



February 7, 2023

Mr. Jeffrey Hill
SBLM Architects P.C.
16910 Dallas Parkway, Suite 216
Dallas, Texas 75248

Re: Floor & Decor
Traffic Study Letter
Lone Tree, Colorado

Dear Mr. Hill,

The purpose of this letter is to provide a trip generation comparison to adequately assess the impacts of a proposed Floor & Decor to occupy the space previously utilized by a Sears department store within the northwest quadrant of the C-470 and Yosemite Street interchange at 8585 Yosemite Street in Lone Tree, Colorado. This study will compare the trips generated by a portion of the previously developed Sears department store to the proposed Floor & Decor. It should be noted that western portion of the existing building is occupied by At Home which also occupied a portion of once was Sears. The Floor & Decor is proposed within the approximate 66,663 square feet of the remaining portion of the previous Sears department store while an approximate 14,838 square foot expansion will be added to this building for a total of 81,501 square feet. The purpose of this trip generation comparison will identify traffic concurrence with the previous use for the City of Lone Tree to determine if additional traffic analysis is required.

SITE INFORMATION AND TRIP GENERATION COMPARISON

The existing approximate 160,000 square foot building was previously a Sears department store. An At Home furniture/décor store currently occupies approximately 94,000 square feet with the remaining building vacant. The Floor & Decor is proposed to be approximately 81,501 square feet including the approximate 66,663 square foot vacant portion of the building and an approximate 14,838 square foot expansion. The site plan of the existing building with the At Home store occupying a portion of the building and the proposed Floor & Decor is attached.

Site-generated traffic estimates are determined through a process known as trip generation. Rates and equations are applied to the proposed land use to estimate traffic generated by the development during a specific time interval. The acknowledged source for trip generation rates is the *Trip Generation Manual*¹ published by the Institute of Transportation Engineers (ITE). ITE has established trip rates in nationwide studies of similar land uses. Trip generation was calculated using the 11th Edition average rates for Department Store (ITE Code 875) for the previous site use. For the proposed Floor & Decor, trips generated by seven (7) existing Floor & Decor locations throughout the country were counted to provide actual data for the specific land use. Based on these site-specific counts, a trip generation rate (trips per 1,000 square feet) of 0.45 (57% enter, 43% exit) was used for the morning peak hour and a trip generation rate of 0.62 (50% enter, 50% exit) was used for the afternoon peak hour.

The following table compares the trip generation of the applicable building area of the previous department store to the expected trip generation for the proposed Floor & Decor. The trip generation calculation sheets and site-specific trip generation are attached for reference.

¹ Institute of Transportation Engineers, *Trip Generation Manual*, Eleventh Edition, Washington DC, 2021.

**Floor & Decor
Trip Generation Comparison**

| Use and Size | Weekday Vehicle Trips | | | | | |
|---|-----------------------|-----------|-----------|--------------|------------|------------|
| | AM Peak Hour | | | PM Peak Hour | | |
| | In | Out | Total | In | Out | Total |
| Approved Use – Sears Outlet | | | | | | |
| Department Store (ITE 875) 66,663 Square Feet | 25 | 14 | 39 | 65 | 65 | 130 |
| Proposed Use Consersion – Floor & Decor | | | | | | |
| Floor & Decor (User-Specific) 81,501 Square Feet | 21 | 16 | 37 | 24 | 27 | 51 |
| Net Difference in Trips | -4 | +2 | -2 | -41 | -38 | -79 |

As summarized in the previous table, the proposed Floor & Decor is anticipated to generate 37 trips during the morning peak hour and 51 trips occurring during the afternoon peak hour. The proposed Floor & Decor is anticipated to account for a decrease of two morning peak hour trips and a decrease of 79 afternoon peak hour trips compared to the trips generated by the previous department store in the same development area (does not include At Home building space).

