



The **Lockheed Martin F-22 Raptor** is a single-seat, **twin-engine**, all weather **stealth** tactical **fighter aircraft** developed for the **United States Air Force (USAF)**. The result of the USAF's **Advanced Tactical Fighter** program, the aircraft was designed primarily as an **air superiority fighter**, but has additional capabilities including **ground attack**, **electronic warfare**, and **signals intelligence** roles. **Lockheed Martin** is the prime contractor and was responsible for the majority of the airframe, weapon systems, and final assembly of the F-22, while program partner **Boeing** provided the wings, aft fuselage, avionics integration, and training systems.

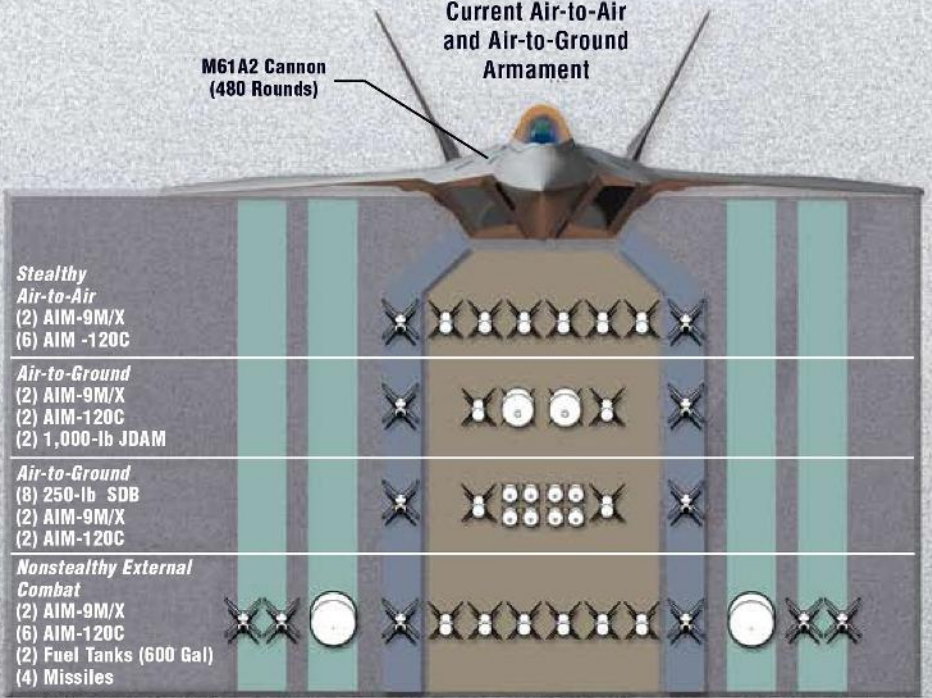
The aircraft was variously designated **F-22** and **F/A-22** prior to formally entering service in December 2005 as the **F-22A**. Despite a protracted development as well as operational issues, the USAF considers the F-22 a critical component of its tactical air power, and states that the aircraft is unmatched by any known or projected fighter. The Raptor's combination of stealth, aerodynamic performance, and situational awareness gives the aircraft unprecedented air combat capabilities.

The high cost of the aircraft, a lack of clear air-to-air missions due to delays in **Russian** and **Chinese** fighter programs, a ban on exports, and development of the more versatile and lower cost **F-35** led to the end of F-22 production. A final procurement tally of 187 operational production aircraft was established in 2009 and the last F-22 was delivered to the USAF in 2012.

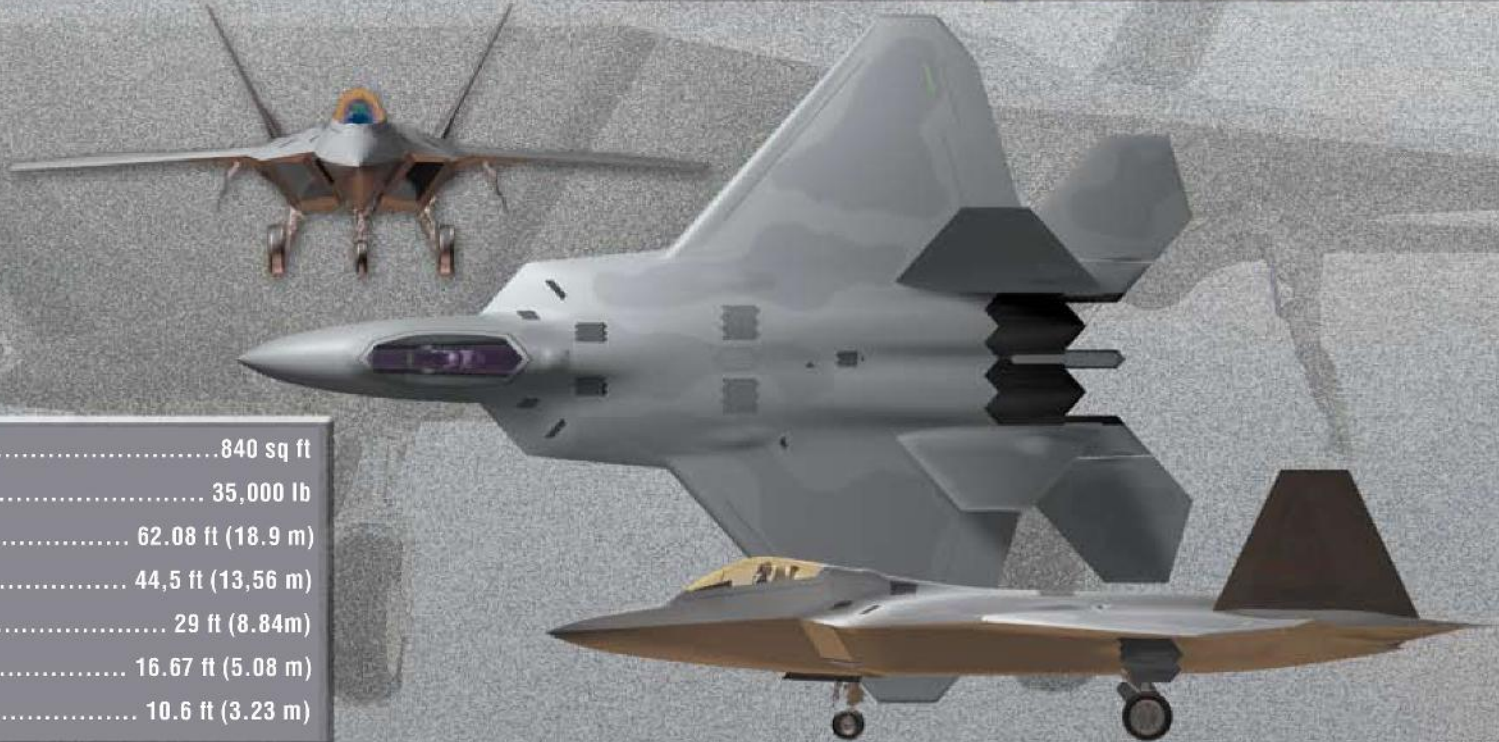
*The first F-22, an engineering and manufacturing development (EMD) aircraft named Raptor 4001, was unveiled at Marietta, Georgia on 9 April 1997, and first flew on 7 September 1997. In 2006, the Raptor's development team, composed of over 1,000 contractors and the USAF, won the **Collier Trophy**, American aviation's most prestigious award. The F-22 was in production for 15 years, at a rate of roughly two per month during peak production.*



