

City of North Richland Hills
Attn: Clayton Husband, Principal Planner
4301 City Point Dr
North Richland Hills, TX 76180

Dear Mr. Husband:

Project Description

Wing and Walmart seek to continue their existing drone delivery offering for the residents of North Richland Hills. Wing has operated from its fenced-in sites within the parking lots of two Walmart Supercenters, located at 9101 N Tarrant Pkwy and 6401 NE Loop 820, since April 2024. The existing sites each utilize 39 parking stalls. The sites, including all fenced operational areas, comprise 29.9 feet by 127.3 feet, totaling 3,806 sq. ft. The sites also include temporary 14kW generators, which comply with the city's noise ordinance regulations and will not exceed the 63 dBA maximum permissible decibel limits. Permanent power will be supplied to the sites by Walmart within the next 12 months. The sites also include a storage container that is 10x20x10 ft. and an anchored metal fence for safety.

About Wing

Wing offers drone delivery on behalf of Walmart, our retail partner in the Dallas-Fort Worth Metroplex. Our fleet of lightweight, highly automated delivery drones transport small packages directly from businesses to homes in minutes. Wing delivery is safe, sustainable, and easy to integrate into existing delivery and logistics networks. Wing is part of Google's parent company, Alphabet.

Walmart - Wing Partnership

Wing initially brought its drone delivery technology to the Dallas-Fort Worth Metroplex in 2022. Wing and Walmart began working together a year later, launching a 30-minute drone delivery service from a Walmart Supercenter in Frisco, TX, in September 2023. The partnership has been steadily expanding to additional stores ever since, as part of [Walmart's initiative](#) to offer drone delivery to up to 75% of the DFW population. Wing's sites in North Richland Hills are open to deliver to Walmart customers in the area during daylight hours, seven days a week. Since launching our nests in North Richland Hills in April 2024, Wing has delivered thousands of Walmart orders to thousands of Walmart customers in the area.

How Wing drone delivery works

Since April 2024, our drone delivery service has offered North Richland Hills residents a convenient and safe delivery option for their Walmart purchases.

- **Order.** Thousands of items are available via drone delivery in the Walmart app, including groceries, snacks and over-the-counter medicines. During checkout, customers select a precise delivery

location on their property.

- **Flight Planning.** While team members at the store prepare the items, Wing's software automatically calculates a route from the store, to the delivery spot, and then back to the store. The flight plan is then uploaded to the drone.
- **Package Pick Up.** Once the loader indicates the package is ready to go, the drone takes off automatically, proceeds to the pick up area, then hovers about 23 feet above the ground. The drone uses a winch to lower a tether, so the package can be hooked on. The winch pulls the package up to the aircraft, and secures it in place.
- **Flight.** The drone uses vertical propellers to climb to a cruising height of about 150 feet above the ground, and then transitions to horizontal flight using forward propellers and fixed wings. The drone navigates itself to the delivery spot at speeds of up to 65 mph, conducting health checks along the way to make sure everything is operating correctly.
- **Delivery.** Once it reaches the delivery spot, the drone slows down, hovers, descends to a delivery height of 23 feet above ground, and then gently lowers the package on the tether. The drone automatically releases the package when it touches the ground, and there's no need for the customer to unclip or assist with the delivery.
- **Return.** The drone then climbs back to cruise height and returns to the store, where it lands on a charging pad and gets ready for its next mission.



Wingspan
4.9 ft / 1.5 m

Aircraft Weight
11.7 lbs / 5.3 kg

Payload
2.3 lbs / 1.05 kg

Cruises
65 mph / 104 kph

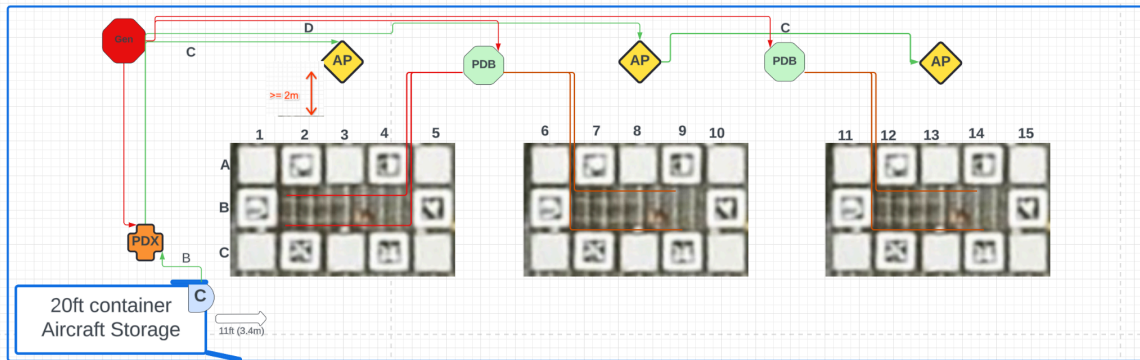
Delivery Range (one-way)
6 miles / 10 km

Nest Set Up and Site Logistics

As part of Wing's partnership with Walmart, we established our operational sites for drone operations, known as nests. Each nest location is set up following municipal permitting approvals with oversight from Walmart's real estate and supply management teams. The site logistics for Wing's nests are outlined below.

- **Nest Fencing:**
 - Anchored to ground via ground type specific anchors (concrete / asphalt)
 - Baseplates for anchoring style may vary depending on fence type and city
- **Nest Generator:**
 - Generator is on mobile trailer that have wheel chocks when parked in place
 - They are also earth-grounded via copper wire and pole into ground surface
- **Nest Lighting:**
 - There is no external lighting of the nest other than what's provided in the Walmart parking lots.
 - The parking lot lighting will not be impacted by the nest.

- **Security Cameras:**
 - There are security cameras attached to aircraft storage solution and power run off of the provided generator
 - Walmart parking lots also have security cameras installed
- **Nest Storage for Drones - Storage Container:**
 - The generator and fence are currently deployed to one side of the nest along the fence. Example below:



- **Service Gate Entrance:**
 - A large service gate is located near the generator for refueling and other operational activities.
 - Personnel gate(s) are typically located as close as practical to the store.
- **Distance to Fire Lane:**
 - The nest is roughly 62 ft. from the fire lane along the front of the store.

Wing is committed to continuing safe operations in compliance with the City of North Richland Hills. We welcome any questions or feedback. Thank you for your time and support.

Sincerely,

Ian Bright
Global Site Launch Lead
Wing Aviation LLC