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Sam Schwartz

September 13, 2021

Attn: Tom Toronto
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Bergen County United Way
6 Forest Avenue
Paramus, NJ 07652

RE: Proposed Special Needs Housing Development
Township of Warren, Somerset County, NJ
Block 83, Lot 4
SSC Project No. 21-02-1460

Dear Tom:

Sam Schwartz Consulting, L.L.C. (Sam Schwartz) has performed an estimate of the vehicle trip generation and parking demands associated with the proposed special needs housing development located in Lot 4 of Block 83 in Warren Township, New Jersey. The proposed development consists of a 36-bedroom (30-unit) special needs housing development with 50 parking spaces on site.

SUMMARY CONCULSION

Based on vehicle and parking data collected at a similar facility, the proposed site would generate a low number of vehicle trips (12 AM and 10 PM) and would require up to 13 parking spaces.

DETAILED STUDY

Sam Schwartz conducted driveway counts and parking occupancy counts at a comparable development consisting of a 102-bedroom (63-unit) special needs housing facility with 67 parking spaces on site. The facility is located at 86 Park Avenue in Florham Park, New Jersey and the counts were conducted Tuesday, August 31, 2021, approximately from 7-9 AM (AM peak period) and 4-6 PM (PM peak period).

Figure 1 - Florham Pak Site (86 Park Ave)

The collected data was used to determine the trip generation and parking demand rates applicable to a special needs housing land use as proposed. Vehicles entering/exiting, and parking were counted and tabulated in 15-minute intervals by vehicle classification (cars, mini-vans, large vans, and trucks).

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TABLE 1 depicts the parking utilization observed at the comparable special needs housing development in Florham Park, NJ during the study periods. As shown, the parking utilization was at its highest levels from 4:00 – 4:15 PM and from 5:45 – 6:00 PM, where a total of 27 vehicles were parking on site. During the two peak times, an average 26% of the vehicles parked required ADA accessible parking spaces (equivalent to approximately 7 vehicles). As shown, the peak parking demand rate was 0.43 spaces per dwelling unit. **At this peak rate, the proposed 30-unit development in Warren, NJ would require up to 13 parking spaces (with a minimum of 4 spaces being ADA accessible), whereas 50 parking spaces are proposed.**

Table 1: Parking Utilization of Comparable Facility

Observed Parking Utilization of Special Needs Housing (86 Park Avenue, Florham Park, NJ)											
Time Start	6:45 AM	7:00 AM	7:15 AM	7:30 AM	7:45 AM	8:00 AM	8:15 AM	8:30 AM	8:45 AM	9:00 AM	**Peak AM**
Vehicles Parked	24	26	25	24	24	23	25	23	25	23	**26**
Utilization	36%	39%	37%	36%	36%	34%	37%	34%	37%	34%	**39%**
Spaces Available	43	41	42	43	43	44	42	44	42	44	**41**
Time Start	3:45 PM	4:00 PM	4:15 PM	4:30 PM	4:45 PM	5:00 PM	5:15 PM	5:30 PM	5:45 PM	6:00 PM	**Peak PM**
Vehicles Parked	25	27	22	25	24	26	23	24	27	21	**27**
Utilization	37%	40%	33%	37%	36%	39%	34%	36%	40%	31%	**40%**
Spaces Available	42	40	45	42	43	41	44	43	40	46	**40**
Peak AM Parking Rate (observed demand)		**=**	**26 spaces**		**÷**	**63 units**		**=**	**0.41 spaces per unit**		
Peak PM Parking Rate (observed demand)		**=**	**27 spaces**		**÷**	**63 units**		**=**	**0.43 spaces per unit**		
Note: The peak parking demand occurred from 4:00 - 4:15 PM and from 5:45 - 6:00 PM, at which times an approximate average of 26% of the vehicles parked utilized ADA accessible parking stalls.											

TABLE 2 details the trip generation of the 63-unit comparable facility in Florham Park, NJ by vehicle class and depicts calculated trip generation rates for a generic special needs housing facility. During the AM peak hour (8am – 9am), trip generation rates were calculated as 0.35 trips per dwelling unit; similarly, the land use was found to produce 0.32 trips per dwelling unit in the PM peak hour (4pm – 5pm). The majority of trips produced were car trips, but vans, large vans, and trucks comprised approximately 14%, 9%, and 5%, respectively, of the trips during the AM peak hour. In the PM peak hour, large vans comprised 10% of observed trips and the remaining 90% were car trips.

