

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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 OR 15(d) of The Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): December 20, 2024

**FIREFLY NEUROSCIENCE, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**

(State or other jurisdiction  
of incorporation)

**001-41092**

(Commission File Number)

**54-1167364**

(IRS Employer  
Identification No.)

**1100 Military Road, Kenmore, NY**

(Address of principal executive offices)

**14217**

(Zip Code)

**(888) 237-6412**

(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.0001 per share	AIFF	The Nasdaq Capital Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934.

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 13(a) of the Exchange Act.

**Item 1.01 Entry into a Material Definitive Agreement.**

**Securities Purchase Agreement**

On December 20, 2024, Firefly Neuroscience, Inc., a Delaware corporation ("the Company") entered into a definitive security purchase agreement (the "SPA") with Helena Special Opportunities LLC ("Helena"), an affiliate of Helena Partners Inc., a Cayman-Islands based advisor and investor, providing for gross proceeds up to USD\$2.4 million through a private placement (the "Financing") for the issuance of a convertible promissory note (the "Note").

The Note has an initial aggregate principal amount of USD\$2.4 million (the "Principal Amount"), including an original issue discount ("OID") of the Note of an aggregate USD\$360,000, which shall be convertible into such number of shares of the common stock ("Conversion Shares") of the Company, par value \$0.0001 per share (the "Common Stock") at the conversion price of \$3.00, subject adjustment as provided therein. In connection with the issuance of the Note, the Company also issued to Helena common stock purchase warrant (the "Warrant") to purchase 800,000 shares of the Common Stock ("Warrant Shares"), with an initial exercise price of \$4.00 per share, equal to the applicable Warrant Share Amount. The purchase price of the Note and the Warrant shall be computed by subtracting the portion of the OID represented by the Note from the portion of the Principal Amount represented by the Note (a "Purchase Price"). After deduction of various expenses of the Financing of a Purchase Price, a total aggregate amount of USD\$2.04 million will be funded to the Company.

In addition, the Company and its subsidiary (the "Subsidiaries") entered into a security agreement with Helena, dated as of December 20, 2024 (the "Security Agreement"), pursuant to which the Company and the Subsidiaries granted Helena a security interest in their assets to secure the Company's obligations under the Note.

In connection with the Securities Purchase Agreement, the Company and Helena also entered into a Registration Rights Agreement, dated as of December 20, 2024 (the "RRA"), providing for the registration of the Conversion Shares and the Warrant Shares (the "Registerable Securities"). The Company has agreed to prepare and file a registration statement (the "Registration Statement") with the Securities and Exchange Commission (the "SEC") promptly, and in any event within 60 calendar days of the date of the RRA.

The Company has granted Helena customary indemnification rights in connection with the RRA. Helena has also granted the Company customary indemnification rights in connection with the Registration Statement.

The securities to be issued pursuant to the SPA was made in reliance on the exemption from registration provided by Section 3(a)(9) of the Securities Act of 1933, as amended (the “Securities Act”), as promulgated by the SEC under the Securities Act.

The foregoing summary of the terms and conditions of the Note, the Warrant, the SPA, the Security Agreement, and the RRA, does not purport to be complete and is qualified in its entirety by reference to the full text of the Note, the Warrant, the SPA, the Security Agreement, and the RRA, copies or forms of which are filed as Exhibit 4.1, Exhibit 4.2, Exhibit 10.1, Exhibit 10.2, and Exhibit 10.3, respectively, to this Current Report on Form 8-K and incorporated herein by reference.

#### ***Equity Line of Credit***

On December 20, 2024, the Company entered into a purchase agreement (“ELOC Agreement”) with Arena Business Solutions Global SPC II, Ltd (“Arena”). Under the ELOC Agreement, the Company has the right, but not the obligation, to direct Arena to purchase up to USD\$10 million in shares of the Common Stock (the “ELOC Shares”) upon satisfaction of certain terms and conditions contained in the ELOC Agreement, including, without limitation, an effective registration statement filed with the SEC registering the resale of Common Shares and any securities issued or issuable to Arena from time to time under the ELOC Agreement (the “Registrable Securities”). The term of the ELOC Agreement began on the date of execution and ends on the earlier of (i) the first day of the month following the 36-month anniversary of the execution date of the ELOC Agreement, (ii) the date on which Arena shall have purchased the maximum amount of ELOC Shares, or (iii) the effective date of any written notice of termination delivered pursuant to the terms of the ELOC Agreement (the “Commitment Period”).

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During the Commitment Period, the Company may direct Arena to purchase ELOC Shares by delivering a notice (an “Advance Notice”) to Arena. The Company shall, in its sole discretion, select the amount of ELOC Shares requested by the Company in each Advance Notice. However, such amount may not exceed the Maximum Advance Amount (as defined in the ELOC Agreement). The purchase price to be paid by Arena for the ELOC Shares will be eighty-eight percent (88%) of the VWAP (as defined in the ELOC Agreement) of the Common Stock during the trading day commencing on the date of the Advance Notice, subject to adjustment pursuant to the terms of the ELOC Agreement.

In consideration for Arena’s execution and delivery of the ELOC Agreement, the Company agreed to pay Arena \$300,000 in cash (the “Commitment Fee”) which shall be deemed fully earned on the date of the ELOC Agreement and which shall be payable within five (5) calendar days of the Purchase Agreement.

Under the ELOC Agreement, the Company also agreed to, no later than sixty (60) calendar days following the execution date of the Purchase Agreement, file with the SEC a registration statement for the resale by Arena of Registrable Securities and shall file one or more additional registration statements for the resale by Arena of Registrable Securities if necessary.

The ELOC Agreement contains customary representations, warranties, agreements and conditions to completing future sale transactions, indemnification rights and obligations of the parties.

Under the Company’s engagement letter agreement with Joseph Gunnar & Co., LLC (“Joseph Gunnar”), Joseph Gunnar is acting as the exclusive placement agent in connection with the transaction contemplated by the ELOC Agreement, for which the Company will pay to Joseph Gunnar a cash fee a cash fee payable upon each closing of this transaction (each, a “Closing”) equal to three percent (3.0%) of the gross proceeds received by the Company (the “Placement Fee”), and in addition to the Placement Fee, the Company shall promptly, upon request from time to time and at each Closing, reimburse Joseph Gunnar for all applicable expenses (including, without limitation, fees and disbursements of the Joseph Gunnar’s counsel and all travel and other out-of-pocket expenses) incurred by Joseph Gunnar in connection with its engagement. All expenses (inclusive of legal fees) in connection with this transaction shall not exceed \$20,000.

The ELOC Agreement is filed as Exhibit 10.4 to this Current Report on Form 8-K, respectively, and the description above of the material terms of the ELOC Agreement is qualified in its entirety by reference to such exhibit.

#### **Item 2.03. Creation of a Direct Financial Obligation or an Obligation Under an Off-balance Sheet Arrangement of a Registrant.**

The information set forth under Item 1.01 of this Current Report on Form 8-K is incorporated herein by reference.

#### **Item 3.02. Unregistered Sales of Equity Securities.**

The information set forth under Item 1.01 of this Current Report on Form 8-K is incorporated hereby reference.

The securities that may be issued by the Company to Helena under the SPA are being offered and sold by the Company to Helena in a transaction that is exempt from the registration requirements of the Securities Act in reliance on Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D thereunder. In the SPA, Helena represented to the Company, among other things, that it is an “accredited investor” (as such term is defined in Rule 501(a) of Regulation D under the Securities Act). Accordingly, the offer and sale by the Company of the securities that may be issued and sold to Helena under the SPA have not been and will not be registered under the Securities Act or any applicable state securities or “Blue Sky” laws and, therefore, such securities may not be offered or sold in the United States absent registration or an exemption from registration under the Securities Act and any applicable state securities or “Blue Sky” laws.

The securities that may be issued by the Company to Arena under the ELOC Agreement are being offered and sold by the Company to Arena in a transaction that is exempt from the registration requirements of the Securities Act, in reliance on Section 4(a)(2) of the Securities Act and Rule 506(b) of Regulation D thereunder. In the Purchase Agreement, Arena represented to the Company, among other things, that it is an “accredited investor” (as such term is defined in Rule 501(a) of Regulation D under the Securities Act). Accordingly, the offer and sale by the Company of the securities that may be issued and sold to Arena under the ELOC Agreement have not and will not be registered under the Securities Act or any applicable state securities or “Blue Sky” laws and, therefore, such securities may not be offered or sold in the United States absent registration or an exemption from registration under the Securities Act and any applicable state securities or “Blue Sky” laws.

This Current Report on Form 8-K shall not constitute an offer to sell or a solicitation of an offer to buy any securities of the Company, nor shall there be any sale of any securities of the Company in any state or other jurisdiction in which such an offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or other jurisdiction.

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On December 20, 2024, Samer Kaba resigned from his position of Chief Medical Officer of the Company, effective immediately. Mr. Kaba's resignation was not related to any disagreement regarding the Company's operations, policies or practices.

**Item 7.01 Regulation FD Disclosure.**

The information set forth under Item 1.01 and Item 3.02 of this Current Report on Form 8-K is incorporated herein by reference.

**Item 9.01 Financial Statements and Exhibits.**

(d) Exhibits

<b>Exhibit No.</b>	<b>Description</b>
4.1	<a href="#">Form of Convertible Promissory Note issued to Helena Special Opportunities LLC</a>
4.2	<a href="#">Form of Common Stock Purchase Warrant issued to Helena Special Opportunities LLC</a>
10.1	<a href="#">Securities Purchase Agreement, dated December 20, 2024, between Firefly Neuroscience, Inc. and Helena Special Opportunities LLC</a>
10.2	<a href="#">Registration Rights Agreement, dated December 20, 2024, between Firefly Neuroscience, Inc. and Helena Special Opportunities LLC</a>
10.3	<a href="#">Security Agreement, dated December 20, 2024, among Firefly Neuroscience, Inc., Firefly Neuroscience Ltd., Firefly Neuroscience Canada, Elminda 2022 Inc., Elminda Canada Inc., and Helena Special Opportunities LLC</a>
10.4	<a href="#">Purchase Agreement, dated December 20, 2024, between Firefly Neuroscience, Inc. and Arena Business Solutions Global SPC II, Ltd</a>
104	Cover Page Interactive Data File (embedded with the Inline XBRL document).

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: December 23, 2024

FIREFLY NEUROSCIENCE, INC.

/s/ Jon Olsen

Name: Jon Olsen

Title: Chief Executive Officer

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NEITHER THIS NOTE NOR THE SECURITIES INTO WHICH THIS NOTE IS CONVERTIBLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY. THIS NOTE AND THE SECURITIES ISSUABLE UPON CONVERSION OF THIS NOTE MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT SECURED BY SUCH SECURITIES.

**FIREFLY NEUROSCIENCE, INC.**

**Convertible Promissory Note**

Dated: December 20, 2024 (the "Issuance Date")

\$2,400,000.00

**FOR VALUE RECEIVED, FIREFLY NEUROSCIENCE, INC.**, a corporation incorporated under the laws of the State of Delaware (hereinafter called the "Maker" or the "Company"), hereby promises to pay to the order of **HELENA SPECIAL OPPORTUNITIES LLC**, organized and existing under the laws of the Cayman Islands, or registered assigns (the "Holder") the principal sum of Two Million Four Hundred and Zero/100 United States Dollars (\$2,400,000.00) (the "Principal Amount") pursuant to the terms of this Convertible Promissory Note (this "Note"). The consideration to the Maker for this Note is \$Two Million Forty Thousand and Zero/100 United States Dollars (\$2,040,000.00) (the "Consideration") in United States currency, due to the prorated original issuance discount of 15.0% (the "OID") equaling \$Three Hundred Sixty Thousand and Zero/100 United States Dollars (\$360,000.00).

The maturity date of this Note shall be December 20, 2025 (the "Maturity Date") and is the date upon which the Principal Amount and all outstanding but unpaid interest thereon shall be due and payable unless otherwise accelerated pursuant to the terms of this Note.

This Note may not be repaid in whole or in part except as otherwise explicitly set forth herein.

All payments under or pursuant to this Note shall be made in United States Dollars in immediately available funds to the Holder at the address of the Holder set forth in the Purchase Agreement (as hereinafter defined) or at such other place as the Holder may designate from time to time in writing to the Maker or by wire transfer of funds to the Holder's account designated in writing by Holder to the Maker.

1.1 Purchase Agreement. This Note has been executed and delivered pursuant to, and is one of the Notes issued pursuant to, the Securities Purchase Agreement, dated as of December 20, 2024 (as the same may be amended from time to time, the "Purchase Agreement"), by and among the Maker, the other "Investors" (as such term is defined in the Purchase Agreement) and the Holder. Capitalized terms used and not otherwise defined herein shall have the meanings set forth for such terms in the Purchase Agreement.

1.2 Interest.

1.2.1 During the term of this Note interest shall not accrue on any Outstanding Principal Balance except as required pursuant to Section 1.2.2.

1.2.2 If any amount payable by the Company under any Transaction Document is not paid when due, such amount shall thereafter bear interest at the Past Due Rate (as hereinafter defined) to the fullest extent permitted by applicable law. In addition, following any Event of Default, any Outstanding Principal Balance shall bear interest at the Past Due Rate (the "Default Interest"). In either case, accrued and unpaid Default Interest or past due amounts (including interest on past due Interest) shall be due and payable on demand, at a rate per annum equal to fifteen percent (15%) compounded annually and computed on the basis of a 360-day year (the "Past Due Rate"), provided that, in no event shall the rate of interest hereunder exceed the maximum rate permitted by applicable law.

1.3 Prepayment. At any time after the Issuance Date and provided that no Event of Default has occurred, but subject in all cases to the terms of the Purchase Agreement, the Maker may repay all or any portion of the Outstanding Principal Amount upon at least ten (10) Trading Days' written notice (the "Prepayment Notice Period") to the Holder (the "Prepayment Notice") by paying an amount equal to 110% of the Principal Amount then being prepaid (representing a 10% prepayment premium payable to the Holder which shall not constitute a principal repayment). Notwithstanding the foregoing, if the Maker elects to prepay this Note pursuant to the provisions of this Section 1.3, the Holder shall continue to have the right to issue a Conversion Notice, or Conversion Notices, in accordance with Section 3.1 hereof, specifying the Principal Amount that the Holder will convert.

1.4 Payment on Non-Business Days. Whenever any payment to be made shall be due on a day which is not a Business Day, such payment shall be due on the next succeeding Business Day.

1.5 Transfer. This Note may be transferred or sold, subject to the provisions of Section 5.8 of this Note, or pledged, hypothecated or otherwise granted as security by the Holder.

1.6 Replacement. Upon receipt of a duly executed and notarized written statement from the Holder with respect to the loss, theft or destruction of this Note (or any replacement hereof), or, in the case of a mutilation of this Note, upon surrender and cancellation of such Note, the Maker shall issue a new Note, of like tenor and amount, in lieu of such lost, stolen, destroyed or mutilated Note.

1.7 Use of Proceeds. The Maker shall use the proceeds of this Note as set forth in the Purchase Agreement.

1.8 Status of Note. The obligations of the Maker under this Note shall rank senior to all other existing Indebtedness and equity of the Company except that the obligations of the Maker under this Note shall rank *pari passu* with all other Indebtedness owing to the other Investors under the other Notes (as such term is defined in the Purchase Agreement) (the "Other Notes"). Upon any Liquidation Event (as hereinafter defined), but subject in all cases to the Purchase Agreement, the Holder will be entitled to receive, before any distribution or payment is made upon, or set apart with respect to, any Indebtedness of the Maker (other than Indebtedness in respect of the Other Notes) or any class of shares of the Maker, an amount equal to the sum of the Outstanding Principal Amount. For purposes of this Note, "Liquidation Event" means a liquidation pursuant to a filing of a petition for bankruptcy under applicable law or any other insolvency or debtor's relief, an assignment for the benefit of creditors, or a voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Maker.

1.9 Intended Tax Treatment. The Maker and the Holder agree that for U.S. federal income tax purposes, and applicable state, local and non-U.S. income tax purposes, this Note is not intended to be treated as Indebtedness. Neither the Maker nor the Holder shall take any position on any tax return, or in any audit, claim, investigation, inquiry or proceeding in respect of Taxes inconsistent with such intentions, unless otherwise required pursuant to a final determination within the meaning of Section 1313 of the Internal Revenue Code of 1986, as amended (the "Code"), or any analogous provision of applicable state, local or non-U.S. law.

## ARTICLE 2

2.1 Events of Default. An "Event of Default" under this Note shall mean the occurrence of any of the Events of Default defined in the Purchase Agreement, and any of the additional events described below (unless the Event of Default is waived in writing by the Requisite Holder):

(a) Following a three (3) Business Day opportunity to cure, any default in the payment of (i) the Principal Amount hereunder when due; or (ii) interest as and when the same shall become due and payable (whether on the Maturity Date or by acceleration or otherwise);

(b) the Maker shall fail to observe or perform any other material covenant, condition or agreement contained in this Note or any Transaction Document;

(c) the Maker's notice to the Holder, including by way of public announcement, at any time, of its inability to comply (including for any of the reasons described in Section 3.6(a) hereof) or its intention not to comply with proper requests for conversion of this Note into Common Stock;

(d) the Maker shall fail to (i) timely deliver the Common Stock as and when required in Section 3.2; or (ii) make the payment of any fees and/or liquidated damages under this Note, the Purchase Agreement or the other Transaction Documents;

(e) at any time the Maker shall fail to have the Required Minimum of Common Stock authorized, reserved and available for issuance to satisfy the potential conversion in full (disregarding for this purpose any and all limitations of any kind on such conversion) of this Note;

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(f) any representation or warranty made by the Maker or any of its Subsidiaries in the Purchase Agreement, this Note, or any other Transaction Document shall prove to have been false or incorrect or breached in a material respect on the date as of which made or deemed to be made;

(g) the Maker or any of its Subsidiaries shall (A) default in any payment of any amount or amounts of principal of or interest (if any) on any Indebtedness (other than the Indebtedness hereunder), the aggregate principal amount of which Indebtedness is in excess of \$250,000 (or its equivalent in the relevant currency of payment) or (B) default in the observance or performance of any other agreement or condition relating to any such Indebtedness or contained in any instrument or agreement evidencing, securing or relating thereto, or any other event shall occur or condition exist, the effect of which default or other event or condition is to cause, or to permit the holder or holders or beneficiary or beneficiaries of such Indebtedness to cause with the giving of notice if required, such Indebtedness to become due prior to its stated maturity, in each case, prior to the expiration of the grace period provided in such Indebtedness on the date of such Indebtedness;

(h) the Maker or any of its Significant Subsidiaries shall: (i) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee or liquidator of itself or of all or a substantial part of its property or assets; (ii) make a general assignment for the benefit of its creditors; (iii) commence a voluntary case under the United States Bankruptcy Code (as now or hereafter in effect) or under the comparable laws of any jurisdiction (foreign or domestic); (iv) file a petition seeking to take advantage of any bankruptcy, insolvency, moratorium, reorganization or other similar law affecting the enforcement of creditors' rights generally; (v) acquiesce in writing to any petition filed against it in an involuntary case under the United States Bankruptcy Code (as now or hereafter in effect) or under the comparable laws of any jurisdiction (foreign or domestic); (vi) issue a notice of bankruptcy or winding down of its operations or issue a press release regarding same; or (vii) take any action under the laws of any jurisdiction (foreign or domestic) analogous to any of the foregoing;

(i) a proceeding or case shall be commenced in respect of the Maker or any of its Significant Subsidiaries, without its application or consent, in any court of competent jurisdiction, seeking: (i) the liquidation, reorganization, moratorium, dissolution, winding up, or composition or readjustment of its debts; (ii) the appointment of a trustee, receiver, custodian, liquidator or the like of it or of all or any substantial part of its assets in connection with the liquidation or dissolution of the Maker or any of its Significant Subsidiaries; or (iii) similar relief in respect of it under any law providing for the relief of debtors, and such proceeding or case described in clause (i), (ii) or (iii) shall continue undismissed, or unstayed and in effect, for a period of sixty (60) days or any order for relief shall be entered in an involuntary case under United States Bankruptcy Code (as now or hereafter in effect) or under the comparable laws of any jurisdiction (foreign or domestic) against the Maker or any of its Significant Subsidiaries or action under the laws of any jurisdiction (foreign or domestic) analogous to any of the foregoing shall be taken with respect to the Maker or any of its Subsidiaries and shall continue undismissed, or unstayed and in effect for a period of sixty (60) days;

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(j) one or more final judgments, settlements, or orders for the payment of money aggregating in excess of \$250,000 (or its equivalent in the relevant currency of payment) are rendered against or entered into one or more of the Company and its Subsidiaries, where such judgment, settlement or order is not discharged or stayed within sixty (60) days;

(k) the failure of the Maker to instruct its transfer agent to remove any legends from the Common Stock and issue such unlegended certificates to the Holder within two (2) Trading Days of the Holder's lawful request so long as the Holder has provided reasonable assurances to the Maker that such Common Stock can be sold pursuant to Rule 144 or any other applicable exemption;

(l) the Maker's Common Stock is no longer publicly traded or cease to be listed on the Trading Market or, after the six month anniversary of the Issuance Date, any Investor Shares may not be immediately resold under Rule 144 without restriction on the number of shares to be sold or manner of sale, unless such Investor Shares have been registered for resale under the 1933 Act and may be sold without restriction;

(m) the Maker consummates a "going private" transaction and as a result Common Stock is no longer registered under Sections 12(b) or 12(g) of the 1934 Act;

(n) there shall be any SEC or judicial stop trade order or trading suspension stop-order or any restriction in place with the transfer agent for the Common Stock restricting the trading of such shares of Common Stock for a period that is in excess of five (5) Trading Days;

(o) the Depository Trust Company places any restrictions on transactions in the Common Stock or the Common Stock is no longer tradeable through the Depository Trust Company Fast Automated Securities Transfer program;

(p) following the date that the Effectiveness Date was required to occur pursuant to the Registration Rights Agreement, the Maker shall fail to comply with the reporting requirements of the 1934 Act (including but not limited to becoming delinquent in its filings); and/or the Maker shall cease to be subject to the reporting requirements of the 1934 Act for a period of ten (10) or more Business Days; or

(q) the occurrence of a Material Adverse Effect in respect of the Maker, or the Maker and its Subsidiaries taken as a whole which would reasonably be considered to substantially impair the ability of the Maker to satisfy its obligations in the Transaction Documents.

## 2.2 Remedies Upon an Event of Default

(a) Upon the occurrence of any Event of Default that has not been remedied within (i) two (2) Business Days for an Event of Default occurring by the Company's failure to comply with Section 7.1(c) of the Purchase Agreement or Section 3.2 of this Note, or (ii) five (5) Business Days for all other Events of Default; *provided, however*, that there shall be no cure period for an Event of Default described in Section 2.1(h), or 2.1(i), the Maker shall be obligated to pay to the Holder the Mandatory Default Amount, which Mandatory Default Amount shall be earned by the Holder on the date the Event of Default giving rise thereto occurs and shall be due and payable on the earlier to occur of the Maturity Date, upon conversion, redemption or prepayment of this Note or the date on which all amounts owing hereunder have been accelerated in accordance with the terms hereof (provided all payments shall be subject to the provisions of the Purchase Agreement with respect to the holders of the Other Notes).

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(b) Upon the occurrence of any Event of Default, the Maker shall, as promptly as possible but in any event within two (2) Business Days of the occurrence of such Event of Default, notify the Holder of the occurrence of such Event of Default, describing the event or factual situation giving rise to the Event of Default and specifying the relevant subsections of Section 2.1 hereof under which such Event of Default has occurred.

(c) If an Event of Default shall have occurred and shall not have been remedied within (i) two (2) Business Days for an Event of Default occurring by the Company's failure to comply with Section 7.1(c) of the Purchase Agreement or Section 3.2 of this Note, or (ii) five (5) Business Days for all other Events of Default; *provided, however*, that there shall be no cure period for an Event of Default described in Section 2.1(h), or 2.1(i), the Holder may at any time at its option, subject to receiving the prior written consent of the Requisite Holder, declare all or a portion of the Mandatory Default Amount due and payable, and thereupon, the same shall be accelerated and so due and payable, without presentment, demand, protest, or notice, all of which are hereby expressly unconditionally and irrevocably waived by the Maker; *provided, however*, that upon the occurrence of an Event of Default described above, the Holder, in its sole and absolute discretion, but subject to receiving the prior written consent of the Requisite Holder, may: (a) from time-to-time demand that all or a portion of the Mandatory Default Amount be converted into Common Stock at a price per share equal to the lesser of (i) the then applicable Conversion Price and (ii) the then applicable Event of Default Discount Price. For purposes of this Note, "Event of Default Discount Price" shall mean the lowest daily VWAP in the ten (10) Trading Days ending on the date of the delivery of the applicable Conversion Notice multiplied by eighty-five percent (85%). Upon the occurrence of an Event of Default described in clauses Sections 2.1(h) or (i) above, the Mandatory Default Amount shall become immediately due and payable without presentment, demand, protest or other notice of any kind, all of which are hereby waived by the Maker. No course of delay on the part of the Holder (including because the Holder has not obtained the consent of the Requisite Holder) shall operate as a waiver thereof or otherwise prejudice the rights of the Holder. No remedy conferred hereby shall be exclusive of any other remedy referred to herein or now or hereafter available at law, in equity, by statute or otherwise. All payments shall be subject to the provisions of the Purchase Agreement with respect to the holders of the Other Notes.

## ARTICLE 3 CONVERSION.

3.1 Conversion. This Note shall be convertible (in whole or in part), at the option of the Holder, into such number of fully paid and non-assessable Common Stock as is determined by dividing (x) that portion identified by the Maker of (A) the Outstanding Principal Amount, plus (B) accrued and unpaid interest with respect to such Outstanding Principal Amount of this Note and any other amounts owing under this Note or the Transaction Documents (the "Conversion Amount") by (y) the Conversion Price then in effect on the date on which the Holder delivers a notice of conversion, in substantially the form attached hereto as Exhibit A (the "Conversion Notice"), in accordance with this Section 3.1 to the Maker. The Holder shall deliver this Note to the Maker at the address designated in the Purchase Agreement at any such time that this Note is converted. With respect to partial conversions of this Note, the Maker shall keep written records of the amount of this Note converted as of the date of such conversion (each, a "Conversion Date").

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The "Conversion Price" means (i) initially \$3.00 subject to adjustment as provided herein; and (ii) if the Company shall not, by the date that is five (5) months from the Issuance Date, close a debt or equity financing pursuant to which the Company shall have received gross proceeds of at least Five Million Dollars (\$5,000,000.000), the Conversion Price shall mean the lowest daily VWAP in the five (5) Trading Days ending on the date of the delivery of the applicable Conversion Notice multiplied by ninety percent (90%); *provided*, that the Conversion Price shall not be less than the Floor Price while the Common Stock is listed on the Trading Market.

3.2 Delivery of Conversion Shares. As soon as practicable after any conversion or payment of any amount due hereunder in the form of Common Stock in accordance with this Note, and in any event within two (2) Trading Days thereafter (such date, the "Share Delivery Date"), the Maker shall, at its expense, cause to be issued in the name of and delivered to the Holder, or as the Holder may direct, book-entry statements evidencing the number of fully paid and non-assessable Common Stock to which the Holder shall be entitled on such conversion or payment (the "Conversion Shares"), in the applicable denominations based on the applicable conversion or payment; *provided that*, if the Common Stock is then DWAC Eligible and such Common Stock issuable upon conversion of this Note have been registered for resale pursuant to an effective registration statement under the 1933 Act, upon request of the Holder, the Company shall cause its transfer agent to electronically transmit such Common Stock issuable upon conversion of this Note to the Holder (or its designee), by crediting the account of the Holder's (or such designee's) broker with DTC through its Deposit Withdrawal Agent Commission system (provided that the same time periods herein as for book-entry statements shall apply) as instructed by the Holder (or its designee). In the event that the Maker fails to comply with its obligations under this Section 3.2, a liquidated damages charge of 1% of the Outstanding Principal Balance of this Note will be assessed and will become immediately due and payable each month while such failure remains uncured to the Holder at its election in the form of a cash payment or added to the balance of this Note.

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3.3 Caps on Conversion Shares. Notwithstanding anything to the contrary contained herein, the Holder shall not be entitled to receive shares representing Equity Interests upon conversion of this Note to the extent (but only to the extent) that:

(a) Ownership Cap. Such exercise or receipt would cause the Holder Group (as defined below) to become, directly or indirectly, a "beneficial owner" (within the meaning of Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder) of a number of Equity Interests of a class that is registered under the 1934

Act which exceeds the Maximum Percentage (as defined below) of the Equity Interests of such class that are outstanding at such time. Any purported delivery of Equity Interests in connection with the conversion of this Note prior to the termination of this restriction in accordance herewith shall be void and have no effect to the extent (but only to the extent) that such delivery would result in the Holder Group becoming the beneficial owner of more than the Maximum Percentage of the Equity Interests of a class that is registered under the 1934 Act that is outstanding at such time. If any delivery of Equity Interests owed to the Holder following conversion of this Note is not made, in whole or in part, as a result of this limitation, the Company's obligation to make such delivery shall not be extinguished and the Company shall deliver such Equity Interests as promptly as practicable after the Holder gives notice to the Company that such delivery would not result in such limitation being triggered or upon termination of the restriction in accordance with the terms hereof; provided that no liquidated damages will be assessed or become due and payable pursuant to Section 3.2 hereof with respect to any such Equity Interests not being delivered solely as a result of this limitation. To the extent limitations contained in this Section 3.3(a) apply, the determination of whether this Note is convertible and of which portion of this Note is convertible shall be the sole responsibility and in the sole determination of the Holder, and the submission of a notice of conversion shall be deemed to constitute the Holder's determination that the issuance of the full number of Conversion Shares requested in the notice of conversion is permitted hereunder, and the Company shall not have any obligation to verify or confirm the accuracy of such determination. For purposes of this Section 3.3, (i) the term "Maximum Percentage" shall mean 4.99%; provided, that if at any time after the date hereof the Holder Group beneficially owns in excess of 4.99% of any class of Equity Interests in the Company that is registered under the 1934 Act, then the Maximum Percentage shall automatically increase to 9.99% so long as the Holder Group owns in excess of 4.99% of such class of Equity Interests (and shall, for the avoidance of doubt, automatically decrease to 4.99% upon the Holder Group ceasing to own in excess of 4.99% of such class of Equity Interests); and (ii) the term "Holder Group" shall mean the Holder plus any other Person with which the Holder is considered to be part of a group under Section 13 of the 1934 Act or with which the Holder otherwise files reports under Sections 13 and/or 16 of the 1934 Act. In determining the number of Equity Interests of a particular class outstanding at any point in time, the Holder may rely on the number of outstanding Equity Interests of such class as reflected in (x) the Company's most recent Form 10-K, Form 10-Q, or Form 8-K filed with the Securities and Exchange Commission, as the case may be, (y) a more recent public announcement by the Company or (z) a more recent notice by the Company or its transfer agent to the Holder setting forth the number of Equity Interests of such class then outstanding. For any reason at any time, upon written or oral request of the Holder, the Company shall, within one (1) Business Day of such request, confirm orally and in writing to the Holder the number of Equity Interests of any class then outstanding. The provisions of this Section 3.3 shall be construed, corrected and implemented in a manner so as to effectuate the intended beneficial ownership limitation herein contained. In addition to the beneficial ownership limitations provided in this Note, the sum of the number of shares of Common Stock that may be issued under Transaction Documents shall be limited to 19.99% of the Borrower's outstanding shares of Common Stock as of the date of the Purchase Agreement (the "Exchange Cap"), while the Common Stock is listed on the Trading Market unless Stockholder Approval is obtained to issue more than the Exchange Cap. The Exchange Cap shall be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction.

### 3.4 Adjustments to Conversion Price and Floor Price.

(a) Until the Note has been paid in full or converted in full except as otherwise provided in this Section 3.4, the Conversion Price and Floor Price shall be subject to adjustment from time to time as follows (but shall not be increased, other than pursuant to Section 3.4(a)(i) hereof):

(i) Stock Dividends and Stock Splits. If the Company, at any time while this Note is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions payable in shares of Common Stock on shares of Common Stock or any Common Stock Equivalents (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon conversion of, or payment of interest on, the Notes), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of a reverse stock split) outstanding shares of Common Stock into a smaller number of shares or (iv) issues, in the event of a reclassification of shares of the Common Stock, any shares of capital stock of the Company, then the Conversion Price and the Floor Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding any treasury shares of the Company) outstanding immediately before such event, and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to this Section shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re classification.

(ii) Pro Rata Distributions. During such time as this Note is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Note, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete conversion of this Note (without regard to any limitations on conversion hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

(iii) Adjustments for Reclassification, Exchange or Substitution. If the Common Stock at any time or from time to time after the Closing Date (but whether before or after the Issuance Date) shall be changed to the same or different number of shares or other securities of any class of shares or other property, whether by reclassification, exchange, substitution or otherwise (other than by way of a stock split or combination of shares or stock dividends provided for in Sections 3.4(a)(i) hereof, or a reorganization, merger, consolidation, or sale of assets provided for in Section 3.4(a)(iv) hereof), then, and in each event, an appropriate revision to the Conversion Price and Floor Price shall be made and provisions shall be made (by adjustments of the Conversion Price and Floor Price or otherwise) so that the Holder shall have the right thereafter to convert this Note into the kind and amount of shares or other securities or other property receivable upon reclassification, exchange, substitution or other change, by holders of the number of shares of Common Stock into which such Note might have been converted immediately prior to such reclassification, exchange, substitution or other change, all subject to further adjustment as provided herein.

(iv) Fundamental Transaction. If, at any time while this Note is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company (and all of its Subsidiaries, taken as a whole), directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock are permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off, merger or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding shares of Common Stock (not including any shares of Common Stock held by the other Person or other Persons making or party to, or associated or

affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a “Fundamental Transaction”), then, upon any subsequent conversion of this Note, the Holder shall have the right to receive, for each Conversion Share that would have been issuable upon such conversion immediately prior to the occurrence of such Fundamental Transaction (without regard to any limitation on the conversion of this Note), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the “Alternate Consideration”) receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Note is convertible immediately prior to such Fundamental Transaction (without regard to any limitation in on the conversion of this Note). For purposes of any such conversion, the determination of the Conversion Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one (1) share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Conversion Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any conversion of this Note following such Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the “Successor Entity”) to assume in writing all of the obligations of the Company under this Note and the other Transaction Documents (as defined in the Purchase Agreement) in accordance with the provisions of this Section 3.4(a)(iv) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the holder of this Note, deliver to the Holder in exchange for this Note a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Note which is convertible for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the shares of Common Stock acquirable and receivable upon conversion of this Note (without regard to any limitations on the conversion of this Note) prior to such Fundamental Transaction, and with a conversion price which applies the conversion price hereunder to such shares of capital stock (but taking into account the relative value of the shares of Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such conversion price being for the purpose of protecting the economic value of this Note immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Note and the other Transaction Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Note and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein.

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(v) Other Events. In the event that the Company (or any Subsidiary (as defined in the Purchase Agreement)) shall take any action to which the provisions hereof are not strictly applicable, or, if applicable, would not operate to protect the Holder from dilution or if any event occurs of the type contemplated by the provisions of this Section 3.4 but not expressly provided for by such provisions (including, without limitation, the granting of share appreciation rights, phantom share rights or other rights with equity features), then the Company’s board of directors shall in good faith determine and implement an appropriate adjustment in the Floor Price and the number of Conversion Shares (if applicable) so as to protect the rights of the Holder, provided that no such adjustment pursuant to this Section 3.4 will increase the Conversion Price or Floor Price or decrease the number of Conversion Shares as otherwise determined pursuant to this Section 3.4 provided further that if the Holder does not accept such adjustments as appropriately protecting its rights hereunder, then the Board of Directors and the Holder shall agree, in good faith, upon an independent investment bank of nationally recognized standing to make such appropriate adjustments, whose determination shall be final and binding absent manifest error and whose fees and expenses shall be borne by the Company.

(b) No Impairment. The Maker shall not, by amendment of its Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Maker, but will at all times in good faith assist in the carrying out of all the provisions of this Section 3.4 and in the taking of all such action as may be necessary or appropriate in order to protect the conversion rights of the Holder against impairment. In the event the Holder shall elect to convert this Note as provided herein, the Maker cannot refuse conversion based on any claim that the Holder or anyone associated or affiliated with the Holder has been engaged in any violation of law, violation of an agreement to which the Holder is a party or for any reason whatsoever, unless, an injunction from a court, or notice, restraining and or adjoining conversion of this Note shall have issued and the Maker posts a surety bond for the benefit of the Holder in an amount equal to one hundred percent (100%) of the Principal Amount of the Note the Holder has elected to convert, which bond shall remain in effect until the completion of arbitration/litigation of the dispute and the proceeds of which shall be payable to the Holder (as liquidated damages) in the event it obtains judgment.

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(c) Certificates as to Adjustments. Upon occurrence of each adjustment or readjustment of the Conversion Price or Floor Price or number of shares of Common Stock issuable upon conversion of this Note pursuant to this Section 3.4, the Maker at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to the Holder a certificate setting forth such adjustment and readjustment, showing in detail the facts upon which such adjustment or readjustment is based. The Maker shall, upon written request of the Holder, at any time, furnish or cause to be furnished to the Holder a like certificate setting forth such adjustments and readjustments, the applicable Conversion Price or Floor Price in effect at the time, and the number of shares of Common Stock and the amount, if any, of other securities or property which at the time would be received upon the conversion of this Note. Notwithstanding the foregoing, the Maker shall not be obligated to deliver a certificate unless such certificate would reflect an increase or decrease of at least one percent (1%) of such adjusted amount.

(d) Issue Taxes. The Maker shall pay any and all issue and other taxes, excluding federal, state or local income taxes, that may be payable in respect of any issue or delivery of Common Stock on conversion of this Note pursuant thereto; provided, however, that the Maker shall not be obligated to pay any transfer taxes resulting from any transfer requested by the Holder in connection with any such conversion.

(e) Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of this Note. In lieu of any fractional shares to which the Holder would otherwise be entitled, the Maker shall pay cash equal to such fractional shares multiplied by the Conversion Price then in effect.

(f) Reservation of Common Stock. The Maker shall at all times while this Note shall be outstanding, keep available out of its authorized Common Stock, the Required Minimum of shares of Common Stock (disregarding for this purpose any and all limitations of any kind on such conversion). The Maker shall, from time to time, increase the authorized number of shares of Common Stock or take other effective action if at any time the unissued number of authorized shares shall not be sufficient to satisfy the Maker’s obligations under this Section 3.4(f).

(g) Regulatory Compliance. If any shares of Common Stock for the purpose of conversion of this Note require registration or listing with or approval of any governmental authority, stock exchange or other regulatory body under any federal or state law or regulation or otherwise before such shares may be validly issued or delivered upon conversion, the Maker shall, at its sole cost and expense, in good faith and as expeditiously as possible, secure such registration, listing or approval, as the case may be.

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(h) Effect of Events Prior to the Issuance Date. If the Issuance Date of this Note is after the Closing Date, then, if the Conversion Price, the Floor Price or any other right of the Holder of this Note would have been adjusted or modified by operation of any provision of this Note had this Note been issued on the Closing Date, such adjustment or modification shall be deemed to apply to this Note as of the Issuance Date as if this Note had been issued on the Closing Date.

### 3.5 Prepayment Following a Change of Control

(a) Mechanics of Prepayment at Option of Holder in Connection with a Change of Control. No later than fifteen (15) days following the entry by the Company into an agreement for a Change of Control, but in no event prior to the public announcement of such Change of Control, the Maker shall deliver written notice describing the entry into such agreement ("Notice of Change of Control") to the Holder. Within fifteen (15) days after receipt of a Notice of Change of Control, the Requisite Holder may require the Maker to prepay, effective immediately prior to the consummation of such Change of Control, an amount equal to the Mandatory Default Amount on such date (the "COC Repayment Price"), by delivering written notice thereof ("Notice of Prepayment at Option of Holder Upon Change of Control") to the Maker.

(b) Payment of COC Repayment Price. Upon the Maker's receipt of a Notice(s) of Prepayment at Option of Holder Upon Change of Control from the Holder, the Maker shall deliver the COC Repayment Price to the Holder immediately prior to the consummation of the Change of Control; provided that the Holder's original Note shall have been so delivered to the Maker, and, provided, further, that all payments shall be subject to the provisions of the Purchase Agreement with respect to the holders of the Other Notes.

### 3.6 Inability to Fully Convert

(a) Holder's Option if Maker Cannot Fully Convert. If, upon the Maker's receipt of a Conversion Notice or as otherwise required under this Note, including with respect to repayment of principal in Common Stock as permitted under this Note, the Maker cannot issue Common Stock for any reason, including, without limitation, because the Maker (x) does not have a sufficient number of shares of Common Stock authorized and available or (y) is otherwise prohibited by applicable law or by the rules or regulations of any stock exchange, interdealer quotation system or other self-regulatory organization with jurisdiction over the Maker or any of its securities from issuing all of the Common Stock which are to be issued to the Holder pursuant to this Note, then the Maker shall issue as many shares of Common Stock as it is able to issue and, with respect to the unconverted portion of this Note or with respect to any shares of Common Stock not timely issued in accordance with this Note, the Holder, solely at Holder's option, can elect to:

(i) require the Maker to prepay that portion of this Note for which the Maker is unable to issue Common Stock or for which Common Stock was not timely issued (the "Mandatory Prepayment") at a price equal to the number of shares of Common Stock that the Maker is unable to issue multiplied by the Conversion Price on the date of the Conversion Notice (the "Mandatory Prepayment Price") (provided all payments shall be subject to the provisions of the Purchase Agreement with respect to the holders of the Other Notes); provided that an election under this clause (i) shall not be available in the event that the Maker is unable to issue shares of Common Stock solely pursuant to the caps set forth in Section 3.3 above;

(ii) void its Conversion Notice and retain or have returned, as the case may be, this Note that was to be converted pursuant to the Conversion Notice (provided that the Holder's voiding its Conversion Notice shall not affect the Maker's obligations to make any payments which have accrued prior to the date of such notice); or

(iii) defer issuance of the applicable Conversion Shares until such time as the Maker can legally issue such shares; provided that the Principal Amount underlying such Conversion Shares shall remain outstanding until the delivery of such Conversion Shares; and *provided, further*, that if the Holder elects to defer the issuance of the Conversion Shares, it may exercise its rights under either clause (i) or (ii) above at any time prior to the issuance of the Conversion Shares upon two (2) Business Days' notice to the Maker.

(b) Mechanics of Fulfilling Holder's Election. The Maker shall immediately send to the Holder, upon receipt of a Conversion Notice from the Holder, which cannot be fully satisfied as described in Section 3.6(a) above, a notice of the Maker's inability to fully satisfy the Conversion Notice (the "Inability to Fully Convert Notice"). Such Inability to Fully Convert Notice shall indicate (i) the reason why the Maker is unable to fully satisfy the Holder's Conversion Notice; and (ii) the amount of this Note which cannot be converted. The Holder shall notify the Maker of its election pursuant to Section 3.6(a) above by delivering written notice to the Maker ("Notice in Response to Inability to Convert").

(c) Payment of Mandatory Prepayment Price. If the Holder shall elect to have its Note prepaid pursuant to Section 3.6(a)(i) above, the Maker shall pay the Mandatory Prepayment Price to the Holder within five (5) Business Days of the Maker's receipt of the Holder's Notice in Response to Inability to Convert; *provided that* prior to the Maker's receipt of the Holder's Notice in Response to Inability to Convert the Maker has not delivered a notice to the Holder stating, to the satisfaction of the Holder, that the event or condition resulting in the Mandatory Prepayment has been cured and all Conversion Shares issuable to the Holder can and will be delivered to the Holder in accordance with the terms of this Note. If the Maker shall fail to pay the applicable Mandatory Prepayment Price to the Holder on the date that is two (2) Business Days following the Maker's receipt of the Holder's Notice in Response to Inability to Convert, in addition to any remedy the Holder may have under this Note and the Purchase Agreement, such unpaid amount shall bear interest at the rate of fifteen percent (15%) per month (prorated for partial months) until paid in full. Until the full Mandatory Prepayment Price is paid in full to the Holder, the Holder may (i) void the Mandatory Prepayment with respect to that portion of the Note for which the full Mandatory Prepayment Price has not been paid and (ii) receive back such Note.

(d) No Rights as Shareholder. Except as expressly set forth hereunder, nothing contained in this Note shall be construed as conferring upon the Holder, prior to the conversion of this Note, the right to vote or to receive dividends or to consent or to receive notice as a shareholder of the Company in respect of any meeting of shareholders for the election of directors of the Maker or of any other matter, or any other rights as a shareholder of the Maker.

