Registration No. 333-210735

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Amendment No. 1

to

FORM F-3 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

SPHERE 3D CORP.

(Exact name of registrant as specified in its charter)

Not Applicable

(Translation of Registrant's name into English)

Ontario, Canada (State or other jurisdiction of Incorporation or Organization) 240 Matheson Blvd. East Mississauga, Ontario L4Z 1X1 (858) 571-5555 98-1220792 (I.R.S. Employer Identification No.)

(Address and telephone number of Registrant's principal executive offices)

Eric L. Kelly
Chief Executive Officer
9112 Spectrum Center Boulevard
San Diego, California 92123
(858) 571-5555
(Name, address, and telephone number of agent for service)

Copy to:

Warren T. Lazarow, Esq. Paul L. Sieben, Esq. O'Melveny & Myers LLP 2765 Sand Hill Road Menlo Park, California 94025 (650) 473-2600

Approximate date of commencement of proposed sale to the public:

From time to time after the effective date of this registration statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. []

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. [X]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please 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. []

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 that specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until this registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

On April 13, 2016, the Registrant filed a registration statement with the Securities and Exchange Commission (the "Commission") on Form F-3 (Registration No. 333-210735) (the "Form F-3"), to register securities on a shelf registration statement pursuant to Rule 415 under the Securities Act of 1933, as amended.

This Pre-Effective Amendment No. 1 to Form F-3 is being filed by the Registrant to attach a revised Exhibit 5.1 legality opinion of counsel and Exhibit 23.1 consent of counsel. This Pre-Effective Amendment No. 1 to Form F-3 does not modify or update the Form F-3 in any other way.

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 9. Exhibits

A list of exhibits included as part of this registration statement is set forth in the Exhibit Index which immediately precedes such exhibits and is incorporated herein by reference.

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 F-3 and has duly caused this Pre-Effective Amendment No. 1 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on this 25th day of April, 2016.

SPHERE 3D CORP.

By:	/s/ ERIC L. KELLY
	Eric L. Kelly
	Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, as amended, this Pre-Effective Amendment No. 1 has been signed by the following persons in their capacities and on the date indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ ERIC L. KELLY	Chairman of the Board and Chief Executive Officer	April 25, 2016
Eric L. Kelly	(Principal Executive Officer)	
*	Chief Financial Officer	April 25, 2016
Kurt L. Kalbfleisch	(Principal Financial and Accounting Officer)	
*	Director	April 25, 2016
Peter Ashkin *	Diverse	A::1 2E 2016
Mario Biasini	Director	April 25, 2016
*	Director	April 25, 2016
Daniel J. Bordessa *	Director	April 25, 2016
Glenn M. Bowman *	Director	April 25, 2016
Vivekanand Mahadevan *	Director	April 25, 2016
Peter Tassiopoulos * By /s/ ERIC L. KELLY		
Eric L. Kelly, Attorney-in-fact		
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EXHIBIT INDEX

<u>Number</u>	<u>Description</u>
3.1	Certificate and Articles of Amalgamation (incorporated by reference to our Form 6-K filed with the SEC on March 25, 2015).
3.2	By-laws (incorporated by reference to our Form 6-K filed with the SEC on March 25, 2015).
4.1	Form of common share certificate.*
4.2	Exchange Agreement (incorporated by reference to our Form 40-F filed with the SEC on March 30, 2016).
4.3	Warrant issued pursuant to Exchange Agreement (incorporated by reference to our Form 40-F filed with the SEC on March 30, 2016).
4.4	Registration Rights Agreement (incorporated by reference to our Form 40-F filed with the SEC on March 30, 2016).
4.5	Warrant issued to Ladenburg Thalmann & Co. Inc. (incorporated by reference to our Form 40-F filed with the SEC on March 30, 2016).
<u>5.1</u>	Opinion of Stikeman Elliot LLP.
23.1	Consent of Collins Barrow (consent of independent registered public accounting firm).*
23.2	Consents of Moss Adams LLP (consent of independent registered public accounting firm).*
23.3	Consent of RSM Deutschland GmbH Wirtschaftsprüfungsgesellschaft (consent of independent registered public accounting firm).*
<u>23.4</u>	Consent of Stikeman Elliot LLP (included in Exhibit 5.1).
24.1	Power of Attorney (included on signature page of the Registration Statement hereto).*

^{*} Previously filed.

STIKEMAN ELLIOTT

Stikeman Elliott LLP Barristers & Solicitors 1155 René Lévesque Blvd. West, 40th Floor, Montréal, Quebec, Canada H3B 3V2 Tel: (514) 397-3000 Fax: (514) 397-3222 www.stikeman.com

April 25, 2016

Sphere 3D Corp. 240 Matheson Boulevard East Mississauga, ON L4Z 1X1 Canada

Dear Sirs/Mesdames:

Re: Registration of 7,287,679 common shares of Sphere 3D Corp.

