

## PARKING DEMAND ANALYSIS

The number of parking spaces required for the proposed QT 1899 development was calculated according to information in Table 7.9-I in the *Denton Development Code*, which is summarized in **Table 12**.

**Table 12: City Code Parking Requirements Summary**

Land Use	City Code	Size (ft <sup>2</sup> )	Code Requirement (Parking Spaces)
Automotive Fuel Sales	1:350 ft <sup>2</sup> (2.86 parking spaces/1,000 ft <sup>2</sup> )	5,023	15
<b>Minimum Parking Spaces Required by Code</b>			<b>15</b>
<b>Maximum Parking Spaces Allowed per Code (125% of Minimum)</b>			<b>19</b>

With 46 proposed parking spaces, the amount of parking provided for the proposed QT 1899 will exceed the City’s maximum allowable amount by 27 parking spaces.

### **Parking Accumulation Data Collection - Other Locations**

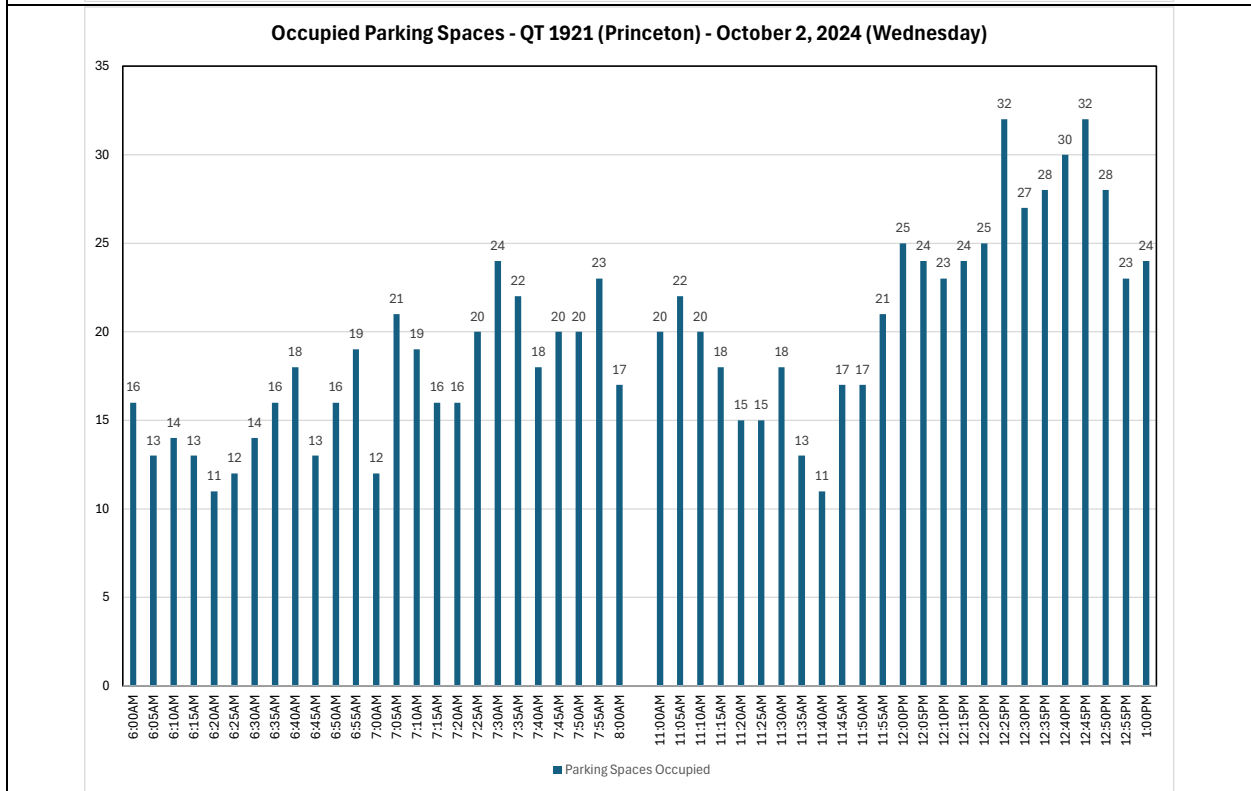
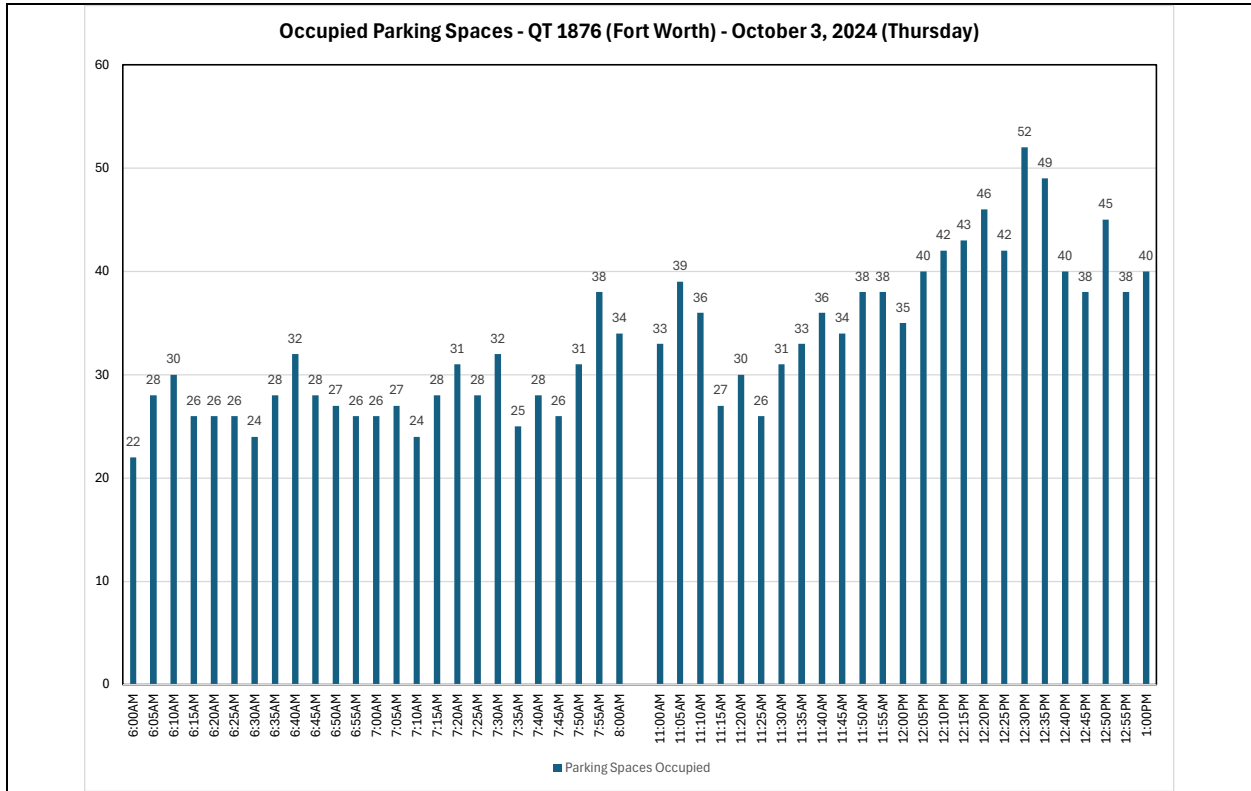
To determine the peak parking demand for the proposed QT 1899, a parking accumulation study was performed at two (2) existing QT stores in the DFW area:

