Legal fees and expenses	3,300,000
Accounting fees and expenses	1,950,000
Custodian, transfer agent, and registrar fees	85,000
Miscellaneous	30,000
Total	\$6,076,214

Item 14. Indemnification of Directors and Officers

Section 102 of the Delaware law allows a corporation to eliminate the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except in cases where the director breached his or her duty of loyalty to the corporation or its stockholders, failed to act in good faith, engaged in intentional misconduct or a knowing violation of the law, willfully or negligently authorized the unlawful payment of a dividend or approved an unlawful stock redemption or repurchase or obtained an improper personal benefit. Shortly following the effectiveness of this registration statement, we expect to adopt an amended and restated certificate of incorporation which will contain a provision that eliminates directors' personal liability as set forth above.

In addition, shortly following the effectiveness of this registration statement, we expect to adopt amended and restated by-laws, which will provide that we shall indemnify our directors and the officers designated by our board of directors to the extent permitted by the Delaware law. Section 145 of the Delaware law provides that a Delaware corporation has the power to indemnify its directors, officers, employees and agents in certain circumstances. Subsection (a) of Section 145 of the Delaware law empowers a corporation to indemnify any director, officer, employee or agent, or former director, officer, employee or agent, who was or is a party, or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation), against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding provided that such director, officer, employee or agent acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation and, with respect to any criminal action or proceeding, provided that such director, officer, employee or agent had no reasonable cause to believe that his or her conduct was unlawful.

Subsection (b) of Section 145 of the Delaware law empowers a corporation to indemnify any director, officer, employee or agent, or former director, officer, employee or agent, who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred in connection with the defense or settlement of such action or suit provided that such person acted in good faith

and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification may be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery shall determine that despite the adjudication of liability such person is fairly and reasonably entitled to indemnity for such expenses which the court shall deem proper.

Section 145 further provides that to the extent that a director or officer or employee of a corporation has been successful in the defense of any action, suit or proceeding referred to in subsections (a) and (b) or in the defense of any claim, issue or matter therein, he or she shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection therewith; that indemnification provided by Section 145 shall not be deemed exclusive of any other rights to which the party seeking indemnification may be entitled; and the corporation is empowered to purchase and maintain insurance on behalf of a director, officer, employee or agent of the corporation against any liability asserted against him or her or incurred by him or her in any such capacity or arising out of his or her status as such whether or not the corporation would have the power to indemnify him or her against such liabilities under Section 145; and that, unless indemnification is ordered by a court, the determination that indemnification under subsections (a) and (b) of Section 145 is proper because the director, officer, employee or agent has met the applicable standard of conduct under such subsections shall be made by (1) a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (2) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion, or (3) by the stockholders.

We will have in effect insurance policies for general officers' and directors' liability insurance covering all of our officers and directors.

Item 15. Recent Sales of Unregistered Securities

Since January 1, 2017, the registrant has sold the following unregistered securities. All amounts set forth below have been adjusted to give effect to a May 1, 2018 stock dividend that had the economic effect of a two-for-one stock split.

- (a) Stock Option Grants and Exercises
 - In 2017, the registrant granted options to purchase 4,541,902 shares of Class B common stock to certain of its colleagues and directors under the 2015 Equity Incentive Plan at an exercise price of \$5.38 per share;
 - In 2018, the registrant granted options to purchase 5,126,000 shares of Class B common stock to certain of its colleagues and directors under the 2015 Equity Incentive Plan at an exercise price of \$6.805 per share;
 - In 2019, the registrant granted options to purchase 4,826,000 shares of Class B common stock to certain of its colleagues and directors under the 2015 Equity Incentive Plan at an exercise price of \$7.24 per share; and
 - In 2020, the registrant granted options to purchase 10,000 shares of Class B common stock to certain of its colleagues and directors under the 2015 Equity Incentive Plan at an exercise price of \$10.84 per share.
 - In 2017, the registrant issued to colleagues 2,855,792 shares of Class B common stock at per share purchase prices ranging from \$0.0488 to \$5.23 pursuant to exercises of options granted under various employee stock option plans;
 - In 2018, the registrant issued to colleagues 2,824,574 shares of Class B common stock at per share purchase prices ranging from \$0.3088 to \$5.38 pursuant to exercises of options granted under various employee stock option plans;
 - In 2019, the registrant issued to colleagues 3,439,131 shares of Class B common stock at per share purchase prices ranging from \$1.785 to \$6.805 pursuant to exercises of options granted under various employee stock option plans; and