3.7 Compensation for Buy-In on Failure to Timely Deliver Conversion Shares. In addition to any other rights available to the Holder, if the Company fails to deliver or cause the Transfer Agent to transmit to the Holder, Conversion Shares or any other shares pursuant to a conversion on or before the Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Conversion Shares which the Holder anticipated receiving upon such conversion (a "Buy-In"), then the Company shall (a) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Conversion Shares that the Company was required to deliver to the Holder in connection with the conversion at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (b) at the option of the Holder, either reinstate the portion of the Note and equivalent number of Conversion Shares for which such conversion was not honored (in which case such conversion shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its conversion and delivery obligations hereunder. For example, if the Holder purchases shares of Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted conversion of shares of

Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (a) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon conversion of the Note as required pursuant to the terms hereof.

#### ARTICLE 4

4.1 Covenants. For so long as any Note is outstanding, without the prior written consent of the Holder:

(a) Compliance with Transaction Documents. The Maker shall, and shall cause its Subsidiaries to, comply with its obligations under this Note and the other Transaction Documents.

(b) Payment of Taxes, Etc. The Maker shall, and shall cause each of its Subsidiaries to, promptly pay and discharge, or cause to be paid and discharged, when due and payable, all lawful taxes, assessments and governmental charges or levies imposed upon the income, profits, property or business of the Maker and the Subsidiaries, except for such failures to pay that, individually or in the aggregate, have not had and would not reasonably be expected to have a Material Adverse Effect; *provided, however*, that any such tax, assessment, charge or levy need not be paid if the validity thereof shall currently be contested in good faith by appropriate proceedings and if the Maker or such Subsidiaries shall have set aside on its books adequate reserves with respect thereto, and provided, further, that the Maker and such Subsidiaries will pay all such taxes, assessments, charges or levies forthwith upon the commencement of proceedings to foreclose any lien which may have attached as security therefor.

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(c) Corporate Existence. The Maker shall, and shall cause each of its Subsidiaries to, maintain in full force and effect its corporate existence, rights and franchises and all licenses and other rights to use property owned or possessed by it and reasonably deemed to be necessary to the conduct of its business.

(d) Investment Company Act. The Maker shall conduct its businesses in a manner so that it will not be required to register as an "investment company" as such term is defined in the Investment Company Act of 1940, as amended.

(e) Prohibited Transactions. The Maker hereby covenants and agrees not to enter into any Prohibited Transactions until thirty (30) days after such time as this Note has been converted into Conversion Shares or repaid in full.

(f) Indebtedness. The Maker hereby covenants and agrees not to incur or enter into any agreement or arrangement for secured Indebtedness until thirty (30) days after such time as this Note has been converted into Conversion Shares or repaid in full.

4.2 Set-Off. This Note shall be subject to the set-off provisions set forth in the Purchase Agreement.

#### ARTICLE 5

5.1 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section prior to 5:00 p.m. (New York time) on a Business Day, (b) the next Business Day after the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section on a day that is not a Business Day or later than 5:00 p.m. (New York time) on any date and earlier than 11:59 p.m. (New York time) on such date, (c) the Business Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (d) upon actual receipt by the party to whom such notice is required to be given. The addresses for notice shall be as set forth in the Purchase Agreement.

5.2 Governing Law. This Agreement shall be governed by and construed in accordance with the Laws of the State of Delaware, without reference to principles of conflict of laws or choice of laws. This Note shall not be interpreted or construed with any presumption against the party causing this Note to be drafted.

5.3 Headings. Article and section headings in this Note are included herein for purposes of convenience of reference only and shall not constitute a part of this Note for any other purpose.

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5.4 Remedies, Characterizations, Other Obligations, Breaches and Injunctive Relief. The remedies provided in this Note shall be cumulative and in addition to all other remedies available under this Note, at law or in equity (including, without limitation, a decree of specific performance and/or other injunctive relief), no remedy contained herein shall be deemed a waiver of compliance with the provisions giving rise to such remedy and nothing herein shall limit the Holder's right to pursue actual damages for any failure by the Maker to comply with the terms of this Note. Amounts set forth or provided for herein with respect to payments, conversion and the like (and the computation thereof) shall be the amounts to be received by the holder thereof and shall not, except as expressly provided herein, be subject to any other obligation of the Maker (or the performance thereof). The Maker acknowledges that a breach by it of its obligations hereunder will cause irreparable and material harm to the Holder and that the remedy at law for any such breach would be inadequate. Therefore, the Maker agrees that, in the event of any such breach or threatened breach, the Holder shall be entitled, in addition to all other available rights and remedies, at law or in equity, to equitable relief, including but not limited to an injunction restraining any such breach or threatened breach, without the necessity of showing economic loss and without any bond or other security being required.

5.5 Enforcement Expenses. The Maker agrees to pay all costs and expenses of enforcement of this Note, including, without limitation, reasonable and documented attorneys' fees and expenses.

5.6 Binding Effect; Assignment. The obligations of the Maker and the Holder set forth herein shall be binding upon the successors and assigns of each such party, whether or not such successors or assigns are permitted by the terms herein. The Holder shall have the right to assign this Note hereunder without notice to or the consent of the Maker.

5.7 Amendments; Waivers. No provision of this Note may be waived or amended except in a written instrument signed by the Company and the Holder and approved by the Requisite Holder (as defined in the Purchase Agreement). No waiver of any default with respect to any provision, condition or requirement of this Note shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of either party to exercise any right hereunder in any manner impair the exercise of any such right.

5.8 Compliance with Securities Laws. The Holder of this Note acknowledges that this Note is being acquired solely for the Holder's own account and not as a nominee for any other party, and for investment, and that the Holder shall not offer, sell or otherwise dispose of this Note in violation of securities laws. This Note and any Note issued in substitution or replacement therefor shall be stamped or imprinted with a legend in substantially the following form:

“NEITHER THIS NOTE NOR THE SECURITIES INTO WHICH THIS NOTE IS CONVERTIBLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY.”

5.9 Jurisdiction; Venue. Any action, proceeding or claim arising out of, or relating in any way to this Note shall be brought and enforced in the New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York. The Company and the Holder irrevocably submit to the jurisdiction of such courts, which jurisdiction shall be exclusive, and hereby waive any objection to such exclusive jurisdiction or that such courts represent an inconvenient forum. The prevailing party in any such action shall be entitled to recover its reasonable and documented attorneys’ fees and out-of-pocket expenses relating to such action or proceeding.

5.10 Failure or Indulgence Not Waiver. No failure or delay on the part of the Holder in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege.

5.11 Maker Waivers. Except as otherwise specifically provided herein, the Maker and all others that may become liable for all or any part of the obligations evidenced by this Note, hereby waive presentment, demand, notice of nonpayment, protest and all other demands and notices in connection with the delivery, acceptance, performance and enforcement of this Note, and do hereby consent to any number of renewals of extensions of the time or payment hereof and agree that any such renewals or extensions may be made without notice to any such persons and without affecting their liability herein and do further consent to the release of any person liable hereon, all without affecting the liability of the other persons, firms or Maker liable for the payment of this Note, AND DO HEREBY WAIVE TRIAL BY JURY.

(a) No delay or omission on the part of the Holder in exercising its rights under this Note, or course of conduct relating hereto, shall operate as a waiver of such rights or any other right of the Holder, nor shall any waiver by the Holder of any such right or rights on any one occasion be deemed a waiver of the same right or rights on any future occasion.

(b) THE MAKER ACKNOWLEDGES THAT THE TRANSACTION OF WHICH THIS NOTE IS A PART IS A COMMERCIAL TRANSACTION, AND TO THE EXTENT ALLOWED BY APPLICABLE LAW, HEREBY WAIVES ITS RIGHT TO NOTICE AND HEARING WITH RESPECT TO ANY PREJUDGMENT REMEDY WHICH THE HOLDER OR ITS SUCCESSORS OR ASSIGNS MAY DESIRE TO USE.

5.12 Definitions. Capitalized terms used herein and not defined shall have the meanings set forth in the Purchase Agreement. For the purposes hereof, the following terms shall have the following meanings:

(a) “Closing Price” means the closing price of the Common Stock on the Trading Market on the date of determination.

(b) “Event Market Price” means, with respect to any Share Combination Event Date, the quotient determined by dividing (x) the sum of the VWAP of the Common Stock for each of the five (5) lowest Trading Days during the twenty (20) consecutive Trading Day period ending and including the Trading Day immediately preceding the sixteenth (16th) Trading Day after such Share Combination Event Date, divided by (y) five (5). All such determinations shall be appropriately adjusted for any share dividend, share split, share combination, recapitalization or other similar transaction during such period.

(c) “Floor Price” means \$0.48, as subject to adjustment as provided herein.

(d) “Indebtedness” means: (a) all obligations for borrowed money; (b) all obligations evidenced by bonds, debentures, notes, or other similar instruments; (c) all capital lease obligations that exceed \$250,000 in the aggregate outstanding at any time; (d) all obligations or liabilities secured by a lien or encumbrance on any asset of the Maker, irrespective of whether such obligation or liability is assumed; (e) all obligations for the deferred purchase price of assets, other than trade debt and other accounts payable incurred in the ordinary course of business; (f) all synthetic leases; and (g) any obligation guaranteeing or intended to guarantee (whether directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse) any of the foregoing obligations of any other person.

(e) “Mandatory Default Amount” means an amount equal to 115% of the Outstanding Principal Amount, accrued interest and all other amounts owing in respect of this Note.

(f) “Outstanding Principal Amount” means, at the time of determination, the Principal Amount outstanding after giving effect to any conversions or prepayments pursuant to the terms hereof.

(g) “Significant Subsidiary” means any Subsidiary of the Company that constitutes, or any group of Subsidiaries of the Company that, in the aggregate, would constitute, a “significant subsidiary” (as defined in Rule 1-02(w) of Regulation S-X under the 1934 Act) of the Company.

(h) “Trading Day” means a day on which the Common Stock is traded on a Trading Market.

(i) “VWAP” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if the Common Stock is traded on OTCQB or OTCQX, the volume weighted average sales price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock is then reported in the “Pink Sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Holder and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

IN WITNESS WHEREOF, the Maker has caused this Note to be duly executed by its duly authorized officer as of the date first above indicated.

**FIRFLY NEUROSCIENCE, INC.**

By: \_\_\_\_\_  
Name: Greg Lipschitz  
Title: Executive Chairman

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**EXHIBIT A**

**FORM OF CONVERSION NOTICE**

(To be Executed by the Registered Holder in order to Convert the Note)

The undersigned hereby irrevocably elects to convert \$ \_\_\_\_\_ of the principal amount of the above Note No. \_\_\_ into Series (the "Maker") according to the conditions hereof, as of the date written below.

Date of Conversion:

Conversion Price:

Number of shares of Common Stock beneficially owned or deemed beneficially owned by the Holder on the Conversion Date:

[HOLDER]

By: \_\_\_\_\_  
Name:  
Title:  
Address:

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NEITHER THIS SECURITY NOR THE SECURITIES FOR WHICH THIS SECURITY IS EXERCISABLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS. THIS SECURITY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES.

## COMMON STOCK PURCHASE WARRANT

### FIREFLY NEUROSCIENCE, INC.

Warrant Shares: 800,000

Issue Date: December 20, 2024

THIS COMMON STOCK PURCHASE WARRANT (the "Warrant") certifies that, for value received, **HELENA SPECIAL OPPORTUNITIES LLC**, a Cayman Islands limited liability company, or its assigns (the "Holder") is entitled, upon the terms and subject to the limitations on exercise and the conditions hereinafter set forth, at any time on or after the Issue Date and on or prior to 5:00 p.m. (New York City time) on December 20, 2029 (such applicable date, the "Termination Date") but not thereafter, to subscribe for and purchase from Firefly Neuroscience, Inc., a Delaware corporation (the "Company"), up to Eight Hundred Thousand (800,000) shares (as subject to adjustment hereunder, the "Warrant Shares") of Common Stock. The purchase price of one share of Common Stock under this Warrant shall be equal to the Exercise Price, as defined in Section 2(b).

Section 1. Definitions. Capitalized terms used and not otherwise defined herein shall have the meanings set forth in that certain Securities Purchase Agreement (the "Purchase Agreement"), dated as of December 20, 2024, by and among the Company and the investors signatory thereto.

#### Section 2. Exercise.

a) Exercise of Warrant. Exercise of the purchase rights represented by this Warrant may be made, in whole or in part, at any time or times on or after the Issue Date and on or before the Termination Date by delivery to the Company of a duly executed facsimile copy or PDF copy submitted by e-mail (or e-mail attachment) of the Notice of Exercise in the form annexed hereto (the "Notice of Exercise"). Within the earlier of (i) two (2) Trading Days and (ii) the number of Trading Days comprising the Standard Settlement Period (as defined in Section 2(d)(i)) following the date of exercise as aforesaid, the Holder shall deliver to the Company the aggregate Exercise Price for the Warrant Shares specified in the applicable Notice of Exercise by wire transfer or cashier's check drawn on a United States bank unless the cashless exercise procedure specified in Section 2(c) is specified in the applicable Notice of Exercise. No ink-original Notice of Exercise shall be required, nor shall any medallion guarantee (or other type of guarantee or notarization) of any Notice of Exercise be required. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company until the Holder has purchased all of the Warrant Shares available hereunder and the Warrant has been exercised in full, in which case, the Holder shall surrender this Warrant to the Company for cancellation within three (3) Trading Days of the date on which the final Notice of Exercise is delivered to the Company. Partial exercises of this Warrant resulting in purchases of a portion of the total number of Warrant Shares available hereunder shall have the effect of lowering the outstanding number of Warrant Shares purchasable hereunder in an amount equal to the applicable number of Warrant Shares purchased. The Holder and the Company shall maintain records showing the number of Warrant Shares purchased and the date of such purchases. The Company shall deliver any objection to any Notice of Exercise within one (1) Business Day of receipt of such notice. **The Holder and any assignee, by acceptance of this Warrant, acknowledge and agree that, by reason of the provisions of this paragraph, following the purchase of a portion of the Warrant Shares hereunder, the number of Warrant Shares available for purchase hereunder at any given time may be less than the amount stated on the face hereof.**

b) Exercise Price. The "Exercise Price" under this Warrant, subject to adjustment as provided herein, shall be equal to USD\$4.00 per share of Common Stock.

c) Cashless Exercise. If at any time following the date which is six months after the Issuance Date ("Registration Deadline"), there is no effective registration statement registering, or no current prospectus available for, the resale of the Warrant Shares by the Holder (a "Registration Default"), then this Warrant may also be exercised, in whole or in part, at such time by means of a "cashless exercise" in which the Holder shall be entitled to receive a number of Warrant Shares equal to the quotient obtained by dividing [(A-B) (X)] by (A), where:

- (A) = as applicable: (i) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise if such Notice of Exercise is (1) both executed and delivered pursuant to Section 2(a) hereof on a day that is not a Trading Day or (2) both executed and delivered pursuant to Section 2(a) hereof on a Trading Day prior to the opening of "regular trading hours" (as defined in Rule 600(b) of Regulation NMS promulgated under the federal securities laws) on such Trading Day, (ii) at the option of the Holder, either (y) the VWAP on the Trading Day immediately preceding the date of the applicable Notice of Exercise or (z) the Bid Price of the Common Stock on the principal Trading Market as reported by Bloomberg L.P. ("Bloomberg") as of the time of the Holder's execution of the applicable Notice of Exercise if such Notice of Exercise is executed during "regular trading hours" on a Trading Day and is delivered within two (2) hours thereafter (including until two (2) hours after the close of "regular trading hours" on a Trading Day) pursuant to Section 2(a) hereof or (iii) the VWAP on the date of the applicable Notice of Exercise if the date of such Notice of Exercise is a Trading Day and such Notice of Exercise is both executed and delivered pursuant to Section 2(a) hereof after the close of "regular trading hours" on such Trading Day;
- (B) = the Exercise Price of this Warrant, as adjusted hereunder; and
- (X) = the number of Warrant Shares that would be issuable upon exercise of this Warrant in accordance with the terms of this Warrant if such exercise were by means of a cash exercise rather than a cashless exercise.

If Warrant Shares are issued in such a cashless exercise, the parties acknowledge and agree that in accordance with Section 3(a)(9) of the Securities Act, the Warrant Shares shall take on the characteristics of the Warrants being exercised, and the holding period of the Warrant Shares being issued may be tacked on to the holding period of this Warrant. The Company agrees not to take any position contrary to this Section 2(c).

"VWAP" means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City

time)), (b) if OTCQB or OTCQX is not a Trading Market, the volume weighted average price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock is then reported in the “Pink Sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a share of Common Stock as determined by an independent appraiser selected in good faith by the Investor, the fees and expenses of which shall be paid by the Company.

d) Mechanics of Exercise.

i. Delivery of Warrant Shares Upon Exercise. The Company shall cause the Warrant Shares purchased hereunder to be transmitted by the Transfer Agent to the Holder by crediting the account of the Holder’s or its designee’s balance account with The Depository Trust Company through its Deposit or Withdrawal at Custodian system (“DWAC”) if the Company is then a participant in such system and either (A) there is an effective registration statement permitting the issuance of the Warrant Shares to or resale of the Warrant Shares by the Holder or (B) the Warrant Shares are eligible for resale by the Holder without volume or manner-of-sale limitations pursuant to Rule 144 (assuming cashless exercise of the Warrants), and otherwise by physical delivery of a certificate, registered in the Company’s share register in the name of the Holder or its designee, for the number of Warrant Shares to which the Holder is entitled pursuant to such exercise to the address specified by the Holder in the Notice of Exercise by the date that is the earliest of (i) three (3) Trading Days after the delivery to the Company of the Notice of Exercise, (ii) two (2) Trading Day after delivery of the aggregate Exercise Price to the Company and (iii) the number of Trading Days comprising the Standard Settlement Period after the delivery to the Company of the Notice of Exercise and aggregate Exercise Price (if not a cashless exercise) (such date, the “Warrant Share Delivery Date”). Upon delivery of the Notice of Exercise, the Holder shall be deemed for all corporate (but not Rule 144) purposes to have become the holder of record of the Warrant Shares with respect to which this Warrant has been exercised, irrespective of the date of delivery of the Warrant Shares, provided that payment of the aggregate Exercise Price (other than in the case of a cashless exercise) is received by the Company prior to the Holder becoming the holder of record of the Warrant Shares. If the Company fails for any reason to deliver to the Holder the Warrant Shares subject to a Notice of Exercise by the Warrant Share Delivery Date, the Company shall pay to the Holder, in cash, as liquidated damages and not as a penalty, for each USD\$1,000 of Warrant Shares subject to such exercise (based on the VWAP of the Common Stock on the date of the applicable Notice of Exercise), USD\$10 per Trading Day (increasing to USD\$20 per Trading Day on the third (3<sup>rd</sup>) Trading Day following the Warrant Share Delivery Date) for each Trading Day after such Warrant Share Delivery Date until such Warrant Shares are delivered or Holder rescinds such exercise. The Company agrees to maintain a transfer agent that is a participant in the FAST program so long as this Warrant remains outstanding and exercisable. As used herein, “Standard Settlement Period” means the standard settlement period, expressed in a number of Trading Days, on the Company’s primary Trading Market with respect to the Common Stock as in effect on the date of delivery of the Notice of Exercise.

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ii. Delivery of New Warrants Upon Exercise. If this Warrant shall have been exercised in part, the Company shall, at the request of a Holder and upon surrender of this Warrant certificate, at the time of delivery of the Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased Warrant Shares called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant.

iii. Rescission Rights. If the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares pursuant to Section 2(d)(i) by the Warrant Share Delivery Date, then the Holder will have the right to rescind such exercise.

iv. Compensation for Buy-In on Failure to Timely Deliver Warrant Shares Upon Exercise. In addition to any other rights available to the Holder, if the Company fails to cause the Transfer Agent to transmit to the Holder the Warrant Shares in accordance with the provisions of Section 2(d)(i) above pursuant to an exercise on or before the Warrant Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder’s brokerage firm otherwise purchases, Common Stock to deliver in satisfaction of a sale by the Holder of the Warrant Shares which the Holder anticipated receiving upon such exercise (a “Buy-In”), then the Company shall (A) pay in cash to the Holder the amount, if any, by which (x) the Holder’s total purchase price (including brokerage commissions, if any) for the Common Stock so purchased exceeds (y) the product of (1) the number of Warrant Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (B) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Warrant Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of USD\$11,000 to cover a Buy-In with respect to an attempted exercise of Common Stock with an aggregate sale price giving rise to such purchase obligation of USD\$10,000, under clause (A) of the immediately preceding sentence the Company shall be required to pay the Holder USD\$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and, upon request of the Company, evidence of the amount of such loss. Nothing herein shall limit a Holder’s right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company’s failure to timely deliver Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

v. No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of this Warrant. As to any fraction of a share which the Holder would otherwise be entitled to purchase upon such exercise, the Company shall pay a cash adjustment in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price.

vi. Charges, Taxes and Expenses. Issuance of Warrant Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Warrant Shares, all of which taxes and expenses shall be paid by the Company, and such Warrant Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event that Warrant Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto. The Company shall pay all Transfer Agent fees required for same-day processing of any Notice of Exercise and all fees to the Depository Trust Company (or another established clearing corporation performing similar functions) required for same-day electronic delivery of the Warrant Shares. The Company shall pay all attorney fees required for the issuance of attorney legal opinions for removal of restrictive legends on Warrant Shares.

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vii. Closing of Books. The Company will not close its stockholder books or records in any manner which prevents the timely exercise of this Warrant, pursuant to the terms hereof.

e) **Holder's Exercise Limitations.** The Company shall not effect any exercise of this Warrant, and a Holder shall not have the right to exercise any portion of this Warrant, pursuant to Section 2 or otherwise, to the extent that after giving effect to such issuance after exercise as set forth on the applicable Notice of Exercise, the Holder (together with the Holder's Affiliates, and any other Persons acting as a group together with the Holder or any of the Holder's Affiliates (such Persons, "Attribution Parties")), would beneficially own in excess of the Beneficial Ownership Limitation (as defined below). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by the Holder and its Affiliates and Attribution Parties shall include the number of shares of Common Stock issuable upon exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (i) exercise of the remaining, nonexercised portion of this Warrant beneficially owned by the Holder or any of its Affiliates or Attribution Parties and (ii) exercise or conversion of the unexercised or unconverted portion of any other securities of the Company (including, without limitation, any other Common Stock Equivalents) subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by the Holder or any of its Affiliates or Attribution Parties. Except as set forth in the preceding sentence, for purposes of this Section 2(e), beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder, it being acknowledged by the Holder that the Company is not representing to the Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 2(e) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable shall be in the sole discretion of the Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by the Holder together with any Affiliates and Attribution Parties) and of which portion of this Warrant is exercisable, in each case subject to the Beneficial Ownership Limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination as to any group status as contemplated above shall be determined in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 2(e), in determining the number of outstanding Common Stock, a Holder may rely on the number of outstanding shares of Common Stock as reflected in (A) the Company's most recent periodic or annual report filed with the Commission, as the case may be, (B) a more recent public announcement by the Company or (C) a more recent written notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written or oral request of a Holder, the Company shall within one Trading Day confirm orally and in writing to the Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including this Warrant, by the Holder or its Affiliates or Attribution Parties since the date as of which such number of outstanding shares of Common Stock was reported. The "Beneficial Ownership Limitation" shall be 4.99% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock issuable upon exercise of this Warrant. The Holder, upon notice to the Company, may increase or decrease the Beneficial Ownership Limitation provisions of this Section 2(e), provided that the Beneficial Ownership Limitation in no event exceeds 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant held by the Holder and the provisions of this Section 2(e) shall continue to apply. Any increase in the Beneficial Ownership Limitation will not be effective until the 61<sup>st</sup> day after such notice is delivered to the Company. In addition to the beneficial ownership limitations provided in this Warrant, the sum of the number of shares of Common Stock that may be issued under Transaction Documents shall be limited to 19.99% of the Borrower's outstanding shares of Common Stock as of the date of the Purchase Agreement (the "Exchange Cap"), while the Common Stock is listed on the Trading Market unless Stockholder Approval is obtained to issue more than the Exchange Cap. The Exchange Cap shall be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction. The provisions of this paragraph shall be construed and implemented in a manner otherwise than in strict conformity with the terms of this Section 2(e) to correct this paragraph (or any portion hereof) which may be defective or inconsistent with the intended Beneficial Ownership Limitation herein contained or to make changes or supplements necessary or desirable to properly give effect to such limitation. The limitations contained in this paragraph shall apply to a successor holder of this Warrant.

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### Section 3. Certain Adjustments.

a) **Stock Dividends and Splits.** If the Company, at any time while this Warrant is outstanding: (i) pays a stock dividend or otherwise makes a distribution or distributions on its Common Stock or any other equity or equity equivalent securities payable in Common Stock (which, for avoidance of doubt, shall not include any Common Stock issued by the Company upon exercise of this Warrant), (ii) subdivides outstanding shares of Common Stock into a larger number of shares, (iii) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares or (iv) issues by reclassification of Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event, and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 3(a) shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or re-classification.

b) **Subsequent Rights Offerings.** In addition to any adjustments pursuant to Section 3(a) above, if at any time the Company grants, issues or sells any Common Stock Equivalents or rights to purchase stock, warrants, securities or other property pro rata to the record holders of any class of Common Stock (the "Purchase Rights"), then the Holder will be entitled to acquire, upon the terms applicable to such Purchase Rights, the aggregate Purchase Rights which the Holder could have acquired if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date on which a record is taken for the grant, issuance or sale of such Purchase Rights, or, if no such record is taken, the date as of which the record holders of Common Stock is to be determined for the grant, issue or sale of such Purchase Rights (provided, however, that, to the extent that the Holder's right to participate in any such Purchase Right would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Purchase Right to such extent (or beneficial ownership of such Common Stock as a result of such Purchase Right to such extent) and such Purchase Right to such extent shall be held in abeyance for the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

c) **Pro Rata Distributions.** During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of Common Stock is to be determined for the participation in such Distribution (provided, however, that, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the Beneficial Ownership Limitation, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the Beneficial Ownership Limitation).

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d) Fundamental Transaction. If, at any time while this Warrant is outstanding, (i) the Company, directly or indirectly, in one or more related transactions effects any merger or consolidation of the Company with or into another Person, (ii) the Company, directly or indirectly, effects any sale, lease, license, assignment, transfer, conveyance or other disposition of all or substantially all of its assets in one or a series of related transactions, (iii) any, direct or indirect, purchase offer, tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of Common Stock is permitted to sell, tender or exchange their shares for other securities, cash or property and has been accepted by the holders of 50% or more of the outstanding Common Stock, (iv) the Company, directly or indirectly, in one or more related transactions effects any reclassification, reorganization or recapitalization of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property, or (v) the Company, directly or indirectly, in one or more related transactions consummates a stock or share purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off, merger or scheme of arrangement) with another Person or group of Persons whereby such other Person or group acquires more than 50% of the outstanding Common Stock (not including any Common Stock held by the other Person or other Persons making or party to, or associated or affiliated with the other Persons making or party to, such stock or share purchase agreement or other business combination) (each a “Fundamental Transaction”), then, upon any subsequent exercise of this Warrant, the Holder shall have the right to receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, at the option of the Holder (without regard to any limitation in Section 2(e) on the exercise of this Warrant), the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the “Alternate Consideration”) receivable as a result of such Fundamental Transaction by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such Fundamental Transaction (without regard to any limitation in Section 2(e) on the exercise of this Warrant). For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon any exercise of this Warrant following such Fundamental Transaction. The Company shall cause any successor entity in a Fundamental Transaction in which the Company is not the survivor (the “Successor Entity”) to assume in writing all of the obligations of the Company under this Warrant and the other Transaction Documents in accordance with the provisions of this Section 3(d) pursuant to written agreements in form and substance reasonably satisfactory to the Holder and approved by the Holder (without unreasonable delay) prior to such Fundamental Transaction and shall, at the option of the Holder, deliver to the Holder in exchange for this Warrant a security of the Successor Entity evidenced by a written instrument substantially similar in form and substance to this Warrant which is exercisable for a corresponding number of shares of capital stock of such Successor Entity (or its parent entity) equivalent to the Common Stock acquirable and receivable upon exercise of this Warrant (without regard to any limitations on the exercise of this Warrant) prior to such Fundamental Transaction, and with an exercise price which applies the exercise price hereunder to such shares of capital stock (but taking into account the relative value of the Common Stock pursuant to such Fundamental Transaction and the value of such shares of capital stock, such number of shares of capital stock and such exercise price being for the purpose of protecting the economic value of this Warrant immediately prior to the consummation of such Fundamental Transaction), and which is reasonably satisfactory in form and substance to the Holder. Upon the occurrence of any such Fundamental Transaction, the Successor Entity shall succeed to, and be substituted for (so that from and after the date of such Fundamental Transaction, the provisions of this Warrant and the other Transaction Documents referring to the “Company” shall refer instead to the Successor Entity), and may exercise every right and power of the Company and shall assume all of the obligations of the Company under this Warrant and the other Transaction Documents with the same effect as if such Successor Entity had been named as the Company herein.

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e) Voluntary Adjustment by Company. Subject to the rules and regulations of the Trading Market and the consent of the Requisite Holder, the Company may at any time during the term of this Warrant reduce the then current Exercise Price to any amount and for any period of time deemed appropriate by the Board of Directors.

f) Calculations. All calculations under this Section 3 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 3, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding.

g) Notice to Holder.

i. Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 3, the Company shall promptly deliver to the Holder by facsimile or email a notice setting forth the Exercise Price after such adjustment and any resulting adjustment to the number of Warrant Shares and setting forth a brief statement of the facts requiring such adjustment.

ii. Notice to Allow Exercise by Holder. If (A) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock, (B) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock, (C) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights, (D) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, or any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property, or (E) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company, then, in each case, the Company shall cause to be delivered by facsimile or email to the Holder at its last facsimile number or email address as it shall appear upon the Warrant Register of the Company, at least 15 calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to deliver such notice or any defect therein or in the delivery thereof shall not affect the validity of the corporate action required to be specified in such notice. To the extent that any notice provided in this Warrant constitutes, or contains, material, non-public information regarding the Company or any of the Subsidiaries, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Holder shall remain entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice except as may otherwise be expressly set forth herein.

#### Section 4. Transfer of Warrant.

a) Transferability. Subject to compliance with any applicable securities laws and the conditions set forth in Section 4(d) hereof and to the provisions of Section 4.1, this Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, solely between the Holder and its Affiliates (as defined in the Purchase Agreement), upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form attached hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the

name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such instrument of assignment and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. Notwithstanding anything herein to the contrary, the Holder shall not be required to physically surrender this Warrant to the Company unless the Holder has assigned this Warrant in full, in which case, the Holder shall surrender this Warrant to the Company within three (3) Trading Days of the date on which the Holder delivers an assignment form to the Company assigning this Warrant in full. The Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Warrant Shares without having a new Warrant issued.

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b) New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 4(a), as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the Issue Date and shall be identical with this Warrant except as to the number of Warrant Shares issuable pursuant thereto.

c) Warrant Register. The Company shall register this Warrant, upon records to be maintained by the Company for that purpose (the "Warrant Register"), in the name of the record Holder hereof from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

d) Transfer Restrictions. If, at the time of the surrender of this Warrant in connection with any transfer of this Warrant, the transfer of this Warrant shall not be either (i) registered pursuant to an effective registration statement under the Securities Act and under applicable state securities or blue sky laws or (ii) eligible for resale without volume or manner-of-sale restrictions or current public information requirements pursuant to Rule 144, the Company may require, as a condition of allowing such transfer, that the Holder or transferee of this Warrant, as the case may be, comply with the provisions of Section 2(f) of the Purchase Agreement.

e) Representation by the Holder. The Holder, by the acceptance hereof, represents and warrants that it is acquiring this Warrant and, upon any exercise hereof, will acquire the Warrant Shares issuable upon such exercise, for its own account and not as a nominee for any other party, and for investment, and that the Holder shall not offer, sell or otherwise dispose of this Warrant and, upon any exercise hereof, the Warrant Shares issuable upon such exercise, in violation of the Securities Act or any applicable state securities law, except pursuant to sales registered or exempted under the Securities Act. This Warrant, any Warrant issued in substitution or replacement thereof and any Warrant Shares issuable upon such exercise hereof or thereof, shall be stamped or imprinted with a legend in substantially the following form:

"NEITHER THIS SECURITY NOR THE SECURITIES FOR WHICH THIS SECURITY IS EXERCISABLE HAVE BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS. THIS SECURITY AND THE SECURITIES ISSUABLE UPON EXERCISE OF THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT OR OTHER LOAN SECURED BY SUCH SECURITIES."

#### Section 5. Miscellaneous.

a) No Rights as Stockholder Until Exercise. This Warrant does not entitle the Holder to any voting rights, dividends or other rights as a stockholder of the Company prior to the exercise hereof.

b) Loss, Theft, Destruction or Mutilation of Warrant. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Warrant Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of the Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

c) Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then, such action may be taken or such right may be exercised on the next succeeding Business Day.

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#### d) Authorized Shares.

The Company covenants that, during the period the Warrant is outstanding, it will reserve from its authorized and unissued shares of Common Stock a sufficient number of shares to provide for the issuance of the Warrant Shares upon the exercise of any purchase rights under this Warrant. The Company further covenants that its issuance of this Warrant shall constitute full authority to its officers who are charged with the duty of issuing the necessary Warrant Shares upon the exercise of the purchase rights under this Warrant. The Company will take all such reasonable action as may be necessary to assure that such Warrant Shares may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of the Trading Market upon which the Common Stock may be listed. The Company covenants that all Warrant Shares which may be issued upon the exercise of the purchase rights represented by this Warrant will, upon exercise of the purchase rights represented by this Warrant and payment for such Warrant Shares in accordance herewith, be duly authorized, validly issued, fully paid and nonassessable and free from all taxes, liens and charges created by the Company in respect of the issue thereof (other than taxes in respect of any transfer occurring contemporaneously with such issue).

Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (i) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (ii) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant and (iii) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof, as may be, necessary to enable the Company to perform its obligations under this Warrant.

Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

e) Jurisdiction. All questions concerning the construction, validity, enforcement and interpretation of this Warrant shall be determined in accordance with the provisions of the Purchase Agreement.

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f) Restrictions. The Holder acknowledges that the Warrant Shares acquired upon the exercise of this Warrant, if not registered and the Holder does not utilize cashless exercise after six months from the date hereof, may have restrictions upon resale imposed by state and federal securities laws.

g) Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of Holder shall operate as a waiver of such right or otherwise prejudice the Holder's rights, powers or remedies. Without limiting any other provision of this Warrant or the Purchase Agreement, if the Company willfully and knowingly fails to comply with any provision of this Warrant, which results in any material damages to the Holder, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.

h) Notices. Any notice, request or other document required or permitted to be given or delivered to the Holders by the Company shall be delivered in accordance with the notice provisions of the Purchase Agreement.

i) Limitation of Liability. No provision hereof, in the absence of any affirmative action by the Holder to exercise this Warrant to purchase Warrant Shares, and no enumeration herein of the rights or privileges of the Holder, shall give rise to any liability of the Holder for the purchase price of any Common Stock or as a stockholder of the Company, whether such liability is asserted by the Company or by creditors of the Company.

j) Remedies. The Holder, in addition to being entitled to exercise all rights granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Warrant. The Company agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Warrant and hereby agrees to waive and not to assert the defense in any action for specific performance that a remedy at law would be adequate.

k) Successors and Assigns. Subject to applicable securities laws, this Warrant and the rights and obligations evidenced hereby shall inure to the benefit of and be binding upon the successors and permitted assigns of the Company and the successors and permitted assigns of Holder. The provisions of this Warrant are intended to be for the benefit of any Holder from time to time of this Warrant and shall be enforceable by the Holder or holder of Warrant Shares.

l) Amendment; Waivers. Any modifications, amendments or waivers of the provisions hereof shall be subject to 11.9 of the Purchase Agreement.

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m) Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provisions or the remaining provisions of this Warrant.

n) Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant.

o) Equal Treatment of Holders. No consideration (including any modification of this Warrant) shall be offered or paid to any Person (as such term is defined in the Purchase Agreement) to amend or consent to a waiver or modification of any provision hereof unless the same consideration is also offered to all of the Holders. For clarification purposes, this provision constitutes a separate right granted to each Holder by the Company and negotiated separately by each Holder and is intended for the Company to treat the Holders as a class and shall not in any way be construed as the Holders acting in concert or as a group with respect to the Warrants or the Common Stock issuable upon exercise of the Warrants.

p) No Net Settlement of Warrants. The Warrants may not be net settled in cash.

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*(Signature Page Follows)*

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IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its officer thereunto duly authorized as of the date first above indicated.

**FIREFLY NEUROSCIENCE, INC.**

By: \_\_\_\_\_  
Name: Greg Lipschitz  
Title: Executive Chairman

TO: [\_\_\_\_\_]

(1) The undersigned hereby elects to purchase \_\_\_\_\_ Warrant Shares of the Company pursuant to the terms of the attached Warrant (only if exercised in full), and tenders herewith payment of the exercise price in full, together with all applicable transfer taxes, if any.

(2) Payment shall take the form of (check applicable box):

in lawful money of the United States; or

if permitted the cancellation of such number of Warrant Shares as is necessary, in accordance with the formula set forth in subsection 2(c), to exercise this Warrant with respect to the maximum number of Warrant Shares purchasable pursuant to the cashless exercise procedure set forth in subsection 2(c).

(3) Please issue said Warrant Shares in the name of the undersigned or in such other name as is specified below:

\_\_\_\_\_

The Warrant Shares shall be delivered to the following DWAC Account Number:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

(4) Accredited Investor. The undersigned is an "accredited investor" as defined in Regulation D promulgated under the Securities Act of 1933, as amended.

[SIGNATURE OF HOLDER]

Name of Investing Entity:

\_\_\_\_\_

*Signature of Authorized Signatory of Investing Entity:*

\_\_\_\_\_

Name of Authorized Signatory:

\_\_\_\_\_

Title of Authorized Signatory:

\_\_\_\_\_

Date:

\_\_\_\_\_

**EXHIBIT B**

ASSIGNMENT FORM

*(To assign the foregoing Warrant, execute this form and supply required information. Do not use this form to purchase shares.)*

FOR VALUE RECEIVED, the foregoing Warrant and all rights evidenced thereby are hereby assigned to

Name:

\_\_\_\_\_  
(Please Print)

Address:

\_\_\_\_\_  
(Please Print)

Phone Number:

\_\_\_\_\_

Email Address:

\_\_\_\_\_

Dated: \_\_\_\_\_, \_\_\_\_\_

Holder's Signature:

\_\_\_\_\_

Holder's Address:

\_\_\_\_\_

## SECURITIES PURCHASE AGREEMENT

This Securities Purchase Agreement (as amended, supplemented, restated and/or modified from time to time, this “**Agreement**”) is entered into as of December 20, 2024, by and between **FIRFLY NEUROSCIENCE, INC.**, a company organized under the laws of the State of Delaware (the “**Company**”), and each investor identified on the signature pages hereto (each, including its successors and assigns, an “**Investor**” and collectively, the “**Investors**”).

## BACKGROUND

A. The board of directors (the “**Board of Directors**”) of the Company has authorized the issuance to each of the Investors of certain Notes (as defined below) and Warrants (as defined below).

B Each Investor desires to purchase certain Notes and Warrants on the terms and conditions set forth in this Agreement.

NOW THEREFORE, in consideration of the foregoing recitals and the covenants and agreements set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and each Investor hereby agree as follows:

**1. DEFINITIONS.** As used in this Agreement, the following terms shall have the following meanings specified or indicated below, and such meanings shall be equally applicable to the singular and plural forms of such defined terms:

“**1933 Act**” means the Securities Act of 1933, as amended.

“**1934 Act**” means the Securities Exchange Act of 1934, as amended.

“**Affiliate**” means a Person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the Person specified.

“**Aggregate Outstanding Amount**” means the sum of (a) the outstanding Aggregate Principal Amount plus (b) the aggregate accrued and unpaid interest and all other amounts owing to all Investors under the Notes as of the applicable measurement date.

“**Aggregate Principal Amount**” has the meaning set forth in Section 2.1.

“**Agreement**” has the meaning set forth in the preamble.

“**Arena ELOC**” shall mean that equity line of credit facility entered into on December 20, 2024, by and between the Company and an Affiliate of the Investor.

“**Board of Directors**” has the meaning set forth in the recitals.

“**Business Day**” means any day other than a Saturday, Sunday or any other day on which banks are permitted or required to be closed in New York City.

“**Canadian Guarantee**” means that certain Guarantee Agreement, dated as of the Closing Date, in the form of Exhibit H as amended, modified, restated and/or supplemented from time to time in accordance with the terms hereof and thereof.

“**Canadian Security Agreement**” means the Canadian Security Agreement, dated as of the Closing Date, in the form of Exhibit G as amended, modified, restated and/or supplemented from time to time in accordance with the terms hereof and thereof.

“**Canadian Security Documents**” means the Canadian Security Agreement and Canadian Guarantee.

“**Change of Control**” means, with respect to the Company:

- (a) other than a shareholder that holds such a position at the date of this Agreement, if a Person comes to have beneficial ownership, control or direction over more than fifty percent (50%) of the voting rights attached to any class of voting securities of the Company; or
- (b) the sale or other disposition in a single transaction, or in a series of transactions, of all or substantially all of the assets of the Company and its Subsidiaries, taken as a whole to any Person.

“**Closing**” has the meaning set forth in Section 2.2.

“**Closing Date**” has the meaning set forth in Section 2.2.

“**Closing Equity Conditions**” means, during the period in question, (a) there is a sufficient number of authorized but unissued and otherwise unreserved Common Stock for the issuance of all of the shares then issuable pursuant to the Transaction Documents, (b) there has been no Event of Default and no existing event which, with the passage of time or the giving of notice, would constitute an Event of Default, and (c) the Common Stock shall be DWAC Eligible.

“**Code**” has the meaning set forth in Section 2.1.

“**Common Stock**” means the common stock of the Company having a par value per share of \$0.0001.

“**Common Stock Equivalent**” means any convertible security or warrant, option or other right to subscribe for or purchase any Common Stock or any convertible security convertible into Common Stock.

“**Company**” has the meaning set forth in the preamble.

“**Company Articles and Bylaws**” means the Amended and Restated Certificate of Incorporation and the Amended and Restated bylaws governing the Company duly authorized under the DGCL.

“**Conversion Shares**” means the Common Stock issuable upon the full or any partial conversion of a Note.

“**Disclosure Schedules**” means the Disclosure Schedules of the Company delivered concurrently herewith.

“**DGCL**” means The Delaware General Corporation Law (Title 8, Chapter 1 of the Delaware Code).

“**DWAC Eligible**” means that (a) the Common Stock is eligible at the Depository Trust Company (“DTC”) for full services pursuant to DTC’s Operational Arrangements, including, without limitation, transfer through DTC’s Deposit and Withdrawal at Custodian (“DWAC”) service, (b) the Transfer Agent is approved as an agent in DTC’s Fast Automated Securities Transfer Program, (c) the Conversion Shares are otherwise eligible for delivery via DWAC, and (d) the Transfer Agent does not have a policy prohibiting or limiting delivery of the Conversion Shares via DWAC.

“**Effectiveness Date**” has the meaning set forth in the Registration Rights Agreement.

“**Equity Interests**” means and includes the Common Stock and any Common Stock Equivalents.

“**Event of Default**” has the meaning set forth in Section 7.1.

“**Exempted Securities**” means (a) equity securities issued by reason of a dividend, stock split, split-up or other distribution on Common Stock, (b) Common Stock or rights, warrants or options to purchase Common Stock issued to employees or directors of, or consultants or advisors to, the Company or any of its Subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors (“**Equity Plans**”), (c) securities issued upon the exercise or exchange of or conversion of any Securities issued hereunder and/or rights or other securities exercisable or exchangeable for or convertible into Common Stock issued and outstanding on the date of this Agreement as disclosed on Schedule 1 hereto, provided that such rights and securities have not been amended since the date of this Agreement to increase the number of such securities or to decrease the exercise price, exchange price or conversion price of such securities or to extend the term of such securities, (d) securities issuable pursuant to the Arena ELOC, (e) securities issued pursuant to acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company or securities issued in financing transactions, the primary purpose of which is to finance acquisitions or strategic transactions approved by a majority of the disinterested directors of the Company, provided that such securities are issued as “restricted securities” (as defined in Rule 144) and carry no registration rights that require or permit the filing of any registration statement in connection therewith, and provided that any such issuance shall only be to a Person (or to the equityholders of a Person) which is, itself or through its subsidiaries, an operating company or an owner of an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities, (f) shares of Common Stock, options or convertible securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by a majority of the disinterested directors of the Company, (g) shares of Common Stock, options or convertible securities issued to in connection with the provision of goods pursuant to transactions approved by a majority of the disinterested directors of the Company and (h) shares of Common Stock, options or convertible securities issued in connection with sponsored research, collaboration, technology license, development, marketing, public relations, investor relations or other similar agreements or strategic partnerships approved a majority of the disinterested directors of the Company.

“**Funding Amount**” shall mean, in respect of any Investor, the amount identified as such on the signature page hereto executed by such Investor, but not to exceed an aggregate amount of Two Million Forty Thousand and zero/100 Dollars (\$2,040,000.00).

