Registration No. 333-135842 Registration No. 333-218796 Registration No. 333-229138

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

 $POST\text{-}EFFECTIVE\ AMENDMENT\ NO.\ 1\ TO\ FORM\ S\text{-}8\ REGISTRATION\ STATEMENT\ NO.\ 333\text{-}135842$ POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-8 REGISTRATION STATEMENT NO. 333-218796 POST-EFFECTIVE AMENDMENT NO. 1 TO FORM S-8 REGISTRATION STATEMENT NO. 333-229138

> UNDER THE SECURITIES ACT OF 1933

# **LIGHTBRIDGE CORPORATION**

Nevada		91-19	975651
(State or other jurisdiction of		(IRS Employer Ide	entification Number)
organizatio	n)		
	11710 Pla	aza America Drive, Suite 2000	
		Reston, VA 20190	
	(Address, including	g zip code, of principal executive offices)	
	Lightbridge Corp	poration 2006 Stock Plan, as amended	
Lig		ion 2015 Equity Incentive Plan, as amended	
		oration 2020 Omnibus Incentive Plan	
		(Full title of the plans)	
		Seth Grae	
		President and CEO	
		ghtbridge Corporation	
	11710 Pla	aza America Drive, Suite 2000	
		Reston, VA 20190	
	11 1.1 1	(571) 730-1200	
(Name, a	address and telephone	e number, including area code, of agent for serv	vice)
		Copy to:	
	_	David R. Crandall	
		Hogan Lovells US LLP	
	1601	Wewatta Street, Suite 900	
		Denver, CO 80202 (303) 899-7300	
		(303) 899-7300	
	See the definitions	rge accelerated filer, an accelerated filer, a no s of "large accelerated filer," "accelerated file	
Large accelerated filer		Accelerated filer	
Non-accelerated filer	$\boxtimes$	Smaller reporting company	
		Emerging growth company	
If an emerging growth company indi	cate by check mark i	if the Registrant has elected not to use the exten	ided transition period for complying wit
		ant to Section $7(a)(2)(B)$ of the Securities Act. [	

#### EXPLANATORY NOTE

Lightbridge Corporation, a Nevada corporation (the "Registrant") filed a registration statement on Form S-8, Registration Number 333-135842 (the "2006 Plan Registration Statement"), with the Securities and Exchange Commission on July 18, 2006, to register a total of 41,667 shares of Common Stock, par value \$0.001 per share, of the Company (the "Common Stock") for issuance under the Lightbridge Corporation 2006 Stock Plan, as amended (the "2006 Plan").

The Registrant also filed registration statements on Forms S-8, Registration Numbers 333-218796 and 333-229138 (the "2015 Plan Registration Statements," together with the 2006 Plan Registration Statement, the "Registration Statements"), with the Securities and Exchange Commission on June 16, 2017 and January 4, 2019, respectively, to register a total of 525,000 shares of Common Stock for issuance under the Lightbridge Corporation 2015 Equity Incentive Plan, as amended (the "2015 Plan," and, together with the 2006 Plan, the "Former Plans").

On September 3, 2020 (the "Effective Date"), the stockholders of the Registrant approved the Lightbridge Corporation 2020 Omnibus Incentive Plan (the "2020 Plan"). Effective as of Effective Date, no new awards may be granted under the Former Plans. However, the 2020 Plan provides that such additional number of shares of Common Stock as is equal to the sum of (a) the number of shares of Common Stock reserved for issuance under the 2015 Plan that remain available for grant under the 2015 Plan immediately prior to the Effective Date and (b) the number of shares of Common Stock subject to awards granted under the Former Plans, which awards expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by the Registrant at their original issuance price pursuant to a contractual repurchase right, in each case after the Effective Date, will become available for awards granted under the 2020 Plan. Up to 515,985 shares of Common Stock, which is equal to the sum of the number of shares of Common Stock subject to awards granted under the 2015 Plan, which awards expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased by the Registrant at their original issuance price pursuant to a contractual repurchase right, will become available for issuance under the 2020 Plan and are collectively referred to herein as the "Carryover Shares".