 From January 1, 2020 to June 30, 2020, the registrant issued to colleagues 2,184,628 shares of Class B common stock at per share purchase prices ranging from \$3.495 to \$7.24 pursuant to exercises of options granted under the 2015 Equity Incentive Plan.

(b) Stock Grants

- In 2017, the registrant granted to colleagues 109,240 fully-vested shares of Class B common stock pursuant to the 2015 Equity Incentive Plan at par value, 100,730 shares of which were ultimately issued net of tax withholding; and
- In 2020, the registrant issued 17,411 fully-vested shares of Class B common stock to independent directors as compensation for board service.

(c) Restricted Stock Unit ("RSU") Grants and Vesting

- In 2017, the registrant issued 43,240 shares of Class B common stock at par value pursuant to vested RSUs under the 2015 Equity Incentive Plan; and
- In 2019, the registrant issued 11,348 shares of Class B common stock at par value pursuant to vested RSUs under the 2015 Equity Incentive Plan; and
- In 2020, the registrant issued 23,592 shares of Class B common stock at par value pursuant to vested RSUs under the 2015 Equity Incentive Plan.

(d) Restricted Stock Award Grants and Vesting

- In 2017, the registrant issued 240,672 shares of restricted Class B common stock to colleagues under the 2015 Equity Incentive Plan;
- In 2018, the registrant issued 570,286 shares of restricted Class B common stock to colleagues under the 2015 Equity Incentive Plan;
- In 2019, the registrant issued 493,840 shares of restricted Class B common stock to colleagues under the 2015 Equity Incentive Plan;
- In 2020, the registrant issued 2,389,896 shares of restricted Class B common stock to colleagues under the 2015 Equity Incentive Plan; and
- In 2020, the registrant issued 12,454 shares of restricted Class B common stock to independent directors as compensation for board service.
- In 2017, the registrant issued to colleagues 85,912 shares of Class B common stock at par value pursuant to vested restricted stock awards under the 2015 Equity Incentive Plan;
- In 2018, the registrant issued to colleagues 296,013 shares of Class B common stock at par value pursuant to vested restricted stock awards under the 2015 Equity Incentive Plan;
- In 2019, the registrant issued to colleagues 261,104 shares of Class B common stock at par value pursuant to vested restricted stock awards under the 2015 Equity Incentive Plan; and
- In 2020, the registrant issued to colleagues 60,221 shares of Class B common stock at par value pursuant to vested restricted stock awards under the 2015 Equity Incentive Plan.

(e) Nonqualified Deferred Compensation Plan Distributions

- In 2017, the registrant issued 1,526,494 shares of Class B common stock at par value to colleagues in connection with distributions from the Nonqualified Deferred Compensation Plan;
- In 2018, the registrant issued 2,332,585 shares of Class B common stock at par value to colleagues in connection with distributions from the Nonqualified Deferred Compensation Plan;
- In 2019, the registrant issued 2,322,983 shares of Class B common stock at par value to
 colleagues in connection with distributions from the Nonqualified Deferred Compensation Plan;
 and

• From January 1, 2020 to June 30, 2020, the registrant issued 2,959,731 shares of Class B common stock at par value to colleagues in connection with distributions from the Nonqualified Deferred Compensation Plan.