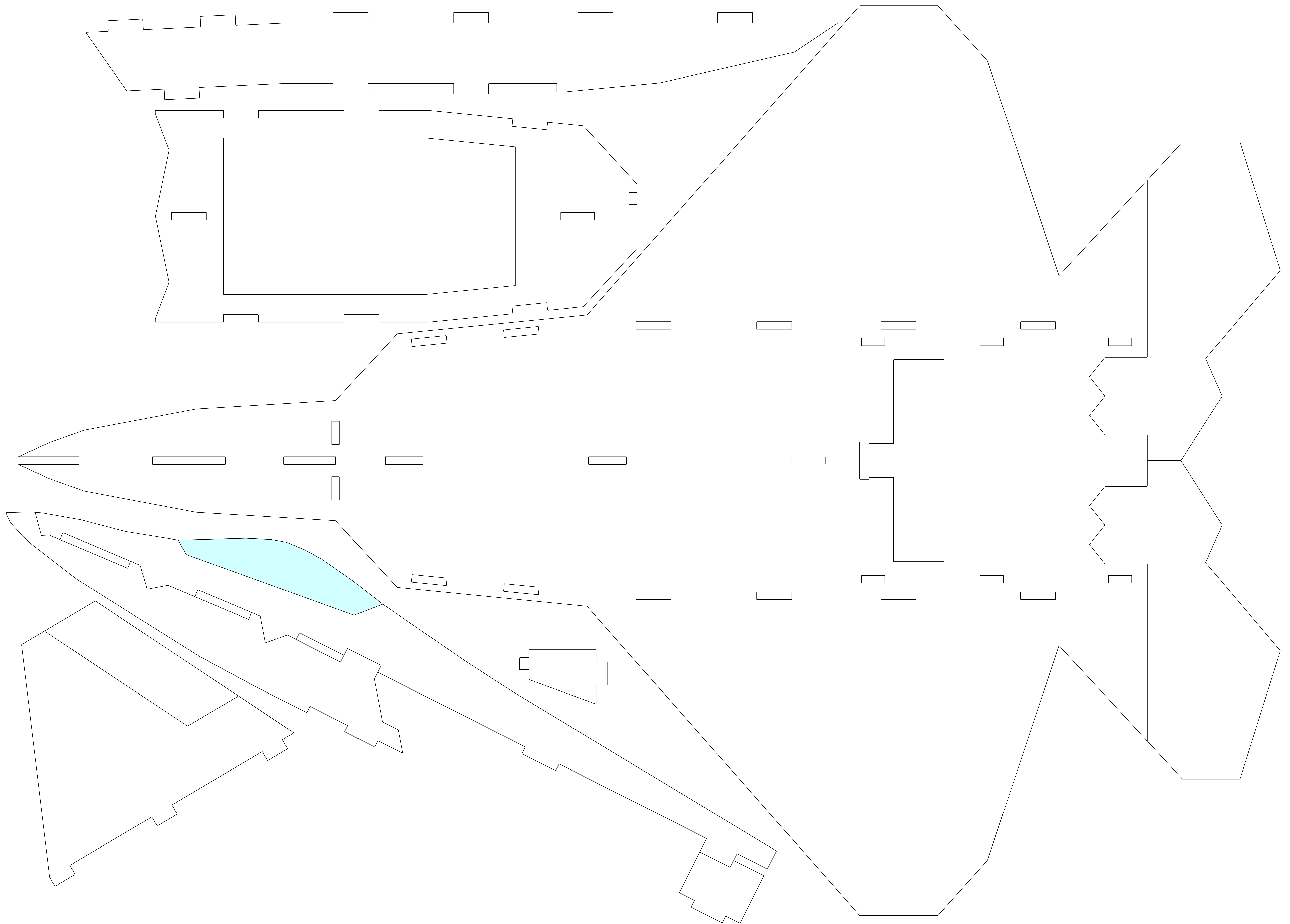
- **Low Observable/Highly Maneuverable**
- **Mach Number: Mach 2 Class**
- **Supercruise (Mil Power): >1.5 Mach**
- **Altitude: 60,000 Feet**
- **Engines**
  - **Two F119-PW-100, 35,000-lb Class**
  - **Thrust Vectorable**

