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

DIVISION OF
CORPORATION FINANCE

May 21, 2025

Andrew W. Limpert
Chief Executive Officer
FireFly Automatix, Inc.
1130 South 3800 West, Suite 100
Salt Lake City, Utah 84104

Re: FireFly Automatix, Inc.
Draft Registration Statement on Form S-1
Submitted April 24, 2025
CIK No. 0001660851

Dear Andrew W. Limpert:

We have reviewed your draft registration statement and have the following comments.

Please respond to this letter by providing the requested information and either submitting an amended draft registration statement or publicly filing your registration statement on EDGAR. If you do not believe a comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing the information you provide in response to this letter and your amended draft registration statement or filed registration statement, we may have additional comments.

Draft Registration Statement on Form S-1

Prospectus Summary
Our Business, page 1

1. You state here that "[f]rom 2016 to March 2025, we have placed a combined total of 787 PATH machines, AMPs and used machines throughout the world, resulting in a compounded annual growth rate (“CAGR”) of approximately 34% from 41 machines sold in 2016." In order to provide additional context for this statement, please disclose the number of machines you placed as of the end of each financial period included in this filing.
2. We note that you estimate your total addressable market to be $48.7 billion, based on internal estimates. Please revise to provide a more detailed and quantified discussion regarding the underlying assumptions and metrics used in determining that figure.

Management's Discussion and Analysis of Our Financial Condition and Results of Operations
Company Overview, page 39

3. We note that you have a compounded annual growth rate ("CAGR") of approximately 34%. Please revise your disclosures to describe how you calculate the CAGR.

Results of Operations, page 41

4. We note from your disclosures on page 1 that from 2016 to March 2025, you have placed a combined total of 787 PATH machines, AMPs and used machines throughout the world including a total of 38 AMPs to delivered to date. We further note from your disclosures on page 50 that you expect an average selling price of $160,000 per AMP. Please tell us your consideration of separately disclosing the number and average selling price of the PATH machines, AMPs and used machine sold for each year presented. Price and volume disclosures including an analysis of any trends or uncertainties appears to be important information necessary to understanding your results of operations. We refer you to Item 303(a) of Regulation S-K and Section III.D of SEC Release No. 33-6835.

Liquidity and Capital Resources, page 42

5. You disclose that your outstanding Debentures include minimum cash flow covenants and historically, you have not been able to comply with such minimum cash flow covenants and the holders of your Debentures have waived such non-compliance. Please revise to disclose the amount or limit required for compliance with the minimum cash flow covenants, and the likelihood of future compliance or obtaining a waiver in the future. Such transparent disclosures will enable investors to better understand the risk of future covenant compliance. We refer you to Section IV. of SEC Release No. 33-8350.
6. Please also disclose whether you are currently in compliance with the financial covenants contained in the debentures, and whether you were in compliance with these covenants as of the end of the most recent financial period included in your filing.

Going Concern Analysis, page 43

7. You disclose that over the next twelve months, you expect to finance your operations with operating revenue from your operations, short-term debt financing, and the proceeds from this offering. Please revise to disclose the minimum period of time that you will be able to conduct your planned operations using only currently available resources. We refer you to Item 303(b)(1) of Regulation S-K and Section IV of SEC Release No. 33-8350.

Critical Accounting Policies and Estimates, page 45

8. You disclose on page F-22 that prior to the Public Company Date, the fair market value of a share of common stock will be determined by an independent appraiser selected in good faith by the Holder of a majority in interest of the Securities. Please revise to clarify the nature and extent of the third-party appraiser's involvement and management's reliance on the work of the appraiser in determining the fair market

value of a share of your common stock. Refer to Question 141.02 of Compliance and Disclosure Interpretations of the Securities Act Sections. Revise to explain the methods that management uses to determine the fair value of the common stock and the nature of the material assumptions involved. Your revised disclosure should also explain the extent to which the estimates are considered highly complex and subjective. In addition, revise to disclose that the estimates will not be necessary to determine the fair value of your common stock once the underlying shares begin trading.