Accordingly, pursuant to the undertaking in Item 512(a)(1)(iii) of Regulation S-K that the Registrant disclose a material change in the plan of distribution as it was disclosed in the Registration Statements, the Registrant is filing this Post-Effective Amendment No. 1 to the Registration Statements to reflect that, as of the Effective Date, the Carryover Shares will no longer be issued under the Former Plans and may instead be issued under the 2020 Plan.

Contemporaneously with the filing of this Post-Effective Amendment No. 1 to the Registration Statement, the Registrant is filing a Registration Statement on Form S-8 to register 362,439 shares of Common Stock authorized for issuance pursuant to the 2020 Plan, which amount excludes the Carryover Shares. No additional shares of Common Stock are being registered by this Post-Effective Amendment No. 1 to the Registration Statements.

#### PART I

### INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

The information specified in Items 1 and 2 of Part I of Form S-8 is omitted from this filing in accordance with the provisions of Rule 428 under the Securities Act and the introductory note to Part I of Form S-8. The documents containing the information specified in Part I have been or will be delivered to the participants in the 2020 Plan as required by Rule 428(b).

#### PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

#### Item 3. Incorporation of Documents by Reference

The following documents filed by the Registrant with the Securities and Exchange Commission (the "Commission") are incorporated by reference in this registration statement:

- (a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2020, filed with the Commission on March 25, 2021;
- (b) The Registrant's Current Reports on Form 8-K filed with the Commission on January 21, 2021 and February 18, 2021; and
- (c) The description of the Registrant's Common Stock contained in its registration statement on Form 8-A filed on July 18, 2006, as updated by Exhibit 4.3 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2019, including any amendments or reports filed for the purpose of updating such description.

All documents filed by the Registrant pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, after the date hereof (excluding any documents or portions of such documents that are furnished under Item 2.02 or Item 7.01 of a Current Report on Form 8-K and any exhibits included with such Items), and prior to the filing of a post-effective amendment that indicates that all the securities offered hereby have been sold or that deregisters the securities offered hereby then remaining unsold, shall also be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of filing of such documents.

Any statement contained in this registration statement or in a document incorporated or deemed to be incorporated by reference in this registration statement will be deemed to be modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference in this registration statement modifies or supersedes that statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

#### Item 4. Description of Securities

Not applicable.

### Item 5. Interests of Named Experts

Not applicable.

### Item 6. Indemnification of Directors and Officers

The Registrant is a Nevada corporation and is generally governed by the Nevada Private Corporations Code, Title 78 of the Nevada Revised Statutes ("NRS").

Section 78.138 of the NRS provides that, unless the corporation's articles of incorporation provide otherwise, a director or officer will not be individually liable unless it is proven that (i) the director's or officer's acts or omissions constituted a breach of his or her fiduciary duties, and (ii) such breach involved intentional misconduct, fraud or a knowing violation of the law.

Section 78.7502 of the NRS permits a Nevada corporation to indemnify its directors and officers against expenses, judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with a threatened, pending, or completed action, suit, or proceeding, except an action by or on behalf of the corporation, if the officer or director (i) is not liable pursuant to NRS 78.138, or (ii) acted in good faith and in a manner the officer or director reasonably believed to be in or not opposed to the best interests of the corporation and, if a criminal action or proceeding, had no reasonable cause to believe the conduct of the officer or director was unlawful. Section 78.7502 of the NRS also requires a corporation to indemnify its officers and directors if they have been successful on the merits or otherwise in defense of any claim, issue, or matter resulting from their service as a director or officer.

Section 78.751 of the NRS permits a Nevada corporation to indemnify its officers and directors against expenses incurred by them in defending a civil or criminal action, suit, or proceeding as they are incurred and in advance of final disposition thereof, upon determination by the stockholders, the disinterested board members, or by independent legal counsel. Section 78.751 of NRS requires a corporation to advance expenses as incurred upon receipt of an undertaking by or on behalf of the officer or director to repay the amount if it is ultimately determined by a court of competent jurisdiction that such officer or director is not entitled to be indemnified by the corporation if so provided in the corporation's articles of incorporation, bylaws, or other agreement. Section 78.751 of the NRS further permits the corporation to grant its directors and officers additional rights of indemnification under its articles of incorporation, bylaws or other agreement.