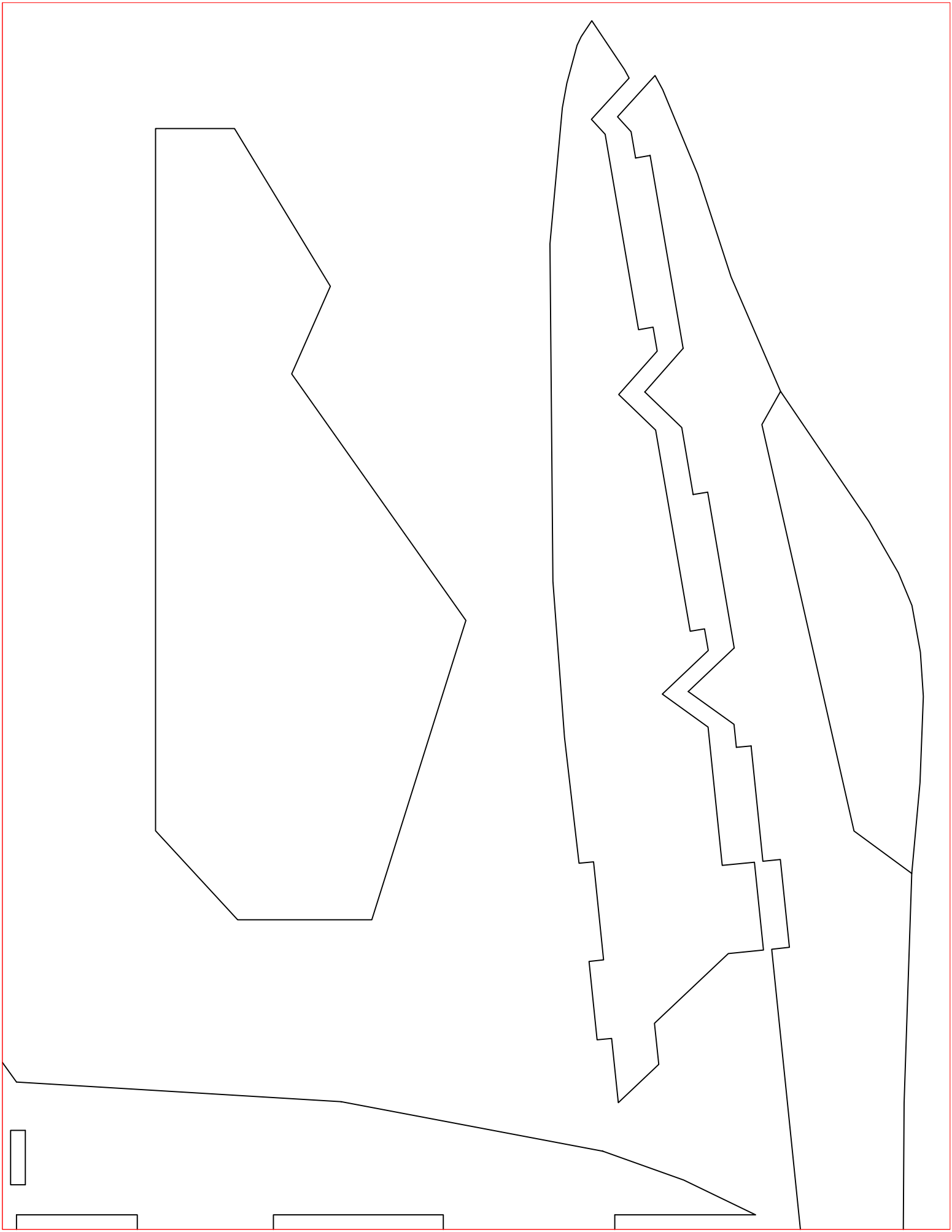


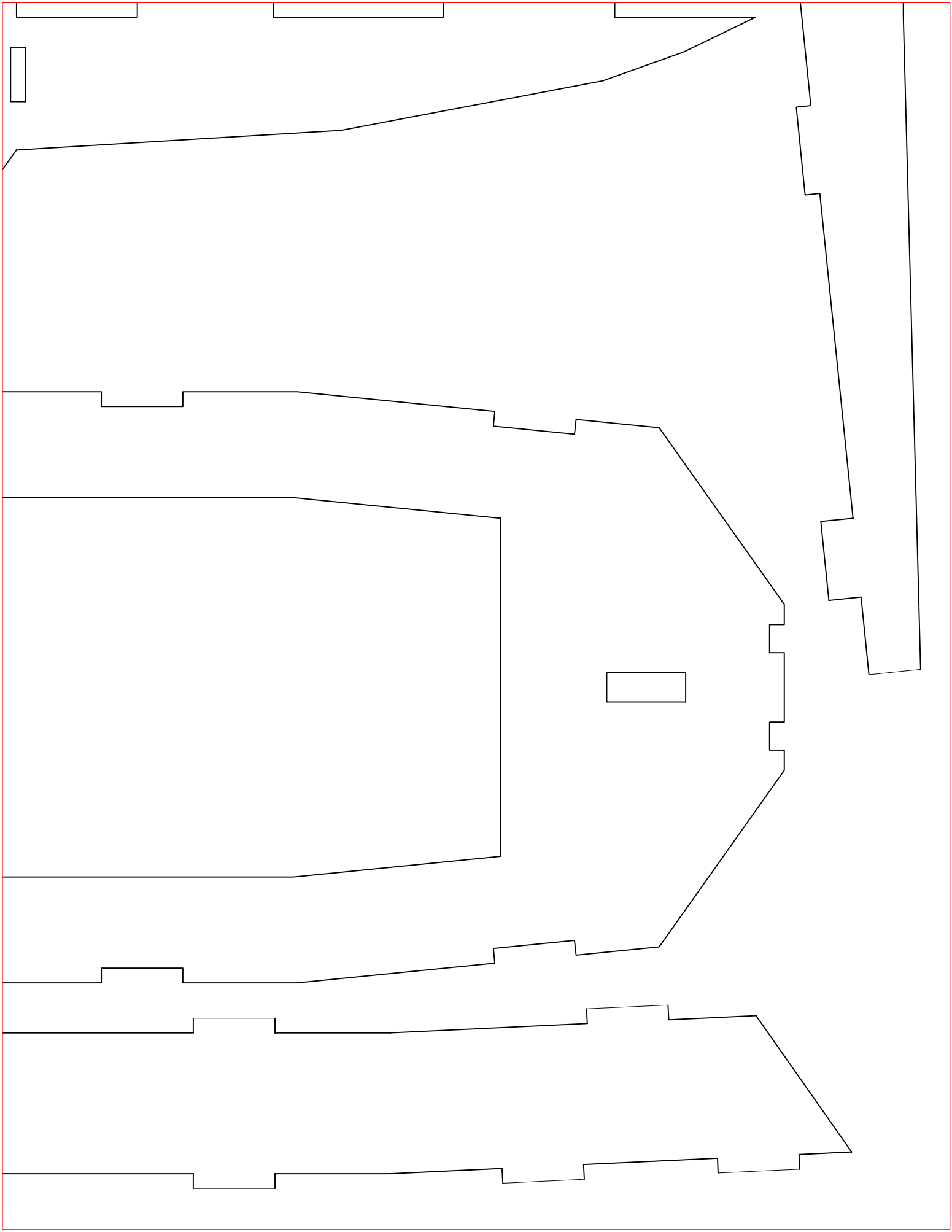
Wing Area .....	840 sq ft
Engine Thrust Class .....	35,000 lb
Length .....	62.08 ft (18.9 m)
Wingspan .....	44,5 ft (13,56 m)
Horizontal Tail Span .....	29 ft (8.84m)
Height .....	16.67 ft (5.08 m)
Track Width .....	10.6 ft (3.23 m)