Business, page 47

9. We note that you utilize third-party generative artificial intelligence platforms, and automation software to enable your autonomous mower technology. Please revise to provide a more complete discussion regarding your use of third-party AI platforms and how they integrate into your automated products, and disclose the platforms used, and the terms of any agreements with the AI platform providers. In addition, clarify whether the automation software is developed internally or by a third-party. Finally, revise your risk factors as appropriate.

Executive Compensation, page 59

10. On page 61, you state you expect to enter into new employment agreements with your named executive officers (NEOs). To the extent known, please revise to describe the material terms of these agreements and file forms of these agreements as exhibits. Additionally, please revise to clarify whether you currently have employment agreements with your NEOs.

Description of Capital Stock
Warrants, page 65

11. Please explain you believe upon the closing of this offering that the warrants issued in connection with the Debentures will remain outstanding. Your response should address that the exercise price of the warrants appears to be significantly less than the fair value of your common stock. In addition, please indicate whether you have any agreements with warrant holders to not exercise their warrants for a period of time.

Convertible Debentures, page 68

12. Please explain why you expect that the January 2022 Debenture and the January 2023 Debenture will remain outstanding following the completion of this offering. Tell us whether the July 2024 Debenture will remain outstanding following the completion of this offering. Describe how you considered that each of the Debentures issued on January 19, 2023 and July 25, 2024 contains a mandatory redemption provision stating that upon the consummation of a “Subsequent Financing,” the Company shall use 50% of the gross proceeds of such Subsequent Financing to redeem principal outstanding on all Debentures. Explain whether any of the net proceeds from the sale of shares in this offering will be used to redeem the principal outstanding on Debentures.

13. We note from your disclosures on page F-19 that from July 2019 through July 2024, the Company issued six Secured Convertible Debentures (the “Debenture(s)”) and

Warrants to certain funds (the “Funds”) managed by ATW Partners (the “Holders”). We further note that upon the closing of this offering, the outstanding principal and capitalized interest under the July 2019 Debenture, April 2020 Debenture, and September 2020 Debenture will automatically convert into shares of your common stock. Please tell us the percentage of share ownership held by ATW Partners after this offering and the automatic conversion of the July 2019 Debenture, April 2020 Debenture and September 2020 Debenture into shares of your common stock. In addition, tell us percentage of share ownership held by ATW Partners after this offering and the assuming the automatic conversion of all outstanding Debentures and Warrants into shares of your common stock.

Consolidated Financial Statements
Notes to the Consolidated Financial Statements
Note 2. Summary of Significant Accounting Policies
Net Loss Per Common Share, page F-12

14. We note that you have "included in the weighted-average number of common shares outstanding are the share equivalents for the warrants with an exercise price of $0.01." We also note that you have identified that weighted-average number of common shares outstanding as diluted computation. Since the underlying shares are issuable for little or no cash consideration, they shall be considered outstanding common shares and included in the computation of basic EPS. Refer to ASC 260-10-45-13. Please revise your description of weighted-average shares outstanding in this footnote to be labeled as basic instead of diluted. In addition, please clarify whether you would be using the if-converted method to measure the dilutive impact of convertible debentures. Refer to ASC 260-10-45-21. Please advise or revise.

Revenue Recognition, page F-13

15. We note from your website that you offer both capital and operating leases to your customers. Please revise your revenue recognition policy to explain how you account for each type of lease arrangement, if material. We refer you to ASC 842-30-50. As part of your response, tell us the amount of revenues recognized under sales-type, direct financing and/or operating leases for each period presented. Refer to ASC 842-30-50-5.

16. Please tell us whether you offer any sales promotions or incentives to your customers and if so, explain how you account for these programs. Refer to ASC 606-10-32-6. In this regard, please clarify whether your contracts include variable consideration including a right of return. Refer to ASC 606-10-32-11 through 32-13 and 606-10-55-22 through 55-29.

17. You disclose that "For PATH machines, AMPs and used machines, control is considered to have passed at the time of shipping (FOB Shipping)." You also disclose that "When [you] deliver the Machines, control is considered to have passed to the customer when the customer accepts the machine at their location." Please revise accordingly.