“**GAAP**” means generally accepted accounting principles in the United States in effect on the Issuance Date, except that any lease that would not be considered a capital lease pursuant to GAAP prior to the effectiveness of Accounting Standards Codification 842 (whether or not such lease was in effect on such date) shall be treated as an operating lease for all purposes hereunder and shall not be deemed to constitute a capitalized lease or Indebtedness hereunder.

“**Investor**” has the meaning set forth in the preamble.

“**Investor Group**” shall mean, in respect of each Investor, such Investor plus any other Person with which such Investor is considered to be part of a group under Section 13 of the 1934 Act or with which the Investor otherwise files reports under Sections 13 and/or 16 of the 1934 Act.

“**Investor Party**” has the meaning set forth in Section 5.12(a).

“**Investor Shares**” means the Conversion Shares and the Warrant Shares, and any other shares issued or issuable to the Investors pursuant to this Agreement or the Notes or the Warrants.

“**IP Rights**” has the meaning set forth in Section 3.10.

“**Law**” means any law, rule, regulation, order, judgment or decree, including, without limitation, any federal and state securities laws.

“**Lead Investor**” means Helena Special Opportunities LLC

“**Losses**” has the meaning set forth in Section 5.12(a).

“**Material Adverse Effect**” means any material adverse effect on (i) the businesses, properties, assets, operations, results of operations or financial condition of the Company, or the Company and its Subsidiaries, taken as a whole, or (ii) the ability of the Company to consummate the transactions contemplated by this Agreement or to perform its obligations hereunder or under the Notes, *provided, however*, that none of the following shall be deemed either alone or in combination to constitute, and none of the following shall be taken into account in determining whether there has been or would be, a Material Adverse Effect: (a) any adverse effect resulting from or arising out of general economic conditions; (b) any adverse effect resulting from or arising out of general conditions in the industries in which the Company and the Subsidiaries operate; (c) any adverse effect resulting from any changes to applicable Law; or (d) any adverse effect resulting from or arising out of any natural disaster or any acts of terrorism, sabotage, military action or war or any escalation or worsening thereof; *provided, further*, that any event, occurrence, fact, condition or change referred to in clauses (a) through (d) immediately above shall be taken into account in determining whether a Material Adverse Effect has occurred or could reasonably be expected to occur to the extent that such event, occurrence, fact, condition or change has a disproportionate effect on the Company and/or the Subsidiaries compared to other participants in the industries in which the Company and the Subsidiaries operate.

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“**Maximum Percentage**” means 4.99%; *provided*, that if at any time after the date hereof an Investor Group beneficially owns in excess of 4.99% of any class of Equity Interests in the Company that is registered under the 1934 Act (excluding any Equity Interests deemed beneficially owned by virtue of a Note), then the Maximum Percentage shall automatically increase to 9.99% so long as the Investor Group owns in excess of 4.99% of such class of Equity Interests (and shall, for the avoidance of doubt, automatically decrease to 4.99% upon the Investor Group ceasing to own in excess of 4.99% of such class of Equity Interests).

“**Money Laundering Laws**” has the meaning set forth in Section 3.25.

“**New Securities**” means, collectively, equity or debt securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity or debt securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity or debt securities.

“**Note**” has the meaning set forth in Section 2.1.

“**OFAC**” has the meaning set forth in Section 3.23.

“**Offer Notice**” has the meaning set forth in Section 10.1.

“**OID**” means the original issue discount of the Note(s) as of the applicable date of determination.

“**Person**” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“**Principal Amount**” means the principal amount of the Note(s) as of the applicable date of determination.

“**Proceedings**” has the meaning set forth in Section 3.6.

“**Prohibited Transaction**” means a transaction with a third party or third parties in which the Company issues or sells (or arranges or agrees to issue or sell):

(a) any debt, equity or equity-linked securities (including options or warrants) that are convertible into, exchangeable or exercisable for, or include the right to receive Common Stock:

(i) at a conversion, repayment, exercise or exchange rate or other price that varies over time based upon a discount to the future trading prices of, or quotations for, Common Stock; or

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(ii) at a conversion, repayment, exercise or exchange rate or other price that is subject to being reset at some future date after the initial issuance of such debt, equity or equity-linked security or upon the occurrence of specified or contingent events, including but not limited to, in connection with anti-dilution provisions or other similar price protection provisions; or

(b) any securities in a capital or debt raising transaction or series of related transactions which grant to an investor the right to receive additional securities based upon future transactions of the Company on terms more favorable than those granted to such investor in such first transaction or series of related transactions.

Notwithstanding the foregoing, and for the avoidance of doubt, rights issuances, shareholder purchase plans, the Arena ELOC or Equity Plans shall not be deemed to be a Prohibited Transaction.

“**Registration Rights Agreement**” means a Registration Rights Agreement, in the form of Exhibit C hereto, among the Company and the Investors.

“**Required Minimum**” means, as of any date, two (2) times the maximum aggregate number of shares Common Stock then issued or potentially issuable in the future pursuant to the Transaction Documents, including any Conversion Shares issuable upon conversion in full of the Notes and Warrant Shares issuable upon exercise in full of the Warrants, ignoring any conversion or exercise limits set forth therein based, as of the date of initial Closing, on a conversion price of \$3.00.

“**Requisite Holder**” means the Lead Investor or any successor in interest to the Lead Investor that is mutually agreed to by the Lead Investor and the Company. For the purposes of clarity hereunder, only one entity shall serve as the Requisite Holder at any time hereunder and the affirmative action or consent by the Requisite Holder shall bind all Investors hereunder.

“**SEC**” means the United States Securities and Exchange Commission.

“**SEC Documents**” has the meaning set forth in Section 3.5(a).

“**Securities**” means the Notes, the Warrants, and the Investor Shares.

“**Securities Termination Event**” means either of the following has occurred:

(a) trading in securities generally in the United States has been suspended or limited for a consecutive period of greater than three (3) Business Days; or

(b) a banking moratorium has been declared by the United States or the New York State authorities and is continuing for a consecutive period of greater than three (3) Business Days.

“**Security Agreement**” means a Security Agreement, in the form of Exhibit F hereto executed by the Company and the Subsidiaries

“**Shareholder Approval**” means the approval of the holders of the requisite number of the outstanding Common Stock to ratify and approve all of the transactions contemplated by the Transaction Documents, including the issuance of all of Investor Shares (as such term is defined in each of such documents) issued and potentially issuable to the Investor thereunder, all as may be required by the applicable rules and regulations of the Trading Market (or any successor entity).

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“**Subsidiaries**” and “**Subsidiary**” have the meaning set forth in Section 3.4(b).

“**Subsidiary Guarantee**” means a guarantee, in the form of Exhibit E hereto issued by the Subsidiaries, of the Company’s obligations under this Agreement and the Notes.

“**Trading Day**” means a day on which the Common Stock is traded on a Trading Market.

“**Trading Market**” means whichever of the New York Stock Exchange, NYSE American, or the Nasdaq Stock Market (including the Nasdaq Capital Market and the Nasdaq Global Market), on which the Common Stock is listed or quoted for trading on the date in question.

“**Transaction Documents**” means this Agreement, the Notes, the Registration Rights Agreement, the Subordination Agreement, the Subsidiary Guarantee, the Security Agreement, the Canadian Security Documents, the Transfer Agent Instruction Letter, and any other documents or agreements executed or delivered in connection with the transactions contemplated hereunder.

“**Transfer Agent**” means Broadridge Corporate Issuer Solutions, Inc. having its offices at 1155 Long Island Avenue, Edgewood, NY 11717.

“**Transfer Agent Instruction Letter**” means a letter of irrevocable instructions addressed by the Company to the Transfer Agent, acceptable to the Investor in its sole discretion.

“**VWAP**” means, for any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of the Common Stock for such date (or the nearest preceding date) on the Trading Market on which the Common Stock is then listed or quoted as reported by Bloomberg L.P. (based on a Trading Day from 9:30 a.m. (New York City time) to 4:02 p.m. (New York City time)), (b) if the Common Stock is traded on OTCQB or OTCQX, the volume weighted average sales price of the Common Stock for such date (or the nearest preceding date) on OTCQB or OTCQX as applicable, (c) if the Common Stock is not then listed or quoted for trading on OTCQB or OTCQX and if prices for the Common Stock is then reported in the “Pink Sheets” published by OTC Markets Group, Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price per share of the Common Stock so reported, or (d) in all other cases, the fair market value of a Share of Common Stock as determined by an independent appraiser selected in good faith by the Lead Investor and reasonably acceptable to the Company, the fees and expenses of which shall be paid by the Company.

“**Warrant**” has the meaning set forth in Section 2.1.

“**Warrant Shares**” means the Common Stock issuable upon the full or any partial exercise of a Warrant.

“**Warrant Share Amount**” means in respect of any Warrant the initial amount of shares of Common Stock for which such Warrant may be exercised and which shall be equal to the Principal Amount of the Note issued to the applicable Investor divided by \$3.00.

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## **2. PURCHASE AND SALE OF THE NOTES**

**2.1 Purchase and Sale of the Notes.** Subject to the terms and conditions set forth herein, the Company shall issue and sell to each Investor, and each Investor shall purchase from the Company, convertible promissory notes in an amount up to the principal amount set forth on the signature page hereto executed by such Investor, in the form attached hereto as Exhibit A (each, a “**Note**” and together, the “**Notes**”). The Notes sold hereunder shall be in an initial aggregate Principal Amount of Notes of Two Million Four Hundred and zero/100 Dollars (\$2,400,000.00), including an OID of an aggregate Three Hundred Sixty Thousand and zero/100 Dollars (\$360,000.00). Each Investor shall also be issued a common stock purchase warrant, in the form attached hereto as Exhibit B (each, a “**Warrant**” and together, the “**Warrants**”) entitled such Investor to purchase a number of shares of Common Stock equal to the applicable Warrant Share Amount relating to such Note. The purchase price of a Note and its accompanying Warrant shall be computed by subtracting the portion of the OID represented by that such Note from the portion of the Principal Amount represented by such Note (a “**Purchase Price**”). For purposes of this Agreement and the other Transaction Documents, the aggregate Principal Amounts of all the Notes, shall be referred to together as, the “**Aggregate Principal Amount**”, and the aggregate Funding Amounts of all of the Notes, shall be referred to together as, the “**Aggregate Funding Amount**”.

**2.2 Closing.** Subject to the terms and conditions set forth herein, the sale of the Notes and Warrants including payment for and delivery thereof, shall take place remotely via the exchange of documents and signatures (the “**Closing**”) to be determined by the mutual agreement of the parties.

**2.3 Priority of Obligation.** As an inducement for the Investors to enter into this Agreement and to purchase the Notes, all obligations of the Company pursuant to this Agreement and the Notes shall be senior in payment to any subsequent Indebtedness (as defined in the Notes).

**2.4 Pro Rata Payments.** The Company and each Investor hereby agree that, notwithstanding anything to the contrary contained herein or in the Notes, to the extent the Company is obligated to make any payments hereunder or under the Notes to the Investors (or offers to make any prepayments hereunder or thereunder), all such payments shall be applied to the outstanding principal amount of the Notes held by all Investors on a pro rata basis based on the Aggregate Outstanding Amount at the time of such prepayment. If any Investor shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of any principal of or interest on any of outstanding amounts under the Notes resulting in such Investor receiving payment of a proportion of the Aggregate Outstanding Amount at the time of such prepayment greater than its pro rata share thereof as provided herein, then the Investor receiving such greater proportion shall (a) notify the other Investors of such fact, and (b) purchase (for cash at face value) participations in the principal amount owing to the other Investors under the applicable Notes, or make such other adjustments as shall be equitable, so that the benefit of all such payments shall be shared by the Investors ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Notes and other amounts owing them. The Company consents to the foregoing and agrees, to the extent it may effectively do so under applicable law, that any Investor acquiring a participation pursuant to the foregoing arrangement may exercise against the Company rights of setoff and counterclaim with respect to such participation as fully as if such Investor were a direct creditor of the Company in the amount of such participation.

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**3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.** Except as set forth in the SEC Documents or the Disclosure Schedules, which SEC Documents and Disclosure Schedules shall be deemed a part hereof and shall qualify any representation or warranty otherwise made herein to the extent of the disclosure contained in the corresponding section of the SEC Documents and Disclosure Schedules, the Company represents and warrants to each Investor and covenants with each Investor that, the following representations and warranties are true and correct as of the date hereof and as of the Closing Date:

**3.1 Organization and Qualification.** The Company is a corporation duly incorporated and validly existing in good standing under the Laws of the State of Delaware and has the requisite corporate power and authority to own its properties and to carry on its business as now being conducted. The Company is duly qualified to do business and is in good standing in every jurisdiction in which the ownership of its property or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not have a Material Adverse Effect.

**3.2 Authorization; Enforcement; Compliance with Other Instruments.** The Company and each Subsidiary has the requisite corporate power and authority to execute the Transaction Documents, and if applicable, to issue and sell the Notes and Warrants pursuant hereto, and to perform its obligations under the Transaction Documents, including issuing the Investor Shares on the terms set forth in this Agreement. The execution and delivery of the Transaction Documents by the Company and each Subsidiary and the issuance and sale of the Securities by the Company pursuant hereto have been duly and validly authorized by the Company's Board of Directors and each Subsidiary's board of directors, shareholder(s), or member(s), as applicable and no further consent or authorization is required by the Company, any Subsidiaries, the Company's Board of Directors, their respective shareholders or members or any other Person in connection therewith, assuming the accuracy of each Investor's representations in Section 4, and except such as have been waived and other than such filings as are required to be made under applicable Laws. The Transaction Documents have been duly and validly executed and delivered by the Company and each Subsidiary to which they are a party and constitute valid and binding obligations of the Company and each Subsidiary, enforceable against the Company and each Subsidiary in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar Laws relating to, or affecting generally, the enforcement of creditors' rights and remedies.

**3.3 No Conflicts.** The execution, delivery and performance of the Transaction Documents by the Company and each Subsidiary and the issuance and sale of the Notes and Warrants hereunder by the Company will not (a) conflict with or result in a violation of the Company Articles and Bylaws, (b) conflict with, or constitute a material default (or an event which, with notice or lapse of time or both, would become a material default) under, or give to others any right of termination, amendment, acceleration or cancellation of, any material agreement to which the Company or any of the Subsidiaries is a party, or (c) violate in any material respect any Law or any rule or regulation of the Trading Market applicable to the Company or any of the Subsidiaries or by which any of their properties or assets are bound or affected. Assuming the accuracy of each Investor's representations in Section 4 and subject to the making of the filings referred to in Section 6 and receipt of the Shareholder Approval, (i) no approval or authorization will be required from any governmental authority or agency, regulatory or self-regulatory agency or other third party (including the Trading Market) in connection with the issuance of the Notes and the other transactions contemplated by this Agreement (including the issuance of the Conversion Shares upon conversion of the Notes), (ii) the issuance of (x) the Notes, and the issuance of the Conversion Shares upon the conversion of the Notes, and (y) the Warrants, and the issuance of the Warrant Shares upon the exercise of the Warrants, will be exempt from the registration and qualification requirements under the 1933 Act and all applicable state securities Laws.

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### **3.4 Capitalization and Subsidiaries.**

(a) As of the date hereof, there are 7,945,480 shares of Common Stock issued and outstanding. The Conversion Shares, when issued upon conversion of a Note in accordance with its terms, will be validly issued, fully paid and non-assessable and free from all taxes, liens and charges with respect to the issuance thereof. The Warrant Shares, when issued upon exercise of a Warrant in accordance with its terms, will be validly issued, fully paid and non-assessable and free from all taxes, liens and charges with respect to the issuance thereof. Other than as provided in Schedule 3.4(a), no Common Stock is subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company. The Company Articles and Bylaws on file with the SEC are true and correct copies of the Company Articles and Bylaws as in effect as of the date hereof. The Company is not in violation of any provision of the Company Articles or Bylaws nor is any Subsidiary in violation of its organization documents.

(b) Schedule 3.4(b) lists each direct and indirect subsidiary of the Company (each, a "Subsidiary" and collectively, the "Subsidiaries") and indicates for each Subsidiary (i) the authorized capital stock or other Equity Interest of such Subsidiary as of the date hereof, (ii) the number and kind of shares or other ownership interests of such Subsidiary that are issued and outstanding as of the date hereof, and (iii) the owner of such shares or other ownership interests as of the date hereof. No Subsidiary has any outstanding stock options, warrants or other instruments pursuant to which such Subsidiary may at any time or under any circumstances be obligated to issue any shares of its capital stock or other Equity Interests. Each Subsidiary is duly organized and validly existing in good standing under the laws of its jurisdiction of formation, except to the extent that the failure to be in good standing would not have a Material Adverse Effect, and has all requisite power and authority to own its properties and to carry on its business as now being conducted.

(c) Other than as provided in Schedule 3.4(c), neither the Company nor any Subsidiary is bound by any agreement or arrangement pursuant to which it is obligated to register the sale of any securities under the 1933 Act. Other than as provided in Schedule 3.4(c), there are no outstanding securities of the Company or any of the Subsidiaries which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to redeem or purchase any security of the Company or any Subsidiary. Other than as provided in Schedule 3.4(c), there will be no outstanding securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Notes, the Warrants, or the Investor Shares. Neither the Company nor any Subsidiary has any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement.

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(d) The issuance and sale of any of the Securities will not obligate the Company to issue Common Stock or other securities to any Person other than the Investors and, other than as provided in Schedule 3.4(d), will not result in the adjustment of the exercise, conversion, exchange, or reset price of any outstanding securities.

### **3.5 SEC Documents; Financial Statements.**

(a) As of the date hereof and the Closing Date and except as set forth on Schedule 3.5(a), the Company has filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the reporting requirements of the 1934 Act since February 6, 2024 (all of the foregoing filed prior to the date hereof, as they have been amended since the time of their filing, and all exhibits included therein and documents incorporated by reference therein being hereinafter referred to as the "SEC Documents"). As of their respective filing dates, the SEC Documents complied in all material respects with the requirements of the 1934 Act and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(b) As of their respective dates, the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles consistently applied, and audited by a firm that is a member of the Public Company Accounting Oversight Board, during the periods involved (except as may be otherwise indicated in such financial statements or the notes thereto, except in the case of pro forma statements or, in the case of unaudited interim statements, except to the extent they may exclude footnotes or may be condensed or summary statements) and fairly present in all material respects the consolidated financial position of the Company as of the dates thereof and the consolidated results of its operations and consolidated cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments).

(c) Except as disclosed in the SEC Documents, the Company and each of the Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with US generally accepted accounting principles and to maintain asset accountability, (iii) reasonable controls to safeguard assets are in place and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

**3.6 Litigation and Regulatory Proceedings.** Except as disclosed in Schedule 3.6, there are no actions, causes of action, suits, claims, proceedings, inquiries or investigations (collectively, "**Proceedings**") (i) before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the executive officers of the Company or any of the Subsidiaries, threatened against or affecting the Company or any of the Subsidiaries, the Common Stock or any other class of issued and outstanding shares of the Company, or any of the Company's or the Subsidiaries' officers or directors in their capacities as such, which adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents or the Securities or (ii) that would, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect; and, to the knowledge of the executive officers of the Company, there is no reason to believe that there is any basis for any such Proceeding.

**3.7 No Undisclosed Events, Liabilities or Developments.** Except for the issuance of the Securities contemplated by this Agreement or as set forth on Schedule 3.7, no event, development or circumstance has occurred or exists, or to the knowledge of the executive officers of the Company is reasonably anticipated to occur or exist that (a) would reasonably be anticipated to have a Material Adverse Effect or (b) would be required to be disclosed by the Company under applicable securities Laws and which has not been publicly announced.

**3.8 Compliance with Law.** Except as disclosed in Schedule 3.8, the Company and each of the Subsidiaries have conducted and are conducting their respective businesses in compliance in all material respects with all applicable Laws and are in compliance in all material respects with the rules and regulations of the Trading Market. Except as disclosed in Schedule 3.8 Documents, the Company is not aware of any facts which could reasonably be anticipated to lead to a delisting of the Common Stock by the Trading Market in the future.

**3.9 Employee Relations.** Neither the Company nor any Subsidiary is involved in any union labor dispute nor, to the knowledge of the Company, is any such dispute threatened. Neither the Company nor any Subsidiary is a party to any collective bargaining agreement. No executive officer (as defined in Rule 501(f) of the 1933 Act) has notified the Company that such officer intends to leave the Company's employ or otherwise terminate such officer's employment with the Company.

**3.10 Intellectual Property Rights.** The Company and each Subsidiary owns or possesses or can acquire on reasonable terms adequate rights or licenses to use all trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets and other intellectual property rights (collectively, "**IP Rights**") used in or reasonably necessary to conduct their respective businesses as now conducted. None of the material IP Rights of the Company or any of the Subsidiaries are expected to expire or terminate within three (3) years from the date of this Agreement. Neither the Company nor any Subsidiary has received any notice alleging that it is infringing, misappropriating or otherwise violating any IP Rights of any other Person. No written notice of a claim has been received by, and no Proceeding is pending against, the Company or any Subsidiary alleging that the Company or any Subsidiary is infringing, misappropriating or otherwise violating the IP Rights of any other Person, and, to the Company's knowledge, no such claim or Proceeding is threatened, and the Company is not aware of any facts or circumstances which might give rise to any such claim or Proceeding. The Company and the Subsidiaries have taken commercially reasonable security measures to protect the secrecy, confidentiality and value of all of their material IP Rights.

**3.11 Environmental Laws.** Except, in each case, as would not be reasonably anticipated to have a Material Adverse Effect, the Company and the Subsidiaries (a) are in compliance with any and all applicable Laws relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants, (b) have received and hold all permits, licenses or other approvals required of them under all such Laws to conduct their respective businesses and (c) are in compliance with all terms and conditions of any such permit, license or approval.

**3.12 Title to Assets.** The Company and the Subsidiaries have good and marketable title to all personal property (other than IP Rights, which is addressed in Section 3.10) owned by them which is material to their respective businesses, in each case free and clear of all liens, encumbrances and defects except those set forth on Schedule 3.12. Any real property and facilities held under lease by the Company or any Subsidiary are held under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and the Subsidiaries.

**3.13 Insurance.** The Company and each of the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company reasonably believes to be prudent and customary in the businesses in which the Company and the Subsidiaries are engaged. Neither the Company nor any of the Subsidiaries has been refused any insurance coverage sought or applied for, and the Company has no reason to believe that it will not be able to renew all existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers.

**3.14 Regulatory Permits.** The Company and the Subsidiaries have in full force and effect all certificates, approvals, authorizations and permits from all regulatory authorities and agencies necessary to own, lease or operate their respective properties and assets and conduct their respective businesses, and neither the Company nor any Subsidiary has received any notice of Proceedings relating to the revocation or modification of any such certificate, approval, authorization or permit, except for such certificates, approvals, authorizations or permits with respect to which the failure to hold would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

**3.15 No Materially Adverse Contracts, Etc.** Neither the Company nor any of the Subsidiaries is (a) subject to any charter, corporate or other legal restriction, or any judgment, decree or order which in the judgment of the Company's officers has or would reasonably be expected in the future to have a Material Adverse Effect or (b) a party to any contract or agreement which in the judgment of the Company's management has or would reasonably be anticipated to have a Material Adverse Effect.

**3.16 Taxes.** Other than as provided on Schedule 3.16, the Company and the Subsidiaries each has made or filed, or caused to be made or filed, all United States federal, and applicable state, local and non-U.S. tax returns, reports and declarations required by any jurisdiction to which it is subject and has paid all taxes and other governmental assessments and charges that are material in amount, required to be paid by it, regardless of whether such amounts are shown or determined to be due on such returns, reports and declarations, except those being contested in good faith by appropriate proceedings and for which it has set aside on its books provision reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and, to the knowledge of the Company, there is no basis for any such claim.

**3.17 Solvency.** After giving effect to the receipt by the Company of the proceeds from the transactions contemplated by this Agreement, (a) the Company's book value of its assets exceeds the Company's book value of existing debts and other liabilities (ignoring any potential contingent liabilities) as they mature; and (b) the current cash flow of the Company, together with the proceeds the Company would receive, were it to liquidate all of its assets at book value, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its debt at book value when such amounts are required to be paid. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). Except as disclosed as set forth in Schedule 3.17, the Company has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction.

**3.18 Investment Company.** The Company is not, and is not an Affiliate of, an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

**3.19 Certain Transactions.** Other than as disclosed in Schedule 3.19, there are no contracts, transactions, arrangements or understandings between the Company or any of its Subsidiaries, on the one hand, and any director, officer or employee thereof on the other hand, that would be required to be disclosed pursuant to Item 404 of Regulation S-K promulgated by the SEC in the Company's Form 10-K or proxy statement pertaining to an annual meeting of shareholders.

**3.20 No General Solicitation.** Neither the Company, nor any of its Affiliates, nor any person acting on its behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the Notes pursuant to this Agreement.

**3.21 Acknowledgment Regarding the Investors' Purchase of the Notes.** The Company's Board of Directors has approved the execution of the Transaction Documents and the issuance and sale of the Notes and Warrants, based on its own independent evaluation and determination that the terms of the Transaction Documents are reasonable and fair to the Company and in the best interests of the Company and its shareholders. The Company is entering into this Agreement and is issuing and selling the Notes and Warrants voluntarily. The Company has had independent legal counsel of its own choosing review the Transaction Documents and advise the Company with respect thereto. The Company acknowledges and agrees that each Investor is acting solely in the capacity of an arm's length purchaser with respect to its Notes and Warrants and the transactions contemplated hereby and that neither such Investor nor any person affiliated with such Investor is acting as a financial advisor to, or a fiduciary of, the Company (or in any similar capacity) with respect to execution of the Transaction Documents or the issuance of the Notes and Warrants or any other transaction contemplated hereby.

**3.22 No Brokers', Finders' or Other Advisory Fees or Commissions.** Except as set forth on Schedule 3.22, no brokers, finders or other similar advisory fees or commissions will be payable by the Company or any Subsidiary or by any of their respective agents with respect to the issuance of the Notes or the Warrants or any of the other transactions contemplated by this Agreement.

**3.23 OFAC.** None of the Company nor any of the Subsidiaries nor, to the best knowledge of the Company, any director, officer, agent, employee, affiliate or person acting on behalf of the Company and/or any Subsidiary has been or is currently subject to any United States sanctions administered by the Office of Foreign Assets Control of the United States Department of the Treasury ("OFAC"); and the Company will not directly or indirectly use any proceeds received from any Investor, or lend, contribute or otherwise make available such proceeds to its Subsidiaries or to any affiliated entity, joint venture partner or other person or entity, to finance any investments in, or make any payments to, any country or person currently subject to any of the sanctions of the United States administered by OFAC.

**3.24 No Foreign Corrupt Practices.** None of the Company or any of the Subsidiaries has, directly or indirectly: (a) made or authorized any contribution, payment or gift of funds or property to any official, employee or agent of any governmental authority of any jurisdiction except as otherwise permitted under applicable Law; or (b) made any contribution to any candidate for public office, in either case, where either the payment or the purpose of such contribution, payment or gift was, is, or would be prohibited under the Foreign Corrupt Practices Act or the rules and regulations promulgated thereunder or under any other legislation of any relevant jurisdiction covering a similar subject matter applicable to the Company or its Subsidiaries and their respective operations and the Company has instituted and maintained policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance with such legislation.

**3.25 Anti-Money Laundering.** The operations of each of the Company and the Subsidiaries are and have been conducted at all times in compliance with all applicable anti-money laundering laws, regulations, rules and guidelines in its jurisdiction of incorporation and in each other jurisdiction in which such entity, as the case may be, conducts business (collectively, the "Money Laundering Laws") and no action, suit or proceeding by or before any court or governmental authority involving the Company or its Subsidiaries with respect to any of the Money Laundering Laws is, to the best knowledge of the Company, pending, threatened or contemplated.

**3.26 Disclosure.** The Company confirms that neither it, nor to its knowledge, any other Person acting on its behalf has provided any Investor or its agents or counsel with any information that the Company believes constitutes material, non-public information. The Company understands and confirms that the Investors will rely on the foregoing representations and covenants in effecting transactions in securities of the Company. All disclosures provided to the Investors regarding the Company, its business and the transactions contemplated hereby, furnished by or on behalf of the Company (including the Company's representations and warranties set forth in this Agreement) are true and correct in all material respects and do not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading.

**3.27 Available Common Stock.** As of the date hereof, the Company has capacity under the rules and regulations of the Trading Market to issue up to 1,589,096 Common Stock (or securities convertible into or exercisable for Common Stock) without obtaining Shareholder Approval.

**3.28 Indebtedness.** Except for as listed on Schedule 3.28, as of the date hereof the Company or any Subsidiary has no outstanding Indebtedness. For the purposes of this Agreement, "Indebtedness" means (x) any liabilities for borrowed money or amounts owed in excess of \$250,000 (other than trade accounts payable incurred in the ordinary course of business), (y) all guaranties, endorsements and other contingent obligations in respect of indebtedness of others, whether or not the same are or should be reflected in the Company's consolidated balance sheet (or the notes thereto), except guaranties by endorsement of negotiable instruments for deposit or collection or similar transactions in the ordinary course of business; and (z) the present value of any lease payments in excess of \$100,000 due under leases required to be capitalized in accordance with GAAP. Except as set forth on Schedule 3.28, neither the Company nor any Subsidiary is in default with respect to any Indebtedness.

**3.29 No Other Representations.** Except for the representations and warranties set forth in this Agreement and in the other Transaction Documents, the Company makes no other representations or warranties to the Investors.

**4. REPRESENTATIONS AND WARRANTIES OF EACH INVESTOR** Each Investor represents and warrants to the Company as follows:

**4.1 Organization and Qualification.** Such Investor is either an individual or an entity duly incorporated or formed, validly existing and in good standing under the laws of the jurisdiction of its incorporation or formation.

**4.2 Authorization; Enforcement; Compliance with Other Instruments.** Such Investor has the requisite power and authority to enter into the Transaction Documents and to perform its obligations thereunder. The execution and delivery by such Investor of the Transaction Documents to which it is a party have been duly and validly authorized by such Investor's governing body, as necessary, and no further consent or authorization is required. The Transaction Documents to which it is a party have been duly and validly executed and delivered by such Investor and constitute valid and binding obligations of such Investor, enforceable against such Investor in accordance with their terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar Laws relating to, or affecting generally, the enforcement of creditors' rights and remedies.

**4.3 No Conflicts.** The execution, delivery and performance of the Transaction Documents to which it is a party by such Investor and the purchase of a Note and accompanying Warrant by such Investor will not (a) conflict with or result in a violation of such Investor's organizational documents, if applicable, (b) conflict with, or constitute a material default (or an event which, with notice or lapse of time or both, would become a material default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any material agreement, contract, indenture mortgage, indebtedness or instrument to which such Investor is a party, or (c) violate any Law applicable to such Investor or by which any of such Investor's properties or assets are bound or affected. No approval or authorization will be required from any governmental authority or agency, regulatory or self-regulatory agency or other third party in connection with the purchase of a Note and the other transactions contemplated by this Agreement.

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**4.4 Investment Intent; Accredited Investor.** Each Investor is purchasing its Notes and Warrants for its own account, for investment purposes, and not with a view towards distribution. Such Investor is an "accredited investor" as such term is defined in Rule 501(a) of Regulation D of the 1933 Act. Such Investor has, by reason of its business and financial experience, such knowledge, sophistication and experience in financial and business matters and in making investment decisions of this type that it is capable of (a) evaluating the merits and risks of an investment in its Notes, Warrants and the Investor Shares and making an informed investment decision, (b) protecting its own interests and (c) bearing the economic risk of such investment for an indefinite period of time.

**4.5 Acknowledgement of Risk; Opportunity to Discuss.** Each Investor acknowledges that an investment in the Company is speculative and subject to numerous risks, including those risks described in the SEC Documents. Each Investor has reviewed and understands the risks related to the Company and its business as described in the SEC Documents. Each Investor has received all materials relating to the business, finance and operations of the Company and the Subsidiaries as it has requested and has had an opportunity to discuss the business, management and financial affairs of the Company and the Subsidiaries with the Company's management. In making its investment decision, such Investor has relied solely on its own due diligence performed on the Company by its own representatives.

**4.6 Restricted Securities.** Each Investor understands that its Notes, Warrants and the Investor Shares are being offered in a transaction not involving any public offering within the meaning of the 1933 Act and that its Notes and the Investor Shares may not be registered under the 1933 Act except as otherwise required under the Transaction Documents. The Investor understands that its Notes, Warrants and the Investor Shares may not be offered, resold, transferred, pledged or otherwise disposed of by the Investor absent an effective registration statement under the 1933 Act, except (i) to the Company or a Subsidiary thereof, (ii) to non-U.S. persons pursuant to offers and sales that occur outside the United States within the meaning of Regulation S under the 1933 Act or (iii) pursuant to an applicable exemption from the registration requirements of the 1933 Act, and, in each of cases (ii) and (iii), in accordance with any applicable securities laws of the states and other jurisdictions of the United States, and that any book-entry position or certificates representing its Notes, Warrants or Investor Shares shall contain a notation or restrictive legend, as applicable, to such effect, and as a result of these transfer restrictions, the Investor may not be able to readily offer, resell, transfer, pledge or otherwise dispose of its Notes, Warrants or Investor Shares and may be required to bear the financial risk of an investment in its Notes, Warrants and Investor Shares for an indefinite period of time. The Investor acknowledges and agrees that (i) its Notes, Warrants and Investor Shares will not be eligible for offer, resale, transfer, pledge or disposition pursuant to Rule 144 promulgated under the 1933 Act ("Rule 144") until the date that is at least one year from the date that the Company filed "Form 10 information" with the SEC reflecting its status as an entity that is no longer an issuer described in Rule 144(i)(1)(i) and (ii) additional conditions to any such transaction may apply under Rule 144 and other applicable securities laws to the extent that the Investor is at such time, or has been at any time in the immediately preceding three months, an "affiliate" of the Company within the meaning of Rule 144. The Investor understands that it has been advised to consult legal counsel prior to making any offer, resale, pledge or transfer of any of its Notes, Warrants or Investor Shares.

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**4.7 Exculpation Among Investors.** Each Investor acknowledges that it is not relying upon any Person, other than the Company and its officers and directors, in making its investment or decision to invest in the Company. Each Investor agrees that neither the Lead Investor, any Investor nor the respective controlling Persons, officers, directors, partners, agents, or employees of any Investor shall be liable to any other Investor for any action heretofore taken or omitted to be taken by any of them in connection with the purchase of the Notes.

**4.8 No Other Representations.** Except for the representations and warranties set forth in this Agreement and in other Transaction Documents, such Investor makes no other representations or warranties to the Company.

**5. OTHER AGREEMENTS OF THE PARTIES**

**5.1 Restrictions on Transfer.** The Investor Shares, when issued, will be restricted and book-entry positions or certificates relating to the same shall bear a restrictive legend unless sold pursuant to an effective registration statement or available for resale pursuant to Rule 144 under the 1933 Act.

**5.2 Furnishing of Information.** As long as an Investor owns Securities, the Company covenants to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the 1934 Act. As long as an Investor owns Securities, if the Company is not required to file reports pursuant to the 1934 Act, it will prepare and furnish to such Investor and make publicly available in accordance with Rule 144(c) such information as is required for such Investor to sell the Investor Shares under Rule 144. The Company further covenants that it will take such further action as any holder of Securities may reasonably request, all to the extent required from time to time to enable such Person to sell such Investor Shares without registration under the 1933 Act within the limitation of the exemptions provided by Rule 144 or other applicable exemptions.

**5.3 Integration.** The Company shall not, and shall use its commercially reasonable efforts to ensure that no Affiliate of the Company shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the 1933 Act) that will be integrated with the offer or sale of the Securities in a manner that would require the registration under the 1933 Act of the sale of the Securities to any Investor.

**5.4 Notification of Certain Events.** The Company shall give prompt written notice to each Investor of (a) any notice or other communication from any Person alleging that the consent of such Person is or may be required in connection with the consummation of the transactions contemplated by this Agreement or any other

**5.5 Available Shares.** The Company shall at all times keep authorized and available for issuance, free of preemptive rights, the Required Minimum of Common Stock. If the Company determines at any time that it does not have a sufficient number of authorized Common Stock to keep available for issuance as described in this Section 5.5, the Company shall use all commercially reasonable efforts to increase the number of authorized Common Stock by seeking approval from its shareholders for the authorization of such additional shares.

**5.6 Use of Proceeds.** The Company will use the proceeds from the sale of the Notes to fund its general working capital.

**5.7 Repayment of Notes.** If the Company issues any debt, including any subordinated debt or convertible debt (other than the Notes) in respect of which the Company receives gross proceeds in one or a series of related transactions equal to or in excess of \$2,000,000.00, then the Investors will have the option (exercisable in writing by the Requisite Holder) to cause the Company to immediately utilize 30% of the aggregate proceeds of such issuance to repay the Notes on a pro rata basis based on the Aggregate Principal Amount and accrued, but unpaid, Interest (as defined in the Notes) outstanding on the date of funding of such debt. If the Company issues any Equity Interests for cash as part of a financing transaction (other than in connection with an "at the market" funding program or the Arena ELOC) in respect of which the Company receives gross proceeds in one or a series of related transactions equal to or in excess of \$2,000,000.00, then the Investors will have the option (exercisable in writing by the Requisite Holder) to cause the Company to direct 15% of such proceeds from such issuance to repay the Notes on a pro rata basis based on the Aggregate Principal Amount outstanding on the date of closing of such issuance. If the Company issues any shares of Common Stock pursuant to the Arena ELOC, then the Investors will have the option (exercisable in writing by the Requisite Holder) to cause the Company to direct 15% of the proceeds from such issuance to repay the Notes on a pro rata basis based on the Aggregate Principal Amount outstanding on the date of closing of such issuance. The Company will notify the Investors no later than two (2) Business Days prior to the public announcement of any such debt or Equity Interest financing or issuance in pursuant to the Arena ELOC and provide the Investors (with the written approval of the Requisite Holder) the opportunity to exercise the option set forth in the preceding sentence; it being agreed, however, that, notwithstanding such notice to the Investors, the Company shall not be under an obligation to make a public announcement regarding such debt or Equity Interest financing until it is legally required to do so. Notwithstanding the foregoing, Section 5.7 shall not apply to the issuance of Exempted Securities.

**5.8 Shareholder Approval: Exchange Cap.** To fulfill its obligations under the Transaction Documents, the Company shall be required to seek Shareholder Approval, whether at its annual meeting of shareholders or by calling a special meeting of shareholders) on the earlier to occur of (i) the Company's next annual meeting of shareholders or (ii) the date that is 60 days from the date hereof; and the Company shall solicit proxies from its shareholders in connection therewith in the same manner as all other management proposals in such proxy statement and all management-appointed proxyholders shall vote their proxies in favor of such proposal. If the Company does not obtain Shareholder Approval at the first meeting, the Company shall call a meeting every four months thereafter to seek Shareholder Approval until the date the Shareholder Approval is obtained. Notwithstanding anything to the contrary contained in this Agreement, the Notes or the other Transaction Documents, the Investors and the Company agree that the total cumulative number of shares of Common Stock issued to the Investor under the Transaction Documents may not exceed a number of shares equal to 19.99% of the outstanding Common Stock as of the date hereof (the "**Exchange Cap**"), except that such limitation will not apply following Shareholder Approval or if the Common Stock is no longer listed on the Trading Market. If the Company is unable to obtain Shareholder Approval to issue Common Stock to the Investor in excess of the Exchange Cap, without limiting any rights of the Investor under Section 3.6 of the Notes, any remaining outstanding balance under the Notes may be repaid in cash at the request of the Investor in accordance with the terms of the Notes.

**5.9 Prohibited Transactions; Limitation on At the Market Offerings.** The Company hereby covenants and agrees not to enter into any Prohibited Transactions without the prior written consent of the Requisite Holder, until thirty (30) Trading Days after such time as each Note has been repaid in full and/or has been converted into Conversion Shares. The Company hereby covenants and agrees, without the prior written consent of the Requisite Holder, not to utilize any "at the market" offering program in respect of its Common Stock, except as permitted hereunder.

**5.10 ELOC, ATM or Similar Transactions.** The Company hereby covenants and agrees not to enter into any equity line of credit transactions except for the Arena ELOC, at-the-market transaction or similar transaction without the prior written consent of the Requisite Holder, until each Note has been repaid in full and/or has been converted into Conversion Shares. The Company hereby covenants and agrees, without the prior written consent of the Requisite Holder, not to utilize any "at the market" offering program in respect of its Common Stock, except as permitted hereunder.

**5.11 Securities Laws Disclosure; Publicity.** The Company shall, within one (1) Trading Day following the date hereof, file a Form 8-K report or other public disclosure disclosing the material terms of the transactions contemplated hereby and including this Agreement as an exhibit thereto; provided, that the Company may not issue such press release or file such Form 8-K or other public disclosure without the prior written consent (including by electronic mail) of the Requisite Holder, which shall not be unreasonably withheld or delayed. The Company shall not issue any press release nor otherwise make any such public statement regarding the Investors or the Transaction Documents without the prior written consent (including by electronic mail) of the Requisite Holder, except (i) if such disclosure is required by Law, in which case the Company shall (a) ensure that such disclosure is restricted and limited in content and scope to the maximum extent permitted by Law to meet the relevant disclosure requirement and (b) provide a copy of the proposed disclosure to the Requisite Holder for review prior to release and the Company shall incorporate the reasonable comments of the Requisite Holder or (ii) to the extent such press release or public statement contains only information previously disclosed in a press release or public statement previously approved in accordance with the foregoing clause (i). Each Investor will promptly provide any information reasonably requested by the Company or any of its Affiliates for any regulatory application or filing made or to be made or approval sought in connection with the transactions contemplated by this Agreement (including filings with the SEC). Following the execution of this Agreement, each Investor and its Affiliates and/or advisors may, upon receiving the prior written consent of the Requisite Holder, place announcements on their respective corporate websites and in financial and other newspapers and publications (including, without limitation, customary "tombstone" advertisements) describing such Investor's relationship with the Company under this Agreement and including the name and corporate logo of the Company. Notwithstanding anything herein to the contrary, to comply with United States Treasury Regulations Section 1.6011-4(b)(3)(i), each of the Company and each Investor, and each employee, representative or other agent of the Company or such Investor, may disclose to any and all persons, without limitation of any kind, the U.S. federal and state income tax treatment, and the U.S. federal and state income tax structure, of the transactions contemplated hereby and all materials of any kind (including opinions or other tax analyses) that are provided to such party relating to such tax treatment and tax structure insofar as such treatment and/or structure relates to a U.S. federal or state income tax strategy provided to such recipient.

(a) The Company will indemnify and hold each Investor, its Affiliates and their respective directors, officers, managers, shareholders, members, partners, employees and agents and permitted successors and assigns (each, an “Investor Party”) harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys’ fees and costs of investigation and defense (collectively, “Losses”) that any such Investor Party may suffer or incur as a result of or relating to:

(i) any material breach or inaccuracy of any representation, warranty, covenant or agreement made by the Company in any Transaction Document;

(ii) any material misrepresentation made by the Company in any Transaction Document or in any SEC Document;

(iii) any material omission to state any material fact necessary in order to make the statements made in any SEC Document, in light of the circumstances under which they were made, not misleading;

(iv) any Proceeding before or by any court, public board, government agency, self-regulatory organization or body based upon, or resulting from the execution, delivery, performance or enforcement of any of the Transaction Documents or the consummation of the transactions contemplated thereby, and whether or not such Investor is party thereto by claim, counterclaim, crossclaim, as a defendant or otherwise, or if such Proceeding is based upon, or results from, any of the items set forth in clauses (i) through (iii) above;

except, in the case of clauses (ii) and (iii) above, to the extent, but only to the extent, that such misrepresentation or omission is based upon information regarding such Investor furnished in writing to the Company by or on behalf of such Investor expressly for use therein or such Investor has omitted a material fact from such information or otherwise violated the 1933 Act, 1934 Act or any state securities law or any rule or regulation thereunder.

(b) If any action shall be brought against any Investor Party in respect of which indemnity may be sought pursuant to this Agreement, such Investor Party shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Investor Party. Any Investor Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Investor Party except to the extent that (i) the employment thereof has been specifically authorized by the Company in writing, (ii) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or (iii) in such action there is, in the reasonable opinion of counsel, a material conflict on any material issue between the position of the Company and the position of such Investor Party, in which case the Company shall be responsible for the reasonable fees and expenses of no more than one such separate counsel. The Company will not be liable to any Investor Party under this Agreement (i) for any settlement by an Investor Party effected without the Company’s prior written consent, which shall not be unreasonably withheld or delayed; or (ii) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Investor Party’s breach of any of the representations, warranties, covenants or agreements made by such Investor Party in this Agreement or in the other Transaction Documents.

(c) In addition to the indemnity contained herein, the Company will reimburse each Investor Party for its reasonable legal and other expenses (including the cost of any investigation, preparation and travel in connection therewith) incurred in connection therewith, as such expenses are incurred.

(d) The provisions of this [Section 5.12](#) shall survive the termination or expiration of this Agreement.