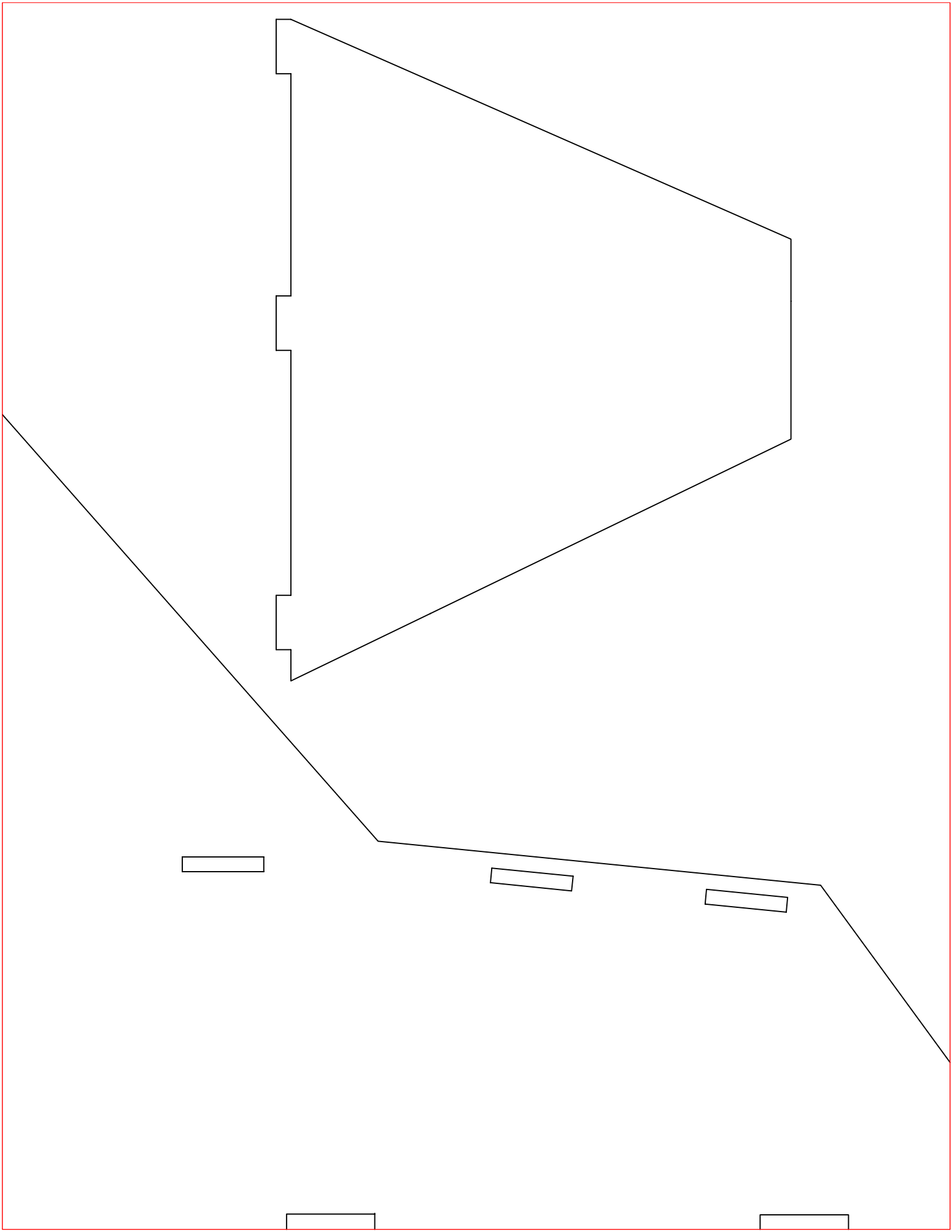


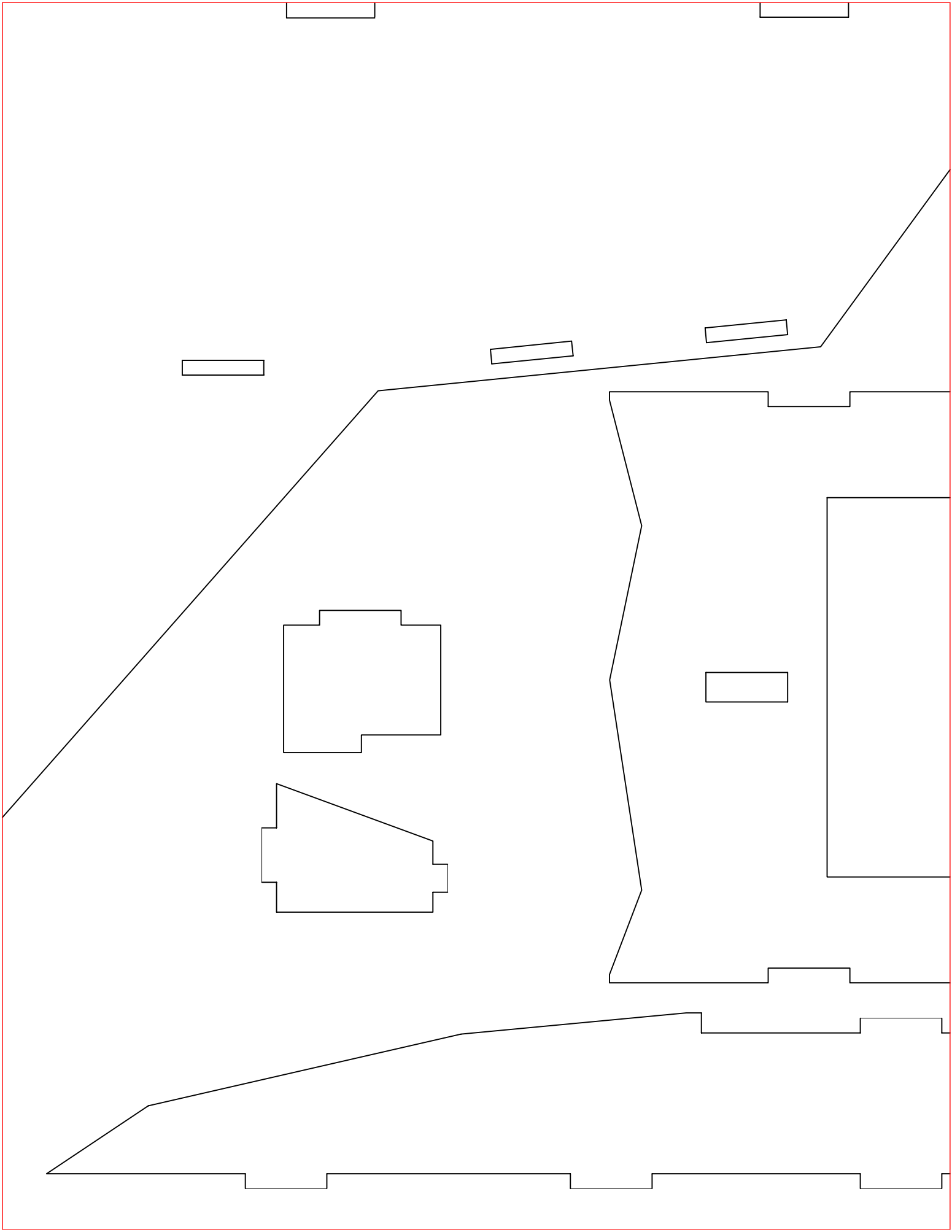


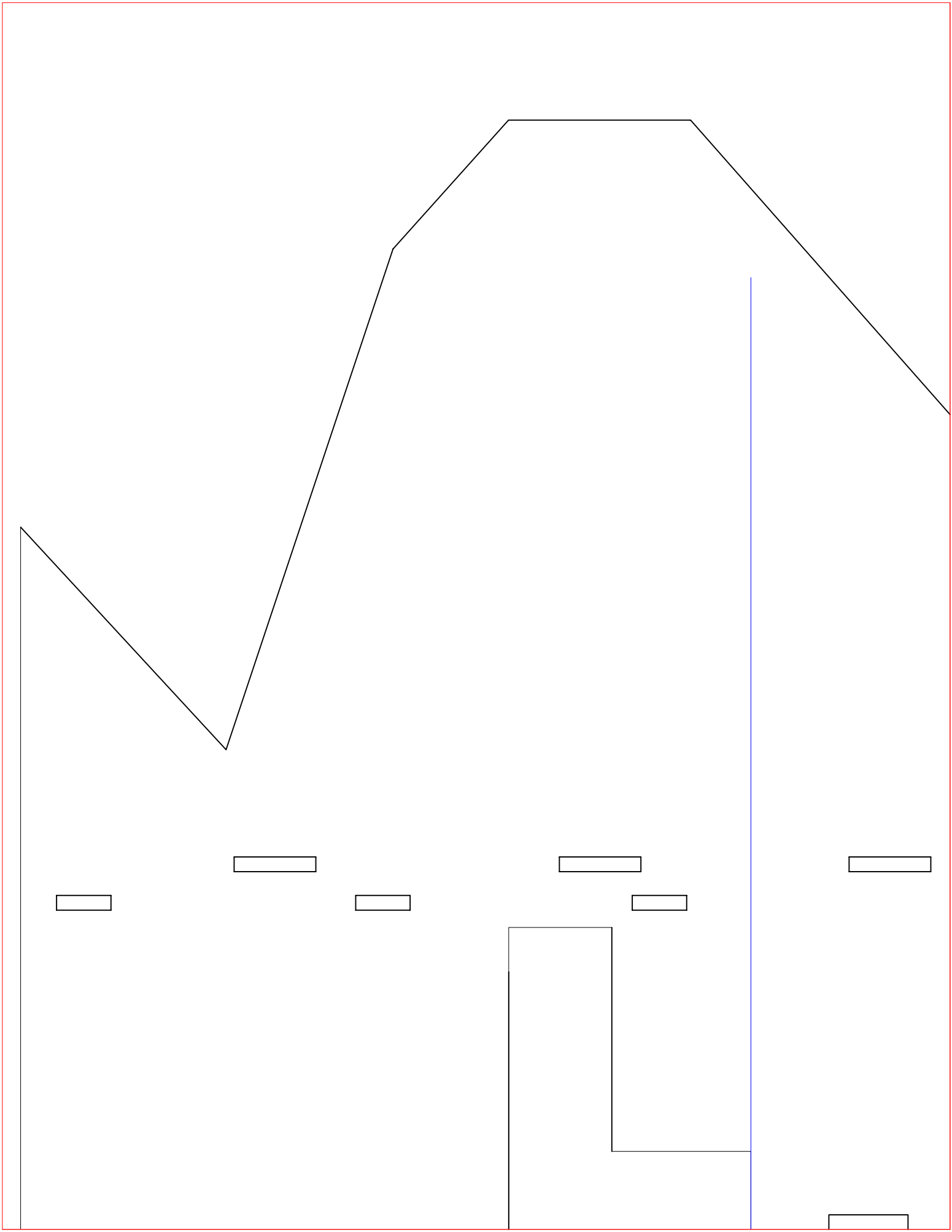


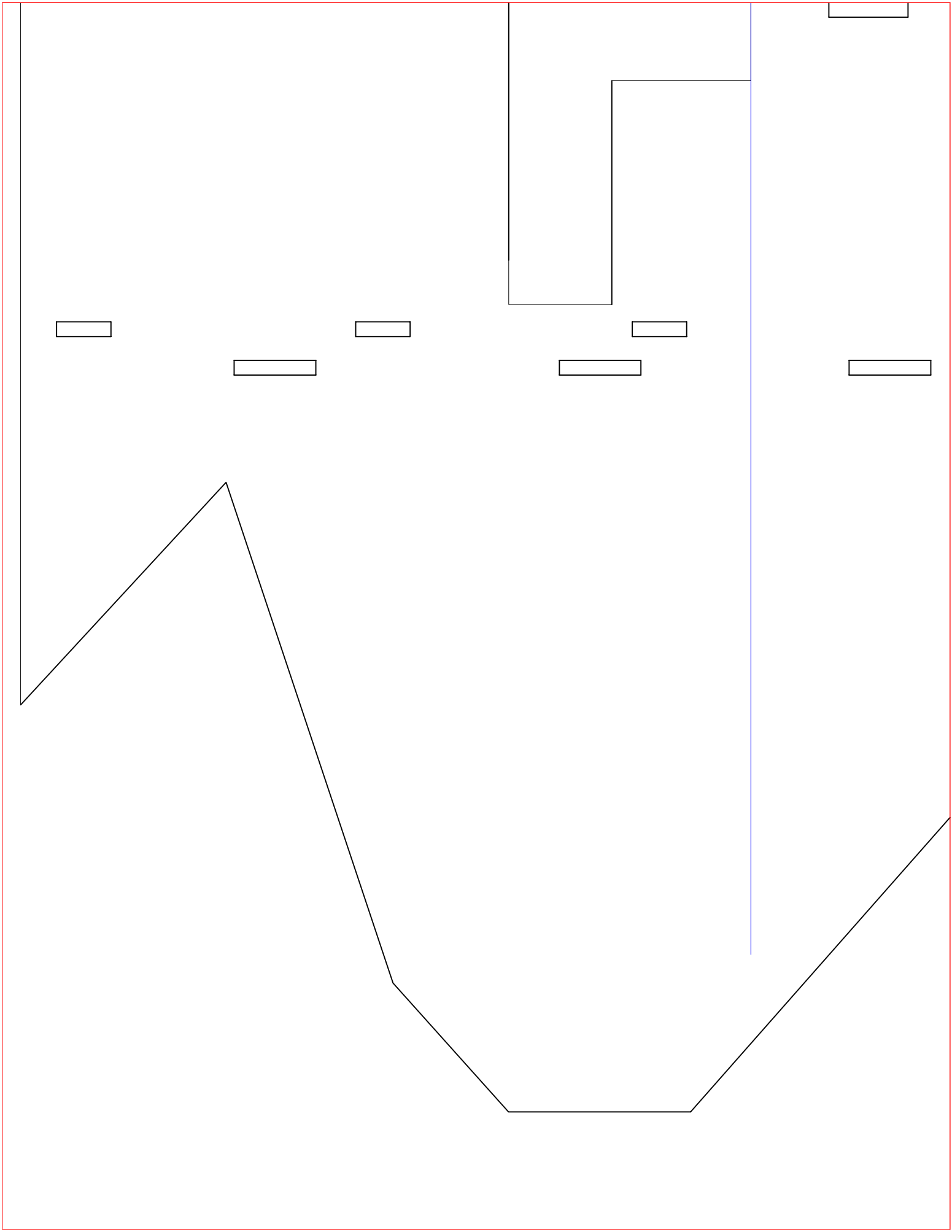


