

CITY COUNCIL MEMORANDUM

FROM: The Office of the City Manager **DATE:** February 26, 2024
SUBJECT: ZC24-0093, Ordinance No. 3841, Public hearing and consideration of a request from Kimley-Horn & Associates for a revision to Planned Development 36 at 9101 North Tarrant Parkway, being 24.65 acres described as Lot 1A1, Block 1, Wal-Mart Addition.
PRESENTER: Clayton Comstock, Director of Planning

SUMMARY:

On behalf of Walmart and Wing Aviation, LLC, Kimley-Horn & Associates is requesting a revision to Planned Development 36 to allow a drone “heliport/landing pad” in the Walmart Supercenter parking lot at 9101 North Tarrant Parkway.

GENERAL DESCRIPTION:

The Walmart Supercenter property is located on the north side of North Tarrant Parkway between Davis Boulevard and Precinct Line Road. The applicant proposes to establish ground operations for drone delivery services in the front parking lot on the property.

Wing Aviation, LLC, a subsidiary of Alphabet, Inc., has received approval from the Federal Aviation Administration (FAA) to operate unmanned aerial vehicles (UAVs, or drones) in the Dallas-Fort Worth Metroplex for the purpose of delivering packaged goods to customers. These services have been available through a prior partnership with Walgreens in Frisco and Little Elm since 2022, and operations began at two Walmart locations in Frisco and Lewisville in 2023.

The YouTube videos listed below may help familiarize City Council and the public with drone operations and the evolution of the industry thus far. The video links are provided only for background and context of the industry as well as Wing’s operational partnership with Walmart. This is not an exhaustive list of video resources available to the general public and any opinions provided in the videos do not represent those of the City of North Richland Hills.

- [Walmart & Wing deliver by drone in less than 30 minutes](#) (1:14) – This video demonstrates the actual improvements required within a Walmart parking lot.
- [Inside look at Wing’s aircraft: How do delivery drones work?](#) (7:29)
- [Bloomberg Technology: Alphabet’s Wing CFO on Walmart Drone Partnership](#) (4:47)
- [CNBC Report: Who Will Win the Drone Delivery Race, Why Walmart and Alphabet are Beating Amazon in Drone Delivery](#) (21:13)



Wing Aviation's proposal is to allow a one-year pilot program at this location with operations identical to the "Walmart & Wing deliver by drone in less than 30 minutes" video provided in the previous section. Within that year, city staff plans to craft a permanent set of standards and policies for drone delivery surface operations, including landing pad locations and setbacks from residential properties, permanent versus temporary ground improvements, maximum number of drones/pads, and similar standards. These standards and policies would be limited to what a municipality can regulate, since FAA permits generally regulate airspace operations once a drone is airborne.

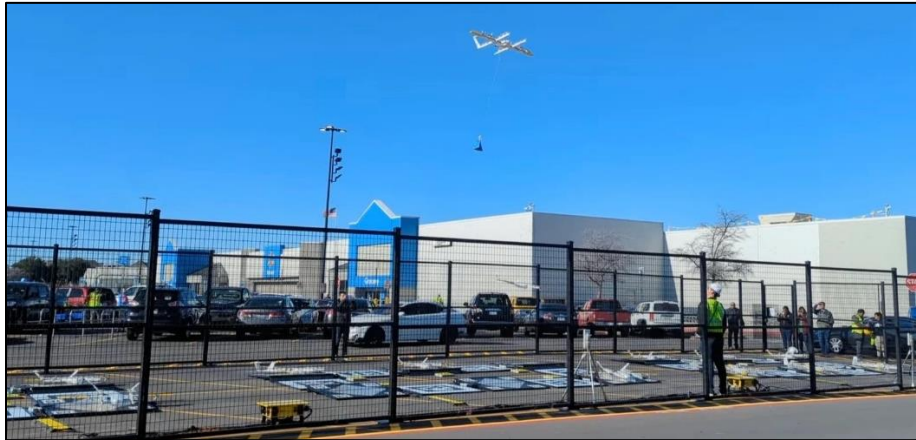
REQUEST SPECIFIC TO 9101 NORTH TARRANT PARKWAY:

The Walmart property at 9101 North Tarrant Parkway is zoned PD (Planned Development 36), which was originally approved in March 2001 and subsequently updated as each of the many pad sites developed. This planned development adopted a base zoning district of C-1 (Commercial). Drone delivery service is not a specifically listed primary or accessory use in the North Richland Hills zoning code, but it is somewhat similar in nature to a "heliport/landing field" in terms of operational characteristics, service demands, occupancy loads, and similar characteristics. The "heliport/landing field" is a use listed on the Table of Permitted Uses (Section 118-61 of the zoning code) and requires approval of a special use permit in the C-1 (Commercial) district. This application is being processed in a similar manner to provide the opportunity to review the suitability of the use and ground operations and improvements at this location.