**5.13 Non-Public Information.** Except to the extent necessary to fulfill its notice, disclosure or similar obligations hereunder or under any Transaction Document, the Company covenants and agrees that neither it nor any other Person acting on its behalf will provide the Investors or their agents or counsel with any information that the Company believes constitutes material, non-public information. Except in connection with the fulfillment of its notice, disclosure or similar obligations hereunder or under any Transaction Document, to the extent the Company provides an Investor with material, non-public information, the Company shall publicly disclose such information within forty-eight (48) hours of providing the information to such Investor, provided that if the last day of any such time period is not a Trading Day, such time period shall be extended to 9:30 a.m., New York City Time, on the next Trading Day following the day on which it would otherwise end. The Company understands and confirms that the Investors shall be relying on the foregoing representation in effecting transactions in securities of the Company. In the event that the Company fails to comply with its obligations under this Section 5.13, a liquidated damages charge of 1% of the outstanding principal balance of each Note will be assessed and will become immediately due and payable each month while such failure remains uncured to the Investors at their election in the form of a cash payment or added to the balance of the respective Note.

**5.14 Share Transfer Agent.** The Company’s share transfer agent is Broadridge Corporate Issuer Solutions, Inc. To the Company’s knowledge, such transfer agent participates in the Depository Trust Company Fast Automated Securities Transfer program. For so long as any Investor holds Investor Securities, the Company shall not change its share transfer agent without the prior written consent of the Requisite Holder.

**5.15 Intended Tax Treatment.** Each Investor and the Company agree that for U.S. federal income tax purposes, and applicable state, local and non-U.S. income tax purposes, the Notes are not intended to be treated as indebtedness. No Investor nor the Company shall take any position on any tax return, or in any audit, claim, investigation, inquiry or proceeding in respect of taxes inconsistent with such intentions, unless otherwise required pursuant to a final determination within the meaning of Section 1313 of the Internal Revenue Code of 1986, as amended, or any analogous provision of applicable state, local or non-U.S. law. Concurrently with the execution and delivery of this Agreement, each Investor agrees to execute and deliver to the Company an IRS Form W-8 or W-9 (as applicable with respect to such Investor).

**5.16 Set-Off.**

(a) Each Investor may, subject to the provisions of Section 2.4 hereof, set off any of its obligations to the Company (whether or not due for payment), against any of the Company’s obligations to such Investor (whether or not due for payment) under this Agreement and/or any other Transaction Document.

(b) Each Investor may do anything necessary to effect any set-off undertaken in accordance with this [Section 5.16](#) (including varying the date for payment of any amount payable by such Investor to the Company).

(c) The Company may set off any of its obligations to an Investor (whether or not due for payment), against any of such Investor’s obligations to the Company (whether or not due for payment) under this Agreement and/or any other Transaction Document.

(d) The Company may do anything necessary to effect any set-off undertaken in accordance with this [Section 5.16](#) (including varying the date for payment of any amount payable by the Company to an Investor).

**5.17 No Repricing.** Except as set forth on Schedule 5.17, the Company shall not, without the prior written consent of the Requisite Holder, (i) authorize the amendment of any outstanding note, option, warrant, or other derivative security convertible, exercisable or exchangeable for Common Stock to reduce the conversion, exercise or exchange price of any such security or (ii) grant a replacement note, option, warrant or other derivative security convertible, exercisable or exchangeable for Common Stock for the purpose of reducing the conversion, exercise or exchange price of any such security being replaced; provided that this Section 5.17 shall not apply to amendments to or grants in respect of any option granted pursuant to an Equity Plan that is outstanding as of the date of this Agreement.

## 6. CLOSING CONDITIONS

**6.1 Conditions Precedent to the Obligations of each Investor.** The obligation of each Investor to fund its Note at the Closing is subject to the satisfaction or waiver by such Investor, at or before such Closing, of each of the following conditions:

(a) General Conditions Precedent.

(i) Required Documentation. The Company must have delivered to such Investor (i) a duly executed certificate of an officer of the Company and each Subsidiary party to the Security Agreement and the Subsidiary Guarantee, appending thereto (A) copies of duly executed resolutions or consents of the directors, members or manager, as applicable, of such party, approving and consenting to such party's execution, performance of its obligations under the applicable Transaction Documents and the transactions contemplated thereby, (B) a certificate of good standing or equivalent document dated no more than five days prior to the date hereof, in respect of such party, (C) true and correct copies of the organizational documents of such party, and (D) incumbency signatures of such party, and (ii) copies of each Transaction Document, duly executed by the Company, the applicable Subsidiaries or the Transfer Agent, as applicable;

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(ii) Consents and Permits. The Company must have obtained and delivered to such Investor copies of all necessary permits, approvals, and registrations necessary to effect this Agreement, the Transaction Documents and any of the transactions contemplated hereby or thereby.

(iii) No Event(s) of Default. No Event of Default has occurred and no Event of Default would result from the execution of this Agreement or any of the Transaction Documents or the transactions contemplated hereby or thereby.

(iv) Representations and Warranties. The representations and warranties of the Company contained herein shall be true and correct in all material respects as of the date when made and as of such Closing as though made on and as of such date;

(v) Performance. The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by it at or prior to such Closing;

(vi) No Injunction. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents;

(vii) No Suspensions of Trading in the Common Stock; Listing. Trading in the Common Stock shall not have been suspended by the SEC or any Trading Market (except for any suspensions of trading of not more than one day on which the Trading Market is open solely to permit dissemination of material information regarding the Company) at any time since the date of execution of this Agreement, and the Common Stock shall have been at all times since such date listed for trading on a Trading Market;

(viii) Limitation on Beneficial Ownership. The issuance of a Note or Warrant to such Investor shall not cause such Investor Group to become, directly or indirectly, a "beneficial owner" (within the meaning of Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder) of a number of Equity Interests of a class that is registered under the 1934 Act which exceeds the Maximum Percentage of the Equity Interests of such class that are outstanding at such time; and

(ix) Funds Flow Request. The Company shall have delivered to the Lead Investor a flow of funds request, substantially in the form set out in Exhibit D.

(x) Non-Public Information. The Company shall, on or before 9:30 a.m., New York City Time, on or prior to the first business day after the date of the Closing, release or file, as applicable, a press release or a Current Report on Form 8-K or other applicable public disclosure describing the terms of the Closing (the "Cleansing Release"). From and after the filing of the Cleansing Release, the Company shall have disclosed all material, non-public information (if any) provided up to such time to each Investor by the Company or any of its officers, directors, employees or agents. In addition, upon the filing of the Cleansing Release, the Company acknowledges and agrees that any and all confidentiality or similar obligations under any agreement with respect to the transactions contemplated hereby or as otherwise disclosed in the Cleansing Release, whether written or oral, between the Company, or any of its officers, directors, affiliates, employees or agents, on the one hand, and any of the Investors or any of their affiliates, on the other hand, shall terminate.

(xi) Opinions of Counsel. The Lead Investor shall have received opinions from United States counsel to the Company and Subsidiaries in forms acceptable to the Lead Investor in its sole discretion.

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(xii) Closing Equity Conditions. Each of the Closing Equity Conditions shall have been satisfied.

**6.2 Conditions Precedent to the Obligations of the Company.** The obligation of the Company to issue a Note to an Investor at the Closing is subject to the satisfaction or waiver by the Company, at or before such Closing, of each of the following conditions:

(a) Required Documentation. Such Investor must have delivered to the Company copies of each Transaction Document to which the Investor is a party, duly executed by such Investor;

(b) Representations and Warranties. The representations and warranties of such Investor contained herein shall be true and correct in all material respects as of the date when made and as of such Closing Date as though made on and as of such date;

(c) Performance. The Investors shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by it at or prior to such Closing; and

(d) No Injunction. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

## 7. EVENTS OF DEFAULT

**7.1 Events of Default.** The occurrence of any of the following events shall be an “**Event of Default**” under this Agreement:

(a) an Event of Default under a Note;

(b) any of the representations or warranties made by the Company or any of its agents, officers, directors, employees or representatives in any Transaction Document or public filing being inaccurate, false or misleading in any material respect, as of the date as of which it is made or deemed to be made, or any certificate or financial or other written statements furnished by or on behalf of the Company to the Investors or any of their representatives, is inaccurate, false or misleading, in any material respect, as of the date as of which it is made or deemed to be made, or on the Closing Date; or

(c) a failure by the Company to comply with any of its covenants or agreements set forth in this Agreement, including those set forth in Section 5 in all material respects.

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**7.2 Investor Right to Investigate an Event of Default.** If in the reasonable opinion of the Requisite Holder, an Event of Default has occurred, or is or may be continuing:

(a) the Requisite Holder may notify the Company that it wishes to investigate such purported Event of Default;

(b) the Company shall cooperate with the Requisite Holder in such investigation;

(c) the Company shall comply with all reasonable requests made by the Requisite Holder to the Company in connection with any investigation by the Requisite Holder and shall (i) provide all information requested by the Requisite Holder in relation to the Event of Default to the Requisite Holder; provided that the Requisite Holder agrees that any materially price sensitive information and/or non-public information will be subject to confidentiality, and (ii) provide all such requested information within three (3) Business Days of such request if practicable to do so; and

(d) the Company shall pay all reasonable costs incurred by the Requisite Holder in connection with any such investigation.

### **7.3 Remedies Upon an Event of Default**

(a) If an Event of Default occurs pursuant to Section 7.1(a), each Investor shall have such remedies as are set forth in their Note.

(b) If an Event of Default occurs pursuant to Section 7.1(b) or Section 7.1(c) and is not remedied following written notice provided by the Requisite Holder to the Company within (i) five (5) Business Days for an Event of Default occurring by the Company's failure to comply with Section 7.1(c), or (ii) ten (10) Business Days for an Event of Default occurring pursuant to Section 7.1(b), the Requisite Holder may declare, by written notice to the Company, effective immediately, all outstanding obligations by the Company under the Transaction Documents to be immediately due and payable in immediately available funds and the Investors shall have no obligation to consummate the Closing under this Agreement or to accept the conversion of any Note into Conversion Shares.

(c) If any Event of Default occurs and is not remedied following written notice provided by the Requisite Holder to the Company within (i) five (5) Business Days for an Event of Default occurring by the Company's failure to comply with Section 7.1(c), or (ii) ten (10) Business Days for an Event of Default occurring pursuant to Section 7.1(b), the Requisite Holder may, by written notice to the Company, terminate this Agreement effective as of the date set forth in the Requisite Holder's notice.

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## 8. TERMINATION

**8.1 Events of Termination.** This Agreement:

(a) may be terminated:

(i) by the Requisite Holder on the occurrence or existence of a Securities Termination Event or a Change of Control;

(ii) by either the Company or the Requisite Holder, by written notice to the other party, effective immediately, if the Closing has not occurred within thirty (30) Business Days of the date specified in Section 2.2 of this Agreement or such later date as the Company and the Requisite Holder agree in writing, provided that the right to terminate this Agreement under this Section 8.1(a)(ii) is not available to any party that is in material breach of or material default under this Agreement or whose failure to fulfill any obligation under this Agreement has been the principal cause of, or has resulted in the failure of the applicable Closing to occur; or

(iii) by the Requisite Holder, in accordance with Section 7.3(c).

(b) will automatically terminate, without further action by the parties, on the date that is sixty (60) days from the date of this Agreement.

### **8.2 Effect of Termination.**

(a) Upon termination of this Agreement, no Investor will be required to fund any further amount after the date of termination of the Agreement, provided that termination will not affect any undischarged obligation under this Agreement, and any obligation of the Company to pay or repay any amounts owing to the Investor hereunder and which have not been repaid at the time of termination.

(b) Nothing in this Agreement will be deemed to release any party from any liability for any breach by such party of the terms and provisions of this Agreement or to impair the right of any party to compel specific performance by any other Party of its obligations under this Agreement.

## 9. RESERVED

**10. RIGHTS TO FUTURE STOCK ISSUANCES.** Subject to the terms and conditions of this Section 10 and applicable securities laws, if at any time during the period ending 12 months after the Closing Date of the initial Closing, the Company proposes to offer or sell any New Securities, the Company shall offer to the Investors the opportunity to purchase up to twenty percent (20%) of such New Securities in the aggregate (such amount, the “**Offered Securities**”). Such offer may only be accepted with the prior written approval of an Investor. If accepted by an Investor, it shall be afforded the opportunity to purchase its Pro Rata Portion (as defined below). The Investors shall be entitled to apportion the right of first offer hereby granted to them in such proportions as they deem appropriate among themselves and their Affiliates.

**10.1** The Company shall give notice no fewer than ten (10) Business Days in advance of the proposed date of the sale of New Securities (the “**Information Notice**”) to the Requisite Holder and each Investor, requesting if such Requisite Holder and Investors would desire to receive further information regarding the proposed sale. In the event that any Investor does not affirmatively respond to the Information Notice within two (2) Business Days of receipt thereof, the Company may proceed with the sale; provided that obligations and rights set forth in this Section 10 shall not be in force and effective for a period with respect to any non-affirming Investor for a period of 45 days following the delivery of the Information Notice; provided, further that the obligations and rights set forth in this Section 10 shall automatically renew following the expiration of such period. If an Investor affirmatively responds to the Information Notice, such sale shall be subject to the obligations and rights set forth in this Section 10.

**10.2** The Company shall give notice no fewer than two (2) Business Days following receipt of an affirmative response to the Information Notice (the “**Offer Notice**”) to the Requisite Holder and each Investor, stating (a) its bona fide intention to offer such New Securities, (b) the number of such New Securities to be offered, and (c) the price and terms, if any, upon which it proposes to offer such New Securities.

**10.3** By notification to the Company within five (5) days after the Offer Notice is given, the Requisite Holder and each Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to their Pro Rata Portion of the Offered Securities. “**Pro Rata Portion**” means the ratio of (x) Securities purchased by an Investor participating under this Section 10.3 and (y) the sum of the aggregate Securities purchased by all Investors participating under this 10.3. The closing of any sale pursuant to this Section 10 shall occur within the later of ninety (90) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Section 10.4.

**10.4** The Company may, during the ninety (90) day period following the expiration of the period provided in Section 10.3, offer and sell the remaining portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Investors in accordance with this Section 10.

**10.5** The right of first offer in this Section 10 shall not be applicable to offers, issuances, sales or other transactions related to Exempted Securities, or any New Securities registered or qualified for sale under the 1933 Act.

## 11. GENERAL PROVISIONS

**11.1 Fees and Expenses.** Prior to the date of this Agreement, the Company has paid the Lead Investor \$20,000 as an advance the expenses payable under this Section 11.1. At the initial Closing, the Company shall reimburse the Lead Investor up to an additional \$30,000 (equal to an aggregate of up to \$50,000 in total fees and expenses, inclusive of the initial \$20,000 paid in accordance with the foregoing sentence) for actual and reasonably documented due diligence, travel and legal fees and expenses related to the preparation and negotiation of the Transaction Documents and disbursements of its counsel, Lucosky Brookman LLP it being understood that Lucosky Brookman LLP has not rendered any legal advice to the Company in connection with the transactions contemplated hereby and that the Company has relied for such matters on the advice of its own counsel; provided that the foregoing cap maybe be increased if in the reasonable discretion of the Lead Investor the legal services required to draft and negotiate the Transaction Documents exceeds those initially contemplated by the Parties. In the event that this Agreement is terminated prior to the occurrence of the initial Closing, the Company shall reimburse the Lead Investor for all actual and reasonably documented due diligence and legal fees and expenses, including the reasonable and documented fees and disbursements of its counsel, Lucosky Brookman LLP. Except as specified above, each party shall pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of the Transaction Documents. The Company shall pay all stamp and other taxes and duties levied in connection with the sale of the Notes.

**11.2 Notices.** Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section prior to 5:00 p.m. (New York time) on a Business Day, (b) the next Business Day after the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section on a day that is not a Business Day or later than 5:00 p.m. (New York time) on any date and earlier than 11:59 p.m. (New York time) on such date, (c) the Business Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as follows:

If to the Company:

Firefly Neuroscience, Inc.  
1100 Military Road, Kenmore, NY, 14217  
Email: greg.lipschitz@fireflyneuro.com  
Attention: Greg Lipschitz

With a copy (which shall not constitute notice) to:

Attention: Louis A. Bevilacqua, Esq.  
Bevilacqua PLLC  
1050 Connecticut Avenue, NW  
Suite 500  
Washington, DC 20036  
Email lou@bevilacquapllc.com

If to an Investor, such address set forth on the signature page hereto executed by such Investor;

or such other address as may be designated in writing hereafter, in the same manner, by such Person.

**11.3 Severability.** If any provision of this Agreement is held by a court of competent jurisdiction to be excessive in scope or otherwise invalid or unenforceable, such provision shall be adjusted rather than voided, if possible, so that it is enforceable to the maximum extent possible, and the validity and enforceability of the remaining provisions of this Agreement will not in any way be affected or impaired thereby.

**11.4 Governing Law.** This Agreement shall be governed by and construed in accordance with the Laws of the State of Delaware, without reference to principles of conflict of laws or choice of laws.

**11.5 Jurisdiction and Venue.** Any action, proceeding or claim arising out of, or relating in any way to this Agreement shall be brought and enforced in the New York Supreme Court, County of New York (Commercial Division), or in the United States District Court for the Southern District of New York. The Company and the Investors irrevocably submit to the jurisdiction of such courts, which jurisdiction shall be exclusive, and hereby waive any objection to such exclusive jurisdiction or that such courts represent an inconvenient forum. The prevailing party in any such action shall be entitled to recover its reasonable and documented attorneys' fees and out-of-pocket expenses relating to such action or proceeding.

**11.6 WAIVER OF RIGHT TO JURY TRIAL.** THE COMPANY AND THE INVESTORS HEREBY IRREVOCABLY WAIVE, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE OTHER TRANSACTION DOCUMENTS.

**11.7 Survival.** The representations, warranties, agreements and covenants contained herein shall survive the Closing and the delivery of the Securities.

**11.8 Entire Agreement.** The Transaction Documents, together with the Exhibits and Schedules thereto, contain the entire understanding of the parties with respect to the subject matter hereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules.

**11.9 Amendments; Waivers.** No provision of this Agreement may be waived or amended except in a written instrument signed by the Company and the Requisite Holder. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of either party to exercise any right hereunder in any manner impair the exercise of any such right.

**11.10 Construction.** The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party. This Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement or any of the Transaction Documents. In addition, each and every reference to share prices and Common Stock in any Transaction Document shall be subject to adjustment for reverse and forward share splits, share dividends, share combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

**11.11 Successors and Assigns.** This Agreement shall be binding upon, and inure to the benefit of and be enforceable by, the Company and the Investors and their respective successors and assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Requisite Holder. Each Investor may assign any or all of its rights under this Agreement to any Person to whom such Investor assigns or transfers any Securities, provided such transferee agrees in writing to be bound, with respect to the transferred Securities, by the provisions hereof that apply to the "Investor" and such transferee is an accredited investor.

**11.12 Further Assurances.** Each party hereto shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

**11.13 Counterparts.** This Agreement may be executed in identical counterparts, each of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other parties. Signature pages delivered by facsimile or e-mail shall have the same force and effect as an original signature.

**11.14 Specific Performance.** The Company acknowledges that monetary damages alone would not be adequate compensation to the Investors for a breach by the Company of this Agreement and the Requisite Holder may seek an injunction or an order for specific performance from a court of competent jurisdiction if (a) the Company fails to comply or threatens not to comply with this Agreement or (b) the Requisite Holder has reason to believe that the Company will not comply with this Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned have executed this Securities Purchase Agreement as of the date first set forth above.

**COMPANY:**

**FIREFLY NEUROSCIENCE, INC.**

By: /s/ Greg Lipschitz  
Name: Greg Lipschitz  
Title: Executive Chairman

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IN WITNESS WHEREOF, the undersigned have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

Name of Investor:

Signature of Authorized Signatory of Investor: /s/ Lawrence Cutler

Name of Authorized Signatory: Lawrence Cutler

Title of Authorized Signatory: Authorized Signatory

Email Address of Authorized Signatory:

Facsimile Number of Authorized Signatory: N/A

Address for Notice to Investor:

Address for Delivery of Securities to Investor (if not same as address for notice):

Funding Amount:

Principal amount of Note:

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**EXHIBIT A**

**FORM OF NOTE**

[See attached]

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**EXHIBIT B**

**FORM OF WARRANT**

[See attached]

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**EXHIBIT C**

**FORM OF REGISTRATION RIGHTS AGREEMENT**

[See attached]

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**EXHIBIT D**

**FLOW OF FUNDS REQUEST**

Firefly Neuroscience, Inc. Corporation. – Securities Purchase Agreement – Flow of Funds Request

In connection with the Securities Purchase Agreement, dated December 20, 2024 (the “Agreement”) between Firefly Neuroscience, Inc. (the “Company”), Helena Special Opportunities LLC (the “Investor”) and the other investors signatory thereto, the Company irrevocably authorizes the Investor to distribute such funds as set out below, in the manner set out below, at the Closing.

Capitalized terms used but not otherwise defined in this letter will have the meaning given to such terms in the Agreement.

<i>Item</i>	<i>Amount</i>
Closing	\$
	\$
Total	\$

Please transfer the net amount of US \$\_\_\_\_\_ due at the Closing, to the following bank account:

Bank ID type:  
 Bank ID:  
 Bank Name:  
 Bank Address 1:  
 Bank Address 2:  
 Recipient Account (if appropriate enter the IBAN):  
 Recipient name:  
 Recipient Address 1:  
 Recipient Address 2:

Yours sincerely,

FIREFLY NEUROSCIENCE, INC.

By: \_\_\_\_\_  
 Name  
 Title

**EXHIBIT E**

FORM OF SUBSIDIARY GUARANTEE

[See attached]

**EXHIBIT F**

FORM OF SECURITY AGREEMENT

[See attached]

**EXHIBIT G**

FORM OF CANADIAN SECURITY AGREEMENT

[See attached]

**EXHIBIT H**

FORM OF CANADIAN SECURITY AGREEMENT

[See attached]

## REGISTRATION RIGHTS AGREEMENT

This **REGISTRATION RIGHTS AGREEMENT** (this “**Agreement**”), dated as of December 20, 2024, is by and among Firefly Neuroscience, Inc., a Delaware corporation (the “**Company**”), and each of the investors to the Securities Purchase Agreement (as defined below) (collectively, the “**Investors**” and, together with the Company, the “**Parties**” and each, a “**Party**”). Certain capitalized terms used herein are defined in Section 1. Except as otherwise defined herein, capitalized terms have the meanings given to them in the Securities Purchase Agreement.

## RECITALS

A. The Company and the Investors have entered into that certain Securities Purchase Agreement, dated as of the date hereof (the “**Securities Purchase Agreement**”), pursuant to which, among other things, the Investors have agreed to purchase, and the Company has agreed to issue and sell, (a) convertible promissory notes in the aggregate original principal amount of up to \$2,400,000, which are being issued with a fifteen percent (15%) original issue discount, in substantially the form attached as Exhibit A to the Securities Purchase Agreement (collectively, the “**Notes**”), and (b) common stock purchase warrants, which shall be exercisable for shares of the Company’s common stock, \$0.0001 par value per share (“**Common Stock**”), in substantially the form attached as Exhibit B to the Securities Purchase Agreement (collectively, the “**Warrants**,” and together with the Notes, the “**Purchased Securities**”).

B. The Purchased Securities are being offered and sold in reliance upon the exemption from securities registration afforded by Section 4(a)(2) of the 1933 Act, and Rule 506(b) of Regulation D as promulgated by the SEC under the 1933 Act.

C. The Notes shall be convertible into shares of Common Stock in certain circumstances in accordance with the terms of the Notes (the shares of Common Stock issuable pursuant to the terms of the Notes, the “**Note Conversion Shares**”).

D. The Warrants shall initially be exercisable for an aggregate number of shares of Common Stock as set forth therein (the “**Warrant Shares**” and, together with the Note Conversion Shares, the “**Conversion Shares**”). The Notes, the Warrants, and the Conversion Shares shall sometimes be collectively referred to herein as the “**Securities**.”

E. Pursuant to the terms of, and in consideration for the Investors entering into, the Securities Purchase Agreement, and to induce the Investors to execute and deliver the Securities Purchase Agreement, the Company has agreed to provide the Investors with certain resale registration rights with respect to the Registrable Securities (as defined herein) upon the terms and subject to the conditions as set forth herein.

## AGREEMENT

NOW, THEREFORE, in consideration of the representations, warranties, covenants and agreements contained herein and in the Securities Purchase Agreement, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, intending to be legally bound hereby, the Company and the Investors hereby agree as follows:

## 1. DEFINITIONS.

As used in this Agreement, the following terms shall have the following meanings:

(a) “**Closing Date**” shall mean the date of this Agreement.

(b) “**Effective Date**” means the date that the applicable Registration Statement has been declared effective by the SEC.

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(c) “**Effectiveness Deadline**” means: (i) with respect to the Initial Registration Statement required to be filed pursuant to Section 2(a), the one-hundred twentieth (120<sup>th</sup>) calendar day after the date of this Agreement; and (ii) with respect to any Subsequent Registration Statements that may be required to be filed by the Company pursuant to this Agreement, the earlier of the (A) sixtieth (60<sup>th</sup>) calendar day following the date on which such Subsequent Registration Statement was initially filed by the Company, and (B) fifth (5<sup>th</sup>) Business Day after the date on which the Company is notified (orally or in writing, whichever is earlier) by the SEC that such Subsequent Registration Statement will not be reviewed or will not be subject to further review.

(d) “**Filing Deadline**” means: (i) with respect to the Initial Registration Statement required to be filed pursuant to Section 2(a), the sixtieth (60<sup>th</sup>) calendar day after the date of this Agreement; and (ii) with respect to any Subsequent Registration Statements that may be required to be filed by the Company pursuant to this Agreement, the thirtieth (30<sup>th</sup>) calendar day following the sale of substantially all of the Registrable Securities included in the Initial Registration Statement or the most recent prior Subsequent Registration Statement, as applicable, or such other date as permitted by the SEC.

(e) “**Person**” means an individual, a limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization, any other entity and any governmental authority or any department or agency thereof.

(f) “**Prospectus**” means (i) the prospectus included in any Registration Statement, as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by such Registration Statement and by all other amendments and supplements to the prospectus, including post-effective amendments and all material incorporated by reference in such prospectus, and (ii) any “free writing prospectus” as defined in Rule 405 under the 1933 Act.

(g) “**Prospectus Supplement**” means any prospectus supplement to a Prospectus filed with the SEC from time to time pursuant to Rule 424(b) under the 1933 Act, including the documents incorporated by reference therein.

(h) “**register**,” “**registered**,” and “**registration**” refer to a registration effected by preparing and filing one or more Registration Statements in compliance with the 1933 Act and pursuant to Rule 415 and the declaration of effectiveness of such Registration Statement(s) by the SEC.

(i) “**Registrable Securities**” means the Conversion Shares and any other securities issued or issuable with respect to or in exchange for Registrable Securities, whether by merger, charter amendment, or as a result of a stock split, stock dividend, recapitalization, exchange or similar event or otherwise, provided that, a security shall cease to be a Registrable Security upon (A) sale pursuant to a Registration Statement or Rule 144, or (B) such security becoming eligible for sale without restriction on the Investors who are not affiliates pursuant to Rule 144.

(j) “**Registration Statement**” means a registration statement or registration statements of the Company filed under the 1933 Act covering the resale by the Investors of Registrable Securities, as such registration statement or registration statements may be amended and supplemented from time to time, including all documents filed as part thereof or incorporated by reference therein. Registration Statement includes the Initial Registration Statement and any Subsequent Registration Statement that may be filed

pursuant to the terms of this Agreement.

(k) “**Rule 415**” means Rule 415 promulgated by the SEC under the 1933 Act, as such rule may be amended from time to time, or any other similar or successor rule or regulation of the SEC providing for offering securities on a delayed or continuous basis.

(l) “**Subsequent Registration Statement**” means any Registration Statement filed subsequent to the Initial Registration Statement that relates to the registration of the Registrable Securities.

## 2. REGISTRATION.

(a) Mandatory Registration. The Company shall prepare and, as soon as practicable, but in no event later than the Filing Deadline, file with the SEC an initial Registration Statement on Form S-1 (or any successor form) covering the resale by the Investors of such number of Registrable Securities equal to the Conversion Shares (the “**Initial Registration Statement**”) that would result from the conversion of the principal amount of the Convertible Notes then outstanding (to the extent determinable) and the exercise of the Warrants then outstanding. The Initial Registration Statement shall also cover, to the extent allowable under the 1933 Act, such indeterminate number of additional shares of Common Stock resulting from stock splits, stock dividends, reclassifications, or similar transactions with respect to the Registrable Securities. The Initial Registration Statement shall not include any shares of Common Stock for the account of any person other than the Investors without the prior written consent of the Requisite Holder. The Initial Registration Statement shall contain the “Selling Stockholder” and “Plan of Distribution” sections in substantially the form attached hereto as Exhibit B. The Initial Registration Statement (and each amendment or supplement thereto, and each request for acceleration of effectiveness thereof) shall be provided in accordance with Section 2(d) to the Investors prior to its filing or submission. The Company shall use its commercially reasonable efforts to have the Initial Registration Statement declared effective by the SEC as soon as reasonably practicable following the filing thereof with the SEC, but in no event later than the applicable Effectiveness Deadline.

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(b) Filing and Effectiveness Failures. If (i) the Initial Registration Statement is not filed on or prior to its Filing Deadline (if the Company files the Initial Registration Statement without affording the Investors the opportunity to review and comment on the same as required by Section 3(e) herein, the Company shall be deemed to have not satisfied this clause (b)(i)), or (ii) the Company fails to file with the SEC a request for acceleration of a Registration Statement in accordance with Rule 461 promulgated by the SEC pursuant to the 1933 Act, within five (5) Trading Days of the date that the Company is notified (orally or in writing, whichever is earlier) by the SEC that such Registration Statement shall not be “reviewed” or shall not be subject to further review, or (iii) prior to the Effective Date of a Registration Statement, the Company fails to file a pre-effective amendment and otherwise respond in writing to comments made by the SEC in respect of such Registration Statement within twenty (20) calendar days after the receipt of comments by or notice from the SEC that such amendment is required in order for such Registration Statement to be declared effective, or (iv) a Registration Statement registering for resale all of the Registrable Securities included in such Registration Statement is not declared effective by the SEC by the Effectiveness Date of the Initial Registration Statement, or (v) after the effective date of a Registration Statement, such Registration Statement ceases for any reason to remain continuously effective as to all Registrable Securities included in such Registration Statement, or the Investors are otherwise not permitted to utilize the Prospectus therein to resell such Registrable Securities, for more than ten (10) consecutive calendar days or more than an aggregate of fifteen (15) calendar days (which need not be consecutive calendar days) during any 12-month period (any such failure or breach being referred to as an “**Event**,” and for purposes of clauses (i) and (iv), the date on which such Event occurs, and for purpose of clause (ii) the date on which such five (5) Trading Day period is exceeded, and for purpose of clause (iii) the date which such ten (10) calendar day period is exceeded, and for purpose of clause (v) the date on which such ten (10) or fifteen (15) calendar day period, as applicable, is exceeded being referred to as “**Event Date**”), then, in addition to any other rights the Investors may have hereunder or under applicable law, on each such Event Date and on each monthly anniversary of each such Event Date (if the applicable Event shall not have been cured by such date) until the applicable Event is cured, the Company shall pay to each Investor an amount in cash, as liquidated damages and not as a penalty, equal to the product of one and one half percent (1.50%) multiplied by the aggregate Purchase Price paid by such Investor pursuant to the Securities Purchase Agreement. If the Company fails to pay any liquidated damages pursuant to this Section in full within seven (7) days after the date payable, the Company will pay interest thereon at a rate of ten percent (10%) per annum (or such lesser maximum amount that is permitted to be paid by applicable law) to the Investor, accruing daily from the date such partial liquidated damages are due until such amounts, plus all such interest thereon, are paid in full. The partial liquidated damages pursuant to the terms hereof shall apply on a daily pro rata basis for any portion of a month prior to the cure of an Event. Notwithstanding the foregoing, the maximum amount of liquidated damages payable pursuant to this Section 2(b) shall not exceed 15% of the aggregate Purchase Price paid by such Investor pursuant to the Securities Purchase Agreement.

(c) Offering. If the Staff of the SEC (the “**Staff**”) or the SEC seeks to characterize any offering pursuant to a Registration Statement filed pursuant to this Agreement as constituting an offering of securities that does not permit such Registration Statement to become effective and be used for resales by the Investors on a delayed or continuous basis under Rule 415 at then-prevailing market prices (and not fixed prices), or if after the filing of any Registration Statement pursuant to Section 2(a), the Company is otherwise required by the Staff or the SEC to reduce the number of Registrable Securities included in such Registration Statement, then the Company shall reduce the number of Registrable Securities to be included in such Registration Statement (after consultation with the Investors as to the specific Registrable Securities to be removed therefrom) until such time as the Staff and the SEC shall so permit such Registration Statement to become effective and be used as aforesaid. Notwithstanding anything in this Agreement to the contrary, if after giving effect to the actions referred to in the immediately preceding sentence, the Staff or the SEC does not permit such Registration Statement to become effective and be used for resales by the Investors on a delayed or continuous basis under Rule 415 at then-prevailing market prices (and not fixed prices), the Company shall not request acceleration of the Effective Date of such Registration Statement, but instead the Company shall promptly (but in no event later than 48 hours from the time that the decision of the Staff or the SEC becomes known to the Company) request the withdrawal of such Registration Statement pursuant to Rule 477 under the 1933 Act, and the Effectiveness Deadline shall automatically be deemed to have elapsed with respect to such Registration Statement at such time as the Staff or the SEC has made a final and non-appealable determination that the SEC will not permit such Registration Statement to be so utilized (unless prior to such time the Company has received assurances from the Staff or the SEC that a Subsequent Registration Statement filed by the Company with the SEC promptly thereafter may be so utilized). In the event of any reduction in Registrable Securities pursuant to this paragraph, the Company shall use its commercially reasonable efforts to file one or more Subsequent Registration Statements with the SEC until such time as all Registrable Securities have been included in Registration Statements that have been declared effective and the Prospectuses contained therein are available for use by the Investors. Notwithstanding any provision herein or in the Securities Purchase Agreement to the contrary, the Company’s obligations to register Registrable Securities (and any related conditions to the Investors’ obligations) shall be qualified as necessary to comport with any requirement of the Staff or the SEC as addressed in this Section 2(c).

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(d) Registrable Securities. Any Registrable Security shall cease to be a “Registrable Security” at the earliest of the following: (i) when a Registration Statement covering such Registrable Security becomes or has been declared effective by the SEC and such Registrable Security has been sold or disposed of pursuant to such effective Registration Statement; (ii) when such Registrable Security is held by the Company or one of its subsidiaries; and (iii) the first (1st) anniversary of the date of the last sale of any Registrable Securities by the Company to the Investors pursuant to the Securities Purchase Agreement.

## 3. COMPANY OBLIGATIONS.

The Company shall use its commercially reasonable efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof, and, pursuant thereto, the Company shall have the following obligations:

(a) The Company shall promptly prepare and file with the SEC the Initial Registration Statement pursuant to Section 2(a) with respect to the Registrable Securities, but in no event later than the applicable Filing Deadline therefor, and the Company shall use its commercially reasonable efforts to cause each such Registration Statement to become effective as soon as practicable after such filing, but in no event later than the applicable Effectiveness Deadline therefor. Subject to Allowable Grace Periods, the Company shall keep each Registration Statement effective (and the Prospectus contained therein available for use) pursuant to Rule 415 for resales by the Investors on a continuous basis at then-prevailing market prices (and not fixed prices) at all times until the earlier of (i) the date on which the Investors shall have sold all of the Registrable Securities covered by such Registration Statement and (ii) the date of termination of the Securities Purchase Agreement if, as of such termination date, the Investors hold no Registrable Securities (or, if applicable, the date on which such Securities cease to be Registrable Securities after the date of termination of the Securities Purchase Agreement) (the “**Registration Period**”).

(b) The Company shall ensure that, when filed and at all times while effective, each Registration Statement (including, without limitation, all amendments and supplements thereto) and the Prospectus (including, without limitation, all amendments and supplements thereto) used in connection with such Registration Statement shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein (in the case of Prospectuses, in the light of the circumstances in which they were made) not misleading and disclose (whether directly or through incorporation by reference to other SEC filings to the extent permitted) all material information regarding the Company and its Securities.

(c) The Company shall use its commercially reasonable efforts to prepare and file with the SEC such amendments (including, without limitation, post-effective amendments) and supplements to each Registration Statement and the Prospectus used in connection with each such Registration Statement, which Prospectus is to be filed pursuant to Rule 424 promulgated under the 1933 Act, as may be necessary to keep each such Registration Statement effective (and the Prospectus contained therein current and available for use) at all times during the Registration Period for such Registration Statement, and, during such period, comply with the provisions of the 1933 Act with respect to the disposition of all Registrable Securities of the Company required to be covered by such Registration Statement until such time as all of such Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the Investors as set forth in such Registration Statement. Without limiting the generality of the foregoing, the Company covenants and agrees that at or before 8:30 a.m. (New York City time) on the Trading Day immediately following the Effective Date of the Initial Registration Statement and any Subsequent Registration Statement (or any post-effective amendment thereto), the Company shall file with the SEC in accordance with Rule 424(b) under the 1933 Act the final Prospectus to be used in connection with sales pursuant to such Registration Statement (or post-effective amendment thereto). In the case of amendments and supplements to any Registration Statement on Form S-1 or Prospectus related thereto which are required to be filed pursuant to this Agreement (including, without limitation, pursuant to this Section 3(c)) by reason of the Company filing a report on Form 8-K, Form 10-Q, or Form 10-K or any analogous report under the 1934 Act, the Company shall have incorporated such report by reference into such Registration Statement and Prospectus, if applicable, or shall file such amendments or supplements to the Registration Statement or Prospectus with the SEC on the same day on which the 1934 Act report which created the requirement for the Company to amend or supplement such Registration Statement or Prospectus is filed, for the purpose of including or incorporating such report into such Registration Statement and Prospectus. The Company consents to the use of the Prospectus (including, without limitation, any supplement thereto) included in each Registration Statement in accordance with the provisions of the 1933 Act and with the securities or “Blue Sky” laws of the jurisdictions in which the Registrable Securities may be sold by the Investors, in connection with the resale of the Registrable Securities and for such period of time thereafter as such Prospectus (including, without limitation, any supplement thereto) (or in lieu thereof, the notice referred to in Rule 173(a) under the 1933 Act) is required by the 1933 Act to be delivered in connection with resales of Registrable Securities.

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(d) The Company shall (i) permit the Investors an opportunity to review and comment upon (A) each Registration Statement at least two (2) Business Days prior to its filing with the SEC and (B) all amendments and supplements to each Registration Statement (including, without limitation, the Prospectus contained therein) (except for Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and any similar or successor reports or Prospectus Supplements the contents of which are limited to that set forth in such reports) within a reasonable number of days prior to their filing with the SEC, and (ii) shall reasonably consider any comments of the Investors on any such Registration Statement or amendment or supplement thereto or to any Prospectus contained therein.

(e) Without limiting any obligation of the Company under the Securities Purchase Agreement, the Company shall promptly furnish to the Investors (but not later than one (1) Business Day after the filing date, receipt date, or sending date, as the case may be), without charge, (i) after the same is prepared and filed with the SEC, at least one (1) electronic copy of each Registration Statement and any amendment(s) and supplement(s) thereto, including, without limitation, financial statements and schedules, all documents incorporated therein by reference, if requested by the Investors, all exhibits thereto (or such other number of copies as the Investors may reasonably request from time to time), (ii) upon the effectiveness of each Registration Statement, one (1) electronic copy of the Prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as the Investors may reasonably request from time to time), (iii) electronic or digital copies of any correspondence from the SEC or the Staff to the Company or its representatives relating to each Registration Statement (which correspondence shall be redacted to exclude any material, non-public information regarding the Company or any of its Subsidiaries), and (iv) such other documents, including, without limitation, copies of any final Prospectus and any Prospectus Supplement thereto, as the Investors may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities owned by the Investors; provided, however, the Company shall not be required to furnish any document to the Investors to the extent such document is available on EDGAR.

(f) The Company shall submit to the SEC, within two (2) Business Days after the date that the Company learns that no review of a particular Registration Statement shall be made by the Staff or that the Staff has no further comments on a particular Registration Statement (as the case may be), a request for acceleration of effectiveness of such Registration Statement to a time and date not later than three (3) Business Days after the submission of such request.

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(g) Within one (1) Business Day after each Registration Statement which covers Registrable Securities is declared effective by the SEC, the Company shall deliver, and shall cause its legal counsel to deliver, to the transfer agent for such Registrable Securities (with copies to the Investors) confirmation that such Registration Statement has been declared effective by the SEC in the form attached hereto as Exhibit A, or in such other form as requested by the Company’s transfer agent.

(h) The Company shall take such action as is reasonably necessary to (i) register and qualify, unless an exemption from registration and qualification applies, the resale by the Investors of the Registrable Securities covered by a Registration Statement under such other securities or “Blue Sky” laws of all applicable jurisdictions in the United States, (ii) prepare and file in those jurisdictions, such amendments (including, without limitation, post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period, (iii) take such other actions as may be reasonably necessary to maintain such registrations and qualifications in effect at all times during the Registration Period, and (iv) take all other actions reasonably necessary or advisable to qualify the Registrable Securities for sale in such jurisdictions; provided, however, the Company shall not be required in connection therewith or as a condition thereto to (A) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(h), (B) subject itself to general taxation in any such jurisdiction, or (C) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify the Investors of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or “Blue Sky” laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

(i) The Company shall notify the Investors in writing of the happening of any event, as promptly as reasonably practicable after becoming aware of such event, as a result of which the Prospectus included in a Registration Statement, as then in effect, includes an untrue statement of a material fact or omission to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading (provided that in no event shall

such notice contain any material, non-public information regarding the Company or any of its Subsidiaries), and promptly prepare a supplement or amendment to such Registration Statement and such Prospectus contained therein to correct such untrue statement or omission and deliver one (1) electronic copy of such supplement or amendment to the Investors (or such other number of copies as the Investors may reasonably request) upon its filing with the SEC. The Company shall also promptly notify the Investors in writing (i) when a Prospectus or any Prospectus Supplement or post-effective amendment has been filed, when a Registration Statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to the Investors by e-mail on the same day of such effectiveness, and by overnight delivery), and when the Company receives written notice from the SEC that a Registration Statement or any post-effective amendment will be reviewed by the SEC, (ii) of any request by the SEC for amendments or supplements to a Registration Statement or related Prospectus or related information, and (iii) of the Company's reasonable determination that a post-effective amendment to a Registration Statement would be appropriate and (iv) of the receipt of any request by the SEC or any other federal or state governmental authority for any additional information relating to the Investors or the transactions contemplated by the Transaction Documents in the Registration Statement or any amendment or supplement thereto or any related Prospectus. The Company shall respond in writing to any comments received from the SEC with respect to a Registration Statement or any amendment thereto as promptly as reasonably practicable, but in no event later than ten (10) calendar days after the receipt of such comments by or notice from the SEC that an amendment is required in order for a Registration Statement to be declared effective. Nothing in this Section 3(i) shall limit any obligation of the Company under the Securities Purchase Agreement.

(j) The Company shall (i) use its commercially reasonable efforts to prevent the issuance of any stop order or other suspension of effectiveness of a Registration Statement or the use of any Prospectus contained therein, or the suspension of the qualification, or the loss of an exemption from qualification, of any of the Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible time, and (ii) notify the Investors of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding.

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(k) The Company shall hold in confidence and not make any disclosure of information concerning the Investors provided to the Company unless (i) disclosure of such information is necessary to comply with federal or state securities laws, (ii) the disclosure of such information is necessary to avoid or correct a misstatement or omission in any Registration Statement or is otherwise required to be disclosed in such Registration Statement pursuant to the 1933 Act, (iii) the release of such information is ordered pursuant to a subpoena or other order from a court or governmental body of competent jurisdiction, or (iv) such information has been made generally available to the public other than by disclosure in violation of this Agreement or any other Transaction Document. The Company agrees that it shall, upon learning that disclosure of such information concerning the Investors is sought in or by a court or governmental body of competent jurisdiction or through other means, to the extent legally permissible, the Company shall give prompt written notice (email being sufficient) to the Investors and allow the Investors, at the Investors' expense, to undertake appropriate action to seek prevention of disclosure of, or to seek a protective order for, such information.

(l) Without limiting any obligation of the Company under the Securities Purchase Agreement, the Company shall use its commercially reasonable efforts either to (i) cause all of the Registrable Securities covered by each Registration Statement to be listed on the Trading Market or other market on which the Common Stock is then listed, (ii) secure designation and quotation of all of the Registrable Securities covered by each Registration Statement on another Trading Market, or (iii) if, despite the Company's commercially reasonable efforts to satisfy the preceding clauses (i) or (ii), the Company is unsuccessful in satisfying the preceding clauses (i) or (ii), without limiting the generality of the foregoing, use its commercially reasonable efforts to arrange for at least two (2) market makers to register with the Financial Industry Regulatory Authority ("FINRA") as such with respect to such Registrable Securities. In addition, the Company shall reasonably cooperate with the Investors and any Broker-Dealer through which an Investor proposes to sell its Registrable Securities in effecting a filing with the FINRA pursuant to FINRA Rule 5110 as requested by the Investor. The Company shall pay all fees and expenses in connection with satisfying its obligation under this Section 3(l).