Section 78.752 of the NRS provides that a Nevada corporation may purchase and maintain insurance or make other financial arrangements on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another company, partnership, joint venture, trust or other enterprise, for any liability asserted against him and liability and expenses incurred by him in his capacity as a director, officer, employee or agent, or arising out of his status as such, whether or not the corporation has the authority to indemnify him against such liability and expenses.

The Registrant's Articles of Incorporation and Bylaws implement the indemnification and insurance provisions permitted by Chapter 78 of the NRS by providing that:

- The Registrant shall indemnify its directors and officers to the fullest extent permitted by the NRS against expense, liability and loss reasonably incurred or suffered by them in connection with their service as an officer or director; and
- The Registrant may purchase and maintain insurance, or make other financial arrangements, on behalf of any person who holds or who has held a position as a director, officer, or representative against liability, cost, payment, or expense incurred by such person.

At the present time, there is no pending litigation or proceeding involving a director, officer, employee or other agent of the Registrant in which indemnification would be required or permitted. The Registrant is not aware of any threatened litigation or proceeding which may result in a claim for such indemnification.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, we have been informed that in the opinion of the Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

#### Item 7. Exemption from Registration Claimed

Not applicable.

### Item 8. Exhibits

The following exhibits are submitted herewith or incorporated by reference herein.

Exhibit	
Number	Description
<u>4.1</u>	Lightbridge Corporation 2020 Omnibus Incentive Plan (incorporated by reference to Appendix A to the definitive proxy statement filed
	on July 27, 2020).
<u>4.2</u>	Lightbridge Corporation 2015 Equity Incentive Plan, as amended (incorporated by reference to Appendix A to the definitive proxy
	statement filed on March 29, 2018).
<u>4.3</u>	Lightbridge Corporation 2006 Stock Plan (incorporated by reference to Exhibit 10.1 to the Form 8-K filed by the Registrant on February
	<u>21, 2006).</u>
<u>4.4</u>	Articles of Incorporation of Lightbridge Corporation, as amended (incorporated by reference to Exhibit 3.1 to the Form 10-Q filed by
	the Registrant on November 5, 2019).
<u>4.5</u>	Amended and Restated Bylaws of Lightbridge Corporation (incorporated by reference to Exhibit 3.1 to the Form 8-K filed by the
	Registrant on August 29, 2016).
<u>5.1*</u>	Opinion of Gary R. Henrie, Esq.
23.1*	Consent of BDO USA, LLP.
23.2*	Consent of Gary R. Henrie, Esq. (included in Exhibit 5.1).
24*	Power of Attorney (incorporated by reference to the signature page of each of the Registration Statements).
* Filed herewith.	· · · · · · · · · · · · · · · · · · ·

#### Item 9. Undertakings

- (a) The undersigned Registrant hereby undertakes:
  - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
    - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act;
  - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
  - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; provided, however, that paragraphs (a)(1)(i) and (a)(1) (ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in is registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment 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.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned Registrant hereby undertakes that, for the purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) 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 Commission 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, 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.

### **SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statements to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Reston, Commonwealth of Virginia, on the 25th day of March, 2021.

### LIGHTBRIDGE CORPORATION

By: /s/ Seth Grae
Name: Seth Grae

Title: Chief Executive Officer and President

Pursuant to the requirements of the Securities Act of 1933, this Post-Effective Amendment No. 1 to the Registration Statements has been signed by the following persons in the capacities indicated on March 25, 2021.

Sign	ature	Title	
	th Grae Grae	Chief Executive Officer, President and Director (Principal Executive Officer)	
	g <i>Goldman</i> Goldman	Chief Financial Officer (Principal Financial and Accounting Officer)	
	* Graham, Jr.	Director	
	* r Alessi	Director	
-	* nedy Townsend	Director	
	*  B. Magraw	Director	
-	th Grae	Attorney-in-fact	
		7	

## Gary R. Henrie

Attorney at Law Licensed in the States of Nevada and Utah

P.O. Box 3448 Telephone: 307-200-9415 Alpine, Wyoming 83128 e-mail: grhlaw@hotmail.com