We have acted as Canadian special counsel to Sphere 3D Corp., a corporation amalgamated under the *Business Corporations Act* (Ontario) (the "**Company**"), in connection with a registration statement on Form F-3 (the "**Registration Statement**") filed by the Company with the Securities and Exchange Commission on April 13, 2016, as amended on or about the date hereof, relating to the offer and sale of 7,287,679 common shares (the "**Warrant Shares**") issued or issuable upon the exercise of outstanding warrants (the "**Warrants**") of the Company in accordance with (i) the Warrant Certificate No. 32 for the purchase of 7,199,216 common shares, dated March 25, 2016, issued to MacFarlane Family Ventures LLC (the "**MacFarlane Warrant Agreement**"), and (ii) the Representative's Warrant Agreement for the purchase of 88,463 common shares, dated January 15, 2016, issued to Ladenburg Thalmann & Co. Inc. (the "**Ladenburg Warrant Agreement**", and collectively with the MacFarlane Warrant Agreement, the "**Warrant Agreements**").

Of the 7,287,679 Warrant Shares, 3,031,249 Warrant Shares have been issued through the partial exercise of the warrants under the MacFarlane Warrant Agreement (the "**Issued Warrant Shares**"). The remaining 4,256,430 Warrant Shares are issuable upon the exercise of the warrants under the Warrant Agreements (the "**Issuable Warrant Shares**").

For the purposes of this opinion, we have examined and relied upon copies of the Registration Statement and the Warrant Agreements. We have also examined originals or copies, certified or otherwise identified to our satisfaction, of and relied upon the following documents (collectively, the "**Corporate Documents**"):

- (a) the certificate and articles of amalgamation of the Company;
- (b) the by-laws of the Company;
- (c) certain resolutions of the Company's directors; and

(d) a certificate of an officer of the Company (the "**Officer's Certificate**").

We also have reviewed such other documents, and have considered such questions of law, as we have deemed relevant and necessary as a basis for the opinions expressed herein. We have relied upon the Corporate Documents without independent investigation of the matters provided for therein for the purpose of providing our opinions expressed herein.

In examining all documents and in providing our opinions expressed herein we have assumed that:

- (a) all individuals had the requisite legal capacity;
- (b) all signatures are genuine;
- (c) all documents submitted to us as originals are complete and authentic and all photostatic, certified, telecopied, notarial or other copies conform to the originals;
- (d) all facts set forth in the official public records, certificates and documents supplied by public officials or otherwise conveyed to us by public officials are complete, true and accurate;
- (e) the certificate of amalgamation of the Company is conclusive evidence that the Company is amalgamated and existing under the *Business Corporations Act* (Ontario); and
- (f) all facts set forth in the certificates supplied by the respective officers and directors, as applicable, of the Company including, without limitation, the Officer's Certificate, are complete, true and accurate.

Our opinions below are expressed only with respect to the laws of the Province of Ontario (the "**Jurisdiction**") and the laws of Canada applicable therein. Any reference to the laws of the Jurisdiction includes the laws of Canada that apply in the Jurisdiction.

Our opinions are expressed with respect to the laws of the Jurisdiction in effect on the date of this opinion. We have no responsibility or obligation to: (i) update this opinion, (ii) take into account or inform the addressee, or any other person of any changes in law, facts or other developments subsequent to this date that do or may affect the opinions we express, or (iii) advise the addressee or any other person of any other change in any matter addressed in this opinion, nor do we have any responsibility or obligation to consider the applicability or correctness of this opinion to any person other than the addressee.

Where our opinions expressed herein refer to the Warrant Shares to be issued as being "fully-paid and non-assessable", such opinion assumes that all required consideration (in whatever form) has been paid or provided. No opinion is expressed as to the adequacy of any consideration received.

Based and relying upon the foregoing, we are of the opinion that:

- (a) The Issued Warrant Shares have been validly issued by the Company as fully paid and non-assessable.
- (b) The Issuable Warrant Shares, when issued upon exercise of the Warrants in accordance with the terms of the Warrant Agreements, will be validly issued as fully paid and non-assessable.

This opinion has been prepared for your use in connection with the Registration Statement and is expressed as of the date hereof. Our opinions are expressly limited to the matters set forth above and we render no opinion, whether by implication or otherwise, as to any other matters relating to the Company, the Registration Statement or the Warrant Shares.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our firm under the caption "Legal Matters" in the prospectus dated on or about the date hereof included therein. In giving this consent, we do not admit that we are within the category of persons whose consent is required under the Act or the rules and regulations promulgated thereunder. This opinion may not be quoted from or referred to in any documents other than the Registration Statement as provided for herein without our prior written consent.

Yours truly,

/s/ Stikeman Elliot LLP