(f) Other Issuances

- In 2017, the registrant issued and sold an aggregate of 6,035,736 shares of Class B common stock to Siemens Corporation pursuant to the Common Stock Purchase Agreement. 4,336,940 of such shares were sold at a per share price of \$5.38, and 1,698,796 of such shares were sold at a per share price of \$5.73;
- In 2018, the registrant issued and sold an aggregate of 2,139,466 shares of Class B common stock to Siemens Corporation pursuant to the Common Stock Purchase Agreement. 1,249,067 of such shares were sold at a per share price of \$6.805, and 890,399 of such shares were sold at a per share price of \$8.67;
- In 2018, the registrant issued and sold 57,670 restricted shares of Class B common stock to a colleague for a per share price of \$8.67;
- In 2018, the registrant issued options to acquire a total of 900,000 shares of Class B common stock to five entities in connection with the acquisition of all the outstanding equity interests of a company at an exercise price of \$6.805 per share;
- In 2019, the registrant issued and sold an aggregate of 622,873 shares of Class B common stock to Siemens Corporation pursuant to the Common Stock Purchase Agreement at a per share price of \$7.24; and
- In 2020, the registrant issued and sold an aggregate of 3,769,346 shares of Class B common stock to Siemens Corporation pursuant to the Common Stock Purchase Agreement at a per share price of \$15.48.

The offers, sales and issuances of these securities were exempt from registration under the Securities Act in reliance upon Rule 701 promulgated under the Securities Act as transactions under compensatory benefit plans and contracts relating to compensation in compliance with Rule 701 or in reliance upon Section 4(a)(2) of the Securities Act as transactions by an issuer not involving any public offering.

The recipients of the securities in each of these transactions represented their intentions to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof, and either received or had adequate access, through employment, business or other relationships, to information about us. The sales of these securities were made without general solicitation or advertising and without the involvement of any underwriter.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits.

Exhibit Number	Description
1.1**	Form of Underwriting Agreement
3.1**	Form of Amended and Restated Certificate of Incorporation of Bentley Systems, Incorporated, to be in effect shortly following the effectiveness of the registration statement
3.2**	Form of Amended and Restated By-Laws of Bentley Systems, Incorporated, to be in effect shortly following the effectiveness of the registration statement
<u>4.1</u>	Form of Registrant's Class B common stock certificate of Bentley Systems, Incorporated
<u>5.1</u>	Opinion of Simpson Thacher & Bartlett LLP
10.1**	Amended and Restated Credit Agreement, dated as of December 19, 2017, by and among the Registrant, PNC Bank National Association, as administrative agent, and the lenders party thereto
10.2**	Common Stock Purchase Agreement, by and among the Registrant, Siemens AG, and the persons listed as "Key Holders" therein, dated September 23, 2016, as amended on October 28, 2016, and April 23, 2018
10.3**	Registration Rights Agreement, dated as of January 24, 2017, by and between the Registrant and Siemens Corporation
10.4†**	Form of Bentley Systems, Incorporated Bonus Pool Plan, as amended and restated
10.5†**	Bentley Systems, Incorporated 2015 Equity Incentive Plan, as amended and restated effective as of May 29, 2018
10.6†**	Form of Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan
<u>10.7†**</u>	Bentley Systems, Incorporated Nonqualified Deferred Compensation Plan for Non-Employee Directors, as amended and restated as of January 1, 2015
10.8†**	Form of Bentley Systems, Incorporated 2020 Omnibus Incentive Plan
10.9†**	Form of Bentley Systems, Incorporated Global Employee Stock Purchase Plan
10.10**	Amendment to the Amended and Restated Credit Agreement, dated as of September 2, 2020
21.1**	<u>List of Subsidiaries of Registrant</u>
23.1**	Consent of KPMG LLP, Independent Registered Public Accounting Firm
<u>23.2</u>	Consent of Simpson Thacher & Bartlett LLP (included in Exhibit 5.1)
23.3**	Consent of Cambashi Limited
23.4**	Consent of Janet Haugen
24.1**	Power of Attorney

^{**} Previously filed.

(b) Financial Statement Schedules. All financial statement schedules are omitted because they are not applicable or the information is included in the registrant's consolidated financial statements or related notes included in the prospectus that is part of this registration statement.