Ground Operations

Wing calls their drone launch locations "nests." This nest is proposed in the parking lot area at the southeast corner of the Walmart store, near the existing curbside-delivery parking stalls. The nest would cover about 28 parking spaces (approximately 4,500 square feet) and would be surrounded by a black open-style fence. Even with the loss of 28 parking spaces, the property would still meet the minimum parking standards. Drive aisles in the parking lot will not be blocked by the nest.

A generator and temporary storage container would be placed inside the fenced area. The storage container stores the drone aircraft and some of the associated equipment during operational downtimes. An additional part of the public review is outside storage. A storage container would not normally be permitted in the front of a building, and if located to the side or rear of the building it would require to be screened with a masonry fence. Wing is proposing the storage container to be within the fenced nest, but not screened. This same arrangement has been installed at Walmart locations in Frisco and Lewisville.



Existing Wing Nest at Lewisville Walmart Supercenter at 801 W. Main Street

Noise & Residential Adjacency

In the C-1 (Commercial) zoning district, [Section 118-395\(10\)](#) stipulates that normal business activities conducted may not create a sound pressure level on the bounding property line that exceeds 60 decibels (dB) from 7:00 a.m. to 10:00 p.m. Last year, the Federal Aviation Administration (FAA) posted the [Draft Environmental Assessment for Wing Aviation, LLC Proposed Package Delivery Operations in Dallas-Fort Worth, Texas](#). The full report, which can be viewed at the link provided, describes the noise impact of Wing's "Hummingbird" model aircraft. Table 3.6-1 in the report (page 3-20) provides the extent of noise exposure for nest operations for the 60 dB noise level, which is 75 feet. The nearest property line to the nest is over 100 feet away and it is commercially zoned property.

The proposed Wing nest location is also approximately 690 feet from the nearest residence, which is located on Precinct Line Road in Colleyville. The nearest North Richland Hills residences are more than 1,400 feet northwest in the High Point Estates and Steeple Ridge neighborhoods. The Development Review Committee does not believe that the proposed ground operations will have any negative impact on residential property.

General Operational Characteristics of Wing Drone Delivery

Below are topics of general interest from the attached summary provided by Wing Aviation.

- The Hummingbird model drone by Wing has a 4.9 foot wingspan and weighs 11.7 lbs. It can carry packages close to three (3) pounds in weight.
- Flight operations occur 9am-5pm, 7 days a week, weather permitting. There are no nighttime operations.
- The current model has a six-mile delivery radius. For this NRH Walmart Supercenter, that is generally





north to SH114, east to SH121, south to Airport Freeway, and west to Denton Highway (US 377).

- The drone cruises at 150 feet at about 65 mph. During delivery, it drops to about 20-25 feet and drops the package smoothly down to the surface on a tether.

LAND USE PLAN: This area is designated on the Land Use Plan as Retail Commercial. This category provides sites for community and regional shopping centers, commercial establishments, and employment centers.

CURRENT ZONING: Most of the property is zoned PD (Planned Development), with a base zoning district of C-1 (Commercial). This district is intended to permit a variety of retail trade, personal and business services establishments, and offices.

SURROUNDING ZONING | LAND USE:

DIRECTION	ZONING	LAND USE PLAN	EXISTING LAND USE
NORTH	PD (Planned Development)	Retail Commercial	Retail shopping center (Target)
WEST	PD (Planned Development)	Retail Commercial	Retail and restaurant uses
SOUTH	PD (Planned Development)	Retail Commercial	Retail shopping center (Kroger Marketplace)
EAST	PD (Planned Development)	Retail Commercial	Retail and restaurant uses

PLAT STATUS: The property is platted as Lot 1A1, Block 1, Wal-Mart Addition.

PLANNING & ZONING COMMISSION: The Planning & Zoning Commission held a public hearing and considered this item at their February 15, 2023, meeting and recommended 5-0 to approve the request.

RECOMMENDATION:

Approve Ordinance No. 3841.