18. Please disclose significant judgments applied in the application of ASC 606. For example, disclose how you determine the transaction price and the amount allocated to performance obligations. Refer to ASC 606-10-50-17 to 50-21.

19. Please clarify whether your contracts include trade-in rights or a residual value guarantee. Refer to ASC 460-10-15-4(a) and 606-10-55-66.

Note 7. Customer Deposits, page F-17

20. We note that at the time you accept a machine order from a customer, a cash deposit of generally ten percent of the contact price is required prior to beginning manufacturing and when the machine is completed and invoiced, the deposit is applied to the invoice amount. Please explain whether the amounts of new customer deposits and amounts recognized during the year in your customer deposit reconciliation represent just the cash deposits of generally ten percent of the contact price.

Note 11. Convertible Debentures, page F-19

21. We note your table that presents shares of common stock upon the conversion of principal and accreted interest. Please explain why the opening balances as of January 1, 2023 represent the Original Shares (upon conversion) for the Debentures issued on July 17, 2019, April 20, 2020 and September 4, 2020. Explain why your table only appears to present accreted interest for fiscal 2023 and 2024. In this respect, we note that the total amount of capitalized interest for each Debenture on page 68 reconciles with the total shares of common stock issuable upon the conversion of the accreted interest for fiscal 2023 and 2024.

Note 12 Common Stock Purchase Warrants, page F-22

22. You disclose that you "determined the common stock purchase warrants met the definition of a derivative and did not qualify for equity classification under ASC 815-40 and are therefore accounted for as liabilities." Please provide your analysis that cites the accounting literature in support of this conclusion.

Note 14. Stock Based Compensation, page F-23

23. Your disclosures on page II-3 indicate that in the three years preceding the date of this registration statement, you granted to your employees, officers, directors, consultants and other service providers options to purchase an aggregate of 1,207,880 shares of common stock at per share exercise prices ranging from $5.71 to $5.77, under the 2016 Stock Plan. You also disclose the assumptions made for purposes of estimating fair value under the Black-Scholes model for the 703,102 and 504,778 Options granted during years ended December 31, 2024 and 2023. Please reconcile these statements with your table indicates that 703,102 and 1,255,824 Options were granted during the years ended December 31, 2004 and December 31, 2023.

24. When your preliminary IPO price is known, please provide us with a breakdown of all equity awards granted since January 1, 2025 and leading up to the preliminary pricing of your IPO. This breakdown should list grants in chorological order including the fair value of the underlying common stock used to value such awards as determined by your board of directors. Please reconcile and explain the differences between the fair

values of the underlying equity interest determined on each grant date, including the difference between the most recent grant date fair value and the midpoint of your offering range. In addition, your disclosure should fully describe the assumptions utilized at the IPO valuation date that are significantly different than those used in the most recent valuation.

Item 15. Recent Sales of Unregistered Securities, page II-2

25. You disclose in this section that on December 2, 2024, you issued 420,431 shares of common stock, and from August 16, 2023 to May 8, 2024 you issued 436,701 shares of common stock. Please reconcile this with your disclosures on page F-23 that indicate that the Company issued 196,153 and 584,281 common stock shares in 2024 and 271,573 common stock shares in 2023. That is, your disclosures in this section appear to be missing the issuance of an additional 194,875 shares of common stock.

Exhibits

26. We note that you have entered into operating leases for your corporate headquarters and your manufacturing facility. Please file these leases. See Item 601(b)(10) of Regulation S-K.

General

27. Please provide us with supplemental copies of all written communications, as defined in Rule 405 under the Securities Act, that you, or anyone authorized to do so on your behalf, have presented or expect to present to potential investors in reliance on Section 5(d) of the Securities Act, whether or not you retained, or intend to retain, copies of those communications.

Please contact Morgan Youngwood at 202-551-3479 or Stephen Krikorian at 202-551-3488 if you have questions regarding comments on the financial statements and related matters. Please contact Mitchell Austin at 202-551-3574 or Matthew Derby at 202-551-3334 with any other questions.

Sincerely,

Division of Corporation Finance
Office of Technology

cc: David Marx