Item 17. Undertakings

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director,

[†] Indicates management contract or plan.

officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The registrant hereby further undertakes that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective; and
- (2) For purposes of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Exton, Pennsylvania on this 17th day of September, 2020.

BENTLEY SYSTEMS, INCORPORATED

By: /s/ David J. Hollister

Name: David J. Hollister
Title: Chief Financial Officer

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date	
/s/ Gregory S. Bentley	Chief Executive Officer and Director (Principal Executive Officer)	September 17, 2020	
Gregory S. Bentley	(Timelpar Executive Officer)		
/s/ David J. Hollister	Chief Financial Officer (Principal Financial Officer)	September 17, 2020	
David J. Hollister	,		
/s/ Werner Andre	Chief Accounting Officer (Principal Accounting Officer)	September 17, 2020	
Werner Andre	- Accounting Officer)		
*	Director	September 17, 2020	
Keith A. Bentley			
*	Director	September 17, 2020	
Barry J. Bentley			
*	Director	September 17, 2020	
Raymond B. Bentley			
*	Director	September 17, 2020	
Kirk B. Griswold			
*	Director	September 17, 2020	
Brian F. Hughes			
/s/ David J. Hollister	<u>_</u>		
*By: Name: David J. Hollister			

Title: Attorney-in-Fact





BENTLEY SYSTEMS, INCORPORATED

THE COMPANY WILL FURNISH WITHOUT CHARGE TO EACH SHAREHOLDER WHO SO REQUESTS, A SUMMARY OF THE POWERS, DESIGNATIONS, PREFERENCES AND RELATIVE, PARTICIPATING, OPTIONAL OR OTHER SPECIAL RIGHTS OF EACH CLASS OF STOCK OF THE COMPANY AND THE QUALIFICATIONS, LIMITATIONS OR RESTRICTIONS OF SUCH PREFERENCES AND RIGHTS, AND THE VARIATIONS IN RIGHTS, PREFERENCES AND LIMITATIONS DETERMINED FOR EACH SERIES, WHICH ARE FIXED BY THE CERTIFICATE OF INCORPORATION OF THE COMPANY, AS AMENDED, AND THE RESOLUTIONS OF THE BOARD OF DIRECTORS OF THE COMPANY, AND THE AUTHORITY OF THE BOARD OF DIRECTORS TO DETERMINE VARIATIONS FOR FUTURE SERIES. SUCH REQUEST MAY BE MADE TO THE OFFICE OF THE SECRETARY OF THE COMPANY OR TO THE TRANSFER AGENT. THE BOARD OF DIRECTORS MAY REQUIRE THE OWNER OF A LOST OR DESTROYED STOCK CERTIFICATE, OR HIS LEGAL REPRESENTATIVES, TO GIVE THE COMPANY A BOND TO INDEMNIFY IT AND ITS TRANSFER AGENTS AND REGISTRARS AGAINST ANY CLAIM THAT MAY BE MADE AGAINST THEM ON ACCOUNT OF THE ALLEGED LOSS OR DESTRUCTION OF ANY SUCH CERTIFICATE.

	ng abbreviations, when used in the inscription of applicable laws or regulations:	on the face of this certifica	ite, shall be construed as though they were written out in full	
	A - as tenants in common - as tenants by the entireties	UNIF GIFT MIN ACT	- Custodian (Minor) under Uniform Gifts to Minors Act (State)	
JT TEN	- as joint tenants with right of survivorship and not as tenants in common	UNIF TRF MINACT	Cust) (Cust) under Uniform Transfers to Minors Act	
Additional	abbreviations may also be used though not in	the above list.	(Minor) (State)	
For value receiv	ed, hereby	sell, assign and transfer u	PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE INTO	
(PLEASE PRINT OR TY	PEWRITE NAME AND ADDRESS, INCLUDING POSTAL ZIP CODE, OF	ASSIGNEE)		
			Shares	
of the Class B (Common Stock represented by the within Cert	ificate, and do hereby irre	evocably constitute and appoint Attorney	
to transfer the s	said stock on the books of the within-named C	ompany with full power o	f substitution in the premises.	
Dated:	20	0	Signature(s) Guaranteed: Medallion Guarantee Stamp THE SIGNATURE(s) SHOULD BE GUARANTEED BY AN ELIGBLE GUARANTOR INSTITUTION (Banks, Stodbriders, Savings and Loss Associations and Credit Unions) WITH MEMBERSHIP IN AN APPROVED SKINATURE GUARANTEE MEDALLION PROGRAM, PURSUANT TO S.E.C. RULE 17A-H5.	
Signature:				
Signature:				
Notic	ce: The signature to this assignment must come as written upon the face of the certificate without atteration or enlargement, or any characteristics.	e, in every particular,		