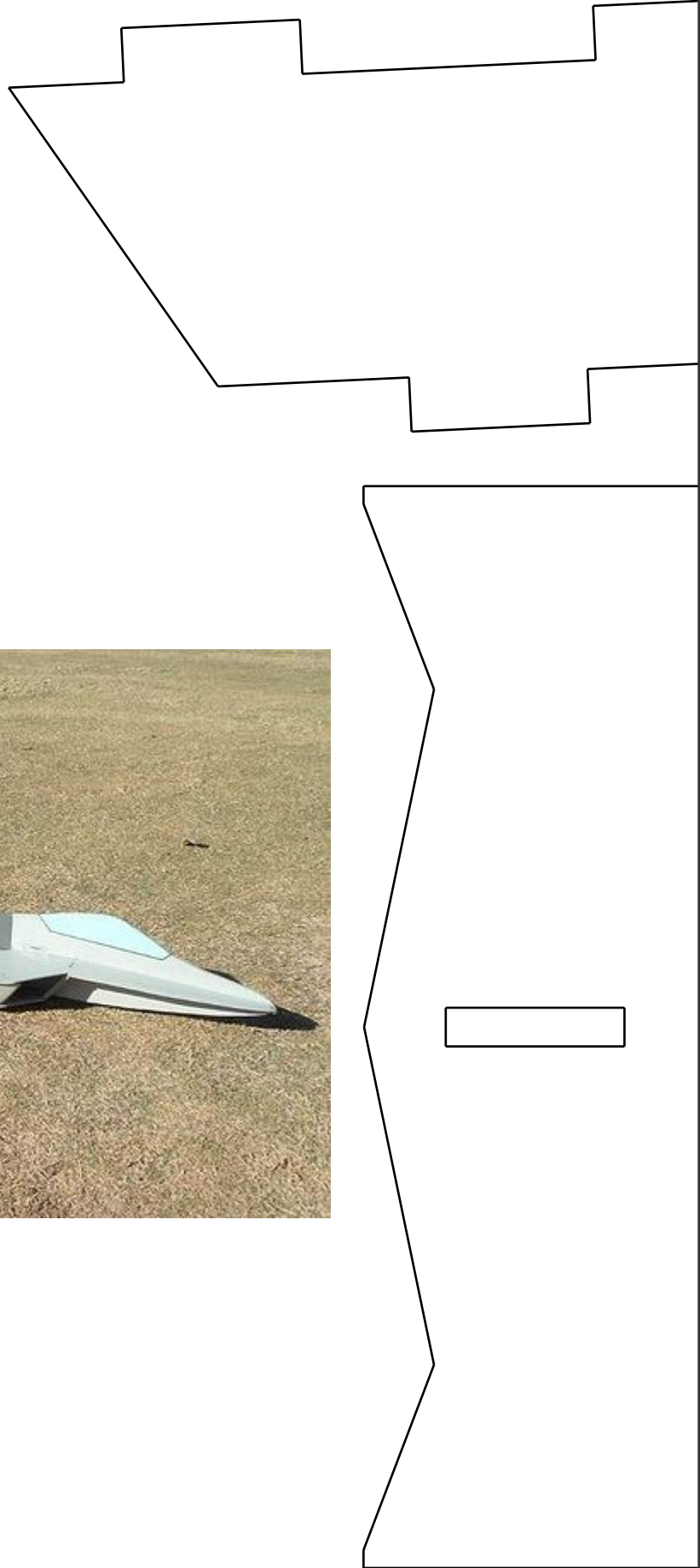




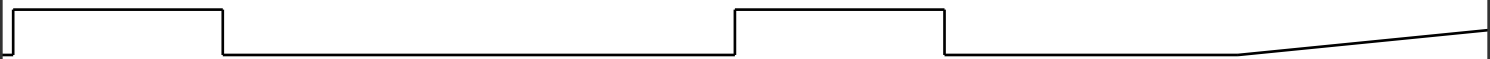
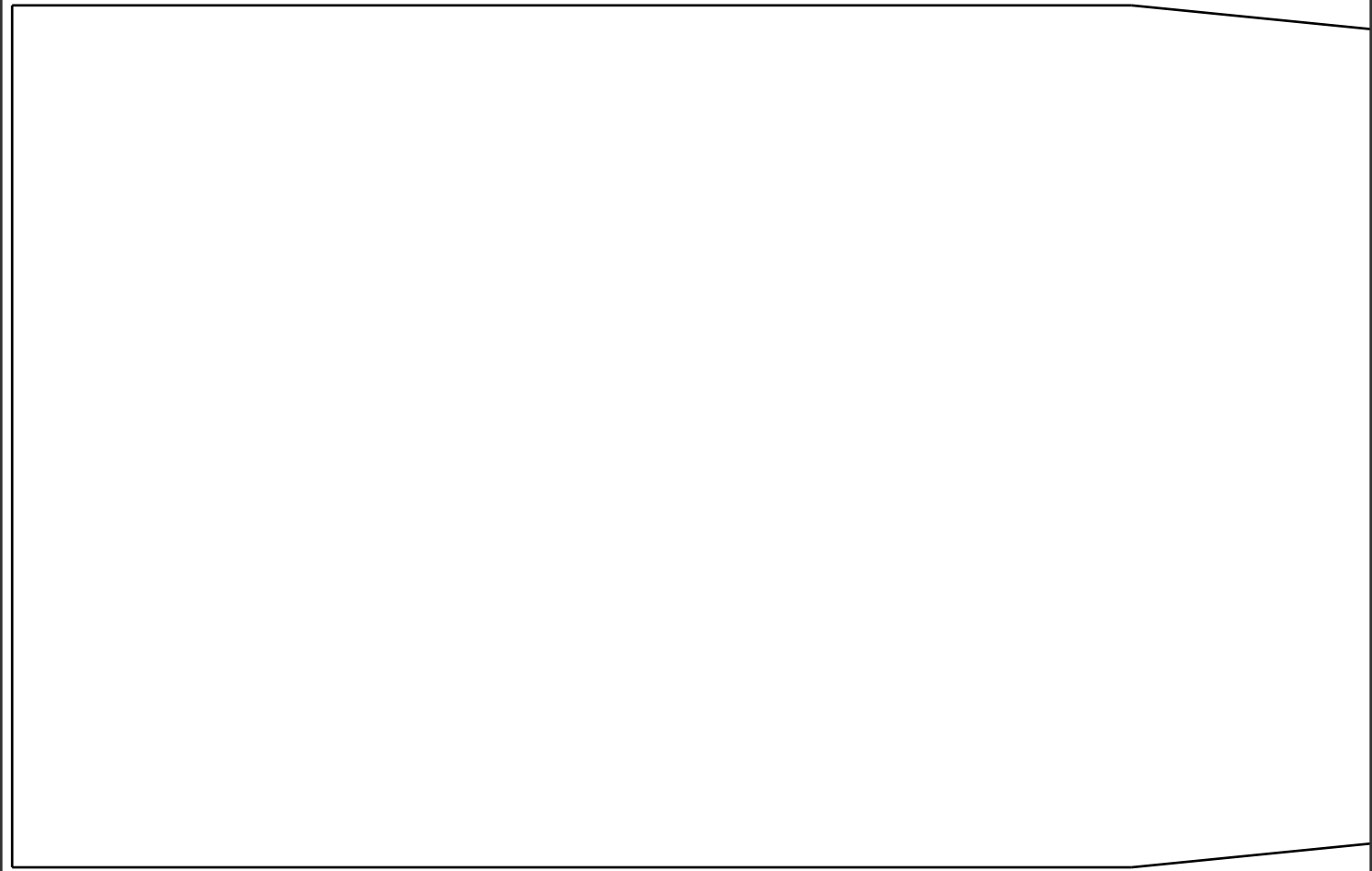
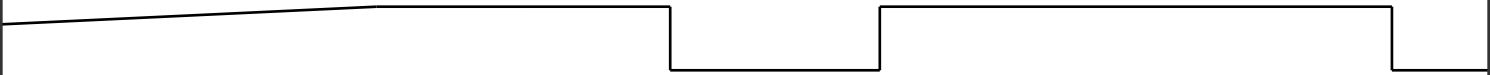
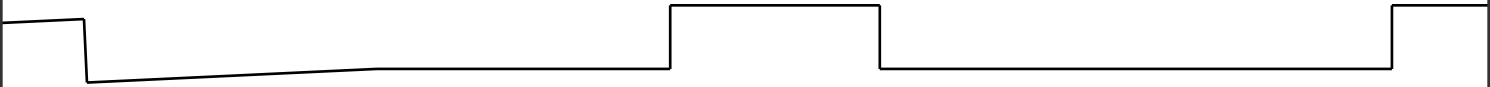