March 25, 2021

Lightbridge Corporation 11710 Plaza America Drive Suite 2000 Reston, VA 20190

Re: Amendment to Registration Statements on Form S-8

#### Ladies and Gentlemen:

We are acting as special Nevada counsel for Lightbridge Corporation, a Nevada corporation (the "Company"), in connection with a post-effective amendment (the "Amendment") to its registration statements on Form S-8 (File Nos. 333-135842, 333-218796 and 333-229138) (the 'Registration Statements'), previously filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Act"), which Registration Statements registered (a) 41,667 shares of common stock, par value \$0.001 per share, of the Company (the "Shares") for issuance under the Lightbridge Corporation 2006 Stock Plan, as amended and (b) 525,000 Shares for issuance under the Lightbridge Corporation 2015 Equity Incentive Plan, as amended. The Amendment reflects that a portion of the Shares registered under the Registration Statements (up to 515,985 shares) will become available for issuance under the Lightbridge Corporation 2020 Omnibus Incentive Plan (the "2020 Plan") pursuant to the terms of the 2020 Plan (such Shares are referred to herein as the "Carryover Shares").

We have reviewed and are familiar with such corporate proceedings and other matters as we have deemed necessary for this opinion.

In rendering the opinion set forth below, we have assumed that (i) all information contained in all documents reviewed by us is true and correct; (ii) all signatures on all documents examined by us are genuine; (iii) all documents submitted to us as originals are authentic and all documents submitted to us as copies conform to the originals of those documents; (iv) each natural person signing any document reviewed by us had the legal capacity to do so; (v) the Amendment will have become effective and comply with all applicable laws; (vi) all of the Carryover Shares will be issued and sold in compliance with applicable federal and state securities laws; (vii) there will not have occurred any change in law affecting the validity or enforceability of such Carryover Shares; (viii) at the time of the sale, issuance or delivery of the Carryover Shares, the authorization of such Carryover Shares by the Company's Board of Directors or applicable committee thereof will not have been modified or rescinded; (ix) with respect to the Carryover Shares, the Company will have a sufficient number of authorized but unissued shares thereof under its charter, and will have reserved from such authorized but unissued and unreserved shares, sufficient shares for the issuance thereof; (x) the certificates representing the Carryover Shares will be duly authorized, executed and delivered; and (xi) the Carryover Shares will be properly authenticated by the manual signature of an authorized representative of the transfer agent.

Based upon the foregoing, we are of the opinion that the Carryover Shares to be issued by the Company pursuant to the 2020 Plan will be validly issued, fully paid and nonassessable, provided that (i) the Company's Board of Directors or an authorized committee thereof has specifically authorized the issuance of such Carryover Shares in exchange for a consideration that the Board of Directors or such committee determines as adequate ("Authorizing Resolutions"), (ii) the issuance and delivery of the Carryover Shares are in conformity with the Company's charter and bylaws, and do not violate any agreement or instrument binding on the Company or a violation of any restriction imposed by any court or governmental body having jurisdiction over the Company and (iii) the Company has received the consideration provided for in the applicable Authorizing Resolutions, if any.

In providing this opinion, we have relied as to certain matters on information obtained from public officials and officers or agents of the Company.

It is understood that this opinion is to be used only in connection with the Amendment.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is limited to matters governed by the Nevada Revised Statutes (including the statutory provisions and reported judicial decisions interpreting such law) and the laws of the State of Nevada. We disclaim any obligation to update this opinion or otherwise advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein, nor do we deliver any opinion as to the extent to which any laws other than the laws of the State of Nevada apply or the effect of any such other laws should they apply.

We hereby consent to the filing of this opinion as Exhibit 5.1 to the Amendment and to the use of our name under the caption "Legal Matters" in the Amendment. In giving this consent, we do not thereby admit that we are within the category of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission promulgated thereunder.

Sincerely,

/s/ Gary R. Henrie

Gary R. Henrie

### Consent of Independent Registered Public Accounting Firm

Lightbridge Corporation Reston, Virginia

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 25, 2021, relating to the consolidated financial statements of Lightbridge Corporation, appearing in the Company's Annual Report on Form 10-K for the year ended December 31, 2020. Our report contains an explanatory paragraph regarding the Company's ability to continue as a going concern.

/s/ BDO USA, LLP

Philadelphia, Pennsylvania March 25, 2021