Table 2: Trip Generationof Comparable Facility

Observed Trip Generation of Special Needs Housing (86 Park Avenue, Florham Park, NJ)					
Hour Starting	**Cars**	**Vans**	**Large Vans**	**Trucks**	**Total**
7:00 AM	9	2	4	0	15
7:15 AM	6	2	4	0	12
7:30 AM	5	1	6	0	12
7:45 AM	7	2	4	0	13
8:00 AM	16	3	2	1	22
4:00 PM	18	0	2	0	20
4:15 PM	16	0	0	1	17
4:30 PM	12	0	0	2	14
4:45 PM	11	0	0	2	13
5:00 PM	16	0	0	2	18
Peak AM Trip Generation Rate = 22 trips ÷ 63 units = 0.35 trips per unit					
Peak PM Trip Generation Rate = 20 trips ÷ 63 units = 0.32 trips per unit					
Note: The in/out split during the AM peak hour was 50% in/50% out. The in/out split during the PM peak hour was 45% in/55% out.					

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To estimate the site trip generation of the proposed 30-unit special needs housing development in Warren, NJ, Sam Schwartz estimated new vehicle trips and parking requirements based on the comparable facility in Florham Park, NJ. We also compared these estimates to several land use codes in the Institute of Transportation Engineers (ITE) Trip Generation Manual, 10th Edition with February 2020 Supplement. The ITE Trip Generation Manual does not have a specific land use code for a special needs housing facility, but Congregate Care Facility (LUC 253) and Continuing Care Retirement Community (LUC 255) were deemed the most closely related land uses.

TABLE 3 compares the comparable trip generation rates to the two ITE land uses and depicts an estimate for the proposed 30-unit development based on each method. Trip generation rates for LUC 253 ranged from 0.07 to 0.18 vehicle trips per dwelling unit in the AM and PM peak hours, respectively. Rates for LUC 255 ranged from 0.15 to 0.20 trips per dwelling unit in the AM and PM peak hours.

TABLE 3: Trip Generation Estimates

Comparison of Trip Generation Estimate Methods Description / ITE Land Use Code	Unit of Measure	Quantity	Rates Comparison		Trip Generation Estimate[1]					
			AM Peak Hour	PM Peak Hour	AM			PM		
					In	Out	Total	In	Out	Total
Congregate Care Facility / LUC 253	DU	30	0.07	0.18	2	1	3	3	3	6
Continuing Care Retirement Community / LUC 255			0.15	0.20	4	1	5	2	4	6
Comparable Site (Florham Park, NJ)			0.35	0.32	6	6	**12**	4	6	**10**
Note: Trip generation estimates from ITE Trip Generation Manual, 10th Edition with February 2020 Supplement.										

Based on this analysis, estimates of the trip generation for the proposed development would be highest based on the collected data. Conservatively, the comparable site was used as basis for the estimation of future trips.

As shown in TABLE 4, the proposed site is expected to produce 12 vehicle trips in the AM peak hour (6 in, 6 out) and 10 trips in the PM peak hour (4 in, 6 out). Table 1 depicts the anticipated vehicle trip generation for the proposed site by vehicle class as calculated based upon the comparable data.

TABLE 4: Proposed Site Trip Generation by Vehicle Class

Proposed 30-Unit Special Needs Housing (Warren, NJ) Trip Generation Estimate by Vehicle Class	Cars	Vans	Large Vans	Trucks	TOTAL
AM Peak Hour (occuring between 7-9 AM)	9	2	1	1	12
PM Peak Hour (occuring between 4-6 PM)	9	0	1	0	10

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In conclusion, based upon the locally collected data and national published trip generation data, the proposed development would provide sufficient parking (50 stalls provided whereas 13 are required) and the vehicle trips to/from the site would be negligible and not have a detrimental effect on traffic during the adjacent roadway peak hours occurring between typical weekday peaks of 7-9 AM and 4-6 PM.

Please let us know if you have any questions or comments related to this data collection and assessment.

Sincerely,

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Attached:

https://samschwartzengineering.sharepoint.com/sites/21-02-1460/Shared Documents/21-02-1460/03 - Deliverables/2021-09-13 Traffic Statement for Special Needs Housing - Warren NJ.docx