SITE CIRCULATION

Access to the external streets and parking internal to the site will remain the same as the current site. The entrance to the proposed Floor & Décor store will be located on the east side of the building, whereas the previous Sears use had entrances on the south side of building. Additionally, a customer pickup will be provided on the north side of the building within the proposed expansion.

CONCLUSIONS AND RECOMMENDATIONS

In summary, this traffic study letter provides a trip generation comparison of the applicable building area of the previous Sears department store to the proposed Floor & Decor at the 8585 Yosemite Street parcel in Lone Tree, Colorado. Based on the results of this trip generation comparison, the proposed Floor & Decor is anticipated to generate traffic volumes within the site's original amount. This development is estimated to account for a decrease of two morning peak hour trips and a decrease of 79 afternoon peak hour trips. Therefore, it is believed no further traffic analysis is required based on this proposal. If there are any questions or if anything further is required, please let us know.

Sincerely,

KIMLEY-HORN AND ASSOCIATES, INC.

Jeffrey R. Planck, P.E.
Project Traffic Engineer



Floor & Decor (Proposed Land Use) Trip Generation Calculations

Parking and Trip Generation Study

Floor & Decor

Prepared for:

Floor & Decor Outlets of America, Inc.

Prepared by:

Kimley-Horn and Associates, Inc.
12740 Gran Bay Parkway West, Suite 2350
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FBPE No. CA 00000696

William J. Schilling Jr., P.E.
Florida License Number: 53947
Date: _____

Table 2: Peak Hour Trip Generation Summary

| Store Location and Size | Date | Peak Hour | Inbound Trips | Outbound Trips | Total Trips | Trip Generation Rate (Trips per 1,000 SF GLA) | Inbound Trip Percentage | Outbound Trip Percentage |
|--|---------------------|-------------------|---------------|----------------|-------------|---|-------------------------|--------------------------|
| Floor & Decor - Boynton Beach 1974 High Ridge Road Boynton Beach, FL 33426 91,916 SF GLA | Wed, Jan 25, 2017 | 8:30 AM - 9:30 AM | 43 | 38 | 81 | 0.88 | 53% | 47% |
| | Wed, Jan 25, 2017 | 4:00 PM - 5:00 PM | 40 | 37 | 77 | 0.84 | 52% | 48% |
| Floor & Decor - Wayne 77 Willowbrook Boulevard Wayne, NJ 07470 88,500 SF GLA | Thur, Jan 26, 2017 | 8:30 AM - 9:30 AM | 10 | 5 | 15 | 0.17 | 67% | 33% |
| | Wed, Jan 25, 2017 | 5:15 PM - 6:15 PM | 27 | 22 | 49 | 0.55 | 55% | 45% |
| Floor & Decor - Potomac Mills 14041 Worth Avenue Woodbridge, VA 22192 76,384 SF GLA | Thur, July 14, 2016 | 7:30 AM - 8:30 AM | 13 | 15 | 28 | 0.37 | 46% | 54% |
| | Wed, July 13, 2016 | 5:00 PM - 6:00 PM | 18 | 20 | 38 | 0.50 | 47% | 53% |
| Floor & Decor - Santa Ana 1801 East Dyer Road Santa Ana, CA 92705 72,914 SF GLA | Tue, Jan 24, 2017 | 8:15 AM - 9:15 AM | 18 | 17 | 35 | 0.48 | 51% | 49% |
| | Tue, Jan 24, 2017 | 4:00 PM - 5:00 PM | 15 | 16 | 31 | 0.43 | 48% | 52% |
| Floor & Decor - North Houston 17211 North Freeway Houston, TX 77090 109,000 SF GLA | Wed, Jan 25, 2017 | 8:15 AM - 9:15 AM | 28 | 26 | 54 | 0.50 | 52% | 48% |
| | Tue, Jan 24, 2017 | 5:30 PM - 6:30 PM | 31 | 33 | 64 | 0.59 | 48% | 52% |
| Floor & Decor - Arlington Heights 600 East Rand Road Arlington Heights, IL 60004 74,900 SF GLA | Wed, Jan 25, 2017 | 8:30 AM - 9:30 AM | 17 | 11 | 28 | 0.37 | 61% | 39% |
| | Wed, Jan 25, 2017 | 5:30 PM - 6:30 PM | 24 | 22 | 46 | 0.61 | 52% | 48% |
| Floor & Decor - Mall of Georgia 2918 Buford Drive Buford, GA 30519 87,825 SF GLA | Tue, Jan 24, 2017 | 8:30 AM - 9:30 AM | 23 | 11 | 34 | 0.39 | 68% | 32% |
| | Tue, Jan 24, 2017 | 5:45 PM - 6:45 PM | 33 | 40 | 73 | 0.83 | 45% | 55% |
| Average AM Peak Hour Trip Generation Rate and Inbound/Outbound Percentage | | | | | | 0.45 | (57% in, 43% out) | |
| Average PM Peak Hour Trip Generation Rate and Inbound/Outbound Percentage | | | | | | 0.62 | (50% in, 50% out) | |