(m) The Company shall cooperate with the Investors and, to the extent applicable, facilitate the timely preparation and delivery of Registrable Securities, as DWAC Shares, to be offered pursuant to a Registration Statement and enable such DWAC Shares to be in such denominations or amounts (as the case may be) as the Investor may reasonably request from time to time and registered in such names as the Investor may request. Each Investor hereby agrees that it shall cooperate with the Company, its counsel and transfer agent in connection with any issuances of the DWAC Shares, and hereby represents, warrants and covenants to the Company that it will resell such shares only pursuant to the Registration Statement in which such DWAC Shares are included, in a manner described under the caption "Plan of Distribution" in such Registration Statement, and in a manner in compliance with all applicable U.S. federal and state securities laws, rules and regulations, including, without limitation, any applicable prospectus delivery requirements of the 1933 Act. DWAC Shares shall be free from all restrictive legends may be transmitted by the transfer agent to the Investor by crediting an account at DTC as directed in writing by the Investor.

(n) Upon the written request of any Investor, the Company shall as soon as reasonably practicable after receipt of notice from the Investor, (i) incorporate in a Prospectus Supplement or post-effective amendment such information as the Investor reasonably requests to be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the number of Registrable Securities being offered or sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities to be sold in such offering; (ii) make all required filings of such Prospectus Supplement or post-effective amendment after being notified of the matters to be incorporated in such Prospectus Supplement or post-effective amendment; and (iii) supplement or make amendments to any Registration Statement or Prospectus contained therein if reasonably requested by the Investor.

(o) The Company shall use its commercially reasonable efforts to cause the Registrable Securities covered by a Registration Statement to be registered with or approved by such other governmental agencies or authorities in the United States as may be necessary to consummate the disposition of such Registrable Securities.

(p) The Company shall make generally available to its security holders (which may be satisfied by making such information available on EDGAR) as soon as practical, but not later than ninety (90) days after the close of the period covered thereby, an earnings statement (in form complying with, and in the manner provided by, the provisions of Rule 158 under the 1933 Act) covering a twelve (12)-month period beginning not later than the first day of the Company's fiscal quarter next following the applicable Effective Date of each Registration Statement.

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(q) The Company shall otherwise use its commercially reasonable efforts to comply with all applicable rules and regulations of the SEC in connection with any registration hereunder.

#### **4. OBLIGATIONS OF THE INVESTORS.**

(a) At least five (5) Business Days prior to the first anticipated filing date of each Registration Statement (or such shorter period to which the Parties agree), the Company shall notify the Investors in writing of the information the Company requires from the Investors with respect to such Registration Statement. It shall be a condition precedent to the obligations of the Company to complete the registration pursuant to this Agreement with respect to the Registrable Securities of the Investors that each Investor shall furnish to the Company such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it, as shall be reasonably required to effect and maintain the effectiveness of the registration of such Registrable Securities and shall execute such documents in connection with such registration as the Company may reasonably request.

(b) Each Investor, by acceptance of the Registrable Securities, agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of each Registration Statement hereunder, unless the Investor has notified the Company in writing of the Investor's election to exclude all of its Registrable Securities from such Registration Statement.

(c) Each Investor agrees that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 3(i), the Investor shall immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement(s) covering such Registrable Securities until the Investor's receipt of the copies of the supplemented or amended Prospectus contemplated by Section 3(i) or receipt of notice that no supplement or amendment is required. Notwithstanding anything to the contrary in this Section 4(c), the Company shall cause its transfer agent to deliver DWAC Shares to a transferee of such Investor in accordance with the terms of the Securities Purchase Agreement in connection with any sale of Registrable Securities with respect to which the Investor has entered into a contract for sale prior to the Investor's receipt of a notice from the Company of the happening of any event of the kind described in Section 3(i) and for which the Investor has not yet settled.

(d) Each Investor covenants and agrees that it shall comply with the prospectus delivery and other requirements of the 1933 Act as applicable to it in connection with sales of Registrable Securities pursuant to a Registration Statement.

## 5. EXPENSES OF REGISTRATION.

The Company shall pay all expenses associated with the registration of the Registrable Securities, including costs to prepare the Registration Statements, filing and printing fees, fees and expenses of the Company's counsel, accounting fees and expenses, costs associated with clearing the Registrable Securities for sale under applicable state securities laws, listing fees, reasonable out of pocket fees and expenses of one counsel to the lead Investor, and such lead Investor's reasonable expenses, which shall not exceed \$10,000. All registration, listing and qualification fees, printers and accounting fees incurred by the Company, and fees and disbursements of counsel for the Company, shall be paid by the Company.

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## 6. INDEMNIFICATION.

(a) In the event any Registrable Securities are included in any Registration Statement under this Agreement, to the fullest extent permitted by law, the Company shall, and hereby does, indemnify, hold harmless and defend each Investor, each of its respective directors, officers, shareholders, members, partners, employees, and authorized representatives, agents and financial, accounting and legal advisors (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding the lack of such title or any other title), and each Person, if any, who controls the Investor within the meaning of the 1933 Act or the 1934 Act and each of the directors, officers, shareholders, members, partners, employees, and authorized representatives, agents and financial, accounting and legal advisors (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding the lack of such title or any other title) of such controlling Persons (each, an "Investor Party" and collectively, the "Investor Parties"), against any losses, obligations, claims, damages, liabilities, contingencies, judgments, fines, penalties, charges, costs (including, without limitation, court costs, attorneys' fees, costs of defense and investigation), amounts paid in settlement or expenses, joint or several, (collectively, "Claims") reasonably incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an Investor Party is or may be a party thereto ("Indemnified Damages"), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in a Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the offering under the securities or other "Blue Sky" laws of any jurisdiction in which Registrable Securities are offered ("Blue Sky Filing"), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, or (ii) any untrue statement or alleged untrue statement of a material fact contained in any Prospectus (as amended or supplemented) or in any Prospectus Supplement or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in light of the circumstances under which the statements therein were made, not misleading (the matters in the foregoing clauses (i) and (ii) being, collectively, "Violations"). Subject to Section 6(c), the Company shall reimburse the Investor Parties, promptly as such expenses are incurred and are due and payable, for any reasonable legal fees or other reasonable out of pocket expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (i) shall not apply to a Claim by an Investor Party arising out of or based upon a Violation which occurs in reliance upon and in conformity with information furnished in writing to the Company by such Investor Party for such Investor Party expressly for use in connection with the preparation of such Registration Statement, Prospectus or Prospectus Supplement or any such amendment thereof or supplement thereto (it being hereby acknowledged and agreed that the written information set forth on Exhibit B attached hereto is the only written information furnished to the Company by or on behalf of the Investor expressly for use in any Registration Statement, Prospectus or Prospectus Supplement); (ii) shall not be available to the Investor to the extent such Claim is based on a failure of the Investor to deliver or to cause to be delivered the Prospectus (as amended or supplemented) made available by the Company (to the extent applicable), including, without limitation, a corrected Prospectus, if such Prospectus (as amended or supplemented) or corrected Prospectus was timely made available by the Company pursuant to Section 3(d) and then only if, and to the extent that, following the receipt of the corrected Prospectus no grounds for such Claim would have existed; and (iii) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld or delayed. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Investor Party and shall survive the transfer of any of the Registrable Securities by the Investor pursuant to Section 9.

(b) In connection with any Registration Statement in which the Investors are participating, each Investor agrees to severally and not jointly indemnify, hold harmless and defend, to the same extent and in the same manner as is set forth in Section 6(a), the Company, each of its directors, each of its officers who signs the Registration Statement and each Person, if any, who controls the Company within the meaning of the 1933 Act or the 1934 Act (each, a "Company Party" and collectively, the "Company Parties"), against any Claim or Indemnified Damages to which any of them may become subject, under the 1933 Act, the 1934 Act or otherwise, insofar as such Claim or Indemnified Damages arise out of or are based upon any Violation, in each case, to the extent, and only to the extent, that such Violation occurs in reliance upon and in conformity with written information relating to the Investor furnished to the Company by the Investor expressly for use in connection with such Registration Statement, the Prospectus included therein or any Prospectus Supplement thereto (it being hereby acknowledged and agreed that the written information set forth on Exhibit B attached hereto is the only written information furnished to the Company by or on behalf of the Investor expressly for use in any Registration Statement, Prospectus or Prospectus Supplement); and, subject to Section 6(c) and the below provisos in this Section 6(b), the Investor shall reimburse a Company Party any legal or other expenses reasonably incurred by such Company Party in connection with investigating or defending any such Claim; provided, however, the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Investor, which consent shall not be unreasonably withheld or delayed; and provided, further that the Investor shall be liable under this Section 6(b) for only that amount of a Claim or Indemnified Damages as does not exceed the net proceeds to the Investor as a result of the applicable sale of Registrable Securities pursuant to such Registration Statement, Prospectus or Prospectus Supplement. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Company Party and shall survive the transfer of any of the Registrable Securities by the Investor pursuant to Section 9 hereof.

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(c) Promptly after receipt by an Investor Party or Company Party (as the case may be) under this Section 6 of notice of the commencement of any action or proceeding (including, without limitation, any governmental action or proceeding) involving a Claim, such Investor Party or Company Party (as the case may be) shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying

party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Investor Party or the Company Party (as the case may be); provided, however, an Investor Party or Company Party (as the case may be) shall have the right to retain its own counsel with the fees and expenses of such counsel to be paid by the indemnifying party if: (i) the indemnifying party has agreed in writing to pay such fees and expenses; (ii) the indemnifying party shall have failed promptly to assume the defense of such Claim and to employ counsel reasonably satisfactory to such Investor Party or Company Party (as the case may be) in any such Claim; or (iii) the named parties to any such Claim (including, without limitation, any impleaded parties) include both such Investor Party or Company Party (as the case may be) and the indemnifying party, and such Investor Party or such Company Party (as the case may be) shall have been advised by counsel that a conflict of interest is likely to exist if the same counsel were to represent such Investor Party or such Company Party and the indemnifying party (in which case, if such Investor Party or such Company Party (as the case may be) notifies the indemnifying party in writing that it elects to employ separate counsel at the expense of the indemnifying party, then the indemnifying party shall not have the right to assume the defense thereof on behalf of the indemnified party and such counsel shall be at the expense of the indemnifying party, provided further that in the case of clause (iii) above the indemnifying party shall not be responsible for the reasonable fees and expenses of more than one (1) separate legal counsel for all Investor Parties or Company Parties (as the case may be). The Company Party or Investor Party (as the case may be) shall reasonably cooperate with the indemnifying party in connection with any negotiation or defense of any such action or Claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Company Party or Investor Party (as the case may be) which relates to such action or Claim. The indemnifying party shall keep the Company Party or Investor Party (as the case may be) reasonably apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its prior written consent; provided, however, the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the prior written consent of the Company Party or Investor Party (as the case may be), consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Company Party or Investor Party (as the case may be) of an unconditional release from all liability in respect to such Claim or litigation, and such settlement shall not include any admission as to fault on the part of the Company Party. For the avoidance of doubt, the immediately preceding sentence shall apply to Sections 6(a) and 6(b). Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Company Party or Investor Party (as the case may be) with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Investor Party or Company Party (as the case may be) under this Section 6, except to the extent that the indemnifying party is materially and adversely prejudiced in its ability to defend such action.

(d) No Person involved in the sale of Registrable Securities who is guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) in connection with such sale shall be entitled to indemnification from any Person involved in such sale of Registrable Securities who is not guilty of fraudulent misrepresentation.

(e) The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred; provided that any Person receiving any payment pursuant to this Section 6 shall promptly reimburse the Person making such payment for the amount of such payment to the extent a court of competent jurisdiction determines that such Person receiving such payment was not entitled to such payment.

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(f) The indemnity and contribution agreements contained herein shall be in addition to (i) any cause of action or similar right of the Company Party or Investor Party against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to the law.

#### 7. CONTRIBUTION.

To the extent any indemnification by an indemnifying party is prohibited, limited by law, or unavailable to an indemnified party or insufficient to hold it harmless, then the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 to the fullest extent permitted by law; provided, however: (i) no contribution shall be made under circumstances where the maker would not have been liable for indemnification under the fault standards set forth in Section 6 of this Agreement, (ii) no Person involved in the sale of Registrable Securities which Person is guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the 1933 Act) in connection with such sale shall be entitled to contribution from any Person involved in such sale of Registrable Securities who was not guilty of fraudulent misrepresentation; and (iii) contribution by any seller of Registrable Securities shall be limited in amount to the amount of net proceeds received by such seller from the applicable sale of such Registrable Securities pursuant to such Registration Statement. Notwithstanding the provisions of this Section 7, an Investor shall not be required to contribute, in the aggregate, any amount in excess of the amount by which the net proceeds actually received by the Investor from the applicable sale of the Registrable Securities subject to the Claim exceeds the amount of any damages the Investor has otherwise been required to pay, or would otherwise be required to pay under Section 6(b), by reason of such untrue or alleged untrue statement or omission or alleged omission.

#### 8. EXCHANGE ACT REPORTS.

With a view to making available to the Investors the benefits of Rule 144 (or its successor rule), the Company agrees to:

(a) use its reasonable best efforts to make and keep public information available, as those terms are understood and defined in Rule 144, until the earlier of (i) six (6) months after such date as all of the Registrable Securities may be sold without restriction by the holders thereof pursuant to Rule 144 or any other rule of similar effect, or (ii) such date as all of the Registrable Securities shall have been resold;

(b) use its reasonable best efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the 1933 Act and the 1934 Act so long as the Company remains subject to such requirements (it being understood that nothing herein shall limit any of the Company's obligations under the Securities Purchase Agreement) and the filing of such reports and other documents is required for the applicable provisions of Rule 144;

(c) furnish to the Investors (so long as the Investors own Registrable Securities), promptly upon request, (i) a written statement by the Company, if true, that it has complied with the reporting, submission, and posting requirements of Rule 144 and the 1934 Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company with the SEC if such reports are not publicly available via EDGAR, and (iii) such other information as may be reasonably requested to permit the Investors to sell such Securities pursuant to Rule 144 without registration; and

(d) take such additional action as is reasonably requested by the Investors to enable the Investors to sell the Registrable Securities pursuant to Rule 144, including, without limitation, delivering all such legal opinions, consents, certificates, resolutions and instructions to the Company's Transfer Agent as may be reasonably requested from time to time by the Investors and otherwise fully cooperate with the Investors and any broker of an Investor to effect such sale of Securities pursuant to Rule 144.

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#### 9. ASSIGNMENT OF REGISTRATION RIGHTS.

Each Investor may transfer or assign, in whole or from time to time in part, to one or more persons its rights hereunder in connection with the transfer of Registrable

Securities by such Investor to such person, provided that the Investor complies with all laws applicable thereto and provides written notice of assignment to the Company promptly after such assignment is effected. This Agreement may not be assigned by the Company (whether by operation of law or otherwise) without the prior written consent of the Investors, provided that in the event that the Company is a party to a merger, consolidation, share exchange or similar business combination transaction in which the Common Stock is converted into the equity securities of another entity, from and after the effective time of such transaction, such entity shall, by virtue of such transaction, be deemed to have assumed the obligations of the Company hereunder, the term "Company" shall be deemed to refer to such entity and the term "Registrable Securities" shall be deemed to include the securities received by the Investors in connection with such transaction unless such securities are otherwise freely tradable by the Investors after giving effect to such transaction. This Agreement shall inure to the benefit of and be binding upon the Parties and their respective successors and permitted assigns. This Agreement is not for the benefit of, nor may any provision hereof be enforced by, any Person, other than the Parties, their respective successors and permitted assigns.

#### 10. AMENDMENT OR WAIVER.

No provision of this Agreement may be (a) amended other than by a written instrument signed by the Company and the Requisite Holder (b) waived other than in a written instrument signed by the Party against whom enforcement of such waiver is sought. Failure of any Party to exercise any right or remedy under this Agreement or otherwise, or delay by a Party in exercising such right or remedy, shall not operate as a waiver thereof.

#### 11. MISCELLANEOUS.

(a) Solely for purposes of this Agreement, a Person is deemed to be a holder of Registrable Securities whenever such Person owns or is deemed to own of record such Registrable Securities. If the Company receives conflicting instructions, notices or elections from two (2) or more Persons with respect to the same Registrable Securities, the Company shall act upon the basis of instructions, notice or election received from such record owner of such Registrable Securities.

(b) Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement shall be given in accordance with Section 11.2 of the Securities Purchase Agreement.

(c) Failure of any Party to exercise any right or remedy under this Agreement or otherwise, or delay by a Party in exercising such right or remedy, shall not operate as a waiver thereof. The Company and the Investors acknowledge and agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that either Party shall be entitled to an injunction or injunctions to prevent or cure breaches of the provisions of this Agreement by the other Party and to enforce specifically the terms and provisions hereof (without the necessity of showing economic loss and without any bond or other security being required), this being in addition to any other remedy to which either Party may be entitled by law or equity.

(d) All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of Delaware, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Delaware or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of New York. Each Party hereby irrevocably submits to the jurisdiction of the state and federal courts sitting in The City and State of New York, New York County, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each Party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such Party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE TO, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HERewith OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

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(e) The Transaction Documents set forth the entire agreement and understanding of the Parties solely with respect to the subject matter thereof and supersedes all prior and contemporaneous agreements, negotiations and understandings between the Parties, both oral and written, solely with respect to such matters. There are no promises, undertakings, representations or warranties by either Party relative to the subject matter hereof not expressly set forth in the Transaction Documents. Notwithstanding anything in this Agreement to the contrary and without implication that the contrary would otherwise be true, nothing contained in this Agreement shall limit, modify or affect in any manner whatsoever any of the Company's obligations under the Securities Purchase Agreement.

(f) The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof. Unless the context clearly indicates otherwise, each pronoun herein shall be deemed to include the masculine, feminine, neuter, singular and plural forms thereof. The terms "including," "includes," "include" and words of like import shall be construed broadly as if followed by the words "without limitation." The terms "herein," "hereunder," "hereof" and words of like import refer to this entire Agreement instead of just the provision in which they are found.

(g) This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each Party and delivered to the other Party; provided that a facsimile signature or signature delivered by e-mail in a ".pdf" or comparable commercially recognized electronic or digital format, including any electronic signature complying with the U.S. Electronic Signatures in Global and National Commerce Act of 2000 shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original signature.

(h) Each Party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents as any other Party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(i) The language used in this Agreement will be deemed to be the language chosen by the Parties to express their mutual intent and no rules of strict construction will be applied against any Party.

[Signature Page Follows]

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IN WITNESS WHEREOF, each Investor and the Company have caused their respective signature page to this Agreement to be duly executed as of the date first above written.

COMPANY:

**FIREFLY NEUROSCIENCE, INC.**

By: /s/ Greg Lipschitz  
Name: Greg Lipschitz  
Title: Executive Chairman

[Signature page to Registration Rights Agreement]

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IN WITNESS WHEREOF, each Investor and the Company have caused their respective signature page to this Agreement to be duly executed as of the date first above written.

**INVESTOR:**

HELENA SPECIAL OPPORTUNITIES LLC

By: /s/ Lawrence Cutler  
Name: Lawrence Cutler  
Title: Authorized Signatory

[Signature page to Registration Rights Agreement]

**Exhibit A**

**FORM OF NOTICE OF EFFECTIVENESS  
OF REGISTRATION STATEMENT**

[Company Transfer Agent]

*Re: Firefly Neuroscience, Inc.*

Ladies and Gentlemen:

We are counsel to Firefly Neuroscience, Inc., a Delaware corporation (the “**Company**”), and have represented the Company in connection with that certain Securities Purchase Agreement, dated as of December 20, 2024 (the “**Securities Purchase Agreement**”), entered into by and among the Company and the investors named therein (the “**Investors**”), pursuant to which the Company may issue to the Investors from time to time convertible promissory notes and common stock purchase warrants, convertible or exercisable, as applicable, into common stock, \$0.0001 par value per share of the Company (the “**Common Stock**”). Pursuant to the Purchase Agreement, the Company also has entered into a Registration Rights Agreement, dated as of December 20, 2024, with the Investor (the “**Registration Rights Agreement**”), pursuant to which the Company agreed, among other things, to register the resale by the Investor of the Registrable Securities (as defined in the Registration Rights Agreement) under the 1933 Act of 1933, as amended (the “**1933 Act**”). In connection with the Company’s obligations under the Registration Rights Agreement, on [●], 202[●], the Company filed a Registration Statement on Form S-1 (File No. 333-[●]) (the “**Registration Statement**”) with the Securities and Exchange Commission (the “**SEC**”) relating to the Registrable Securities which names the Investor as a selling stockholder thereunder.

In connection with the foregoing, based solely on our review of the SEC’s EDGAR website, we advise you that the Registration Statement became effective under the 1933 Act on [●], 202[●]. In addition, based solely on our review of the information made available by the SEC at <http://www.sec.gov/litigation/stoporders.shtml>, we confirm that the SEC has not issued any stop order suspending the effectiveness of the Registration Statement. To our knowledge, based solely on our participation in the conferences mentioned above regarding the Registration Statement and our review of the information made available by the SEC at <http://www.sec.gov/litigation/stoporders.shtml>, no proceedings for that purpose are pending or have been instituted or threatened by the SEC.

This letter shall serve as our standing opinion to you that the shares of Common Stock are freely transferable by the Investor pursuant to the Registration Statement, provided the Registration Statement remains effective.

This opinion letter is limited to the federal securities laws of the United States of America. We express no opinion as to matters relating to state securities laws or Blue Sky laws.

We assume no obligation to update or supplement this opinion letter to reflect any facts or circumstances which may hereafter come to our attention with respect to the opinion and statements expressed above, including any changes in applicable law that may hereafter occur.

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This opinion letter is being delivered solely for the benefit of the person to whom it is addressed; accordingly, it may not be quoted, filed with any governmental authority or other regulatory agency or otherwise circulated or utilized for any purposes without our prior written consent.

Very truly yours,

[COMPANY COUNSEL]

Cc: [ ]

### SELLING STOCKHOLDER

This prospectus relates to the possible resale from time to time by [\_\_\_\_], of any or all of the shares of common stock that may be issued by us to [\_\_\_\_] under the Securities Purchase Agreement. For additional information regarding the issuance of common stock covered by this prospectus, see the section titled “*The [\_\_\_\_] Financing*” above. We are registering the shares of common stock pursuant to the provisions of the Registration Rights Agreement we entered into with [\_\_\_\_] on March [●], 2024, in order to permit the selling stockholder to offer the shares for resale from time to time. Except for the transactions contemplated by the Securities Purchase Agreement and the Registration Rights Agreement, [\_\_\_\_] has not had any material relationship with us within the past three years. As used in this prospectus, the term “selling stockholder” means [\_\_\_\_].

The table below presents information regarding the selling stockholder and the shares of common stock that it may offer from time to time under this prospectus. This table is prepared based on information supplied to us by the selling stockholder, and reflects holdings as of [●], 202[●]. The number of shares in the column “Maximum Number of Shares of Common Stock to be Offered Pursuant to this Prospectus” represents all of the shares of common stock that the selling stockholder may offer under this prospectus. The selling stockholder may sell some, all or none of its shares in this offering.

We do not know how long the selling stockholder will hold the shares before selling them, and we are not currently aware of any existing agreements, arrangements or understandings between the selling stockholder and any other stockholder, broker, dealer, underwriter or agent relating to the sale or distribution of the shares of our common stock offered by this prospectus by the selling stockholder.

Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the 1934 Act, and includes shares of common stock with respect to which the selling stockholder has voting and investment power. The percentage of shares of common stock beneficially owned by the selling stockholder prior to the offering shown in the table below is based on an aggregate of [●] shares of our common stock outstanding on [●], 202[●]. The fourth column assumes the sale of all of the shares offered by the selling stockholder pursuant to this prospectus.

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Name of Selling Stockholder	Number of Shares of Common Stock Owned Prior to Offering		Maximum Number of Shares of Common Stock to be Offered Pursuant to this Prospectus	Maximum Number of Shares of Common Stock Owned After Offering	
	Number <sup>(1)</sup>	Percent <sup>(2)</sup>		Number <sup>(3)</sup>	Percent <sup>(2)</sup>
[____] <sup>(4)</sup>	[●]	*	[●]	[●]	[●]%

\* Represents less than 1.0%.

(1) In accordance with Rule 13d-3(d) under the 1934 Act, we have excluded from the number of shares beneficially owned prior to the offering all of the shares that [\_\_\_\_], may be required to purchase under the Securities Purchase Agreement, because the issuance of such shares is solely at our discretion and is subject to conditions contained in the Securities Purchase Agreement, the satisfaction of which are entirely outside of [\_\_\_\_]’s control, including the registration statement that includes this prospectus becoming and remaining effective. Furthermore, the issuances of common stock are subject to certain agreed upon maximum amount limitations set forth in the Securities Purchase Agreement. Also, the Securities Purchase Agreement prohibits us from issuing and selling any shares of our common stock to [\_\_\_\_] to the extent such shares, when aggregated with all other shares of our common stock then beneficially owned by [\_\_\_\_], would cause [\_\_\_\_]’s beneficial ownership of our common stock to exceed the 4.99% Beneficial Ownership Cap or 9.99% Beneficial Ownership Cap has been so increased.

(2) Applicable percentage ownership is based on [●] shares of our common stock outstanding as of [●], 202[●].

(3) Assumes the sale of all shares being offered pursuant to this prospectus.

(4) The business address of [\_\_\_\_] is [Address]. [\_\_\_\_]’s principal business is that of a private investor. [\_\_\_\_] is the manager [\_\_\_\_] has sole voting control and investment discretion over securities beneficially owned directly by [\_\_\_\_]. We have been advised that none of [\_\_\_\_] is a member of the Financial Industry Regulatory Authority, or FINRA, or an independent broker-dealer, or an affiliate or associated person of a FINRA member or independent broker-dealer. The foregoing should not be construed in and of itself as an admission by [\_\_\_\_] as to beneficial ownership of the securities beneficially owned directly by [\_\_\_\_].

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### PLAN OF DISTRIBUTION

The shares of common stock offered by this prospectus are being offered by the selling stockholder, [\_\_\_\_]. The shares may be sold or distributed from time to time by the selling stockholder directly to one or more purchasers or through brokers, dealers, or underwriters who may act solely as agents at market prices prevailing at the time of sale, at prices related to the prevailing market prices, at negotiated prices, or at fixed prices, which may be changed. The sale of the ordinary shares offered by this prospectus could be effected in one or more of the following methods:

- ordinary brokers’ transactions;
- transactions involving cross or block trades;
- through brokers, dealers, or underwriters who may act solely as agents;
- “at the market” into an existing market for the ordinary shares;

- in other ways not involving market makers or established business markets, including direct sales to purchasers or sales effected through agents;
- in privately negotiated transactions; or
- any combination of the foregoing.

In order to comply with the securities laws of certain states, if applicable, the shares may be sold only through registered or licensed brokers or dealers. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the state or an exemption from the state's registration or qualification requirement is available and complied with.

[ ] has informed us that it intends to use one or more registered broker-dealers to effectuate all sales, if any, of our common stock that it has acquired and may in the future acquire from us pursuant to the Purchase Agreement. Such sales will be made at prices and at terms then prevailing or at prices related to the then current market price. Each such registered broker-dealer will be an underwriter within the meaning of Section 2(a)(11) of the 1933 Act. [ ] has informed us that each such broker-dealer will receive commissions from [ ] that will not exceed customary brokerage commissions.

Brokers, dealers, underwriters or agents participating in the distribution of the shares of our common stock offered by this prospectus may receive compensation in the form of commissions, discounts, or concessions from the purchasers, for whom the broker-dealers may act as agent, of the shares sold by the selling stockholder through this prospectus. The compensation paid to any such particular broker-dealer by any such purchasers of shares of our common stock sold by the selling stockholder may be less than or in excess of customary commissions. Neither we nor the selling stockholder can presently estimate the amount of compensation that any agent will receive from any purchasers of shares of our common stock sold by the selling stockholder.

We know of no existing arrangements between the selling stockholder or any other stockholder, broker, dealer, underwriter or agent relating to the sale or distribution of the shares of our common stock offered by this prospectus.

We may from time to time file with the SEC one or more supplements to this prospectus or amendments to the registration statement of which this prospectus forms a part to amend, supplement or update information contained in this prospectus, including, if and when required under the 1933 Act, to disclose certain information relating to a particular sale of shares offered by this prospectus by the selling stockholder, including the names of any brokers, dealers, underwriters or agents participating in the distribution of such shares by the selling stockholder, any compensation paid by the selling stockholder to any such brokers, dealers, underwriters or agents, and any other required information.

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We will pay the expenses incident to the registration under the 1933 Act of the offer and sale of the shares of our common stock covered by this prospectus by the selling stockholder, and have agreed to reimburse [ ] for the fees and disbursements of its counsel incurred in connection therewith, in an amount not to exceed \$[ ]. We also have agreed to reimburse [ ] for the fees and disbursements of its counsel, payable upon execution of the Securities Purchase Agreement.

We also have agreed to indemnify [ ] and certain other persons against certain liabilities in connection with the offering of shares of our common stock offered hereby, including liabilities arising under the 1933 Act or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. [ ] has agreed to indemnify us against liabilities under the 1933 Act that may arise from certain written information furnished to us by [ ] specifically for use in this prospectus or, if such indemnity is unavailable, to contribute amounts required to be paid in respect of such liabilities. Insofar as indemnification for liabilities arising under the 1933 Act may be permitted to our directors, officers, and controlling persons, we have been advised that in the opinion of the SEC this indemnification is against public policy as expressed in the 1933 Act and is therefore, unenforceable.

We estimate that the total expenses for the offering will be approximately \$[●].

[ ] has represented to us that at no time prior to the date of the Securities Purchase Agreement has [ ] or its agents, representatives or affiliates engaged in or effected, in any manner whatsoever, directly or indirectly, any short sale (as such term is defined in Rule 200 of Regulation SHO of the 1934 Act) of our common stock or any hedging transaction, which establishes a net short position with respect to our common stock. [ ] has agreed that during the term of the Purchase Agreement, neither [ ], nor any of its agents, representatives or affiliates will enter into or effect, directly or indirectly, any of the foregoing transactions.

We have advised the selling stockholder that it is required to comply with Regulation M promulgated under the 1934 Act. With certain exceptions, Regulation M precludes the selling stockholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the securities offered by this prospectus.

This offering will terminate on the date that all shares of our common stock offered by this prospectus have been sold by the selling stockholder.

Our common stock is currently listed on The Nasdaq Capital Market under the symbol 'ONMD.'

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## SECURITY AGREEMENT

This SECURITY AGREEMENT, dated as of December 20, 2024 (this “Agreement”), is among FIREFLY NEUROSCIENCE, INC., a Delaware corporation (the “Company”), those Subsidiaries of the Company signatory hereto (such subsidiaries, the “Guarantors” and together with the Company, the “Debtors”) and the holders of the Company’s convertible promissory notes (collectively, the “Notes”) signatory hereto, their endorsees, transferees and assigns (collectively, the “Secured Parties”).

## WITNESSETH:

WHEREAS, pursuant to the Purchase Agreement, the Secured Parties have severally agreed to purchase Notes from the Company;

WHEREAS, pursuant to a certain Guarantee, dated as of the date hereof (the “Guarantee”), the Guarantors have jointly and severally agreed to guarantee and act as surety for payment of such Notes; and

WHEREAS, in order to induce the Secured Parties to purchase the Notes, each Debtor has agreed to execute and deliver to the Secured Parties this Agreement and to grant the Secured Parties, pari passu with each other Secured Party and through the Agent (as defined in Section 18 hereof), a security interest in the assets of such Debtor to secure the prompt payment, performance and discharge in full of all of the Company’s obligations under the Notes and the Guarantors’ obligations under the Guarantee.

NOW, THEREFORE, in consideration of the agreements herein contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties hereto hereby agree as follows:

1. **Certain Definitions.** As used in this Agreement, the following terms shall have the meanings set forth in this Section 1. Terms used but not otherwise defined in this Agreement that are defined in Article 9 of the UCC (such as “account”, “chattel paper”, “commercial tort claim”, “deposit account”, “document”, “equipment”, “fixtures”, “general intangibles”, “goods”, “instruments”, “inventory”, “investment property”, “letter-of-credit rights”, “proceeds” and “supporting obligations”) shall have the respective meanings given such terms in Article 9 of the UCC.

(a) “Collateral” means the collateral in which the Secured Parties are granted a security interest by this Agreement and which shall include the following personal property of the Debtors, whether presently owned or existing or hereafter acquired or coming into existence, wherever situated, and all additions and accessions thereto and all substitutions and replacements thereof, and all proceeds, products and accounts thereof, including, without limitation, all proceeds from the sale or transfer of the Collateral and of insurance covering the same and of any tort claims in connection therewith, and all dividends, interest, cash, notes, securities, equity interest or other property at any time and from time to time acquired, receivable or otherwise distributed in respect of, or in exchange for, any or all of the Pledged Securities (as defined below):

(i) All goods, including, without limitation, (A) all machinery, equipment, computers, motor vehicles, trucks, tanks, boats, ships, appliances, furniture, special and general tools, fixtures, test and quality control devices and other equipment of every kind and nature and wherever situated, together with all documents of title and documents representing the same, all additions and accessions thereto, replacements therefor, all parts therefor, and all substitutes for any of the foregoing and all other items used and useful in connection with any Debtor’s businesses and all improvements thereto; and (B) all inventory;

(ii) All contract rights and other general intangibles, including, without limitation, all partnership interests, membership interests, stock or other securities, rights under any of the Organizational Documents, agreements related to the Pledged Securities, licenses, distribution and other agreements, computer software (whether “off-the-shelf”, licensed from any third party or developed by any Debtor), computer software development rights, leases, franchises, customer lists, quality control procedures, grants and rights, goodwill, Intellectual Property and income tax refunds;

(iii) All accounts, together with all instruments, all documents of title representing any of the foregoing, all rights in any merchandising, goods, equipment, motor vehicles and trucks which any of the same may represent, and all right, title, security and guaranties with respect to each account, including any right of stoppage in transit;

(iv) All documents, letter-of-credit rights, instruments and chattel paper;

(v) All commercial tort claims;

(vi) All deposit accounts and all cash (whether or not deposited in such deposit accounts);

(vii) All investment property;

(viii) All supporting obligations; and

(ix) All files, records, books of account, business papers, and computer programs; and

(x) the products and proceeds of all of the foregoing Collateral set forth in clauses (i)-(ix) above.

Without limiting the generality of the foregoing, the “Collateral” shall include all investment property and general intangibles respecting ownership and/or other equity interests in each Guarantor, including, without limitation, the shares of capital stock and the other equity interests listed on Schedule H hereto (as the same may be modified from time to time pursuant to the terms hereof), and any other shares of capital stock and/or other equity interests of any other direct or indirect subsidiary of any Debtor obtained in the future, and, in each case, all certificates representing such shares and/or equity interests and, in each case, all rights, options, warrants, stock, other securities and/or equity interests that may hereafter be received, receivable or distributed in respect of, or exchanged for, any of the foregoing and all rights arising under or in connection with the Pledged Securities, including, but not limited to, all dividends, interest and cash.

Notwithstanding the foregoing, nothing herein shall be deemed to constitute an assignment of any asset which, in the event of an assignment, becomes void by operation of applicable law or the assignment of which is otherwise prohibited by applicable law (in each case to the extent that such applicable law is not overridden by Sections 9-406, 9-407 and/or 9-408 of the UCC or other similar applicable law); provided, however, that to the extent permitted by applicable law, this Agreement shall create a valid security interest in such asset and, to the extent permitted by applicable law, this Agreement shall create a valid security interest in the proceeds of such

asset.

(b) “Events of Default” shall have the meaning ascribed to such term in Section 6.

(c) “Intellectual Property” means the collective reference to all rights, priorities and privileges relating to intellectual property, whether arising under United States, multinational or foreign laws or otherwise, including, without limitation, (i) all copyrights arising under the laws of the United States, any other country or any political subdivision thereof, whether registered or unregistered and whether published or unpublished, all registrations and recordings thereof, and all applications in connection therewith, including, without limitation, all registrations, recordings and applications in the United States Copyright Office, (ii) all letters patent of the United States, any other country or any political subdivision thereof, all reissues and extensions thereof, and all applications for letters patent of the United States or any other country and all divisions, continuations and continuations-in-part thereof, (iii) all trademarks, trade names, corporate names, company names, business names, fictitious business names, trade dress, service marks, logos, domain names and other source or business identifiers, and all goodwill associated therewith, now existing or hereafter adopted or acquired, all registrations and recordings thereof, and all applications in connection therewith, whether in the United States Patent and Trademark Office or in any similar office or agency of the United States, any State thereof or any other country or any political subdivision thereof, or otherwise, and all common law rights related thereto, (iv) all trade secrets arising under the laws of the United States, any other country or any political subdivision thereof, (v) all rights to obtain any reissues, renewals or extensions of the foregoing, (vi) all licenses for any of the foregoing, and (vii) all causes of action for infringement of the foregoing.

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(d) “Necessary Endorsement” means undated stock powers endorsed in blank or other proper instruments of assignment duly executed and such other instruments or documents as the Agent (as that term is defined below) may reasonably request.

(d) “Obligations” means all of the liabilities and obligations (primary, secondary, direct, contingent, sole, joint or several) due or to become due, or that are now or may be hereafter contracted or acquired, or owing to, of any Debtor to the Secured Parties, including, without limitation, all obligations under this Agreement, the Notes, the Guarantee and any other instruments, agreements or other documents executed and/or delivered in connection herewith or therewith, in each case, whether now or hereafter existing, voluntary or involuntary, direct or indirect, absolute or contingent, liquidated or unliquidated, whether or not jointly owed with others, and whether or not from time to time decreased or extinguished and later increased, created or incurred, and all or any portion of such obligations or liabilities that are paid, to the extent all or any part of such payment is avoided or recovered directly or indirectly from any of the Secured Parties as a preference, fraudulent transfer or otherwise as such obligations may be amended, supplemented, converted, extended or modified from time to time. Without limiting the generality of the foregoing, the term “Obligations” shall include, without limitation: (i) principal of, and interest on the Notes and the loans extended pursuant thereto; (ii) any and all other fees, indemnities, costs, obligations and liabilities of the Debtors from time to time under or in connection with this Agreement, the Notes, the Guarantee and any other instruments, agreements or other documents executed and/or delivered in connection herewith or therewith; and (iii) all amounts (including but not limited to post-petition interest) in respect of the foregoing that would be payable but for the fact that the obligations to pay such amounts are unenforceable or not allowable due to the existence of a bankruptcy, reorganization or similar proceeding involving any Debtor.

(e) “Organizational Documents” means with respect to any Debtor, the documents by which such Debtor was organized (such as a certificate of incorporation, certificate of limited partnership or articles of organization, and including, without limitation, any certificates of designation for preferred stock or other forms of preferred equity) and which relate to the internal governance of such Debtor (such as bylaws, a partnership agreement or an operating, limited liability or members agreement).

(f) “Person” shall have the meaning ascribed to such term in the Purchase Agreement.

(g) “Pledged Interests” shall have the meaning ascribed to such term in Section 4(j).

(h) “Pledged Securities” shall have the meaning ascribed to such term in Section 4(i).

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(i) “Purchase Agreement” means that certain Securities Purchase Agreement, dated as of the date hereof, among the Company, and the Secured Parties, as amended, restated or supplemented from time to time.

(j) “UCC” means the Uniform Commercial Code of the State of Delaware and or any other applicable law of any state or states which has jurisdiction with respect to all, or any portion of, the Collateral or this Agreement, from time to time. It is the intent of the parties that defined terms in the UCC should be construed in their broadest sense so that the term “Collateral” will be construed in its broadest sense. Accordingly, if there are, from time to time, changes to defined terms in the UCC that broaden the definitions, they are incorporated herein and if existing definitions in the UCC are broader than the amended definitions, the existing ones shall be controlling.

(k) “Requisite Holders” shall have the meaning ascribed to such term in the Purchase Agreement.

(l) “Transaction Documents” shall have the meaning ascribed to such term in the Purchase Agreement.

**2. Grant of Security Interest in Collateral.** As an inducement for the Secured Parties to purchase the Notes and to secure the complete and timely payment, performance and discharge in full, as the case may be, of all of the Obligations, each Debtor hereby unconditionally and irrevocably pledges, grants and hypothecates to the Secured Parties a security interest in and to, a lien upon and a right of set-off against all of their respective right, title and interest of whatsoever kind and nature in and to, the Collateral (a “Security Interest” and, collectively, the “Security Interests”).

**3. Delivery of Certain Collateral.** Contemporaneously or prior to the execution of this Agreement, each Debtor shall deliver or cause to be delivered to the Agent (a) any and all certificates and other instruments representing or evidencing the Pledged Securities, and (b) any and all certificates and other instruments or documents representing any of the other Collateral, in each case, together with all Necessary Endorsements. The Debtors are, contemporaneously with the execution hereof, delivering to Agent, or have previously delivered to Agent, a true and correct copy of each Organizational Document governing any of the Pledged Securities.

**4. Representations, Warranties, Covenants and Agreements of the Debtors.** Except as set forth under the corresponding section of the disclosure schedules delivered to the Secured Parties concurrently herewith (the “Disclosure Schedules”), which Disclosure Schedules shall be deemed a part hereof, each Debtor represents and warrants to, and covenants and agrees with, the Secured Parties as follows:

(a) Each Debtor has the requisite corporate, partnership, limited liability company or other power and authority to enter into this Agreement and otherwise to carry out its obligations hereunder. The execution, delivery and performance by each Debtor of this Agreement and the filings contemplated therein have been duly authorized by all necessary action on the part of such Debtor. This Agreement has been duly executed by each Debtor. This Agreement constitutes the legal, valid and

(b) The Debtors have no place of business or offices where their respective books of account and records are kept (other than temporarily at the offices of its attorneys or accountants) or places where Collateral is stored or located, except as set forth on Schedule A attached hereto. As specifically set forth on Schedule A, the Debtors lease the property where the Collateral is located. Except as disclosed on Schedule A, none of such Collateral is in the possession of any consignee, bailee, warehouseman, agent or processor.

(c) Except as set forth on Schedule B attached hereto, the Debtors are the sole owners of the Collateral (except for non-exclusive licenses granted by or to any Debtor in the ordinary course of business), free and clear of any liens, security interests, encumbrances, rights or claims, and are fully authorized to grant the Security Interests. Except as set forth on Schedule C attached hereto, there is not on file in any governmental or regulatory authority, agency or recording office an effective financing statement, security agreement, license or transfer or any notice of any of the foregoing (other than those that will be filed in favor of the Secured Parties pursuant to this Agreement) covering or affecting any of the Collateral. Except as set forth on Schedule C attached hereto and except pursuant to this Agreement, as long as this Agreement shall be in effect, the Debtors shall not execute and shall not knowingly permit to be on file in any such office or agency any other financing statement or other document or instrument (except to the extent filed or recorded in favor of the Secured Parties pursuant to the terms of this Agreement).

(d) No written claim has been received by or to the knowledge of any Debtor that any Collateral or any Debtor's use of any Collateral violates the rights of any third party. There has been no adverse decision to any Debtor's claim of ownership rights in or exclusive rights to use the Collateral in any jurisdiction or to any Debtor's right to keep and maintain such Collateral in full force and effect, and there is no proceeding involving said rights pending or, to the best knowledge of any Debtor, threatened before any court, judicial body, administrative or regulatory agency, arbitrator or other governmental authority.

(e) Each Debtor shall at all times maintain its books of account and records relating to the Collateral at its principal place of business and its Collateral at the locations set forth on Schedule A attached hereto and may not relocate such books of account and records or tangible Collateral unless it delivers to the Secured Parties at least 5 days prior to such relocation (i) written notice of such relocation and the new location thereof (which must be within the United States) and (ii) evidence that appropriate financing statements under the UCC and other necessary documents have been filed and recorded and other steps have been taken to perfect the Security Interests to create in favor of the Secured Parties a valid, perfected and continuing perfected first priority lien in the Collateral.

(f) This Agreement creates in favor of the Secured Parties a valid security interest in the Collateral securing the payment and performance of the Obligations. Upon making the filings described in the immediately following paragraph, all security interests created hereunder in any Collateral which may be perfected by filing Uniform Commercial Code financing statements shall have been duly perfected. Except for the filing of the Uniform Commercial Code financing statements referred to in the immediately following paragraph, the recordation of the Intellectual Property Security Agreement (as defined in Section 4(p) hereof) with respect to copyrights and copyright applications in the United States Copyright Office referred to in paragraph (m), the execution and delivery of deposit account control agreements satisfying the requirements of Section 9-104(a)(2) of the UCC with respect to each deposit account of the Debtors, and the delivery of the certificates and other instruments provided in Section 3), no action is necessary to create, perfect or protect the security interests created hereunder. Without limiting the generality of the foregoing, except for the filing of said financing statements, the recordation of said Intellectual Property Security Agreement, and the execution and delivery of said deposit account control agreements, no consent of any third parties and no authorization, approval or other action by, and no notice to or filing with, any governmental authority or regulatory body is required for (i) the execution, delivery and performance of this Agreement, (ii) the creation or perfection of the Security Interests created hereunder in the Collateral or (iii) the enforcement of the rights of the Agent and the Secured Parties hereunder.