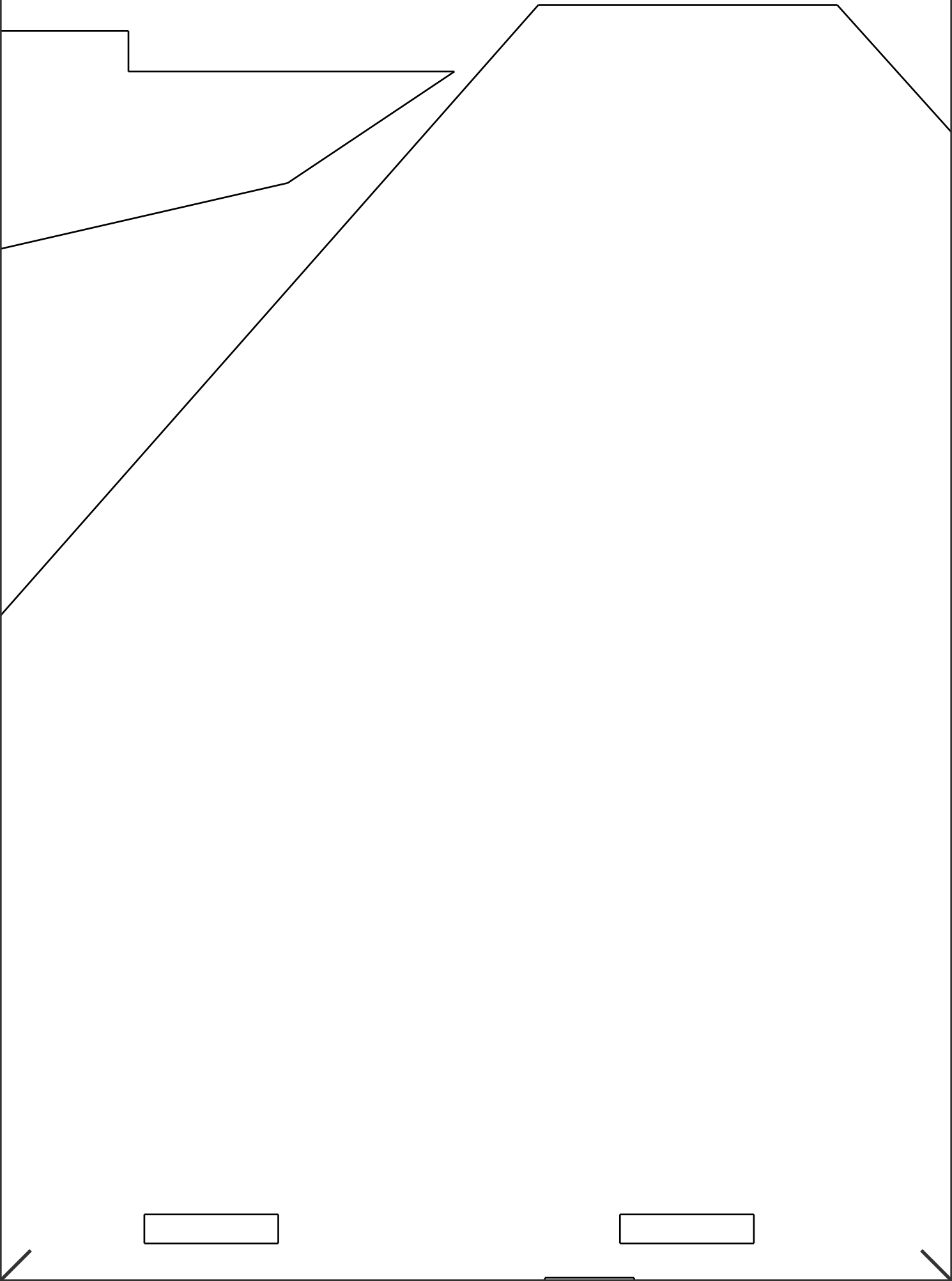


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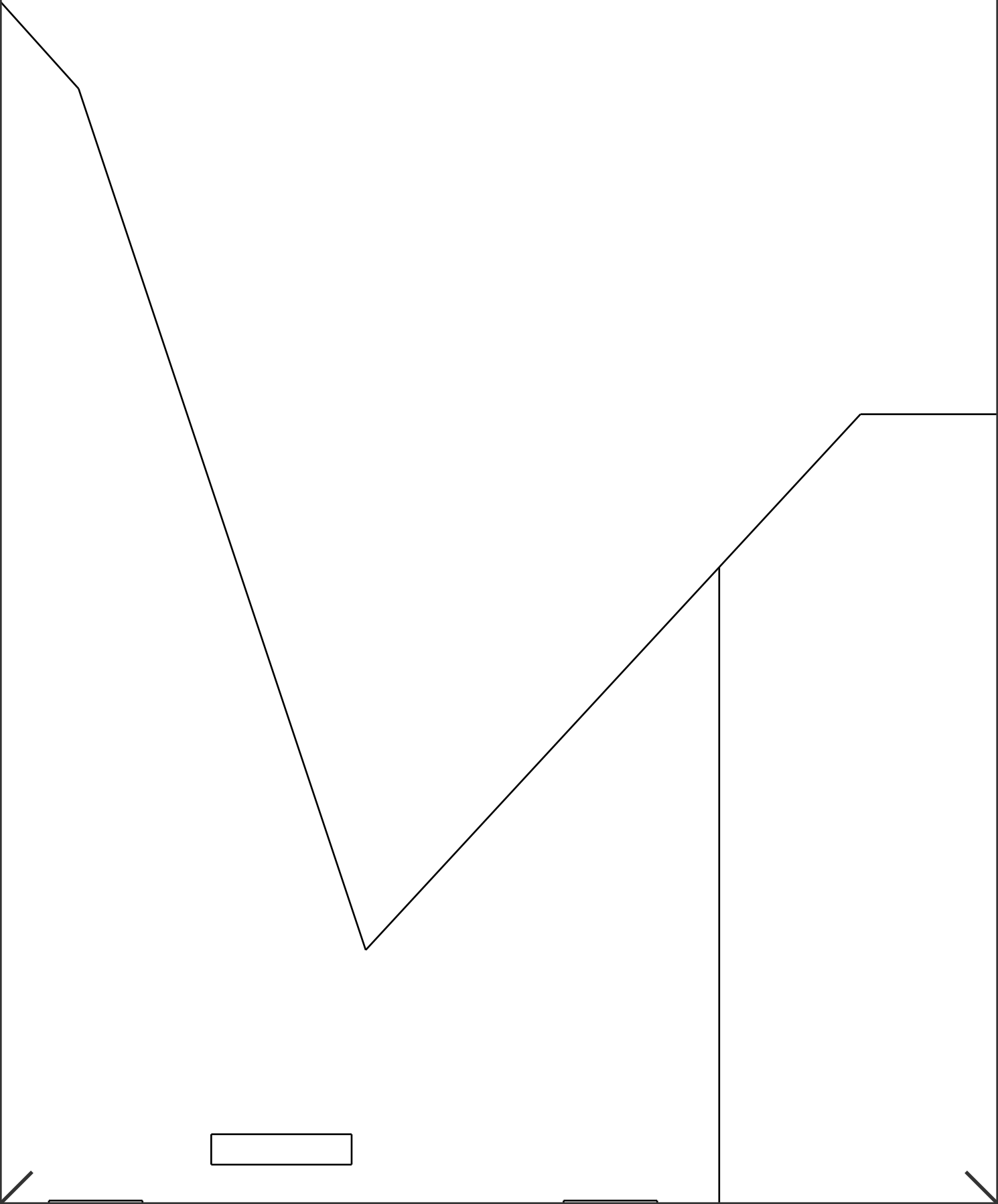