The IRS requires that the named transfer agent ("we") report the cost basis of certain shares or units acquired after January 1, 2011. If your shares or units are covered by the legislation, and you requested to sell or trensfer the shares or units using a specific cost basis calculation method, then we have processed as you requested. If you did not specify a cost basis calculation method, then we have defaulted to the first in, first out (FIFO) method. Please consult your tax advisor if you need additional information about cost basis.

If you do not keep in contact with the issuer or do not have any activity in your account for the time period specified by state law, your property may become subject to state unclaimed property laws and transferred to the appropriate state.



Simpson Thacher & Bartlett LLP 425 LEXINGTON AVENUE NEW YORK, NY 10017-3954

TELEPHONE: +1-212-455-2000 FACSIMILE: +1-212-455-2502

September 17, 2020

Bentley Systems, Incorporated 685 Stockton Drive Exton, PA 19341

Ladies and Gentlemen:

We have acted as counsel to Bentley Systems, Incorporated, a Delaware corporation (the "Company"), in connection with the Registration Statement on Form S-1 (the "Registration Statement") filed by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Act"), relating to (i) the sale by certain selling stockholders referred to in the Registration Statement of an aggregate of up to 11,335,530 shares (the "Selling Stockholder Outstanding Shares") of Class B Common Stock, par value \$0.01 per share, of the Company (the "Common Stock") currently issued and outstanding and (ii) the sale by certain selling stockholders referred to in the Registration Statement of an aggregate of up to 1,025,461 shares (the "Selling Stockholder Option Shares") of Common Stock to be issued by the Company to such selling stockholders upon the exercise of options currently issued and outstanding under the Bentley Systems, Incorporated 2015 Equity Incentive Plan, as amended and restated, effective as of May 29, 2018, and as further amended on July 10, 2020 (the "2015 Plan").

We have examined the Registration Statement, the 2015 Plan and the form of option agreement under the 2015 Plan pursuant to which the options relating to the Selling Stockholder Option Shares were issued (each, an "Option Agreement"). In addition, we have examined, and have relied as to matters of fact upon, originals, or duplicates or certified or conformed copies, of such records, agreements, documents and other instruments and such certificates or comparable documents of public officials and of officers and representatives of the Company and have made such other investigations as we have deemed relevant and necessary in connection with the opinions hereinafter set forth.

BEIJING HONG KONG HOUSTON LONDON LOS ANGELES PALO ALTO SÃO PAULO SEOUL TOKYO WASHINGTON, D.C.

In rendering the opinion set forth below, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as duplicates or certified or conformed copies and the authenticity of the originals of such latter documents.

Based upon the foregoing, and subject to the qualifications, assumptions and limitations stated herein, we are of the opinion that (1) the Selling Stockholder Outstanding Shares have been validly issued and are fully paid and nonassessable and (2) upon issuance and delivery in accordance with the terms of the 2015 Plan and the applicable Option Agreement following the valid exercise by the applicable selling stockholder of the related option, the Selling Stockholder Option Shares will be validly issued, fully paid and nonassessable.

We do not express any opinion herein concerning any law other than the Delaware General Corporation Law.

We hereby consent to the filing of this opinion letter as Exhibit 5.1 to the Registration Statement and to the use of our name under the caption "Legal Matters" in the prospectus included in the Registration Statement.

Very truly yours,

/s/ Simpson Thacher & Bartlett LLP

SIMPSON THACHER & BARTLETT LLP