(g) Each Debtor hereby authorizes the Agent to file one or more financing statements under the UCC, with respect to the Security Interests, with the proper filing and recording agencies in any jurisdiction deemed proper by it.

(h) The execution, delivery and performance of this Agreement by the Debtors does not (i) violate any of the provisions of any Organizational Documents of any Debtor or any judgment, decree, order or award of any court, governmental body or arbitrator or any applicable law, rule or regulation applicable to any Debtor or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing any Debtor's debt or otherwise) or other understanding to which any Debtor is a party or by which any property or asset of any Debtor is bound or affected. If any, all required consents (including, without limitation, from stockholders or creditors of any Debtor) necessary for any Debtor to enter into and perform its obligations hereunder have been obtained.

(i) The capital stock and other equity interests listed on Schedule H hereto (the "Pledged Securities") represent all of the capital stock and other equity interests of the Guarantors owned by the Company, and represent all capital stock and other equity interests owned, directly or indirectly, by the Company. All of the Pledged Securities are validly issued, fully paid and nonassessable, and the Company is the legal and beneficial owner of the Pledged Securities, free and clear of any lien, security interest or other encumbrance except for the security interests created by this Agreement.

(j) The ownership and other equity interests in partnerships and limited liability companies (if any) included in the Collateral (the "Pledged Interests") by their express terms do not provide that they are securities governed by Article 8 of the UCC and are not held in a securities account or by any financial intermediary.

(k) Each Debtor shall at all times maintain the liens and Security Interests provided for hereunder as valid and perfected first priority liens and security interests in the Collateral in favor of the Secured Parties until this Agreement and the Security Interest hereunder shall be terminated pursuant to Section 14 hereof. Each Debtor hereby agrees to defend the same against the claims of any and all persons and entities. Each Debtor shall safeguard and protect all Collateral for the account of the Secured Parties. At the request of the Agent, each Debtor will sign and deliver to the Agent on behalf of the Secured Parties at any time or from time to time one or more financing statements pursuant to the UCC in form reasonably satisfactory to the Agent and will pay the cost of filing the same in all public offices wherever filing is, or is deemed by the Agent to be, necessary or desirable to effect the rights and obligations provided for herein. Without limiting the generality of the foregoing, each Debtor shall pay all fees, taxes and other amounts necessary to maintain the Collateral and the Security Interests hereunder, and each Debtor shall obtain and furnish to the Agent from time to time, upon demand, such releases and/or subordinations of claims and liens which may be required to maintain the priority of the Security Interests

hereunder.

(l) No Debtor will transfer, pledge, hypothecate, encumber, license, sell or otherwise dispose of any of the Collateral (except for non-exclusive licenses granted by a Debtor in its ordinary course of business and sales of inventory by a Debtor in its ordinary course of business and transfers between Debtors) without the prior written consent of the Requisite Holders.

(m) Each Debtor shall keep and preserve its equipment, inventory and other tangible Collateral in good condition, repair and order (ordinary wear excepted) and shall not operate or locate any such Collateral (or cause to be operated or located) in any area excluded from insurance coverage.

(n) Each Debtor shall maintain with financially sound and reputable insurers, insurance with respect to the Collateral, including Collateral hereafter acquired, against loss or damage of the kinds and in the amounts customarily insured against by entities of established reputation having similar properties similarly situated and in such amounts as are customarily carried under similar circumstances by other such entities and otherwise as is prudent for entities engaged in similar businesses but in any event sufficient to cover the full replacement cost thereof. Each Debtor shall cause each insurance policy issued in connection herewith to provide, and the insurer issuing such policy to certify to the Agent, that (a) the Agent will be named as lender loss payee and additional insured under each such insurance policy; (b) if such insurance be proposed to be cancelled or materially changed for any reason whatsoever, such insurer will promptly notify the Agent and such cancellation or change shall not be effective as to the Agent for at least thirty (30) days after receipt by the Agent of such notice, unless the effect of such change is to extend or increase coverage under the policy; and (c) the Agent will have the right (but no obligation) at its election to remedy any default in the payment of premiums within thirty (30) days of notice from the insurer of such default. If no Event of Default exists and if the proceeds arising out of any claim or series of related claims do not exceed \$100,000, loss payments in each instance will be applied by the applicable Debtor to the repair and/or replacement of property with respect to which the loss was incurred to the extent reasonably feasible, and any loss payments or the balance thereof remaining, to the extent not so applied, shall be payable to the applicable Debtor; provided, however, that payments received by any Debtor after an Event of Default occurs and is continuing or in excess of \$100,000 for any occurrence or series of related occurrences shall be paid to the Agent on behalf of the Secured Parties and, if received by such Debtor, shall be held in trust for the Secured Parties and immediately paid over to the Agent unless otherwise directed in writing by the Agent. Copies of such policies or the related certificates, in each case, naming the Agent as lender loss payee and additional insured shall be delivered to the Agent at least annually and at the time any new policy of insurance is issued.

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(o) Each Debtor shall, within seven (7) business days of obtaining knowledge thereof, advise the Secured Parties promptly, in sufficient detail, of any material adverse change in the Collateral, and of the occurrence of any event which would have a material adverse effect on the value of the Collateral or on the Secured Parties' security interest, through the Agent, therein.

(p) Each Debtor shall promptly execute and deliver to the Agent such further deeds, mortgages, assignments, security agreements, financing statements or other instruments, documents, certificates and assurances and take such further action as the Agent may from time to time request and may in its reasonable discretion deem necessary to perfect, protect or enforce the Secured Parties' security interest in the Collateral including, without limitation, if applicable, the execution and delivery of a separate security agreement with respect to each Debtor's Intellectual Property ("Intellectual Property Security Agreement") in which the Secured Parties have been granted a security interest hereunder, substantially in a form reasonably acceptable to the Agent, which Intellectual Property Security Agreement, other than as stated therein, shall be subject to all of the terms and conditions hereof.

(q) Each Debtor shall, following and during the continuance of an Event of Default, permit the Agent and its representatives and agents to inspect the Collateral during normal business hours and upon reasonable prior notice, and to make copies of records pertaining to the Collateral as may be reasonably requested by the Agent from time to time.

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(r) Each Debtor shall take all steps reasonably necessary to diligently pursue and seek to preserve, enforce and collect any rights, claims, causes of action and accounts receivable in respect of the Collateral.

(s) Each Debtor shall promptly notify the Secured Parties in sufficient detail upon becoming aware of any attachment, garnishment, execution or other legal process levied against any material portion of the Collateral and of any other information received by such Debtor that may materially affect the value of the Collateral, the Security Interest or the rights and remedies of the Secured Parties hereunder.

(t) All information heretofore, herein or hereafter supplied to the Secured Parties by or on behalf of any Debtor with respect to the Collateral is accurate and complete in all material respects as of the date furnished.

(u) The Debtors shall at all times preserve and keep in full force and effect their respective valid existence and good standing and any rights and franchises material to its business.

(v) No Debtor will change its name, type of organization, jurisdiction of organization, organizational identification number (if it has one), legal or corporate structure, or identity, or add any new fictitious name unless it provides at least 10 Business Days prior written notice to the Secured Parties of such change and, at the time of such written notification, such Debtor provides any financing statements or fixture filings necessary to perfect and continue the perfection of the Security Interests granted and evidenced by this Agreement.

(w) Except in the ordinary course of business, no Debtor may consign any of its inventory or sell any of its inventory on bill and hold, sale or return, sale on approval, or other conditional terms of sale without the consent of the Agent which shall not be unreasonably withheld.

(x) No Debtor may relocate its chief executive office to a new location without providing 30 days prior written notification thereof to the Secured Parties and so long as, at the time of such written notification, such Debtor provides any financing statements or fixture filings necessary to perfect and continue the perfection of the Security Interests granted and evidenced by this Agreement.

(y) Each Debtor was organized and remains organized solely under the laws of the state set forth next to such Debtor's name in Schedule D attached hereto, which Schedule D sets forth each Debtor's organizational identification number or, if any Debtor does not have one, states that one does not exist.

(z) (i) The actual name of each Debtor is the name set forth in Schedule D attached hereto; (ii) no Debtor has any trade names except as set forth on Schedule E attached hereto; (iii) no Debtor has used any name other than that stated in the preamble hereto or as set forth on Schedule E for the preceding five years; and (iv) no entity has merged into any Debtor or been acquired by any Debtor within the past five years except as set forth on Schedule E.

(aa) At any time and from time to time that any Collateral consists of instruments, certificated securities or other items that require or permit possession by the secured party to perfect the security interest created hereby, the applicable Debtor shall deliver such Collateral to the Agent.

(bb) Each Debtor, in its capacity as issuer, hereby agrees to comply with any and all orders and instructions of Agent regarding the Pledged Interests consistent with the terms of this Agreement without the further consent of any Debtor as contemplated by Section 8-106 (or any successor section) of the UCC. Further, each Debtor agrees that it shall not enter into a similar agreement (or one that would confer "control" within the meaning of Article 8 of the UCC) with any other person or entity.

(cc) Each Debtor shall cause all tangible chattel paper constituting Collateral to be delivered to the Agent, or, if such delivery is not possible, then to cause such tangible chattel paper to contain a legend noting that it is subject to the security interest created by this Agreement. To the extent that any Collateral consists of electronic chattel paper, the applicable Debtor shall cause the underlying chattel paper to be "marked" within the meaning of Section 9-105 of the UCC (or successor section thereto).

(dd) If there is any investment property or deposit account included as Collateral that can be perfected by "control" through an account control agreement, the applicable Debtor shall cause such an account control agreement, in form and substance in each case satisfactory to the Agent, to be entered into and delivered to the Agent for the benefit of the Secured Parties following the date hereof upon the request of the Agent.

(ee) To the extent that any Collateral consists of letter-of-credit rights, the applicable Debtor shall cause the issuer of each underlying letter of credit to consent to an assignment of the proceeds thereof to the Secured Parties.

(ff) To the extent that any Collateral is in the possession of any third party, the applicable Debtor shall join with the Agent in notifying such third party of the Secured Parties' security interest in such Collateral and shall use its best efforts to obtain an acknowledgement and agreement from such third party with respect to the Collateral, in form and substance reasonably satisfactory to the Agent.

(gg) If any Debtor shall at any time hold or acquire a commercial tort claim, such Debtor shall promptly notify the Secured Parties in a writing signed by such Debtor of the particulars thereof and grant to the Secured Parties in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance satisfactory to the Agent.

(hh) Each Debtor shall promptly provide written notice to the Secured Parties of any and all accounts which arise out of contracts with any governmental authority and, to the extent necessary to perfect or continue the perfected status of the Security Interests in such accounts and proceeds thereof, shall execute and deliver to the Agent an assignment of claims for such accounts and cooperate with the Agent in taking any other steps required, in its judgment, under the Federal Assignment of Claims Act or any similar federal, state or local statute or rule to perfect or continue the perfected status of the Security Interests in such accounts and proceeds thereof.

(ii) As soon as reasonably practicable, each Debtor shall cause each newly-acquired or newly-formed subsidiary of such Debtor to become a party hereto (an "Additional Debtor"), by executing and delivering an Additional Debtor Joinder in substantially the form of Annex A attached hereto and comply with the provisions hereof applicable to the Debtors. Concurrent therewith, the Additional Debtor shall deliver replacement schedules for, or supplements to all other Schedules to (or referred to in) this Agreement, as applicable, which replacement schedules shall supersede, or supplements shall modify, the Schedules then in effect. The Additional Debtor shall also deliver such authorizing resolutions, good standing certificates, incumbency certificates, organizational documents, financing statements and other information and documentation as the Agent may reasonably request. Upon delivery of the foregoing to the Agent, the Additional Debtor shall be and become a party to this Agreement with the same rights and obligations as the Debtors, for all purposes hereof as fully and to the same extent as if it were an original signatory hereto and shall be deemed to have made the representations, warranties and covenants set forth herein as of the date of execution and delivery of such Additional Debtor Joinder, and all references herein to the "Debtors" shall be deemed to include each Additional Debtor.

(jj) Each Debtor shall vote the Pledged Securities to comply with the covenants and agreements set forth herein and in the Notes.

(kk) Each Debtor shall register the pledge of the applicable Pledged Securities on the books of such Debtor. Each Debtor shall notify each issuer of Pledged Securities to register the pledge of the applicable Pledged Securities in the name of the Secured Parties on the books of such issuer. Further, except with respect to certificated securities delivered to the Agent, the applicable Debtor shall deliver to Agent an acknowledgement of pledge (which, where appropriate, shall comply with the requirements of the relevant UCC with respect to perfection by registration) signed by the issuer of the applicable Pledged Securities, which acknowledgement shall confirm that: (a) it has registered the pledge on its books and records; and (b) at any time directed by Agent during the continuation of an Event of Default, such issuer will transfer the record ownership of such Pledged Securities into the name of any designee of Agent, will take such steps as may be necessary to effect the transfer, and will comply with all other instructions of Agent regarding such Pledged Securities without the further consent of the applicable Debtor.

(ll) In the event that, upon an occurrence of an Event of Default, Agent shall sell all or any of the Pledged Securities to another party or parties (herein called the "Transferee") or shall purchase or retain all or any of the Pledged Securities, each Debtor shall, to the extent applicable: (i) deliver to Agent or the Transferee, as the case may be, the articles of incorporation, bylaws, minute books, stock certificate books, corporate seals, deeds, leases, indentures, agreements, evidences of indebtedness, books of account, financial records and all other Organizational Documents and records of the Debtors and their direct and indirect subsidiaries; (ii) use its best efforts to obtain resignations of the persons then serving as officers and directors of the Debtors and their direct and indirect subsidiaries, if so requested; and (iii) use its best efforts to obtain any approvals that are required by any governmental or regulatory body in order to permit the sale of the Pledged Securities to the Transferee or the purchase or retention of the Pledged Securities by Agent and allow the Transferee or Agent to continue the business of the Debtors and their direct and indirect subsidiaries.

(mm) Without limiting the generality of the other obligations of the Debtors hereunder, each Debtor shall promptly (i) cause to be registered at the United States Copyright Office all of its material copyrights, (ii) cause the security interest contemplated hereby with respect to all Intellectual Property registered at the United States Copyright Office or United States Patent and Trademark Office to be duly recorded at the applicable office, and (iii) give the Agent notice whenever it acquires (whether absolutely or by license) or creates any additional material Intellectual Property.

(nn) Each Debtor will from time to time, at the joint and several expense of the Debtors, promptly execute and deliver all such further instruments and

documents, and take all such further action as may be necessary or desirable, or as the Agent may reasonably request, in order to perfect and protect any security interest granted or purported to be granted hereby or to enable the Secured Parties to exercise and enforce their rights and remedies hereunder and with respect to any Collateral or to otherwise carry out the purposes of this Agreement.

(oo) Schedule F attached hereto lists all of the patents, patent applications, trademarks, trademark applications, registered copyrights, and domain names owned by any of the Debtors as of the date hereof. Schedule F lists all material licenses in favor of any Debtor for the use of any patents, trademarks, copyrights and domain names as of the date hereof. All material patents and trademarks of the Debtors have been duly recorded at the United States Patent and Trademark Office and all material copyrights of the Debtors have been duly recorded at the United States Copyright Office.

(pp) Except as set forth on Schedule G attached hereto, none of the account debtors or other persons or entities obligated on any of the Collateral is a governmental authority covered by the Federal Assignment of Claims Act or any similar federal, state or local statute or rule in respect of such Collateral.

(qq) Until the Obligations shall have been paid and performed in full, the Company covenants that it shall promptly direct any direct or indirect subsidiary of the Company formed or acquired after the date hereof to enter into a Guarantee in favor of the Secured Party, in the form of Exhibit E to the Purchase Agreement.

**5. Effect of Pledge on Certain Rights.** If any of the Collateral subject to this Agreement consists of nonvoting equity or ownership interests (regardless of class, designation, preference or rights) that may be converted into voting equity or ownership interests upon the occurrence of certain events (including, without limitation, upon the transfer of all or any of the other stock or assets of the issuer), it is agreed that the pledge of such equity or ownership interests pursuant to this Agreement or the enforcement of any of Agent's rights hereunder shall not be deemed to be the type of event which would trigger such conversion rights notwithstanding any provisions in the Organizational Documents or agreements to which any Debtor is subject or to which any Debtor is party.

**6. Defaults.** The following events shall be "Events of Default":

(a) The occurrence of an Event of Default (as defined in the Notes) under the Notes;

(b) Any representation or warranty of any Debtor in this Agreement shall prove to have been incorrect in any material respect when made;

(c) The failure by any Debtor to observe or perform any of its obligations hereunder for ten (10) business days after delivery to such Debtor of notice of such failure by or on behalf of a Secured Party unless such default is capable of cure but cannot be cured within such time frame and such Debtor is using best efforts to cure same in a timely fashion; or

(d) If any material provision of this Agreement shall at any time for any reason be declared to be null and void, or the validity or enforceability thereof shall be contested by any Debtor, or a proceeding shall be commenced by and Debtor, or by any governmental authority having jurisdiction over any Debtor, seeking to establish the invalidity or unenforceability thereof, or any Debtor shall deny that any Debtor has any liability or obligation purported to be created under this Agreement.

#### **7. Duty To Hold In Trust**

(a) Upon the occurrence of any Event of Default and at any time thereafter, each Debtor shall, upon receipt of any revenue, income, dividend, interest or other sums subject to the Security Interests, whether payable pursuant to the Notes or otherwise, or of any check, draft, note, trade acceptance or other instrument evidencing an obligation to pay any such sum, hold the same in trust for the Secured Parties and shall forthwith endorse and transfer any such sums or instruments, or both, to the Secured Parties, pro-rata in proportion to their respective then-currently outstanding principal amount of Notes for application to the satisfaction of the Obligations (and if any Note is not outstanding, pro-rata in proportion to the initial purchases of the remaining Notes).

(b) If any Debtor shall become entitled to receive or shall receive any securities or other property (including, without limitation, shares of Pledged Securities or instruments representing Pledged Securities acquired after the date hereof, or any options, warrants, rights or other similar property or certificates representing a dividend, or any distribution in connection with any recapitalization, reclassification or increase or reduction of capital, or issued in connection with any reorganization of such Debtor or any of its direct or indirect subsidiaries) in respect of the Pledged Securities (whether as an addition to, in substitution of, or in exchange for, such Pledged Securities or otherwise), such Debtor agrees to (i) accept the same as the agent of the Secured Parties; (ii) hold the same in trust on behalf of and for the benefit of the Secured Parties; and (iii) to deliver any and all certificates or instruments evidencing the same to Agent on or before the close of business on the fifth (5<sup>th</sup>) business day following the receipt thereof by such Debtor, in the exact form received together with the Necessary Endorsements, to be held by Agent subject to the terms of this Agreement as Collateral.

#### **8. Rights and Remedies Upon Default**

(a) Upon the occurrence of any Event of Default and at any time thereafter, the Secured Parties, acting through the Agent, shall have the right to exercise all of the remedies conferred hereunder and under the Notes, and the Secured Parties shall have all the rights and remedies of a secured party under the UCC. Without limitation, the Agent, for the benefit of the Secured Parties, shall have the following rights and powers:

(i) The Agent shall have the right to take possession of the Collateral and, for that purpose, enter, with the aid and assistance of any person, any premises where the Collateral, or any part thereof, is or may be placed and remove the same, and each Debtor shall assemble the Collateral and make it available to the Agent at places which the Agent shall reasonably select, whether at such Debtor's premises or elsewhere, and make available to the Agent, without rent, all of such Debtor's respective premises and facilities for the purpose of the Agent taking possession of, removing or putting the Collateral in saleable or disposable form.

(ii) Upon notice to the Debtors by Agent, all rights of each Debtor to exercise the voting and other consensual rights which it would otherwise be entitled to exercise and all rights of each Debtor to receive the dividends and interest which it would otherwise be authorized to receive and retain, shall cease. Upon such notice, Agent shall have the right to receive, for the benefit of the Secured Parties, any interest, cash dividends or other payments on the Collateral and, at the option of Agent, to exercise in such Agent's discretion all voting rights pertaining thereto. Without limiting the generality of the foregoing, Agent shall have the right (but not the obligation) to exercise all rights with respect to the Collateral as it were the sole and absolute owner thereof, including, without limitation, to vote and/or to exchange, at its sole discretion, any or all of the Collateral in connection with a merger, reorganization, consolidation, recapitalization or other readjustment concerning or involving the Collateral or any Debtor or any of its direct or indirect subsidiaries.

(iii) The Agent shall have the right to operate the business of each Debtor using the Collateral and shall have the right to assign, sell, lease or otherwise dispose of and deliver all or any part of the Collateral, at public or private sale or otherwise, either with or without special conditions or stipulations, for cash or on credit or for future delivery, in such parcel or parcels and at such time or times and at such place or places, and upon such terms and conditions as the Agent may deem commercially reasonable, all without (except as shall be required by applicable statute and cannot be waived) advertisement or demand upon or notice to any Debtor or right of redemption of a Debtor, which are hereby expressly waived. Upon each such sale, lease, assignment or other transfer of Collateral, the Agent, for the benefit of the Secured Parties, may, unless prohibited by applicable law which cannot be waived, purchase all or any part of the Collateral being sold, free from and discharged of all trusts, claims, right of redemption and equities of any Debtor, which are hereby waived and released.

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(iv) The Agent shall have the right (but not the obligation) to notify any account debtors and any obligors under instruments or accounts to make payments directly to the Agent, on behalf of the Secured Parties, and to enforce the Debtors' rights against such account debtors and obligors.

(v) The Agent, for the benefit of the Secured Parties, may (but is not obligated to) direct any financial intermediary or any other person or entity holding any investment property to transfer the same to the Agent, on behalf of the Secured Parties, or its designee.

(vi) The Agent may (but is not obligated to) transfer any or all Intellectual Property registered in the name of any Debtor at the United States Patent and Trademark Office and/or Copyright Office into the name of the Secured Parties or any designee or any purchaser of any Collateral.

(b) The Agent shall comply with any applicable law in connection with a disposition of Collateral and such compliance will not be considered adversely to affect the commercial reasonableness of any sale of the Collateral. The Agent may sell the Collateral without giving any warranties and may specifically disclaim such warranties. If the Agent sells any of the Collateral on credit, the Debtors will only be credited with payments actually made by the purchaser. In addition, each Debtor waives any and all rights that it may have to a judicial hearing in advance of the enforcement of any of the Agent's rights and remedies hereunder, including, without limitation, its right following an Event of Default to take immediate possession of the Collateral and to exercise its rights and remedies with respect thereto.

(c) For the purpose of enabling the Agent to further exercise rights and remedies under this Section 8 or elsewhere provided by agreement or applicable law, each Debtor hereby grants to the Agent, for the benefit of the Agent and the Secured Parties, an irrevocable, nonexclusive license (exercisable without payment of royalty or other compensation to such Debtor) to use, license or sublicense following an Event of Default, any Intellectual Property now owned or hereafter acquired by such Debtor, and wherever the same may be located, and including in such license access to all media in which any of the licensed items may be recorded or stored and to all computer software and programs used for the compilation or printout thereof.

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**9. Applications of Proceeds.** The proceeds of any such sale, lease or other disposition of the Collateral hereunder or from payments made on account of any insurance policy insuring any portion of the Collateral shall be applied first, to the expenses of retaking, holding, storing, processing and preparing for sale, selling, and the like (including, without limitation, any taxes, fees and other costs incurred in connection therewith) of the Collateral, to the reasonable attorneys' fees and expenses incurred by the Agent in enforcing the Secured Parties' rights hereunder and in connection with collecting, storing and disposing of the Collateral, and then to satisfaction of the Obligations pro rata among the Secured Parties (based on then-outstanding principal amounts of Notes at the time of any such determination), and to the payment of any other amounts required by applicable law, after which the Secured Parties shall pay to the applicable Debtor any surplus proceeds. If, upon the sale, license or other disposition of the Collateral, the proceeds thereof are insufficient to pay all amounts to which the Secured Parties are legally entitled, the Debtors will be liable for the deficiency, together with interest thereon, at the rate of 18% per annum or the lesser amount permitted by applicable law (the "Default Rate"), and the reasonable fees of any attorneys employed by the Secured Parties to collect such deficiency. To the extent permitted by applicable law, each Debtor waives all claims, damages and demands against the Secured Parties arising out of the repossession, removal, retention or sale of the Collateral, unless due solely to the gross negligence or willful misconduct of the Secured Parties as determined by a final judgment (not subject to further appeal) of a court of competent jurisdiction.

**10. Securities Law Provision.** Each Debtor recognizes that Agent may be limited in its ability to effect a sale to the public of all or part of the Pledged Securities by reason of certain prohibitions in the Securities Act of 1933, as amended, or other federal or state securities laws (collectively, the "Securities Laws"), and may be compelled to resort to one or more sales to a restricted group of purchasers who may be required to agree to acquire the Pledged Securities for their own account, for investment and not with a view to the distribution or resale thereof. Each Debtor agrees that sales so made may be at prices and on terms less favorable than if the Pledged Securities were sold to the public, and that Agent has no obligation to delay the sale of any Pledged Securities for the period of time necessary to register the Pledged Securities for sale to the public under the Securities Laws. Each Debtor shall cooperate with Agent in its attempt to satisfy any requirements under the Securities Laws (including, without limitation, registration thereunder if requested by Agent) applicable to the sale of the Pledged Securities by Agent.

**11. Costs and Expenses.** Each Debtor agrees to pay all reasonable out-of-pocket fees, costs and expenses incurred in connection with any filing required hereunder, including without limitation, any financing statements pursuant to the UCC, continuation statements, partial releases and/or termination statements related thereto or any expenses of any searches reasonably required by the Agent. The Debtors shall also pay all other claims and charges which in the reasonable commercial judgment of the Agent is reasonably likely to prejudice, imperil or otherwise affect the Collateral or the Security Interests therein. The Debtors will also, upon demand, pay to the Agent the amount of any and all reasonable expenses, including the reasonable fees and expenses of its counsel and of any experts and agents, which the Agent, for the benefit of the Secured Parties, may incur in connection with the creation, perfection, protection, satisfaction, foreclosure, collection or enforcement of the Security Interest and the preparation, administration, continuance, amendment or enforcement of this Agreement and pay to the Agent the amount of any and all reasonable expenses, including the reasonable fees and expenses of its counsel and of any experts and agents, which the Agent, for the benefit of the Secured Parties, and the Secured Parties may incur in connection with (i) the enforcement of this Agreement, (ii) the custody or preservation of, or the sale of, collection from, or other realization upon, any of the Collateral, or (iii) the exercise or enforcement of any of the rights of the Secured Parties under the Notes. Until so paid, any fees payable hereunder shall be added to the principal amount of the Notes and shall bear interest at the Default Rate.

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**12. Responsibility for Collateral.** The Debtors assume all liabilities and responsibility in connection with all Collateral, and the Obligations shall in no way be affected or diminished by reason of the loss, destruction, damage or theft of any of the Collateral or its unavailability for any reason. Without limiting the generality of the foregoing, (a) neither the Agent nor any Secured Party (i) has any duty (either before or after an Event of Default) to collect any amounts in respect of the Collateral or to preserve any rights relating to the Collateral, or (ii) has any obligation to clean-up or otherwise prepare the Collateral for sale, and (b) each Debtor shall remain obligated and liable under each contract or agreement included in the Collateral to be observed or performed by such Debtor thereunder. Neither the Agent nor any Secured Party shall have any obligation or liability under any such contract or agreement by reason of or arising out of this Agreement or the receipt by the Agent or any Secured Party of any payment

relating to any of the Collateral, nor shall the Agent or any Secured Party be obligated in any manner to perform any of the obligations of any Debtor under or pursuant to any such contract or agreement, to make inquiry as to the nature or sufficiency of any payment received by the Agent or any Secured Party in respect of the Collateral or as to the sufficiency of any performance by any party under any such contract or agreement, to present or file any claim, to take any action to enforce any performance or to collect the payment of any amounts which may have been assigned to the Agent or to which the Agent or any Secured Party may be entitled at any time or times.

**13. Security Interests Absolute.** All rights of the Secured Parties and all obligations of the Debtors hereunder, shall be absolute and unconditional, irrespective of: (a) any lack of validity or enforceability of this Agreement, the Notes or any agreement entered into in connection with the foregoing, or any portion hereof or thereof; (b) any change in the time, manner or place of payment or performance of, or in any other term of, all or any of the Obligations, or any other amendment or waiver of or any consent to any departure from the Notes or any other agreement entered into in connection with the foregoing; (c) any exchange, release or nonperfection of any of the Collateral, or any release or amendment or waiver of or consent to departure from any other collateral for, or any guarantee, or any other security, for all or any of the Obligations; (d) any action by the Secured Parties to obtain, adjust, settle and cancel in its sole discretion any insurance claims or matters made or arising in connection with the Collateral; or (e) any other circumstance which might otherwise constitute any legal or equitable defense available to a Debtor, or a discharge of all or any part of the Security Interests granted hereby. Until the Obligations shall have been paid and performed in full, the rights of the Secured Parties shall continue even if the Obligations are barred for any reason, including, without limitation, the running of the statute of limitations or bankruptcy. Each Debtor expressly waives presentment, protest, notice of protest, demand, notice of nonpayment and demand for performance. In the event that at any time any transfer of any Collateral or any payment received by the Secured Parties hereunder shall be deemed by final order of a court of competent jurisdiction to have been a voidable preference or fraudulent conveyance under the bankruptcy or insolvency laws of the United States, or shall be deemed to be otherwise due to any party other than the Secured Parties, then, in any such event, each Debtor's obligations hereunder shall survive cancellation of this Agreement, and shall not be discharged or satisfied by any prior payment thereof and/or cancellation of this Agreement, but shall remain a valid and binding obligation enforceable in accordance with the terms and provisions hereof. Each Debtor waives all right to require the Secured Parties to proceed against any other person or entity or to apply any Collateral which the Secured Parties may hold at any time, or to marshal assets, or to pursue any other remedy. Each Debtor waives any defense arising by reason of the application of the statute of limitations to any obligation secured hereby.

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**14. Term of Agreement.** This Agreement and the Security Interests shall terminate on the date on which all payments under the Notes have been indefeasibly paid in full and all other Obligations have been paid or discharged; provided, however, that all indemnities of the Debtors contained in this Agreement (including, without limitation, Annex B hereto) shall survive and remain operative and in full force and effect regardless of the termination of this Agreement.

**15. Power of Attorney; Further Assurances.**

(a) Each Debtor authorizes the Agent, and does hereby make, constitute and appoint the Agent and its officers, agents, successors or assigns with full power of substitution, as such Debtor's true and lawful attorney-in-fact, with power, in the name of the Agent or such Debtor, to, after the occurrence and during the continuance of an Event of Default, (i) endorse any note, checks, drafts, money orders or other instruments of payment (including payments payable under or in respect of any policy of insurance) in respect of the Collateral that may come into possession of the Agent; (ii) to sign and endorse any financing statement pursuant to the UCC or any invoice, freight or express bill, bill of lading, storage or warehouse receipts, drafts against debtors, assignments, verifications and notices in connection with accounts, and other documents relating to the Collateral; (iii) to pay or discharge taxes, liens, security interests or other encumbrances at any time levied or placed on or threatened against the Collateral; (iv) to demand, collect, receipt for, compromise, settle and sue for monies due in respect of the Collateral; (v) to transfer any Intellectual Property or provide licenses respecting any Intellectual Property; and (vi) generally, at the option of the Agent, and at the expense of the Debtors, at any time, or from time to time, to execute and deliver any and all documents and instruments and to do all acts and things which the Agent deems necessary to protect, preserve and realize upon the Collateral and the Security Interests granted therein in order to effect the intent of this Agreement and the Notes all as fully and effectually as the Debtors might or could do; and each Debtor hereby ratifies all that said attorney shall lawfully do or cause to be done by virtue hereof. This power of attorney is coupled with an interest and shall be irrevocable for the term of this Agreement and thereafter as long as any of the Obligations shall be outstanding. The designation set forth herein shall be deemed to amend and supersede any inconsistent provision in the Organizational Documents or other documents or agreements to which any Debtor is subject or to which any Debtor is a party. Without limiting the generality of the foregoing, after the occurrence and during the continuance of an Event of Default, each Secured Party is specifically authorized to execute and file any applications for or instruments of transfer and assignment of any patents, trademarks, copyrights or other Intellectual Property with the United States Patent and Trademark Office and the United States Copyright Office.

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(b) On a continuing basis, each Debtor will make, execute, acknowledge, deliver, file and record, as the case may be, with the proper filing and recording agencies in any jurisdiction, including, without limitation, the jurisdictions indicated on Schedule C attached hereto, all such instruments, and take all such action as may reasonably be deemed necessary or advisable, or as reasonably requested by the Agent, to perfect the Security Interests granted hereunder and otherwise to carry out the intent and purposes of this Agreement, or for assuring and confirming to the Agent the grant or perfection of a perfected security interest in all the Collateral under the UCC.

(c) Each Debtor hereby irrevocably appoints the Agent as such Debtor's attorney-in-fact, with full authority in the place and instead of such Debtor and in the name of such Debtor, from time to time in the Agent's discretion, to take any action and to execute any instrument which the Agent may deem reasonably necessary or advisable to accomplish the purposes of this Agreement, including the filing, in its sole discretion, of one or more financing or continuation statements and amendments thereto, relative to any of the Collateral without the signature of such Debtor where permitted by law, which financing statements may (but need not) describe the Collateral as "all assets" or "all personal property" or words of like import, and ratifies all such actions taken by the Agent. This power of attorney is coupled with an interest and shall be irrevocable for the term of this Agreement and thereafter as long as any of the Obligations shall be outstanding.

**16. Notices.** All notices, requests, demands and other communications hereunder shall be subject to the notice provision of the Purchase Agreement (as such term is defined in the Notes).

**17. Other Security.** To the extent that the Obligations are now or hereafter secured by property other than the Collateral or by the guarantee, endorsement or property of any other person, firm, corporation or other entity, then the Agent shall have the right, in its sole discretion, to pursue, relinquish, subordinate, modify or take any other action with respect thereto, without in any way modifying or affecting any of the Secured Parties' rights and remedies hereunder.

**18. Appointment of Agent.** The Secured Parties hereby appoint Helena Special Opportunities LLC to act as their agent ("Agent") for purposes of exercising any and all rights and remedies of the Secured Parties hereunder. Such appointment shall continue until revoked in writing by the Requisite Holders, at which time the Requisite Holders shall appoint a new Agent. The Agent shall have the rights, responsibilities and immunities set forth in Annex B hereto.

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## 19. Miscellaneous.

(a) No course of dealing between the Debtors and the Secured Parties, nor any failure to exercise, nor any delay in exercising, on the part of the Secured Parties, any right, power or privilege hereunder or under the Notes shall operate as a waiver thereof; nor shall any single or partial exercise of any right, power or privilege hereunder or thereunder preclude any other or further exercise thereof or the exercise of any other right, power or privilege.

(b) All of the rights and remedies of the Secured Parties with respect to the Collateral, whether established hereby or by the Notes or by any other agreements, instruments or documents or by law shall be cumulative and may be exercised singly or concurrently.

(c) This Agreement, together with the Notes, Securities Purchase Agreement, the other Transaction Documents and the exhibits and schedules hereto and thereto, contain the entire understanding of the parties with respect to the subject matter hereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into this Agreement and the exhibits and schedules hereto. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Debtors and the Requisite Holders, or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought.

(d) If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

(e) No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right.

(f) This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. The Company and the Guarantors may not assign this Agreement or any rights or obligations hereunder without the prior written consent of each Secured Party. Any Secured Party may assign any or all of its rights under this Agreement to any Person to whom such Secured Party assigns or transfers any Obligations, provided such transferee agrees in writing to be bound, with respect to the transferred Obligations, by the provisions of this Agreement that apply to the "Secured Parties."

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(g) Each party shall take such further action and execute and deliver such further documents as may be necessary or appropriate in order to carry out the provisions and purposes of this Agreement.

(h) Except to the extent mandatorily governed by the jurisdiction or situs where the Collateral is located, all questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by and construed and enforced in accordance with the internal laws of the State of Delaware, without regard to the principles of conflicts of law thereof. Except to the extent mandatorily governed by the jurisdiction or situs where the Collateral is located, each Debtor agrees that all proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and the Notes (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York, Borough of Manhattan. Except to the extent mandatorily governed by the jurisdiction or situs where the Collateral is located, each Debtor hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such proceeding is improper. Each party hereto hereby irrevocably waives personal service of process and consents to process being served in any such proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. Each party hereto hereby irrevocably waives, to the fullest extent permitted by applicable law, any and all right to trial by jury in any legal proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

(i) This Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and, all of which taken together shall constitute one and the same Agreement. In the event that any signature is delivered by facsimile transmission, electronic mail or any other electronic signature complying with the U.S. federal E-SIGN Act of 2000, as amended (e.g., [www.docuSign.com](http://www.docuSign.com)), such signature shall create a valid binding obligation of the party executing (or on whose behalf such signature is executed) the same with the same force and effect as if such electronically delivered signature were the original thereof.

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(j) All Debtors shall jointly and severally be liable for the obligations of each Debtor to the Secured Parties hereunder.

(k) Each Debtor shall indemnify, reimburse and hold harmless the Agent and the Secured Parties and their respective partners, members, shareholders, officers, directors, employees and agents (and any other persons with other titles that have similar functions) (collectively, "Indemnitees") from and against any and all losses, claims, liabilities, damages, penalties, suits, costs and expenses, of any kind or nature, (including fees relating to the cost of investigating and defending any of the foregoing) imposed on, incurred by or asserted against such Indemnitee in any way related to or arising from or alleged to arise from this Agreement or the Collateral, except any such losses, claims, liabilities, damages, penalties, suits, costs and expenses which result from the gross negligence or willful misconduct of an Indemnitee as determined by a final, nonappealable decision of a court of competent jurisdiction. This indemnification provision is in addition to, and not in limitation of, any other indemnification provision in the Notes, the Purchase Agreement (as such term is defined in the Notes) or any other agreement, instrument or other document executed or delivered in connection herewith or therewith.

(l) Nothing in this Agreement shall be construed to subject Agent or any Secured Party to liability as a partner in any Debtor or any if its direct or indirect subsidiaries that is a partnership or as a member in any Debtor or any of its direct or indirect subsidiaries that is a limited liability company, nor shall Agent or any Secured Party be deemed to have assumed any obligations under any partnership agreement or limited liability company agreement, as applicable, of any such Debtor or any of its direct or indirect subsidiaries or otherwise, unless and until any such Secured Party exercises its right to be substituted for such Debtor as a partner or member, as applicable, pursuant hereto.

(m) To the extent that the grant of the security interest in the Collateral and the enforcement of the terms hereof require the consent, approval or action of any partner or member, as applicable, of any Debtor or any direct or indirect subsidiary of any Debtor or compliance with any provisions of any of the Organizational

IN WITNESS WHEREOF, the parties hereto have caused this Security Agreement to be duly executed on the day and year first above written.

**COMPANY:**

**FIREFLY NEUROSCIENCE, INC.**

By: /s/ Greg Lipschitz  
Name: Greg Lipschitz  
Title: Executive Chairman

**GUARANTORS:**

**FIREFLY NEUROSCIENCE LTD.**

By: /s/ Jon Olsen  
Name: Jon Olsen  
Title: Director

**FIREFLY NEUROSCIENCES CANADA INC.**

By: /s/ Greg Lipschitz  
Name: Greg Lipschitz  
Title: Director

**ELMINDA 2022 INC.**

By: /s/ Paul Krzywicki  
Name: Paul Krzywicki  
Title: Chief Financial Officer

**ELMINDA CANADA INC.**

By: /s/ Jon Olsen  
Name: Jon Olsen  
Title: Director

**FIREFLY NEUROSCIENCE 2023, INC.**

By: /s/ Paul Krzywicki  
Name: Paul Krzywicki  
Title: Chief Financial Officer

[SIGNATURE PAGE OF PURCHASERS FOLLOWS]

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[SIGNATURE PAGE OF HOLDERS FIREFLY NEUROSCIENCE, INC. SECURITY AGREEMENT]

Name of Investing Entity: HELENA SPECIAL OPPORTUNITIES LLC

Signature of Authorized Signatory of Investing entity: /s/ Lawrence Cutler

Name of Authorized Signatory: Lawrence Cutler

Title of Authorized Signatory: Authorized Signatory

[SIGNATURE PAGE OF PURCHASERS FOLLOWS]

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**SCHEDULE A**

Principal Place of Business of Debtors:

Locations Where Collateral is Located or Stored:

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**SCHEDULE B**

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**SCHEDULE C**

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**SCHEDULE D**  
Legal Names and Organizational Identification Numbers

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**SCHEDULE E**  
Names; Mergers and Acquisitions

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**SCHEDULE F**  
Intellectual Property

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**SCHEDULE G**  
Account Debtors

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**SCHEDULE H**  
Pledged Securities

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ANNEX A  
to  
SECURITY  
AGREEMENT

**FORM OF ADDITIONAL DEBTOR JOINDER**

Security Agreement dated as of December 20, 2024 made by  
Firefly Neuroscience, Inc.  
and its subsidiaries party thereto from time to time, as Debtors  
to and in favor of  
the Secured Parties identified therein (the "Security Agreement")

Reference is made to the Security Agreement as defined above; capitalized terms used herein and not otherwise defined herein shall have the meanings given to such terms in, or by reference in, the Security Agreement.

The undersigned hereby agrees that upon delivery of this Additional Debtor Joinder to the Secured Parties referred to above, the undersigned shall (a) be an Additional Debtor under the Security Agreement, (b) have all the rights and obligations of the Debtors under the Security Agreement as fully and to the same extent as if the undersigned was an original signatory thereto and (c) be deemed to have made the representations and warranties set forth therein as of the date of execution and delivery of this Additional Debtor Joinder. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, THE UNDERSIGNED SPECIFICALLY GRANTS TO THE SECURED PARTIES A SECURITY INTEREST IN THE COLLATERAL AS MORE FULLY SET FORTH IN THE SECURITY AGREEMENT AND ACKNOWLEDGES AND AGREES TO THE WAIVER OF JURY TRIAL PROVISIONS SET FORTH THEREIN.

Attached hereto are supplemental and/or replacement Schedules to the Security Agreement, as applicable.

An executed copy of this Joinder shall be delivered to the Secured Parties, and the Secured Parties may rely on the matters set forth herein on or after the date hereof. This Joinder shall not be modified, amended or terminated without the prior written consent of the Secured Parties.

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IN WITNESS WHEREOF, the undersigned has caused this Joinder to be executed in the name and on behalf of the undersigned.

[Name of Additional Debtor

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Dated: \_\_\_\_\_

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ANNEX B  
to  
SECURITY  
AGREEMENT

**THE AGENT**

**1. Appointment.** The Secured Parties (all capitalized terms used herein and not otherwise defined shall have the respective meanings provided in the Security Agreement to which this Annex B is attached (the "Agreement")), by their acceptance of the benefits of the Agreement, hereby designate Helena Special Opportunities LLC ("Agent") as the Agent to act as specified herein and in the Agreement. Each Secured Party shall be deemed irrevocably to authorize the Agent to take such action on its behalf under the provisions of the Agreement and any other Transaction Document (as such term is defined in the Purchase Agreement) and to exercise such powers and to perform such duties hereunder and thereunder as are specifically delegated to or required of the Agent by the terms hereof and thereof and such other powers as are reasonably incidental thereto. The Agent may perform any of its duties hereunder by or through its agents or employees.

**2. Nature of Duties.** The Agent shall have no duties or responsibilities except those expressly set forth in the Agreement. Neither the Agent nor any of its partners, members, shareholders, officers, directors, employees or agents shall be liable for any action taken or omitted by it as such under the Agreement or hereunder or in connection herewith or therewith, be responsible for the consequence of any oversight or error of judgment or answerable for any loss, unless caused solely by its or their gross negligence or willful misconduct as determined by a final judgment (not subject to further appeal) of a court of competent jurisdiction. The duties of the Agent shall be mechanical and administrative in nature; the Agent shall not have by reason of the Agreement or any other Transaction Document a fiduciary relationship in respect of any Debtor or any Secured Party; and nothing in the Agreement or any other Transaction Document, expressed or implied, is intended to or shall be so construed as to impose upon the Agent any obligations in respect of the Agreement or any other Transaction Document except as expressly set forth herein and therein.