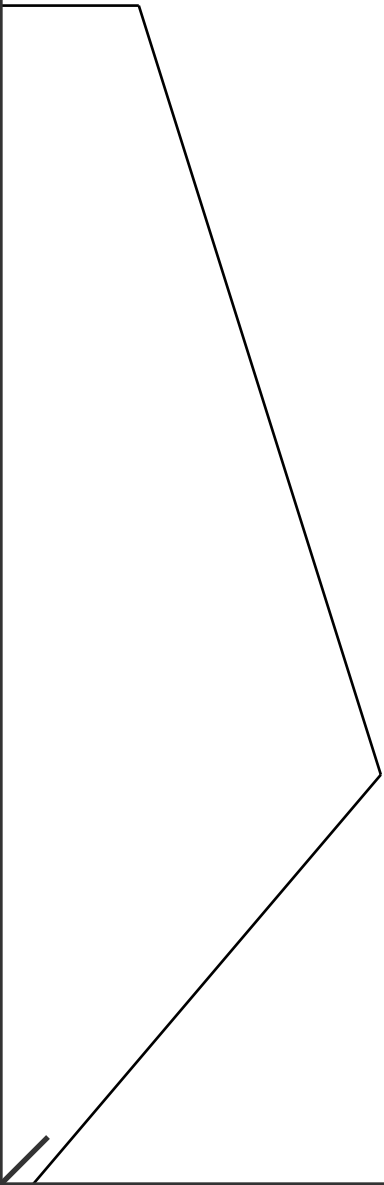
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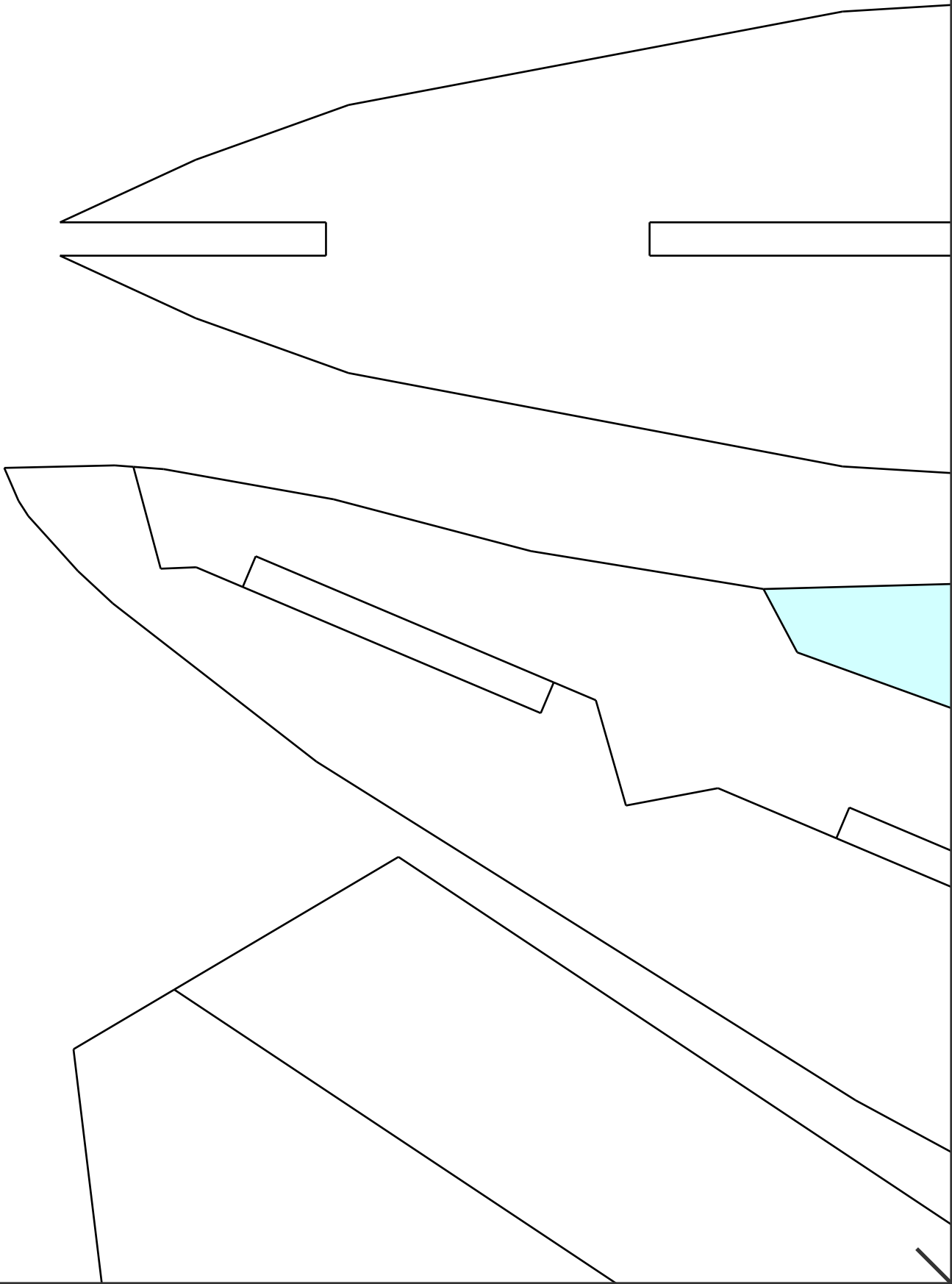
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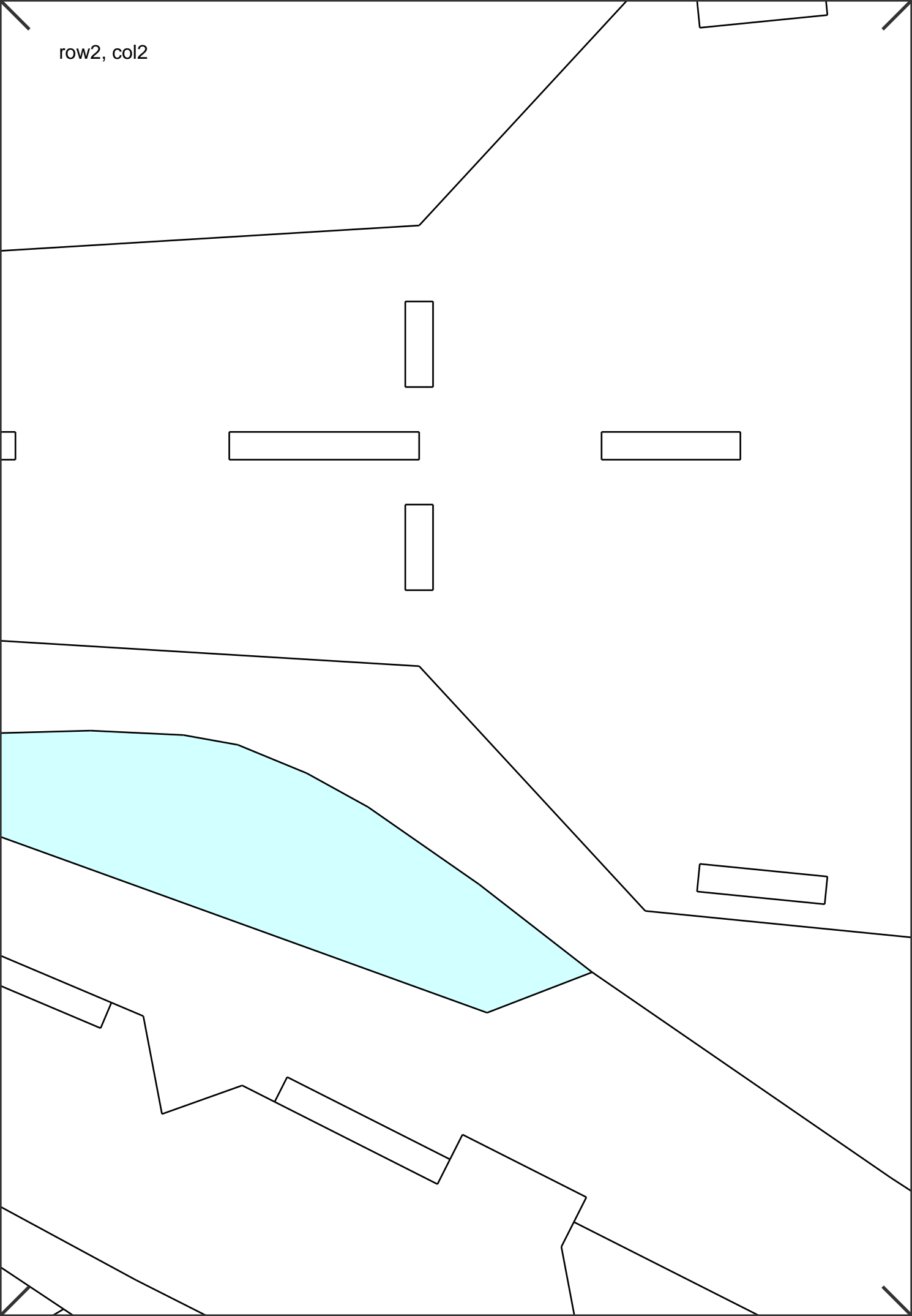
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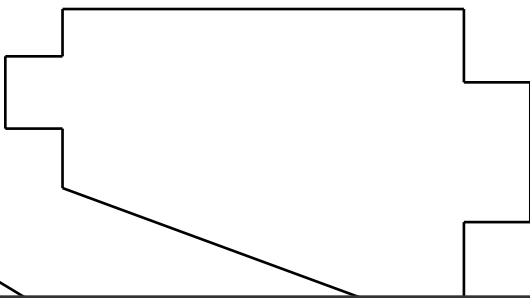
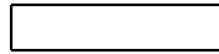
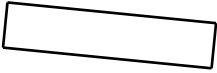
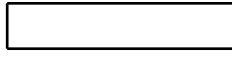