- QT 1876 (10200 West Fwy, Fort Worth, TX 76108) = 4,993 ft<sup>2</sup> building with 16 vehicle fueling positions and 71 parking spaces
- QT 1921 (2000 W. Princeton Drive, Princeton, TX 75407) = 5,312 ft<sup>2</sup> building with 18 vehicle fueling positions and 49 parking spaces

The site plans for both of these stores are provided in the Appendix.

These studies were performed by counting the number of parked vehicles on each site between 6:00AM and 8:00 AM and 11:00 AM and 1:00 PM on either Wednesday, October 2, 2024 or Thursday, October 3, 2024. The number of parked vehicles at each location was documented every 5 minutes within the specified timeframe. The number of parking spaces occupied during each observation period is shown in **Figure 18** for both locations. The data collected at these two (2) locations are summarized in the Appendix.

**Figure 18: Summary of Parking Accumulation Counts at Other QT Stores**



**Table 13** summarizes the existing parking demand observed for both existing locations and the resulting peak parking ratio [peak parking demand/size of the store (1,000 ft<sup>2</sup>)]. The peak parking ratio (9.79 parking spaces occupied/1,000 ft<sup>2</sup>) occurred at QT 1876 and the average peak parking ratio between the two (2) locations was 8.10 parking spaces occupied/1,000 ft<sup>2</sup>.

**Table 13: Existing Parking Demand**

	<b>QT 1876 (4,993 ft<sup>2</sup>) Available Parking Spaces = 71</b>	<b>QT 1921 (5,312 ft<sup>2</sup>) Available Parking Spaces = 49</b>
	<b>Thursday (10/3/24)</b>	<b>Wednesday (10/2/24)</b>
<b>Peak Parking Demand</b>	52	32
<b>Peak Parking Ratio (parking spaces occupied/1,000 ft<sup>2</sup>)</b>	9.79	6.41

### Parking Demand Analysis

**Table 14** provides the results of applying the City of Denton parking requirements to the peak parking observations at the other two (2) existing QT stores and indicate that parking shortages of 12-33 spaces would occur using City of Denton requirements.

**Table 14: City of Denton Parking Requirements (Other Locations)**

	<b>QT 1876 (4,993 ft<sup>2</sup>)</b>	<b>QT 1921 (5,312 ft<sup>2</sup>)</b>
<b>City of Denton Minimum Parking Requirement (Building Size/350)</b>	15	16
<b>City of Denton Maximum Parking Allowed (1.25 x Minimum Parking)</b>	19	20
<b>Peak Parking Observed</b>	52	32
<b>Resulting Parking Shortage (Using Denton's Maximum Parking Allowed)</b>	33 parking spaces	12 parking spaces

Using the average peak parking ratio across both existing locations (8.10 parking spaces occupied/1,000 ft<sup>2</sup>) to the proposed Denton location (5,023 ft<sup>2</sup>) is predicted to result in a total of 41 parking spaces occupied at the Denton location, with the 46-space parking lot being approximately 89% full.

Therefore, based on the results of this analysis, the proposed number of parking spaces for the

proposed QT 1899 (46 parking spaces) is predicted to accommodate the anticipated peak parking demand and exceeding the maximum number of parking spaces allowed by City Code should be allowed.