**3. Lack of Reliance on the Agent.** Independently and without reliance upon the Agent, each Secured Party, to the extent it deems appropriate, has made and shall continue to make (i) its own independent investigation of the financial condition and affairs of the Company and its subsidiaries in connection with such Secured Party's investment in the Debtors, the creation and continuance of the Obligations, the transactions contemplated by the Transaction Documents, and the taking or not taking of any action in connection therewith, and (ii) its own appraisal of the creditworthiness of the Company and its subsidiaries, and of the value of the Collateral from time to time, and the Agent shall have no duty or responsibility, either initially or on a continuing basis, to provide any Secured Party with any credit, market or other information with respect thereto, whether coming into its possession before any Obligations are incurred or at any time or times thereafter. The Agent shall not be responsible to the Debtors or any Secured Party for any recitals, statements, information, representations or warranties herein or in any document, certificate or other writing delivered in connection herewith, or for the execution, effectiveness, genuineness, validity, enforceability, perfection, collectibility, priority or sufficiency of the Agreement or any other Transaction Document, or for the financial condition of the Debtors or the value of any of the Collateral, or be required to make any inquiry concerning either the performance or observance of any of the

terms, provisions or conditions of the Agreement or any other Transaction Document, or the financial condition of the Debtors, or the value of any of the Collateral, or the existence or possible existence of any default or Event of Default under the Agreement, the Notes or any of the other Transaction Documents.

**4. Certain Rights of the Agent.** The Agent shall have the right to take any action with respect to the Collateral, on behalf of all of the Secured Parties. To the extent practical, the Agent shall request instructions from the Secured Parties with respect to any material act or action (including failure to act) in connection with the Agreement or any other Transaction Document, and shall be entitled to act or refrain from acting in accordance with the instructions of the Requisite Holders; if such instructions are not provided despite the Agent's request therefor, the Agent shall be entitled to refrain from such act or taking such action, and if such action is taken, shall be entitled to appropriate indemnification from the Secured Parties in respect of actions to be taken by the Agent; and the Agent shall not incur liability to any person or entity by reason of so refraining. Without limiting the foregoing, (a) no Secured Party shall have any right of action whatsoever against the Agent as a result of the Agent acting or refraining from acting hereunder in accordance with the terms of the Agreement or any other Transaction Document, and the Debtors shall have no right to question or challenge the authority of, or the instructions given to, the Agent pursuant to the foregoing and (b) the Agent shall not be required to take any action which the Agent believes (i) could reasonably be expected to expose it to personal liability or (ii) is contrary to this Agreement, the Transaction Documents or applicable law.

**5. Reliance.** The Agent shall be entitled to rely, and shall be fully protected in relying, upon any writing, resolution, notice, statement, certificate, telex, teletype or telecopier message, cablegram, radiogram, order or other document or telephone message signed, sent or made by the proper person or entity, and, with respect to all legal matters pertaining to the Agreement and the other Transaction Documents and its duties thereunder, upon advice of counsel selected by it and upon all other matters pertaining to this Agreement and the other Transaction Documents and its duties thereunder, upon advice of other experts selected by it. Anything to the contrary notwithstanding, the Agent shall have no obligation whatsoever to any Secured Party to assure that the Collateral exists or is owned by the Debtors or is cared for, protected or insured or that the liens granted pursuant to the Agreement have been properly or sufficiently or lawfully created, perfected, or enforced or are entitled to any particular priority.

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**6. Indemnification.** To the extent that the Agent is not reimbursed and indemnified by the Debtors, the Secured Parties will jointly and severally reimburse and indemnify the Agent, in proportion to their initially purchased respective principal amounts of Notes, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any kind or nature whatsoever which may be imposed on, incurred by or asserted against the Agent in performing its duties hereunder or under the Agreement or any other Transaction Document, or in any way relating to or arising out of the Agreement or any other Transaction Document except for those determined by a final judgment (not subject to further appeal) of a court of competent jurisdiction to have resulted solely from the Agent's own gross negligence or willful misconduct. Prior to taking any action hereunder as Agent, the Agent may require each Secured Party to deposit with it sufficient sums as it determines in good faith is necessary to protect the Agent for costs and expenses associated with taking such action.

**7. Resignation by the Agent**

(a) The Agent may resign from the performance of all its functions and duties under the Agreement and the other Transaction Documents at any time by giving 30 days' prior written notice (as provided in the Agreement) to the Debtors and the Secured Parties. Such resignation shall take effect upon the appointment of a successor Agent pursuant to clauses (b) and (c) below.

(b) Upon any such notice of resignation, the Secured Parties, acting by the Requisite Holders shall appoint a successor Agent hereunder.

(c) If a successor Agent shall not have been so appointed within said 30-day period, the Agent shall then appoint a successor Agent who shall serve as Agent until such time, if any, as the Secured Parties appoint a successor Agent as provided above. If a successor Agent has not been appointed within such 30-day period, the Agent may petition any court of competent jurisdiction or may interplead the Debtors and the Secured Parties in a proceeding for the appointment of a successor Agent, and all fees, including, but not limited to, extraordinary fees associated with the filing of interpleader and expenses associated therewith, shall be payable by the Debtors on demand.

**8. Rights with respect to Collateral.** Each Secured Party agrees with all other Secured Parties and the Agent (i) that it shall not, and shall not attempt to, exercise any rights with respect to its security interest in the Collateral, whether pursuant to any other agreement or otherwise (other than pursuant to this Agreement), or take or institute any action against the Agent or any of the other Secured Parties in respect of the Collateral or its rights hereunder (other than any such action arising from the breach of this Agreement) and (ii) that such Secured Party has no other rights with respect to the Collateral other than as set forth in this Agreement and the other Transaction Documents. Upon the acceptance of any appointment as Agent hereunder by a successor Agent, such successor Agent shall thereupon succeed to and become vested with all the rights, powers, privileges and duties of the retiring Agent and the retiring Agent shall be discharged from its duties and obligations under the Agreement. After any retiring Agent's resignation or removal hereunder as Agent, the provisions of the Agreement including this Annex B shall inure to its benefit as to any actions taken or omitted to be taken by it while it was Agent.

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## PURCHASE AGREEMENT

THIS PURCHASE AGREEMENT (this “Agreement”), dated as of December 20, 2024, is made by and between ARENA BUSINESS SOLUTIONS GLOBAL SPC II, LTD (the “Investor”), and FIREFLY NEUROSCIENCE, INC., a Delaware corporation (the “Company”).

WHEREAS, the parties desire that, upon the terms and subject to the conditions contained herein, the Company shall have the right to issue and sell to the Investor, from time to time as provided herein, and the Investor shall purchase from the Company, up to \$10.00 million of the Company’s common stock, par value \$0.0001 per share (the “Common Shares”); and

WHEREAS, the Common Shares are listed for trading on the Nasdaq Capital Market under the symbol “AIFF”; and

WHEREAS, the offer and sale of the Common Shares issuable hereunder will be made in reliance upon Section 4(a)(2) under the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder (the “Securities Act”), or upon such other exemption from the registration requirements of the Securities Act as may be available with respect to any or all of the transactions to be made hereunder.

NOW, THEREFORE, the parties hereto agree as follows:

**ARTICLE I  
CERTAIN DEFINITIONS**

“Advance” shall mean the portion of the Commitment Amount requested by the Company in an Advance Notice.

“Advance Date” shall mean the 1st Trading Day after expiration of the applicable Pricing Period for each Advance.

“Advance Half” shall have the meaning set forth in Section 2.05(d).

“Advance Notice” shall mean a written notice in the form of Exhibit A attached hereto to the Investor executed by an officer of the Company or other authorized representative of the Company identified on Schedule 1 hereto and setting forth the amount of an Advance that the Company desires to issue and sell to the Investor.

“Advance Notice Date” shall mean each date the Company delivers (in accordance with Section 2.02 of this Agreement) to the Investor an Advance Notice, subject to the terms of this Agreement.

“Affiliate” shall have the meaning set forth in Section 3.07.

“Agreement” shall have the meaning set forth in the preamble of this Agreement.

“Applicable Laws” shall mean all applicable laws, statutes, rules, regulations, orders, executive orders, directives, policies, guidelines and codes having the force of law, whether local, national, or international, as amended from time to time, including without limitation (i) all applicable laws that relate to money laundering, terrorist financing, financial record keeping and reporting, (ii) all applicable laws that relate to anti-bribery, anti-corruption, books and records and internal controls, including the United States Foreign Corrupt Practices Act of 1977, and (iii) any Sanctions laws.

“Bankruptcy Law” means Title 11, U.S. Code, or any similar federal, state or similar laws for the relief of debtors.

“Black Out Period” shall have the meaning set forth in Section 6.02.

“Business Day” means any day on which the Principal Market or Trading Market is open for trading, including any day on which the Principal Market or Trading Market is open for trading for a period of time less than the customary time.

“Buy-In” shall have the meaning set forth in Section 2.06.

“Buy-In Price” shall have the meaning set forth in Section 2.06.

“Closing” shall have the meaning set forth in Section 2.05.

“Commitment Amount” shall mean \$10.00 million of Common Shares, *provided that*, the Company shall not effect any sales under this Agreement and the Investor shall not have the obligation to purchase Common Shares under this Agreement to the extent (but only to the extent) that after giving effect to such purchase and sale the aggregate number of Common Shares issued under this Agreement would exceed 19.99% of the outstanding Common Shares as of the date of this Agreement (the “Exchange Cap”); *provided further that*, the Exchange Cap will not apply if the Company obtains the requisite shareholder approval for issuances in excess of the Exchange Cap (“Shareholder Approval”).

“Commitment Period” shall mean the period commencing on the date hereof and expiring upon the date of termination of this Agreement in accordance with Section 11.02.

“Common Shares” shall have meaning set forth in the recitals of this Agreement.

“Company” shall have the meaning set forth in the preamble of this Agreement.

“Company Indemnitees” shall have the meaning set forth in Section 5.02.

“Condition Satisfaction Date” shall have the meaning set forth in Section 7.01.

“Conversion Cap” means a number of Common Shares equal to 19.99% of the number of shares of Common Stock outstanding as of the date hereof calculated in accordance with the listing standards and rules of the Nasdaq Stock Market, including Rule 5635(d) (or any successor provisions thereof). For the avoidance of doubt, once Shareholder Approval is obtained, the Conversion Cap shall cease to exist.

“Custodian” means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

“DTC” means the Depository Trust Company.

“DWAC Shares” means the Common Shares acquired or purchased by the Investor pursuant to this Agreement (a) that the Investor has resold in a manner described under the caption “Plan of Distribution” in the Registration Statement and otherwise in compliance with this Agreement before the delivery of the Transfer Agent Confirmation regarding the resale of such Common Shares (as applicable) in accordance with this Agreement, and (b) about which the Investor has (i) delivered to the Company and the transfer agent to the Company (A) the Transfer Agent Confirmation relating to such Common Shares (as applicable) and (B) a customary representation letter from the Investor, and, if requested by the transfer agent, its broker, confirming, among other things, the resale of such Common Shares (as applicable) in the manner described in clause (a) of this definition of DWAC Shares (including confirmation of compliance with any relevant prospectus delivery requirements), and (ii) delivered to the transfer agent instructions for the delivery of such Common Shares (as applicable) to the account with DTC of the Investor’s designated broker-dealer as specified in the Transfer Agent Deliverables, which Common Shares (as applicable) will be in the hands of the persons who purchase such Common Shares (as applicable) from the Investor in the manner described in clause (a) of this definition of DWAC Shares, freely tradable and transferable without restriction on resale and without stop transfer instructions maintained against the transfer thereof.

“Environmental Laws” shall have the meaning set forth in Section 4.08.

“Exchange Act” shall mean the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“Exchange Cap” has the meaning set forth in the definition of “Commitment Amount”.

“Hazardous Materials” shall have the meaning set forth in Section 4.08.

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“Indemnified Liabilities” shall have the meaning set forth in Section 5.01.

“Investor” shall have the meaning set forth in the preamble of this Agreement.

“Investor Indemnitees” shall have the meaning set forth in Section 5.01.

“Market Price” shall mean the VWAP of the Common Shares during the Pricing Period.

“Material Adverse Effect” shall mean any event, occurrence or condition that has had or would reasonably be expected to have (i) a material adverse effect on the legality, validity or enforceability of this Agreement or the transactions contemplated herein, (ii) a material adverse effect on the results of operations, assets, business or condition (financial or otherwise) of the Company and its Subsidiaries, taken as a whole, or (iii) a material adverse effect on the Company’s ability to perform in any material respect on a timely basis its obligations under this Agreement.

“Material Outside Event” shall have the meaning set forth in Section 6.08.

“Maximum Advance Amount” shall be calculated as follows: (a) if the Advance Notice is received by 8:30 a.m. Eastern Time, the lower of an amount equal to forty percent (40%) of the average of the Daily Value Traded of the Common Shares on the five (5) Trading Days immediately preceding an Advance Notice, or (ii) \$2 million; provided, however, that the parties hereto may modify the aforementioned conditions by mutual prior written consent. For purposes hereof, “Daily Value Traded” is the product obtained by multiplying the daily trading volume of the Company’s Common Shares on the Principal Market or Trading Market during regular trading hours as reported by Bloomberg L.P., by the VWAP for such Trading Day. For the avoidance of doubt, the daily trading volume shall include all trades on the Principal Market or Trading Market during regular trading hours.

“OFAC” shall mean the U.S. Department of Treasury’s Office of Foreign Asset Control.

“Ownership Limitation” shall have the meaning set forth in Section 2.04(a).

“Person” shall mean an individual, a corporation, a partnership, a limited liability company, a trust or other entity or organization, including a government or political subdivision or an agency or instrumentality thereof.

“Plan of Distribution” shall mean the section of a Registration Statement disclosing the plan of distribution of the Common Shares.

“Pricing Period” shall mean one (1) Trading Day, as notified by the Company to the Investor in the applicable Advance Notice, commencing on the Advance Notice Date.

“Principal Market” shall mean the Nasdaq Global Market.

“Purchase Price” shall mean the price per Share obtained by multiplying the Market Price by 88.0%. If the total day’s VWAP at the end of any given 1-hour interval has changed by +/- 6% versus the previous 1-hour interval, the Purchase Price will be 88.0% of the Investor’s sale execution for that day. The last 30 minutes of trading on a Trading Day will count as the final “1-hour” interval of such Trading Day.

“Registrable Securities” shall mean the Common Shares and any securities issued or issuable with respect to any of the foregoing by way of exchange, stock dividend or stock split or in connection with a combination of shares, recapitalization, merger, consolidation or other reorganization or otherwise.

“Registration Limitation” shall have the meaning set forth in Section 2.04(b).

“Registration Statement” shall mean a registration statement on Form S-1 or Form S-3 or on such other form promulgated by the SEC for which the Company then qualifies and which counsel for the Company shall deem appropriate, and which form shall be available for the registration of the resale by the Investor of the Registrable Securities under the Securities Act.

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“Regulation D” shall mean the provisions of Regulation D promulgated under the Securities Act.

“Required Delivery Date” means any date on which the Company or its transfer agent is required to deliver Common Shares to Investor hereunder.

“Sanctions” means any sanctions administered or enforced by OFAC, the U.S. State Department, the United Nations Security Council, the European Union, Her Majesty’s

Treasury, or other relevant sanctions authority.

“Sanctions Programs” means any OFAC economic sanction program (including, without limitation, programs related to Crimea, Cuba, Iran, North Korea, Sudan and Syria).

“SEC” shall mean the U.S. Securities and Exchange Commission.

“SEC Documents” shall have the meaning set forth in Section 4.04.

“Securities Act” shall have the meaning set forth in the recitals of this Agreement.

“Securities Purchase Agreement” has the meaning set forth in Section 2.04(c).

“Settlement Document” shall have the meaning set forth in Section 2.05(a).

“Shares” shall mean the Common Shares to be issued from time to time hereunder pursuant to an Advance.

“Subsidiaries” shall have the meaning set forth in Section 4.01.

“Trading Day” shall mean any day during which the Principal Market or Trading Market shall be open for business.

“Trading Market” shall mean the New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market, or the NYSE Euronext, whichever is at the time the principal trading exchange or market for the Common Shares.

“Transaction Documents” shall have the meaning set forth in Section 4.02.

“Transfer Agent Confirmation” shall have the meaning set forth in Section 2.05(b).

“Transfer Agent Deliverables” shall have the meaning set forth in Section 2.05(b).

“VWAP” means, for any Trading Day, the daily volume weighted average price of the Common Shares for such Trading Day on the Principal Market or Trading Market from 9:30 a.m. Eastern Time through 4:00 p.m. Eastern Time, excluding the opening price and the closing price, if the Advance Notice is received before 8:30 a.m. Eastern Time (the “Measurement Period”); provided, however, upon an Advance Halt the VWAP calculation shall terminate as of the effective time of the Material Outside Event.

## ARTICLE II ADVANCES

**Section 2.01 Advances; Mechanics.** Subject to the terms and conditions of this Agreement (including, without limitation, the provisions of Article VII hereof), the Company at its sole and exclusive option, may issue and sell to the Investor, and the Investor shall purchase from the Company, Common Shares on the following terms.

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**Section 2.02 Advance Notice.** At any time during the Commitment Period, the Company may require the Investor to purchase Common Shares by delivering an Advance Notice to the Investor, subject to the conditions set forth in Section 7.01, and in accordance with the following provisions:

- (a) The Company shall, in its sole discretion, select the amount of the Advance, not to exceed the Maximum Advance Amount, it desires to issue and sell to the Investor in each Advance Notice and the time it desires to deliver each Advance Notice.
- (b) There shall be no mandatory minimum Advances and no non-usages fee for not utilizing the Commitment Amount or any part thereof.
- (c) The Company shall be limited to delivering up to two (2) Advance Notices to Investor per Trading Day.
- (d) The Advance Notice shall be valid upon delivery to Investor in accordance with Exhibit C.

**Section 2.03 Date of Delivery of Advance Notice.** An Advance Notice shall be deemed delivered on the day it is received by the Investor if such notice is received by email prior to 8:30 a.m. Eastern Time (or later if waived by the Investor in its sole discretion) in accordance with the instructions set forth on Exhibit C.

**Section 2.04 Advance Limitations.** Regardless of the amount of an Advance requested by the Company in the Advance Notice, the final amount of an Advance pursuant to an Advance Notice shall be reduced in accordance with each of the following limitations:

- (a) Ownership Limitation; Commitment Amount. In no event shall the number of Common Shares issuable to the Investor pursuant to an Advance cause the aggregate number of Shares beneficially owned (as calculated pursuant to Section 13(d) of the Exchange Act) by the Investor and its Affiliates as a result of previous issuances and sales of Common Shares to Investor under this Agreement to exceed 9.99% of the then outstanding Common Shares (the “Ownership Limitation”). In connection with each Advance Notice delivered by the Company, any portion of an Advance that would (i) cause the Investor to exceed the Ownership Limitation or (ii) cause the aggregate number of Common Shares issued and sold to the Investor hereunder to exceed the Commitment Amount shall automatically be withdrawn with no further action required by the Company, and such Advance Notice shall be deemed automatically modified to reduce the amount of the Advance requested by an amount equal to such withdrawn portion; provided that in the event of any such automatic withdrawal and automatic modification, Investor will promptly notify the Company of such event.
- (b) Registration Limitation. In no event shall an Advance exceed the amount registered under the Registration Statement then in effect (the “Registration Limitation”) or the Exchange Cap to the extent applicable. In connection with each Advance Notice, any portion of an Advance that would exceed the Registration Limitation or Exchange Cap shall automatically be withdrawn with no further action required by the Company and such Advance Notice shall be deemed automatically modified to reduce the aggregate amount of the requested Advance by an amount equal to such withdrawn portion in respect of each Advance Notice; provided that in the event of any such automatic withdrawal and automatic modification, Investor will promptly notify the Company of such event.

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- (c) Principal Market Regulation. The Company shall not effect any sales of Common Shares under this Agreement and the Investor shall not have the obligation to purchase Common Shares under this Agreement to the extent (but only to the extent) that after giving effect to such purchase and sale the aggregate number of Common Shares issued under this Agreement, plus the Common Shares issued pursuant to Notes under that certain securities purchase agreement entered into by the Company and Helena Special Opportunities LLC on or about the date of this Agreement (the “Securities Purchase Agreement”), and Common Shares issued pursuant to the Warrants (as defined in the Securities Purchase Agreement) would exceed the Conversion Cap, subject to appropriate adjustment for any stock dividend, stock split, stock combination, rights offerings, reclassification or similar transaction that proportionately decreases or increases the Common Shares until the Shareholder Approval has been obtained by the Company.
- (d) Notwithstanding any other provision in this Agreement, the Company and the Investor acknowledge and agree that upon the Investor’s receipt of a valid Advance Notice the parties shall be deemed to have entered into an unconditional contract binding on both parties for the purchase and sale of Common Shares pursuant to such Advance Notice in accordance with the terms of this Agreement and subject to Applicable Law and Section 3.08 (Trading Activities), the Investor may sell Common Shares during the Pricing Period.

**Section 2.05 Closings.** The closing of each Advance and each sale and purchase of Common Shares related to each Advance (each, a “Closing”) shall take place as soon as practicable on or after each Advance Date in accordance with the procedures set forth below. The parties acknowledge that the Purchase Price is not known at the time the Advance Notice is delivered (at which time the Investor is irrevocably bound) but shall be determined on each Closing based on the daily prices of the Common Shares that are the inputs to the determination of the Purchase Price as set forth further below. In connection with each Closing, the Company and the Investor shall fulfill each of its obligations as set forth below:

- (a) On each Advance Date, the Investor shall deliver to the Company a written document, in the form attached hereto as Exhibit B (each a “Settlement Document”), setting forth the final number of Common Shares to be purchased by the Investor (taking into account any adjustments pursuant to Section 2.04), the Market Price, the Purchase Price, the aggregate proceeds to be paid by the Investor to the Company, and a report by Bloomberg, L.P. indicating the VWAP for each of the Trading Days during the Pricing Period (or, if not reported on Bloomberg, L.P., another reporting service reasonably agreed to by the parties), in each case in accordance with the terms and conditions of this Agreement.

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- (b) Promptly after receipt of the Settlement Document with respect to each Advance (and, in any event, not later than one (1) Trading Days after such receipt), the Company will, or will cause its transfer agent to, issue in the Investor’s name in a DRS account or accounts at the transfer agent all Common Shares purchased by Investor pursuant to such Advance. Such Common Shares shall constitute “restricted securities” as such term is defined in Rule 144(a)(3) under the Securities Act and the certificate or book-entry statement representing such Shares shall bear the restrictive legend under the Securities Act set forth in Section 9.1(iii). Notwithstanding the foregoing, if the Investor has resold the Common Shares in a manner described under the caption “Plan of Distribution” in the Registration Statement and otherwise in compliance with this Agreement prior to the delivery by the Investor to the Company of the Settlement Document, the Investor shall concurrently with the delivery by the Investor to the Company of such Settlement Document (i) send a confirmation to the transfer agent setting forth the number of such Common Shares that have been so resold and the date of such resales (such confirmation, the “Transfer Agent Confirmation”) and (ii) deliver to the transfer agent the items set forth in clause (b) of the definition of DWAC Shares with respect to such resold Common Shares and such other items as the transfer agent may reasonably request (collectively, the “Transfer Agent Deliverables”). With respect to Common Shares resold by the Investor as described in the preceding sentence and as to which the Investor has timely delivered the Transfer Agent Deliverables with respect to such resold Common Shares, such securities shall be delivered and credited by the transfer agent using the Fast Automated Securities Transfer (FAST) Program maintained by DTC (or any similar program hereafter adopted by DTC performing substantially the same function) to the account with DTC of the Investor’s designated Broker-Dealer as specified in the Transfer Agent Deliverables with respect to such resold securities at the time such securities would otherwise have been required to be delivered to the Investor in accordance with this Agreement, which securities (x) shall only be used by the Investor’s Broker-Dealer to deliver such securities to DTC for the purpose of settling the Investor’s share delivery obligations with respect to the sale of such Common Shares (as applicable), which may include delivery to other accounts of such Broker-Dealer and inclusion in the number of Common Shares delivered by that Broker-Dealer in “net settling” that Broker-Dealer’s trading of shares of the Company’s Common Shares, including its positions with the Broker-Dealers of the respective persons who purchase such securities from the Investor, and (y) shall remain “restricted securities” as such term is defined in Rule 144(a)(3) under the Securities Act until so delivered. The Company and the Investor acknowledge that, if and when the Investor has (i) resold Common Shares in a manner described under the caption “Plan of Distribution” in the Registration Statement and otherwise in compliance with this Agreement and (ii) timely delivered the Transfer Agent Deliverables with respect to such resold Common Shares (as applicable), the transfer agent shall cause such resold Common Shares (as applicable) to be subsequently credited using the Fast Automated Securities Transfer (FAST) Program maintained by DTC (or any similar program hereafter adopted by DTC performing substantially the same function) to the account with DTC of the Investor’s designated Broker-Dealer as specified in the Transfer Agent Deliverables with respect to such resold Common Shares (as applicable), which Common Shares (as applicable) (x) shall only be used by the Investor’s Broker-Dealer to deliver such resold Common Shares (as applicable) to DTC for the purpose of settling the Investor’s share delivery obligations with respect to the sale of such Common Shares (as applicable), which may include delivery to other accounts of such Broker-Dealer and inclusion in the number of securities delivered by that Broker-Dealer in “net settling” that Broker-Dealer’s trading of shares of the Company’s Common Shares, including its positions with the Broker-Dealers of the respective persons who purchase such Shares (as applicable) from the Investor, and (y) shall remain “restricted securities” as such term is defined in Rule 144(a)(3) under the Securities Act until so delivered. The Company and the Investor acknowledge that such resold Common Shares (as applicable) credited to the account with DTC of the Investor’s designated Broker-Dealer shall be eligible for transfer to the third-party purchasers of such Common Shares or their respective Broker-Dealers as DWAC Shares. The Company and the Investor acknowledge that such resold Common Shares (as applicable) credited to the account with DTC of the Investor’s designated Broker-Dealer shall be eligible for transfer to the third-party purchasers of such Common Shares or their respective Broker-Dealers as DWAC Shares. The Company shall promptly notify Investor if it has reasonable grounds to dispute the calculations set forth in the Settlement Document, and the Company agrees that such calculations shall be deemed agreed upon and final upon transfer of the Common Shares. Promptly upon receipt of such notification (in any event, not later than three (3) Trading Days after such receipt), the Investor shall pay to the Company the aggregate purchase price of the Common Shares (as set forth in the Settlement Document) in cash in immediately available funds to an account designated by the Company in writing and transmit notification to the Company that such funds transfer has been requested. No fractional shares shall be issued, and any fractional amounts shall be rounded to the next higher whole number of shares.

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- (c) On or prior to the Advance Date, each of the Company and the Investor shall deliver to the other all documents, instruments and writings expressly required to be delivered by either of them pursuant to this Agreement in order to implement and effect the transactions contemplated herein.
- (d) Notwithstanding anything to the contrary in this Agreement, if on any day during the Pricing Period (i) the Company notifies Investor that a Material Outside Event set forth in Section 6.08(j) through (v) has occurred or if the Material Outside Event set forth in Sections 6.08(vi) or (vii) shall have occurred, or (ii) the Company notifies the Investor of a Black Out Period, the parties agree that the pending Advance shall end (the “Advance Halt”) and the final number of Common Shares to be purchased by the Investor at the Closing for such Advance shall be equal to the number of Common Shares sold by the Investor during the applicable Pricing Period prior to the notification from the Company of a Material Outside Event or Black Out Period.

**Section 2.06 Failure to Timely Deliver.**

- (a) If on or prior to the Required Delivery Date either (I) if the transfer agent is not participating in the DTC Fast Automated Securities Transfer Program, the Company shall fail to issue and deliver a certificate to Investor and register such Common Shares on the Company's share register or, if the transfer agent is participating in the DTC Fast Automated Securities Transfer Program, credit the balance account of Investor or Investor's designee with DTC for the number of Common Shares to which Investor submitted for legend removal by Investor pursuant to clause (ii) below or otherwise or (II) if the Company's transfer agent is participating in the DTC Fast Automated Securities Transfer Program, the transfer agent fails to credit the balance account of Investor or Investor's designee with DTC for any Common Shares submitted for legend removal by Investor, in each case, if and only if the Investor has delivered the Transfer Agent Deliverables in accordance with the requirements of Section 2.05(b) above, and the Company fails to promptly, but in no event later than one (1) Business Day (x) so notify Investor and (y) deliver the Common Shares electronically without any restrictive legend in accordance with the requirements of Section 2.05(b) above, and if on or after such Trading Day Investor purchases (in an open market transaction or otherwise) Common Shares to deliver in satisfaction of a sale by Investor of Common Shares submitted for legend removal by Investor that Investor is entitled to receive from the Company (a "Buy-In"), then the Company shall, within one (1) Business Day after Investor's request and in Investor's discretion, either (i) pay cash to Investor in an amount equal to Investor's total purchase price (including brokerage commissions, borrow fees and other out-of-pocket expenses, if any, for the Common Shares so purchased) (the "Buy-In Price"), at which point the Company's obligation to so deliver such certificate or credit Investor's balance account shall terminate and such shares shall be cancelled, or (ii) promptly honor its obligation to so deliver to Investor a certificate or certificates or credit the balance account of Investor or Investor's designee with DTC representing such number of Common Shares that would have been so delivered if the Company timely complied with its obligations hereunder and pay cash to Investor in an amount equal to the excess (if any) of the Buy-In Price over the product of (A) such number of Common Shares that the Company was required to deliver to Investor by the Required Delivery Date multiplied by (B) the price at which Investor sold such Common Shares in anticipation of the Company's timely compliance with its delivery obligations hereunder. Nothing shall limit Investor's right to pursue any other remedies available to it hereunder, at law or in equity, including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing Common Shares (or to electronically deliver such Common Shares) as required pursuant to the terms hereof.

- (b) In the event the Investor sells Common Shares after receipt of an Advance Notice and the Company fails to perform its obligations as mandated in Section 2.05, the Company agrees that in addition to and in no way limiting the rights and obligations set forth in Article V hereto and in addition to any other remedy to which the Investor is entitled at law or in equity, including, without limitation, specific performance, it will hold the Investor harmless against any loss, claim, damage, or expense (including, without limitation, all brokerage commissions, borrow fees, legal fees and expenses and all other related out-of-pocket expenses), as incurred, arising out of or in connection with such default by the Company and acknowledges that irreparable damage may occur in the event of any such default. It is accordingly agreed that the Investor shall be entitled to an injunction or injunctions to prevent such breaches of this Agreement and to specifically enforce (subject to the Securities Act and other rules of the Principal Market or Trading Market), without the posting of a bond or other security, the terms and provisions of this Agreement.
- (c) In the event the Company provides an Advance Notice and the Investor fails to perform its obligations as mandated in Section 2.05, the Investor agrees that in addition to and in no way limiting the rights and obligations set forth in Article V hereto and in addition to any other remedy to which the Company is entitled at law or in equity, including, without limitation, specific performance, it will hold the Investor harmless against any loss, claim, damage, or expense (including, without limitation, legal fees and expenses and all other related out-of-pocket expenses), as incurred, arising out of or in connection with such default by the Investor and acknowledges that irreparable damage may occur in the event of any such default. It is accordingly agreed that the Company shall be entitled to an injunction or injunctions to prevent such breaches of this Agreement and to specifically enforce (subject to the Securities Act and other rules of the Principal Market or Trading Market), without the posting of a bond or other security, the terms and provisions of this Agreement.

**Section 2.07 Completion of Resale Pursuant to the Registration Statement.** After the Investor has purchased the full Commitment Amount and has completed the subsequent resale of all of the Registrable Securities (which shall include all of the Warrant Shares), Investor will notify the Company that all subsequent resales are completed and the Company will be under no further obligation to maintain the effectiveness of the Registration Statement.

### ARTICLE III REPRESENTATIONS AND WARRANTIES OF INVESTOR

Investor hereby represents and warrants to, and agrees with, the Company that the following are true and correct as of the date hereof and as of each Advance Notice Date and each Advance Date:

**Section 3.01 Organization and Authorization.** The Investor is duly organized, validly existing and in good standing under the laws of the Cayman Islands and has all requisite power and authority to execute, deliver and perform this Agreement, including all transactions contemplated hereby. The decision to invest and the execution and delivery of this Agreement by the Investor, the performance by the Investor of its obligations hereunder and the consummation by the Investor of the transactions contemplated hereby have been duly authorized and require no other proceedings on the part of the Investor. The undersigned has the right, power and authority to execute and deliver this Agreement and all other instruments on behalf of the Investor or its shareholders. This Agreement has been duly executed and delivered by the Investor and, assuming the execution and delivery hereof and acceptance thereof by the Company, will constitute the legal, valid and binding obligations of the Investor, enforceable against the Investor in accordance with its terms.

**Section 3.02 Evaluation of Risks.** The Investor has such knowledge and experience in financial, tax and business matters as to be capable of evaluating the merits and risks of, and bearing the economic risks entailed by, an investment in the Common Shares of the Company and of protecting its interests in connection with the transactions contemplated hereby. The Investor acknowledges and agrees that its investment in the Company involves a high degree of risk, and that the Investor may lose all or a part of its investment.

**Section 3.03 No Legal, Investment or Tax Advice from the Company.** The Investor acknowledges that it had the opportunity to review this Agreement and the transactions contemplated by this Agreement with its own legal counsel and investment and tax advisors. The Investor is relying solely on such counsel and advisors and not on any statements or representations of the Company or any of the Company's representatives or agents for legal, tax, investment or other advice with respect to the Investor's acquisition of Common Shares hereunder, the transactions contemplated by this Agreement or the laws of any jurisdiction, and the Investor acknowledges that the Investor may lose all or a part of its investment.

**Section 3.04 Investment Purpose.** The Investor is acquiring the Common Shares for its own account, for investment purposes and not with a view towards, or for resale in connection with, the public sale or distribution thereof, except pursuant to sales registered under or exempt from the registration requirements of the Securities Act; provided, however, that by making the representations herein, the Investor does not agree, or make any representation or warranty, to hold any of the Securities for any minimum or other specific term and reserves the right to dispose of the Securities at any time in accordance with, or pursuant to, a registration statement filed pursuant to this Agreement or an applicable exemption under the Securities Act. The Investor does not presently have any agreement or understanding, directly or indirectly, with any Person to sell or distribute any of the Common Shares. The Investor acknowledges that it will be disclosed as an "underwriter" and a "selling stockholder" in each Registration Statement and in any prospectus contained therein.

**Section 3.05 Accredited Investor.** The Investor is an “Accredited Investor” as that term is defined in Rule 501(a)(3) of Regulation D.

**Section 3.06 Information.** The Investor and its advisors (and its counsel), if any, have been furnished with all materials relating to the business, finances and operations of the Company and information the Investor deemed material to making an informed investment decision. The Investor and its advisors (and its counsel), if any, have been afforded the opportunity to ask questions of the Company and its management and have received answers to such questions. Neither such inquiries nor any other due diligence investigations conducted by such Investor or its advisors (and its counsel), if any, or its representatives shall modify, amend or affect the Investor’s right to rely on the Company’s representations and warranties contained in this Agreement. The Investor acknowledges and agrees that the Company has not made to the Investor, and the Investor acknowledges and agrees it has not relied upon, any representations and warranties of the Company, its employees or any third party other than the representations and warranties of the Company contained in this Agreement. The Investor understands that its investment involves a high degree of risk. The Investor has sought such accounting, legal and tax advice, as it has considered necessary to make an informed investment decision with respect to the transactions contemplated hereby.

**Section 3.07 Not an Affiliate.** The Investor is not an officer, director or a person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with the Company or any “affiliate” of the Company (as that term is defined in Rule 405 promulgated under the Securities Act).

**Section 3.08 Trading Activities.** The Investor’s trading activities with respect to the Common Shares shall be in compliance with all applicable federal and state securities laws, rules and regulations and the rules and regulations of the Principal Market or Trading Market. Neither the Investor nor its affiliates has any open short position in the Common Shares, nor has the Investor entered into any hedging transaction that establishes a net short position with respect to the Common Shares, and the Investor agrees that it shall not, and that it will cause its affiliates not to, engage in any short sales or hedging transactions with respect to the Common Shares; provided that the Company acknowledges and agrees that upon receipt of an Advance Notice the Investor has the right to sell (a) the Common Shares to be issued to the Investor pursuant to the Advance Notice prior to receiving such Common Shares, or (b) other Common Shares issued or sold by the Company to Investor pursuant to this Agreement and which the Company has continuously held as a long position.

**Section 3.09 General Solicitation.** Neither the Investor, nor any of its affiliates, nor any person acting on its or their behalf, has engaged or will engage in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with any offer or sale of the Common Shares by the Investor.

#### ARTICLE IV REPRESENTATIONS AND WARRANTIES OF THE COMPANY

Except as set forth in the SEC Documents, or in the Disclosure Schedules, which Disclosure Schedules shall be deemed a part hereof and shall qualify any representation or warranty otherwise made herein to the extent of the disclosure contained in the corresponding section of the Disclosure Schedules or in another Section of the Disclosure Schedules, to the extent that it is reasonably apparent on the face of such disclosure that such disclosure is applicable to such Section, the Company represents and warrants to the Investor that, as of the date hereof and each Advance Notice Date (other than representations and warranties which address matters only as of a certain date, which shall be true and correct as written as of such certain date), that:

**Section 4.01 Organization and Qualification.** Each of the Company and its Subsidiaries (as defined below) is an entity duly organized and validly existing under the laws of its organization or incorporation, and has the requisite power and authority to own its properties and to carry on its business as now being conducted. Each of the Company and its Subsidiaries is duly qualified to do business and is in good standing (to the extent applicable) in every jurisdiction in which the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing would not have a Material Adverse Effect. The Company’s Subsidiaries means any Person (as defined below) in which the Company, directly or indirectly, (x) owns a majority of the outstanding capital stock or equity or similar interests of such Person or (y) controls or operates all or any part of the business, operations or administration of such Person provided that such Subsidiary is set forth on Schedule 4.01.

**Section 4.02 Authorization, Enforcement, Compliance with Other Instruments.** The Company has the requisite corporate power and authority to enter into and perform its obligations under this Agreement and the other Transaction Documents and to issue the Shares in accordance with the terms hereof and thereof. The execution and delivery by the Company of this Agreement and the other Transaction Documents, and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the issuance of the Common Shares) have been or (with respect to consummation) will be duly authorized by the Company’s board of directors and no further consent or authorization will be required by the Company, its board of directors or its shareholders (except as otherwise contemplated by this Agreement). This Agreement and the other Transaction Documents to which it is a party have been (or, when executed and delivered, will be) duly executed and delivered by the Company and, assuming the execution and delivery thereof and acceptance by the Investor, constitute (or, when duly executed and delivered, will be) the legal, valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or other laws relating to, or affecting generally, the enforcement of applicable creditors’ rights and remedies and except as rights to indemnification and to contribution may be limited by applicable foreign, federal or U.S. state securities law. “Transaction Documents” means, collectively, this Agreement and each of the other agreements and instruments entered into or delivered by any of the parties hereto in connection with the transactions contemplated hereby and thereby, as may be amended from time to time.

**Section 4.03 No Conflict.** The execution, delivery and performance of the Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the issuance of the Common Shares) will not (i) result in a violation of the articles of incorporation or other organizational documents of the Company or its Subsidiaries (with respect to consummation, as the same may be amended prior to the date on which any of the transactions contemplated hereby are consummated), (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which the Company or its Subsidiaries is a party, or (iii) result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations) applicable to the Company or its Subsidiaries or by which any property or asset of the Company or its Subsidiaries is bound or affected except, in the case of clause (ii) or (iii) above, to the extent such violations or conflicts would not reasonably be expected to have a Material Adverse Effect.

**Section 4.04 SEC Documents; Financial Statements.** The Company has filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the Exchange Act for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (all of the foregoing filed within the past two years preceding the date hereof or amended after the date hereof, or filed after the date hereof, and all exhibits included therein and financial statements and schedules thereto and documents incorporated by reference therein, and all registration statements filed by the Company under the Securities Act, being hereinafter referred to as the “SEC Documents”). The Company has made available to the Investor through the SEC’s website at <http://www.sec.gov>, true and complete copies of the SEC Documents, and none of the SEC Documents, when viewed as a whole as of the date hereof, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. As of their respective dates (or, with respect to any filing that has been amended or superseded, the date of such amendment or superseding filing), the SEC Documents complied in all material respects with the requirements of the Exchange Act or the Securities Act, as applicable, and the rules and regulations of the SEC promulgated thereunder applicable

to the SEC Documents. As of their respective dates (or, with respect to any financial statements that have been amended or superseded, the date of such amended or superseding financial statements), the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles, consistently applied, during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto, or (ii) in the case of unaudited interim statements, to the extent they may exclude footnotes or may be condensed or summary statements) and fairly present in all material respects the financial position of the Company as of the respective dates thereof and the results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments).

**Section 4.05 Equity Capitalization.** As of the date hereof, the authorized capital of the Company consists of (A) 100,000,000 Common Shares, of which, 7,945,480 are issued and outstanding and 2,021,503 shares are reserved for issuance pursuant to Convertible Securities (as defined below) exercisable or exchangeable for, or convertible into, Common Shares and (B) 1,000,000 shares of preferred stock, par value \$0.0001 per share, of which none are issued and outstanding. No Common Shares are held in the treasury of the Company. “Convertible Securities” means any capital stock or other security of the Company or any of its Subsidiaries that is at any time and under any circumstances directly or indirectly convertible into, exercisable or exchangeable for, or which otherwise entitles the holder thereof to acquire, any capital stock or other security of the Company (including, without limitation, Common Shares) or any of its Subsidiaries.

**Section 4.06 Intellectual Property Rights.** The Company and its Subsidiaries own or possess adequate rights or licenses to use all trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets and rights, if any, necessary to conduct their respective businesses as now conducted, except as would not cause a Material Adverse Effect. The Company and its Subsidiaries have not received written notice of any infringement by the Company or its Subsidiaries of trademark, trade name rights, patents, patent rights, copyrights, inventions, licenses, service names, service marks, service mark registrations, or trade secrets. To the knowledge of the Company, there is no claim, action or proceeding being made or brought against, or to the Company’s knowledge, being threatened against the Company or its Subsidiaries regarding any material trademark, trade name, patents, patent rights, invention, copyright, license, service names, service marks, service mark registrations, trade secret or other infringement; and the Company is not aware of any facts or circumstances which might give rise to any of the foregoing.

**Section 4.07 Employee Relations.** Neither the Company nor any of its Subsidiaries is involved in any labor dispute nor, to the knowledge of the Company or any of its Subsidiaries, is any such dispute threatened, in each case which is reasonably likely to cause a Material Adverse Effect.

**Section 4.08 Environmental Laws.** The Company and its Subsidiaries (i) have not received written notice alleging any failure to comply in all material respects with all Environmental Laws (as defined below), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) have not received written notice alleging any failure to comply with all terms and conditions of any such permit, license or approval where, in each of the foregoing clauses (i), (ii) and (iii), the failure to so comply would be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect. The term “Environmental Laws” means all applicable federal, state and local laws relating to pollution or protection of human health or the environment (including, without limitation, ambient air, surface water, groundwater, land surface or subsurface strata), including, without limitation, laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, “Hazardous Materials”) into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations issued, entered, promulgated or approved thereunder.

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**Section 4.09 Title.** Except as would not cause a Material Adverse Effect, the Company (or its Subsidiaries) have indefeasible fee simple or leasehold title to its properties and assets owned by it, free and clear of any pledge, lien, security interest, encumbrance, claim or equitable interest. Any real property and facilities held under lease by the Company and its Subsidiaries are held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its Subsidiaries.

**Section 4.10 Insurance.** The Company and each of its Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company believes to be prudent and customary in the businesses in which the Company and its Subsidiaries are engaged. The Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not have a Material Adverse Effect.

**Section 4.11 Regulatory Permits.** Except as would not cause a Material Adverse Effect, the Company and its Subsidiaries possess all certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to own their respective businesses, and neither the Company nor any such Subsidiary has received any written notice of proceedings relating to the revocation or modification of any such certificate, authorization or permits.

**Section 4.12 Internal Accounting Controls.** The Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management’s general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management’s general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences, and management is not aware of any material weaknesses that are not disclosed in the SEC Documents as and when required.

**Section 4.13 Absence of Litigation.** Except with respect to receipt of deficiency notices relating to Nasdaq delisting, which have been disclosed in the SEC Documents, there is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending against or affecting the Company, the Common Shares or any of the Company’s Subsidiaries, wherein an unfavorable decision, ruling or finding would have a Material Adverse Effect.

**Section 4.14 Subsidiaries.** As of the date hereof, the Company does not own or control, directly or indirectly, any interest in any other corporation, partnership, association or other business entity, except for the Subsidiaries and Excluded Subsidiaries.

**Section 4.15 Tax Status.** Except as would not have a Material Adverse Effect, each of the Company and its Subsidiaries (i) has timely made or filed all foreign, federal and state income and all other tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has timely paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations, except those being contested in good faith and (iii) has set aside on its books provision reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. The Company has not received written notification any unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company and its Subsidiaries know of no basis for any such claim where failure to pay would cause a Material Adverse Effect.