Project Floor and Decor
 Subject Trip Generation for Floor and Decor
 Designed by TES Date February 06, 2023 Job No. 096198011
 Checked by _____ Date _____ Sheet No. _____ of _____

TRIP GENERATION MANUAL TECHNIQUES

User-Specific Trip Generation

Land Use Code - Floor and Decor

Independent Variable - 1000 Square Feet (X)

SF = 81,501

X = 81.501

T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

(T) = 0.45 (X)

(T) = 0.45 * (81.5)

Directional Distribution: 57% ent. 43% exit.

T = 37 Average Vehicle Trip Ends

21 entering 16 exiting

21 + 16 = 37

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

(T) = 0.62 (X)

(T) = 0.62 * (81.5)

Directional Distribution: 50% ent. 50% exit.

T = 51 Average Vehicle Trip Ends

24 entering 26 exiting

24 + 27 = 51

Sears (Previous Land Use) Trip Generation Calculations

Project Sear Outlet Department Store
 Subject Trip Generation for Department Store
 Designed by TES Date February 06, 2023 Job No. 096198011
 Checked by _____ Date _____ Sheet No. _____ of _____

TRIP GENERATION MANUAL TECHNIQUES

ITE Trip Generation Manual 11th Edition, Average Rates

Land Use Code - Department Store (875)

Independent Variable - 1000 Square Feet (X)

SF = 66,663

X = 66.663

T = Average Vehicle Trip Ends

Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (800 Series Page 496)

| | | | | |
|----------------|--------|---------------------------|---------------------------|-----------|
| (T) = 0.58 (X) | | Directional Distribution: | 64% ent. | 36% exit. |
| (T) = 0.58 * | (66.7) | T = 39 | Average Vehicle Trip Ends | |
| | | 25 entering | 14 | exiting |
| | | 25 + 14 = | 39 | |

Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (800 Series Page 497)

| | | | | |
|----------------|--------|---------------------------|---------------------------|-----------|
| (T) = 1.95 (X) | | Directional Distribution: | 50% ent. | 50% exit. |
| (T) = 1.95 * | (66.7) | T = 130 | Average Vehicle Trip Ends | |
| | | 65 entering | 65 | exiting |
| | | 65 + 65 = | 130 | |

Weekday

*No daily weekday data available, assumed 10 * the PM peak hour.

| | | | | |
|-------------------------|---------|---------------------------|---------------------------|-----------|
| (T) = 10 * PM Peak Hour | | Directional Distribution: | 50% ent. | 50% exit. |
| (T) = 10 * | (130.0) | T = 1300 | Average Vehicle Trip Ends | |
| | | 650 entering | 650 | exiting |
| | | 650 + 650 = | 1300 | |

Conceptual Site Plan