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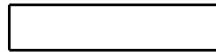
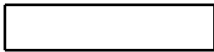
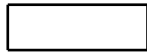
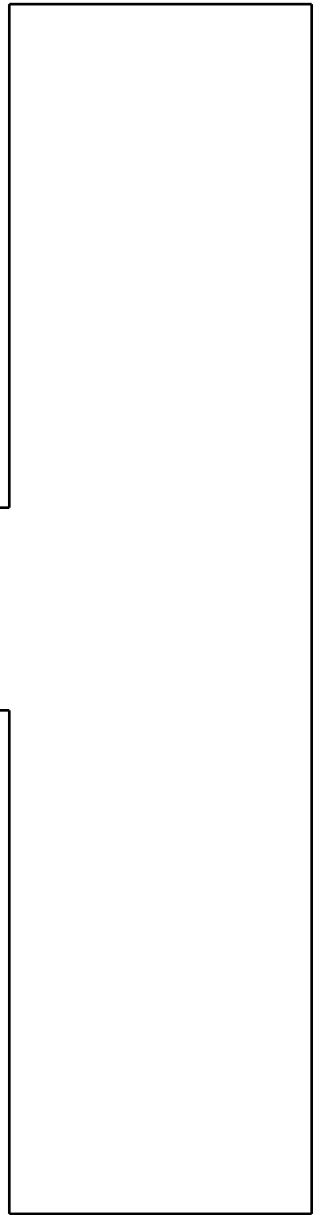
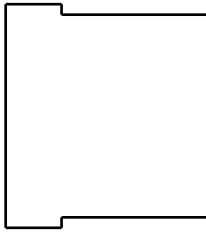
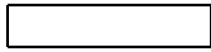
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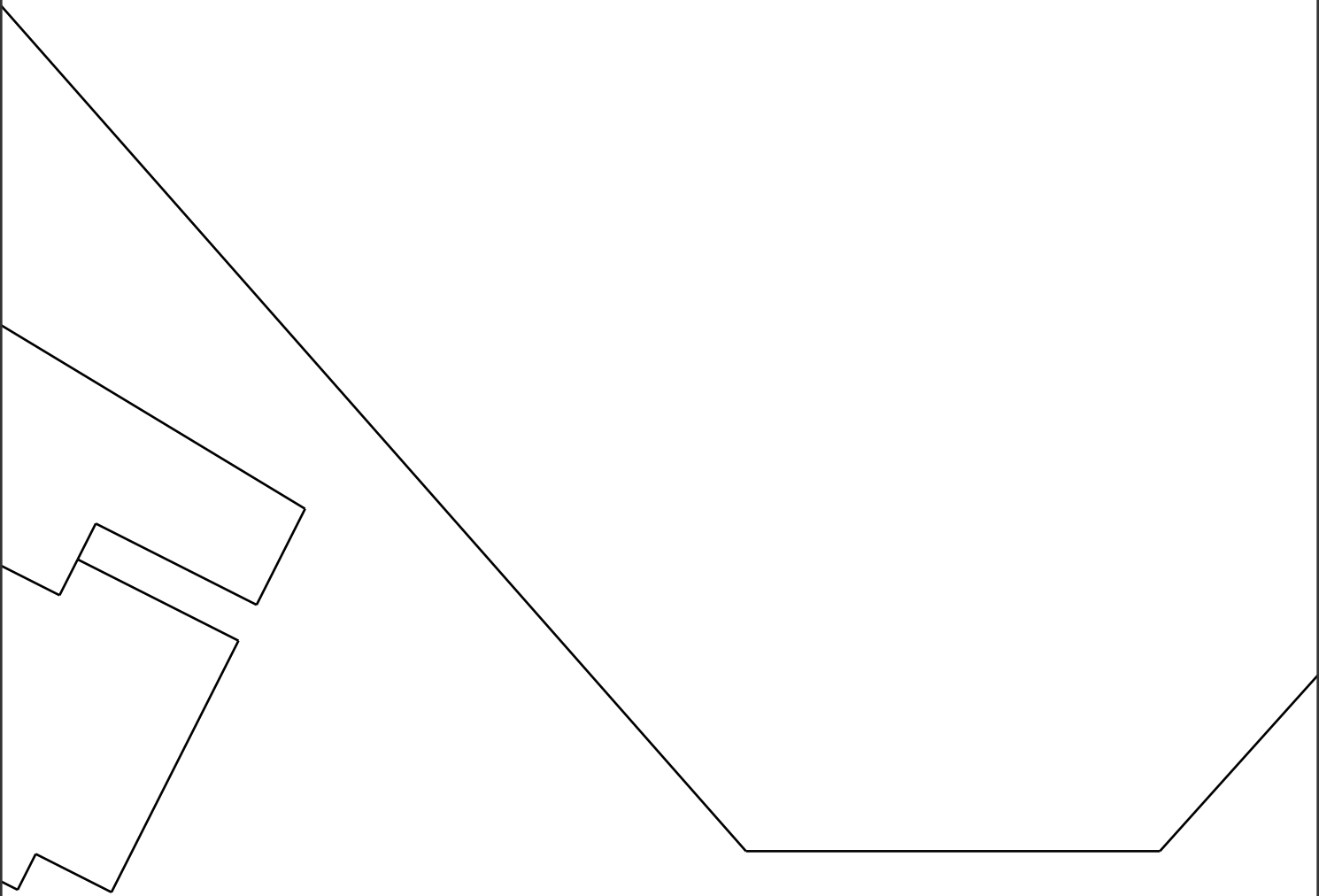
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