**Section 4.16 Certain Transactions.** Except as (i) set forth in the SEC Documents or (ii) not required to be disclosed pursuant to Applicable Law (including, for the avoidance of doubt, not yet required to be disclosed at the relevant time), none of the officers or directors of the Company is presently a party to any transaction with the Company (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer or director, or to the knowledge of the Company, any corporation, partnership, trust or other entity in which any officer or director has a substantial interest or is an officer, director, trustee or partner.

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**Section 4.17 Rights of First Refusal.** The Company is not obligated to offer the Common Shares offered hereunder on a right of first refusal basis or otherwise to any third parties including, but not limited to, current or former shareholders of the Company, underwriters, brokers, agents or other third parties.

**Section 4.18 Dilution.** The Company is aware and acknowledges that the issuance of Common Shares hereunder could cause dilution to existing shareholders and could significantly increase the outstanding number of Common Shares.

**Section 4.19 Acknowledgment Regarding Investor's Purchase of Shares.** The Company acknowledges and agrees that the Investor is acting solely in the capacity of an arm's length investor with respect to this Agreement and the transactions contemplated hereunder. The Company further acknowledges that the Investor is not acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to this Agreement and the transactions contemplated hereunder and any advice given by the Investor or any of its representatives or agents in connection with this Agreement and the transactions contemplated hereunder is merely incidental to the Investor's purchase of the Shares hereunder. The Company is aware and acknowledges that it shall not be able to request Advances under this Agreement if the Registration Statement is not effective or if any issuances of Common Shares pursuant to any Advances would violate any rules of the Principal Market or Trading Market.

**Section 4.20 Sanctions Matters.** Neither the Company, nor any Subsidiary of the Company, nor, to the Company's knowledge, any director, officer, agent, employee or affiliate of the Company or any Subsidiary of the Company, is a Person that is, or is owned or controlled by a Person that is on the list of Specially Designated Nationals and Blocked Persons maintained by OFAC from time to time;

- (a) the subject of any Sanctions; or
- (b) has a place of business in, or is operating, organized, resident or doing business in a country or territory that is, or whose government is, the subject of Sanctions Programs (including without limitation Crimea, Cuba, Iran, North Korea, Sudan and Syria).

**Section 4.21 DTC Eligibility.** The Company, through the transfer agent, currently participates in the DTC Fast Automated Securities Transfer (FAST) Program and the Common Shares can be transferred electronically to third parties via the DTC Fast Automated Securities Transfer (FAST) Program.

## ARTICLE V INDEMNIFICATION

The Investor and the Company represent to the other the following with respect to itself:

**Section 5.01 Indemnification by the Company.** In consideration of the Investor's execution and delivery of this Agreement, and in addition to all of the Company's other obligations under this Agreement, the Company shall defend, protect, indemnify and hold harmless the Investor, its investment manager, and each of their respective officers, directors, managers, members, partners, employees and agents (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) and each person who controls the Investor within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act (collectively, the "Investor Indemnitees") from and against any and all actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and reasonable and documented expenses in connection therewith (irrespective of whether any such Investor Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "Indemnified Liabilities"), incurred by the Investor Indemnitees or any of them as a result of, or arising out of, or relating to (a) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement for the registration of the Shares as originally filed or in any amendment thereof, or in any related prospectus, or in any amendment thereof or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading; provided, however, that the Company will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon any such untrue statement or alleged untrue statement or omission or alleged omission made therein in reliance upon and in conformity with written information furnished to the Company by or on behalf of the Investor specifically for inclusion therein; (b) any material misrepresentation or breach of any material representation or material warranty made by the Company in this Agreement or any other certificate, instrument or document contemplated hereby or thereby; or (c) any material breach of any material covenant, material agreement or material obligation of the Company contained in this Agreement or any other certificate, instrument or document contemplated hereby or thereby. To the extent that the foregoing undertaking by the Company may be unenforceable under Applicable Law, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities, which is permissible under Applicable Law.

**Section 5.02 Indemnification by the Investor.** In consideration of the Company's execution and delivery of this Agreement, and in addition to all of the Investor's other obligations under this Agreement, the Investor shall defend, protect, indemnify and hold harmless the Company and all of its officers, directors, shareholders, employees and agents (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) and each person who controls the Investor within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act (collectively, the "Company Indemnitees") from and against any and all Indemnified Liabilities incurred by the Company Indemnitees or any of them as a result of, or arising out of, or relating to (a) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement for the registration of the Shares as originally filed or in any amendment thereof, or in any related prospectus, or in any amendment thereof or supplement thereto, or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading; provided, however, that the Investor will only be liable for written information relating to the Investor furnished to the Company by or on behalf of the Investor specifically for inclusion in the documents referred to in the foregoing indemnity, and will not be liable in any such case to the extent that any such loss, claim, damage or liability arises out of or is based upon any such untrue statement or alleged untrue statement or omission or alleged omission made therein in reliance upon and in conformity with written information furnished to the Investor by or on behalf of the Company specifically for inclusion therein; (b) any misrepresentation or breach of any representation or warranty made by the Investor in this Agreement or any instrument or document contemplated hereby or thereby executed by the Investor; or (c) any breach of any covenant, agreement or obligation of the Investor(s) contained in this Agreement or any other certificate, instrument or document contemplated hereby or thereby executed by the Investor. To the extent that the foregoing undertaking by the Investor may be unenforceable under Applicable Law, the Investor shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities, which is permissible under Applicable Law.

**Section 5.03 Notice of Claim.** Promptly after receipt by an Investor Indemnitee or Company Indemnitee of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving an Indemnified Liability, such Investor Indemnitee or Company Indemnitee, as applicable, shall, if a claim for an Indemnified Liability in respect thereof is to be made against any indemnifying party under this Article V, deliver to the indemnifying party a written notice of the commencement thereof; but the failure to so notify the indemnifying party will not relieve it of liability under this Article V except to the extent the indemnifying party is prejudiced by such failure. The indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly notified, to assume control of the defense thereof with counsel mutually reasonably satisfactory to the indemnifying party and the Investor Indemnitee or Company Indemnitee, as the case may be; provided, however, that an Investor Indemnitee or Company Indemnitee shall have the right to retain its own counsel with the actual and reasonable third party fees and expenses of not more than one counsel for such Investor Indemnitee or Company Indemnitee to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the indemnifying party, the representation by such counsel of the Investor Indemnitee or Company Indemnitee and the indemnifying party would be inappropriate due to actual or potential differing interests between such Investor Indemnitee or Company Indemnitee and any other party represented by such counsel in such proceeding. The Investor Indemnitee or Company Indemnitee shall cooperate fully with the indemnifying party in connection with any negotiation or defense of

any such action or claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Investor Indemnitee or Company Indemnitee which relates to such action or claim. The indemnifying party shall keep the Investor Indemnitee or Company Indemnitee reasonably apprised as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its prior written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the prior written consent of the Investor Indemnitee or Company Indemnitee, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Investor Indemnitee or Company Indemnitee of a release from all liability in respect to such claim or litigation. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Investor Indemnitee or Company Indemnitee with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The indemnification required by this Article V shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received and payment therefor is due, subject to receipt by the indemnifying party of an undertaking to repay any amounts that such party is ultimately not entitled to receive as indemnification pursuant to this Agreement.

**Section 5.04 Remedies.** The remedies provided for in this Article V are not exclusive and shall not limit any right or remedy which may be available to any indemnified person at law or equity. The obligations of the parties to indemnify or make contribution under this Article V shall survive expiration or termination of this Agreement.

**Section 5.05 Limitation of Liability.** Notwithstanding the foregoing, no party shall be entitled to recover from the other party for punitive, indirect, incidental or consequential damages.

## ARTICLE VI COVENANTS

### Section 6.01 Registration Statement.

- (a) **Filing of a Registration Statement.** No later than Sixty (60) calendar days following the date hereof, the Company shall have prepared and filed with the SEC a Registration Statement for the resale by the Investor of Registrable Securities and shall file one or more additional Registration Statements for the resale by Investor of Registrable Securities if necessary. The Company acknowledges and agrees that it shall not have the ability to request any Advances until the effectiveness of a Registration Statement registering the applicable Registrable Securities for resale by the Investor.
- (b) **Maintaining a Registration Statement.** The Company shall use commercially reasonable efforts to maintain the effectiveness of any Registration Statement that has been declared effective at all times during the Commitment Period, provided, however, that if the Company has received notification pursuant to Section 2.07 that the Investor has completed resales pursuant to the Registration Statement for all of the Registrable Securities registered thereon, then the Company shall be under no further obligation to maintain the effectiveness of the Registration Statement. Notwithstanding anything to the contrary contained in this Agreement, the Company shall use commercially reasonable efforts to ensure that, when filed, each Registration Statement (including, without limitation, all amendments and supplements thereto) and the prospectus (including, without limitation, all amendments and supplements thereto) used in connection with such Registration Statement shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein (in the case of prospectuses, in the light of the circumstances in which they were made) not misleading. During the Commitment Period, the Company shall notify the Investor promptly if (i) the Registration Statement shall cease to be effective under the Securities Act, (ii) the Common Shares shall cease to be authorized for listing on the Principal Market or Trading Market, (iii) the Common Shares cease to be registered under Section 12(b) or Section 12(g) of the Exchange Act or (iv) the Company fails to file in a timely manner all reports and other documents required of it as a reporting company under the Exchange Act.

- (c) **Filing Procedures.** Not less than one business day prior to the filing of a Registration Statement and not less than one business day prior to the filing of any related amendments and supplements to any Registration Statements (except for any amendments or supplements caused by the filing of any annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any similar or successor reports), the Company shall furnish to the Investor copies of all such documents proposed to be filed, which documents (other than those filed pursuant to Rule 424 promulgated under the Securities Act) will be subject to the reasonable and prompt review of the Investor (in each of which cases, if such document contains material non-public information as consented to by the Investor pursuant to Section 6.13, the information provided to Investor will be kept strictly confidential until filed and treated as subject to Section 6.08). The Investor shall furnish comments on a Registration Statement and any related amendment and supplement to a Registration Statement to the Company within 24 hours of the receipt thereof. If the Investor fails to provide comments to the Company within such 24-hour period, then the Registration Statement, related amendment or related supplement, as applicable, shall be deemed accepted by the Investor in the form originally delivered by the Company to the Investor.
- (d) **Delivery of Final Documents.** The Company shall furnish to the Investor without charge, (i) at least one copy of each Registration Statement as declared effective by the SEC and any amendment(s) thereto, including financial statements and schedules, all documents incorporated therein by reference, all exhibits and each preliminary prospectus, (ii) at the request of the Investor, at least one copy of the final prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as the Investor may reasonably request) and (iii) such other documents as the Investor may reasonably request from time to time in order to facilitate the disposition of the Common Shares owned by the Investor pursuant to a Registration Statement. Filing of the foregoing with the SEC via its EDGAR system shall satisfy the requirements of this section.
- (e) **Amendments and Other Filings.** The Company shall use commercially reasonable efforts to (i) prepare and file with the SEC such amendments (including post-effective amendments) and supplements to a Registration Statement and the related prospectus used in connection with such Registration Statement, which prospectus is to be filed pursuant to Rule 424 promulgated under the Securities Act, as may be necessary to keep such Registration Statement effective at all times during the Commitment Period, and prepare and file with the SEC such additional Registration Statements in order to register for resale under the Securities Act all of the Registrable Securities; (ii) cause the related prospectus to be amended or supplemented by any required prospectus supplement (subject to the terms of this Agreement), and as so supplemented or amended to be filed pursuant to Rule 424 promulgated under the Securities Act; (iii) provide the Investor copies of all correspondence from and to the SEC relating to a Registration Statement (provided that the Company may excise any information contained therein which would constitute material non-public information), and (iv) comply with the provisions of the Securities Act with respect to the disposition of all Common Shares of the Company covered by such Registration Statement until such time as all of such Common Shares shall have been disposed of in accordance with the intended methods of disposition by the seller or sellers thereof as set forth in such Registration Statement. In the case of amendments and supplements to a Registration Statement which are required to be filed pursuant to this Agreement (including pursuant to this Section 6.01(e)) by reason of the Company's filing a report on Form 10-K, Form 10-Q or Form 8-K or any analogous report under the Exchange Act, the Company shall use commercially reasonable efforts to file such report in a prospectus supplement filed pursuant to Rule 424 promulgated under the Securities Act to incorporate such filing into the Registration Statement, if applicable, or shall file such amendments or supplements with the SEC either on the day on which the Exchange Act report is filed which created the requirement for the Company to amend or supplement the Registration Statement, if feasible, or otherwise promptly thereafter.

- (f) Blue-Sky. The Company shall use its commercially reasonable efforts to, if required by Applicable Law, (i) register and qualify the Common Shares covered by a Registration Statement under such other securities or “blue sky” laws of such jurisdictions in the United States as the Investor reasonably requests, (ii) prepare and file in those jurisdictions, such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Commitment Period, (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Commitment Period, and (iv) take all other actions reasonably necessary or advisable to qualify the Common Shares for sale in such jurisdictions; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (w) make any change to its articles of incorporation or bylaws, (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 6.01(f), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify the Investor of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Common Shares for sale under the securities or “blue sky” laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

#### **Section 6.02 Suspension of Registration Statement**

- (a) Establishment of a Black Out Period. During the Commitment Period, the Company from time to time may suspend the use of the Registration Statement by written notice to the Investor in the event that the Company determines in its sole discretion in good faith that such suspension is necessary to (A) delay the disclosure of material nonpublic information concerning the Company, the disclosure of which at the time is not, in the good faith opinion of the Company, in the best interests of the Company or (B) amend or supplement the Registration Statement or prospectus so that such Registration Statement or prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading (a “Black Out Period”).
- (b) No Sales by Investor During the Black Out Period. During such Black Out Period, the Investor agrees not to sell any Common Shares of the Company.
- (c) Limitations on the Black Out Period. The Company shall not impose any Black Out Period that is longer than 60 days or in a manner that is more restrictive (including, without limitation, as to duration) than the comparable restrictions that the Company may impose on transfers of the Company’s equity securities by its directors and senior executive officers. In addition, the Company shall not deliver any Advance Notice during any Black Out Period. If the public announcement of such material, nonpublic information is made during a Black Out Period, the Black Out Period shall terminate immediately after such announcement, and the Company shall immediately notify the Investor of the termination of the Black Out Period.

**Section 6.03 Listing of Common Shares.** As of each Advance Date, the Shares to be sold by the Company from time to time hereunder will have been registered under Section 12(b) of the Exchange Act and approved for listing on the Principal Market or Trading Market, subject to official notice of issuance.

**Section 6.04 Opinion of Counsel.** Prior to the date of the delivery by the Company of the first Advance Notice, the Investor shall have received an opinion and negative assurances letter from counsel to the Company in form and substance reasonably satisfactory to the Investor.

**Section 6.05 Exchange Act Registration.** The Company will use commercially reasonable efforts to file in a timely manner all reports and other documents required of it as a reporting company under the Exchange Act and will not take any action or file any document (whether or not permitted by Exchange Act or the rules thereunder) to terminate or suspend its reporting and filing obligations under the Exchange Act.

**Section 6.06 Transfer Agent Instructions.** For any time while there is a Registration Statement in effect for this transaction, the Company shall (if required by the transfer agent for the Common Shares) cause legal counsel for the Company to deliver to the transfer agent for the Common Shares (with a copy to the Investor) instructions to issue Common Shares to the Investor free of restrictive legends upon each Advance if the delivery of such instructions are consistent with Applicable Law and the Investor has provided the Transfer Agent Deliverables with respect to such Common Shares required by this Agreement.

**Section 6.07 Corporate Existence.** The Company will use commercially reasonable efforts to preserve and continue the corporate existence of the Company during the Commitment Period.

**Section 6.08 Notice of Certain Events Affecting Registration; Suspension of Right to Make an Advance.** The Company will promptly notify the Investor, and confirm in writing, upon its becoming aware of the occurrence of any of the following events in respect of a Registration Statement or related prospectus relating to an offering of Common Shares (in each of which cases the information provided to Investor will be kept strictly confidential): (i) except for requests made in connection with SEC or other Federal or state governmental authority investigations disclosed in the SEC Documents, receipt of any request for additional information by the SEC or any other Federal or state governmental authority during the period of effectiveness of the Registration Statement or any request for amendments or supplements to the Registration Statement or related prospectus; (ii) the issuance by the SEC or any other Federal governmental authority of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose; (iii) receipt of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Common Shares for sale in any jurisdiction or the initiation or written threat of any proceeding for such purpose; (iv) the happening of any event that makes any statement made in the Registration Statement or related prospectus or any document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires the making of any changes in the Registration Statement, related prospectus or documents so that, in the case of the Registration Statement, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and that in the case of the related prospectus, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, or of the necessity to amend the Registration Statement or supplement a related prospectus to comply with the Securities Act or any other law; and (v) the Company’s reasonable determination that a post-effective amendment to the Registration Statement would be appropriate; and the Company will promptly make available to the Investor any such supplement or amendment to the related prospectus. The Company shall not deliver to the Investor any Advance Notice, and the Company shall not sell any Shares pursuant any pending Advance Notice (other than as required pursuant to Section 2.05(d)), during the continuation of any of the foregoing events in clauses (i) through (v) above, or in the event that (vi) there shall be no bid for the Common Shares on the Principal Market or Trading Market for a period of 15 consecutive minutes at any time during the applicable Pricing Period or (vii) there shall be a “trading halt” or circuit breaker” event with respect to the Common Shares on the Principal Market or Trading Market during the applicable Pricing Period (each of the events described in the immediately preceding clauses (i) through (vii), inclusive, a “Material Outside Event”).

**Section 6.09 Consolidation.** If an Advance Notice has been delivered to the Investor, then the Company shall not effect any consolidation of the Company with or into, or a transfer of all or substantially all the assets of the Company to another entity before the transaction contemplated in such Advance Notice has been closed in accordance with Section 2.05 hereof, and all Shares in connection with such Advance have been received by the Investor.

**Section 6.10 Issuance of the Company’s Common Shares.** The issuance and sale of the Common Shares hereunder shall be made in accordance with the provisions and requirements of Section 4(a)(2) of the Securities Act or Regulation D under the Securities Act and any applicable state securities law.

**Section 6.11 Market Activities.** The Company will not, directly or indirectly, take any action designed to cause or result in, or that constitutes or might reasonably be expected to constitute, the stabilization or manipulation of the price of any security of the Company under Regulation M of the Exchange Act.

**Section 6.12 Expenses.** The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is terminated, will pay all expenses incident to the performance of its obligations hereunder, including but not limited to (i) the preparation, printing and filing of the Registration Statement and each amendment and supplement thereto, of each prospectus and of each amendment and supplement thereto; (ii) the preparation, issuance and delivery of any Shares issued pursuant to this Agreement, (iii) all reasonable fees and disbursements of the Company's counsel, accountants and other advisors, (iv) the qualification of the Shares under securities laws in accordance with the provisions of this Agreement, including filing fees in connection therewith, (v) the printing and delivery of copies of any prospectus and any amendments or supplements thereto, (vi) the fees and expenses incurred in connection with the listing or qualification of the Shares for trading on the Principal Market or Trading Market, or (vii) filing fees of the SEC and the Principal Market or Trading Market.

**Section 6.13 Current Report.** The Company shall not, and the Company shall cause each of its Subsidiaries and each of its and their respective officers, directors, employees and agents not to, provide the Investor with any material, non-public information regarding the Company or any of its Subsidiaries without the express prior written consent of the Investor (which may be granted or withheld in the Investor's sole discretion and must include an agreement to keep such information confidential until publicly disclosed or 45 days have passed); it being understood that the mere notification of Investor required pursuant to Section 6.08(iv) hereof shall not in and of itself be deemed to be material non-public information. Notwithstanding anything contained in this Agreement to the contrary, the Company expressly agrees that it shall use its commercial reasonable efforts to publicly disclose, no later than 45 days following the date hereof, but in any event prior to delivering the first Advance Notice hereunder, any information communicated to the Investor by or, to the knowledge of the Company, on behalf of the Company in connection with the transactions contemplated herein, which, following the date hereof would, if not so disclosed, constitute material, non-public information regarding the Company or its Subsidiaries.

**Section 6.14 Advance Notice Limitation.** The Company shall not deliver an Advance Notice if a shareholder meeting or corporate action date, or the record date for any shareholder meeting or any corporate action, would fall during the period beginning two Trading Days prior to the date of delivery of such Advance Notice and ending two Trading Days following the Closing of such Advance.

**Section 6.15 Use of Proceeds.** The Company will use the proceeds from the sale of the Common Shares hereunder for working capital and other general corporate purposes or, if different, in a manner consistent with the application thereof described in the Registration Statement. Neither the Company nor any Subsidiary will, directly or indirectly, use the proceeds of the transactions contemplated herein, or lend, contribute, facilitate or otherwise make available such proceeds to any Person (i) to fund, either directly or indirectly, any activities or business of or with any Person that is identified on the list of Specially Designated Nationals and Blocker Persons maintained by OFAC, or in any country or territory, that, at the time of such funding, is, or whose government is, the subject of Sanctions or Sanctions Programs, or (ii) in any other manner that will result in a violation of Sanctions.

**Section 6.16 Compliance with Laws.** The Company shall comply in all material respects with all Applicable Laws.

**Section 6.17 Aggregation.** From and after the date of this Agreement, neither the Company, nor or any of its affiliates will, and the Company shall use its commercially reasonable efforts to ensure that no Person acting on their behalf will, directly or indirectly, make any offers or sales of any security or solicit any offers to buy any security, under circumstances that would cause this offering of the Securities by the Company to the Investor to be aggregated with other offerings by the Company in a manner that would require shareholder approval pursuant to the rules of the Principal Market or Trading Market on which any of the securities of the Company are listed or designated, unless shareholder approval is obtained before the closing of such subsequent transaction in accordance with the rules of such Principal Market or Trading Market.

**Section 6.18 Other Transactions.** The Company shall not enter into, announce or recommend to its shareholders any agreement, plan, arrangement or transaction in or of which the terms thereof would restrict, materially delay, conflict with or impair the ability or right of the Company to perform its obligations under the Transaction Documents, including, without limitation, the obligation of the Company to deliver the Shares to the Investor in accordance with the terms of the Transaction Documents. For the avoidance of doubt, the Parties agree that the transactions contemplated by the Securities Purchase Agreement do not conflict with this Section 6.18.

**Section 6.19 Integration.** From and after the date of this Agreement, neither the Company, nor or any of its affiliates will, and the Company shall use its commercially reasonable efforts to ensure that no Person acting on their behalf will, directly or indirectly, make any offers or sales of any security or solicit any offers to buy any security, under circumstances that when combined with the offering of securities hereunder would require registration of the offer and sale of any of the securities under the Securities Act prior to the issuance of securities hereunder.

**Section 6.20 Limitation on Variable Rate Transactions.** From the date hereof until the earlier of (i) the date that the Investor has purchased \$5 million in Common Shares hereunder or (ii) three (3) months after any Termination hereunder (the "Limitation Date"), the Company shall be prohibited from effecting or entering into an agreement to effect any issuance by the Company of Common Shares or Common Share Equivalents (or a combination of units thereof) involving a Variable Rate Transaction, other than in connection with an Exempt Issuance or with the prior written consent of the Investor. The Investor shall be entitled to seek injunctive relief against the Company to preclude any such issuance, which remedy shall be in addition to any right to collect damages, without the necessity of showing economic loss and without any bond or other security being required.

"Common Share Equivalents" means any securities of the Company which entitle the holder thereof to acquire at any time Common Shares, including, without limitation, Common Shares, any debt, preferred shares, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Shares.

"Variable Rate Transaction" means a transaction in which the Company (i) issues or sells any future equity or debt securities that are convertible into, exchangeable or exercisable for, or include the right to receive additional Common Shares or Common Share Equivalents either (A) at a conversion price, exercise price, exchange rate or other price that is based upon and/or varies with the trading prices of or quotations for the Common Shares at any time after the initial issuance of such equity or debt securities (including, without limitation, pursuant to any "cashless exercise" provision), or (B) with a conversion, exercise or exchange price that is subject to being reset at some future date after the initial issuance of such equity or debt security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Shares (including, without limitation, any "full ratchet" or "weighted average" anti-dilution provisions, but not including any standard anti-dilution protection for any reorganization, recapitalization, non-cash dividend, share split, reverse share split or other similar transaction), (ii) issues or sells any equity or debt securities, including without limitation, Common Shares or Common Share Equivalents, either (A) at a price that is subject to being reset at some future date after the initial issuance of such debt or equity security or upon the occurrence of specified or contingent events directly or indirectly related to the business of the Company or the market for the Common Shares (other than standard anti-dilution protection for any reorganization, recapitalization, non-cash dividend, share split, reverse share split or other similar transaction), or (B) that is subject to or contains any put, call, redemption, buy-back, price-reset or other similar provision or mechanism (including, without limitation, a "Black-Scholes" put or call right) that provides for the issuance of additional equity securities of the Company or the payment of cash by the Company, or (iii) enters into any agreement, including, but not limited to, an at-the-market offering or "equity line" (that is not an Exempt Issuance) or other continuous offering or similar offering of Common

Shares or Common Share Equivalents, whereby the Company may sell Common Shares or Common Share Equivalents at a future determined price.

“**Exempt Issuance**” means the issuance of (a) Common Shares, options, restricted stock units or other equity incentive awards to employees, officers, consultants, directors or vendors of the Company pursuant to any equity incentive plan duly adopted for such purpose, by the Board of Directors of the Company or a majority of the members of a committee of directors established for such purpose, (b) any Shares issued to the Investor pursuant to this Agreement or to Helena Special Opportunities LLC pursuant to the Securities Purchase Agreement, (c) Common Shares, Common Share Equivalents or other securities issued to the Investor pursuant to any other existing or future contract, agreement or arrangement between the Company and the Investor or Helena Special Opportunities LLC, (d) Common Shares, Common Share Equivalents or other securities upon the exercise, exchange or conversion of any Common Shares, Common Share Equivalents or other securities held by the Investor at any time, (e) any securities issued upon the exercise or exchange of or conversion of any Common Share Equivalents issued and outstanding on the date hereof, provided that such securities or Common Share Equivalents referred to in this clause (e) have not been amended since the date hereof to increase the number of such securities or Common Shares underlying such securities or to decrease the exercise price, exchange price or conversion price of such securities, (f) Common Share Equivalents that are convertible into, exchangeable or exercisable for, or include the right to receive Common Shares at a conversion price, exercise price, exchange rate or other price (which may be below the then current market price of the Common Shares) that is fixed at the time of initial issuance of such Common Share Equivalents (subject only to standard anti-dilution protection for any reorganization, recapitalization, non-cash dividend, share split, reverse share split or other similar transaction), which fixed conversion price, exercise price, exchange rate or other price shall not at any time after the initial issuance of such Common Share Equivalent be based upon or varying with the trading prices of or quotations for the Common Shares or subject to being reset at some future date and (g) securities issued pursuant to acquisitions, divestitures, licenses, partnerships, collaborations or strategic transactions approved by the Board of Directors of the Company or a majority of the members of a committee of directors established for such purpose, which acquisitions, divestitures, licenses, partnerships, collaborations or strategic transactions can have a Variable Rate Transaction component, provided that any such issuance shall only be to a Person (or to the equity holders of a Person) which is, itself or through its subsidiaries, an operating company or an asset in a business synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities. In the event that the Company enters into a Variable Rate Transaction in breach of this section, the Company shall promptly pay to Investor \$100,000 in cash as liquidated damages and upon receipt of such payment by the Investor, the Investor shall not be entitled to any other damages nor shall it be entitled to specific performance as the result of such breach.

**Section 6.21 DTC.** The Company shall take all action reasonably required to ensure that its Common Shares can be transferred electronically as DWAC Shares if the Transfer Agent Deliverables with respect to such Common Shares have been provided by the Investor.

**Section 6.22 Non-Public Information.** Each party hereto agrees not to disclose any Confidential Information of the other party to any third party and shall not use the Confidential Information for any purpose other than in connection with, or in furtherance of, the transactions contemplated hereby in full compliance with applicable securities laws; provided, however that a party may disclose Confidential Information that is required by law to be disclosed by the receiving party, provided that the receiving party gives the disclosing party prompt written notice of such requirement prior to such disclosure and assistance in obtaining an order protecting the information from public disclosure. Each party hereto acknowledges that the Confidential Information shall remain the property of the disclosing party and agrees that it shall take all reasonable measures to protect the secrecy of any Confidential Information disclosed by the other party. The Company confirms that neither it nor any other Person acting on its behalf shall provide the Investor or its agents or counsel with any information that constitutes material, non-public information, unless a simultaneous public announcement thereof is made by the Company in the manner contemplated by Regulation FD under the Exchange Act. In the event of a breach of the foregoing covenant by the Company or any Person acting on its behalf (as determined in the reasonable good faith judgment of the Investor), in addition to any other remedy provided herein or in the other Transaction Documents, the Investor shall have the right to make a public disclosure, in the form of a press release, public advertisement or otherwise, of such material, non-public information without the prior approval by the Company; provided the Investor shall have first provided notice to the Company that it believes it has received information that constitutes material, non-public information, the Company shall have at least twenty-four (24) hours to publicly disclose such material, non-public information prior to any such disclosure by the Investor, and the Company shall have failed to publicly disclose such material, non-public information within such time period. The Investor shall not have any liability to the Company, any of its Subsidiaries, or any of their respective directors, officers, employees, shareholders or agents, for any such disclosure. The Company understands and confirms that the Investor shall be relying on the foregoing covenants in effecting transactions in securities of the Company.

**Section 6.23 Prohibition of Short Sales and Hedging Transactions.** The Investor agrees that beginning on the date of this Agreement and ending on the date of termination of this Agreement as provided in Section 11, the Investor and its agents, representatives and affiliates shall not in any manner whatsoever enter into or effect, directly or indirectly, any (i) “short sale” (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of the Common Shares (excluding transactions properly marked “short exempt”) or (ii) hedging transaction, which establishes a net short position with respect to the Common Shares.

**Section 6.24 Use of Name.** The Company shall not, directly or indirectly, use the names “Arena Business Solutions Global”, “Arena Business Results”, “Arena Management Company, LLC”, “Arena Finance Company, LLC”, or “Arena”, or any derivations thereof, or logos associated with these names, as the case may be, in any manner or take any action that may imply any relationship with the Investor or any of its Affiliates without the prior written consent of the Investor, provided, however, the Investor hereby consents to all lawful uses of these names in the prospectus, statement and other materials that are required by applicable laws or pursuant to the disclosure requirements of the SEC or any state securities authority.

## ARTICLE VII CONDITIONS FOR DELIVERY OF ADVANCE NOTICE

**Section 7.01 Conditions Precedent to the Right of the Company to Deliver an Advance Notice.** The right of the Company to deliver an Advance Notice and the obligations of the Investor hereunder with respect to an Advance is subject to:

- (a) the satisfaction by the Company, on each Advance Notice Date (a “Condition Satisfaction Date”), of each of the following conditions:
- (b) Accuracy of the Company’s Representations and Warranties. The representations and warranties of the Company in this Agreement shall be true and correct in all material respects.
- (c) Registration of the Common Shares with the SEC. There is an effective Registration Statement pursuant to which the Investor is permitted to utilize the prospectus thereunder to resell all of the Registrable Securities. The Company shall have filed with the SEC all reports, notices and other documents required under the Exchange Act and applicable SEC regulations during the twelve-month period immediately preceding the applicable Condition Satisfaction Date.
- (d) Authority. The Company shall have obtained all permits and qualifications required by any applicable state for the offer and sale of all the Common Shares issuable pursuant to such Advance Notice, or shall have the availability of exemptions therefrom. The sale and issuance of such Common Shares shall be legally permitted by all laws and regulations to which the Company is subject.

- (e) No Material Outside Event or Material Adverse Effect No Material Outside Event or Material Adverse Effect shall have occurred and be continuing.
- (f) Performance by the Company. The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior the applicable Condition Satisfaction Date including, without limitation, the delivery of all Common Shares issuable pursuant to all previously delivered Advance Notices and pay the Commitment Fee to Investor (for the avoidance of doubt, if the Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by this Agreement at the time of the applicable Condition Satisfaction Date, but did not comply with any timing requirement set forth herein, then this condition shall be deemed satisfied unless the Investor is materially prejudiced by the failure of the Company to comply with any such timing requirement).
- (g) No Injunction. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction that prohibits or directly, materially and adversely affects any of the transactions contemplated by this Agreement.
- (h) No Suspension of Trading in or Delisting of Common Shares The Common Shares are quoted for trading on the Principal Market or Trading Market and all of the Shares issuable pursuant to such Advance Notice will be listed or quoted for trading on the Principal Market or Trading Market. The Company shall not have received any written notice that is then still pending threatening the continued quotation of the Common Shares on the Principal Market or Trading Market.
- (i) Authorized. There shall be a sufficient number of authorized but unissued and otherwise unreserved Common Shares for the issuance of all of the Shares issuable pursuant to such Advance Notice.
- (j) Executed Advance Notice. The representations contained in the applicable Advance Notice shall be true and correct in all material respects as of the applicable Condition Satisfaction Date.
- (k) Consecutive Advance Notices. Except with respect to the first Advance Notice, the Pricing Period for all prior Advances has been completed.
- (l) Shareholder Approval. The Company shall have obtained Shareholder Approval.

Furthermore, the Company shall not have the right to deliver an Advance Notice to the Investor if any of the following shall occur:

- (l) the Company breaches any representation or warranty in any material respect, or breaches any covenant or other term or condition under any Transaction Document in any material respect, and except in the case of a breach of a covenant which is reasonably curable, only if such breach continues for a period of at least five (5) consecutive Business Days;
- (m) if any Person commences a proceeding against the Company pursuant to or within the meaning of any Bankruptcy Law for so long as such proceeding is not dismissed;
- (n) if the Company is at any time insolvent, or, pursuant to or within the meaning of any Bankruptcy Law, (i) commences a voluntary case, (ii) consents to the entry of an order for relief against it in an involuntary case, (iii) consents to the appointment of a Custodian of it or for all or substantially all of its property, or (iv) makes a general assignment for the benefit of its creditors or (v) the Company is generally unable to pay its debts as the same become due;
- (o) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that (i) is for relief against the Company in an involuntary case, (ii) appoints a Custodian of the Company or for all or substantially all of its property, or (iii) orders the liquidation of the Company or any Subsidiary for so long as such order, decree or similar action remains in effect;
- (p) if at any time the Company is not eligible or is unable to transfer its Shares to Investor, including, without limitation, electronically through DTC's Deposit/Withdrawal At Custodian system; or
- (q) if the last trade of the Common Shares is below \$0.50 at the time of timely receipt of an Advance Notice.

**ARTICLE VIII  
NON-DISCLOSURE OF NON-PUBLIC INFORMATION**

The Company covenants and agrees that, other than as expressly required by Section 6.08 hereof or, with the Investor's consent pursuant to Section 6.01(c) and 6.13, it shall refrain from disclosing, and shall cause its officers, directors, employees and agents to refrain from disclosing, any material non-public information (as determined under the Securities Act, the Exchange Act, or the rules and regulations of the SEC) directly or indirectly to the Investor or its affiliates, without also disseminating such information to the public, unless prior to disclosure of such information the Company identifies such information as being material non-public information and provides the Investor with the opportunity to accept or refuse to accept such material non-public information for review. Unless specifically agreed to in writing, in no event shall the Investor have a duty of confidentiality, or be deemed to have agreed to maintain information in confidence, with respect to the delivery of any Advance Notices.

**ARTICLE IX  
NON EXCLUSIVE AGREEMENT**

Notwithstanding anything contained herein, this Agreement and the rights awarded to the Investor hereunder are non-exclusive, and the Company may, at any time throughout the term of this Agreement and thereafter, issue and allot, or undertake to issue and allot, any shares and/or securities and/or convertible notes, bonds, debentures, options to acquire shares or other securities and/or other facilities which may be converted into or replaced by Common Shares or other securities of the Company, and to extend, renew and/or recycle any bonds and/or debentures, and/or grant any rights with respect to its existing and/or future share capital.

**ARTICLE X  
CHOICE OF LAW/JURISDICTION**

This Agreement shall be governed by and interpreted in accordance with the laws of the State of New York without regard to the principles of conflict of laws. The parties further agree that any action between them shall be heard in New York County, New York, and expressly consent to the jurisdiction and venue of the Supreme Court of New York, sitting in New York County, New York and the United States District Court of the Southern District of New York, sitting in New York, New York, for the adjudication of any civil action asserted pursuant to this Agreement.

**ARTICLE XI  
ASSIGNMENT; TERMINATION**

**Section 11.01 Assignment.** Neither this Agreement nor any rights or obligations of the parties hereto may be assigned to any other Person.

**Section 11.02 Termination.**

- (a) Unless earlier terminated as provided hereunder, this Agreement shall terminate automatically on the earliest of (i) the first day of the month next following the 36-month anniversary of the date hereof or (ii) the date on which the Investor shall have made payment of Advances pursuant to this Agreement for Common Shares equal to the Commitment Amount.
- (b) The Company may terminate this Agreement effective upon five Trading Days' prior written notice to the Investor; provided that (i) there are no outstanding Advance Notices, the Common Shares under which have yet to be issued, and (ii) the Company has paid all amounts owed to the Investor pursuant to this Agreement including, without limitation, the Commitment Fee. This Agreement may be terminated at any time by the mutual written consent of the parties, effective as of the date of such mutual written consent unless otherwise provided in such written consent.
- (c) Nothing in this Section 11.02 shall be deemed to release the Company or the Investor from any liability for any breach under this Agreement, or to impair the rights of the Company and the Investor to compel specific performance by the other party of its obligations under this Agreement. The indemnification provisions contained in Article V shall survive termination hereunder.

**ARTICLE XII  
NOTICES**

Other than with respect to Advance Notices, which must be in writing and will be deemed delivered on the day set forth in Section 2.02 in accordance with Exhibit C, any notices, consents, waivers, or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile or e-mail if sent on a Trading Day, or, if not sent on a Trading Day, on the immediately following Trading Day; (iii) 5 days after being sent by U.S. certified mail, return receipt requested, (iv) 1 day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications (except for Advance Notices which shall be delivered in accordance with Exhibit A hereof) shall be:

If to the Company, to:

FIREFLY NEUROSCIENCE, INC.  
1100 Military Road, Kenmore, NY, 14217  
Email: greg.lipschitz@fireflyneuro.com  
Attention: Greg Lipschitz

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With a Copy (which shall not constitute notice or delivery of process) to:

BEVILACQUA PLLC  
1050 Connecticut Avenue, NW  
Suite 500  
Washington, DC 20036  
Email lou@bevilacqua PLLC.com  
Attention: Louis A. Bevilacqua, Esq.

If to the Investor(s):

ARENA BUSINESS SOLUTIONS GLOBAL SPC II, LTD  
405 Lexington Ave, 59th Floor  
New York, NY 10174  
Attention: Yoav Stramer  
Telephone: (212) 752-2568  
Email: [ystramer@arenaco.com](mailto:ystramer@arenaco.com)

With a Copy (which shall not constitute notice or delivery of process) to:

Pryor Cashman LLP  
7 Times Square  
New York, New York 10036  
Attention: Matthew Ogurick, Esq.  
Telephone: (212) 326-0243  
Email: mogurick@pryorcashman.com

Either may change its information contained in this Article XII by delivering notice to the other party as set forth herein.

**ARTICLE XIII  
MISCELLANEOUS**

**Section 13.01 Counterparts.** This Agreement may be executed in identical counterparts, both which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party. Facsimile or other electronically scanned and delivered signatures, including by e-mail attachment, shall be deemed originals for all purposes of this Agreement.

**Section 13.02 Entire Agreement; Amendments.** This Agreement supersedes all other prior oral or written agreements between the Investor, the Company, their respective affiliates and persons acting on their behalf with respect to the matters discussed herein, and this Agreement contains the entire understanding of the parties with respect to the matters covered herein and, except as specifically set forth herein, neither the Company nor the Investor makes any representation, warranty, covenant or undertaking with respect to such matters. No provision of this Agreement may be waived or amended other than by an instrument in writing signed by the parties to this Agreement. The provisions of the existing confidentiality agreement between the Investor and the Company shall remain in force, except that all provisions therein dealing with the treatment of material non-public information are superseded by this Agreement.

**Section 13.03 Reporting Entity for the Common Shares.** The reporting entity relied upon for the determination of the trading price or trading volume of the Common Shares on any given Trading Day for the purposes of this Agreement shall be Bloomberg, L.P. or any successor thereto. The written mutual consent of the Investor and the Company shall be required to employ any other reporting entity.

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**Section 13.04 Due Diligence Fee; Commitment Fee.**

- (a) Each of the parties shall pay its own fees and expenses (including the fees of any attorneys, accountants, appraisers or others engaged by such party) in connection with this Agreement and the transactions contemplated hereby, except that the Company shall be responsible for all of Investor’s customary due diligence and legal fees (and will provide proof of any retainer payments and engagement letters) not to exceed \$40,000.
- (b) In consideration for the Investor’s execution and delivery of this Agreement, the Company shall pay the Investor \$300,000 in cash (the “Commitment Fee”) which shall be deemed fully earned on the date hereof and which shall be payable within five (5) calendar days of the date hereof.

**Section 13.05 Brokerage.** Except as set forth on Schedule 13.05, each of the parties hereto represents that it has had no dealings in connection with this transaction with any finder or broker who will demand payment of any fee or commission from the other party. The Company on the one hand, and the Investor, on the other hand, agree to indemnify the other against and hold the other harmless from any and all liabilities to any person claiming brokerage commissions or finder’s fees on account of services purported to have been rendered on behalf of the indemnifying party in connection with this Agreement or the transactions contemplated hereby.

*[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]*

**IN WITNESS WHEREOF**, the parties hereto have caused this Purchase Agreement to be executed by the undersigned, thereunto duly authorized, as of the date first set forth above.

**COMPANY:**

**FIREFLY NEUROSCIENCE, INC.**

By: /s/ Greg Lipschitz

Name: Greg Lipschitz

Title: Executive Chairman

**INVESTOR:**

**ARENA BUSINESS SOLUTIONS GLOBAL SPC II, LTD**

By: /s/ Lawrence Cutler

Name: Lawrence Cutler

Title: Authorized Signatory

**EXHIBIT A  
ADVANCE NOTICE**

FIREFLY NEUROSCIENCE, INC.

Dated: \_\_\_\_\_ Advance Notice Number: \_\_\_\_\_

The undersigned, \_\_\_\_\_, hereby certifies, with respect to the sale of Common Shares of FIREFLY NEUROSCIENCE, INC. (the “Company”) issuable in connection with this Advance Notice, delivered pursuant to that certain Purchase Agreement, dated as of December \_\_, 2024 (the “Agreement”), as follows:

- 1 The undersigned is the duly elected \_\_\_\_\_ of the Company.
- 2 There are no fundamental changes to the information set forth in the Registration Statement which would require the Company to file a post-effective amendment to the Registration Statement.
- 3 All conditions to the delivery of this Advance Notice are satisfied as of the date hereof.
- 4 The number of Common Shares that the Company is requesting in this Advance is \_\_\_\_\_.
- 5 The number of Common Shares of the Company issued and outstanding as of the date hereof is \_\_\_\_\_.
- 6 The Pricing Period shall be one (1) Trading Day.

The undersigned has executed this Advance Notice as of the date first set forth above.

**FIREFLY NEUROSCIENCE, INC.**

By: \_\_\_\_\_  
Name:  
Title:

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**EXHIBIT B  
FORM OF SETTLEMENT DOCUMENT**

**VIA EMAIL**

FIREFLY NEUROSCIENCE, INC.

Attn:

Email:

Subject:

Below please find the settlement information with respect to the Advance Notice Date of:

1. Amount of Advance requested in the Advance Notice
2. Adjusted Advance (after taking into account any adjustments pursuant to Section 2.01):
3. Market Price
4. Purchase Price (Market Price x 88.0%) per share
5. Number of Shares due to Investor

**Please issue the number of Shares due to the Investor to the account of the Investor as follows:**

**INVESTOR'S DTC PARTICIPANT #<sup>1</sup>:**

ACCOUNT NAME:  
ACCOUNT NUMBER:  
ADDRESS:  
CITY:  
COUNTRY:  
CONTACT PERSON:  
NUMBER AND/OR EMAIL:

**Sincerely,**

**ARENA BUSINESS SOLUTIONS GLOBAL SPC II, LTD**

By: \_\_\_\_\_  
Name:  
Title:

- 
- 1 Investor understands and acknowledges that shares will be issued in book-entry form on the DRS of the transfer agent or certificated unless the conditions set forth in Section 2.05(b) have been satisfied

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**Agreed and Approved:**

**FIREFLY NEUROSCIENCE, INC.**

By: \_\_\_\_\_  
Name:  
Title:

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**SCHEDULE 1  
Authorized Representatives**

The following individuals may execute Advance Notices:

1. Greg Lipschitz
2. Paul Krzywicki

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**EXHIBIT C**

**VIA EMAIL**

Email: ELOC@arenaco.com

Subject: ELOC: FIREFLY NEUROSCIENCE, INC.  
Advance Notice

Below please find the Advance Notice Date of:

1. Amount of Advance Shares:
  2. Time of Advance:
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