

STONEFIELD

October 20, 2023

Planning Board
Township of West Orange
66 Main Street
West Orange, New Jersey 07052

**RE: Parking Utilization Memorandum
Proposed Childcare Facility Expansion
289 Mt Pleasant Avenue
Block 83, Lots 1 and 5
Township of West Orange, Essex County, New Jersey
SE&D Job No. RUT-230300**

Dear Board Members:

Stonefield Engineering and Design, LLC ("Stonefield") has prepared this memorandum to examine the potential parking impacts of the proposed facility expansion to the existing Goddard School of West Orange. The subject property is located at the northeasterly quadrant of the intersection of Mt Pleasant Avenue and Prospect Avenue in the Township of West Orange, Essex County, New Jersey. Access to the site is facilitated via one (1) full-movement driveway along Marcella Avenue and one (1) full-movement driveway with a left-turn egress restriction along Mt Pleasant Avenue. Access to the site and the existing parking area, inclusive of 45 parking spaces, are to remain.

In order to assess the existing parking availability of the childcare facility, on-site parking utilization counts were conducted on Wednesday, October 18, 2023, throughout the operational hours of the facility. Data was collected in 10-minute intervals from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:30 p.m.; and in 30-minute intervals from 9:00 a.m. to 4:00 p.m. The 10-minute interval study time periods were chosen as they are representative of the expected peak parking turnover of the existing Goddard School during child drop-off and pick-up operations. The results of the on-site parking utilization study are provided in **Table I**.

TABLE I – MAXIMUM OBSERVED PARKING DEMAND

Time Period	Peak Period	Parking Supply	Maximum Demand	Parking Utilization
Weekday Morning (Child Drop-Off)	7:00 AM – 9:00 AM	45	23	51%
Weekday Midday (Faculty Parking)	9:00 AM – 4:00 PM	45	15	33%
Weekday Evening (Child Pick-Up)	4:00 PM – 6:30 PM	45	16	36%

Based on a review of the count data, the maximum parking demand was 23 vehicles during the weekday morning peak period, 15 vehicles during the weekday midday peak period, and 16 vehicles during the weekday evening peak period. Based on the on-site parking utilization observations conducted, a maximum parking demand of 23 parking spaces was observed at 8:40 a.m. during the critical weekday morning student drop-off time period.

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Appended **Exhibit A1** provides a summary of the parking utilization results, and **Exhibit A2** and **A3** are aerial drone images of the maximum parking demand during the 10-minute peak weekday morning and weekday evening parking demand periods, respectively.

The on-site parking utilization observations were conducted on the peak child attendance day, where an attendance was recorded of 138 students supported by 25 faculty. The proposed childcare expansion would accommodate an enrollment of potentially up to 60 additional students and the hiring of potentially up to seven (7) additional faculty for a total of 198 students and 31 faculty under the proposed condition. The proposed childcare facility expansion would equate to a 44% increase in student enrollment and 28% increase in faculty for a total increase of approximately 41% (students + faculty). This would result in a proposed maximum parking demand of 33 vehicles during the weekday morning peak period, 21 vehicles during the weekday midday peak period, and 23 vehicles during the weekday evening peak period. Based on the existing parking utilization percentage and number of open spaces available for each time period, the existing parking supply of 45 parking spaces would be sufficient to support the expected parking demand of the proposed expansion.

If you have any comments regarding the above information, please contact our office.

Best regards,



Matthew J. Seckler, PE, PP, PTOE
Stonefield Engineering and Design, LLC



John R. Corak, PE
Stonefield Engineering and Design, LLC

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Exhibit A1 - Parking Utilization Counts

Proposed Childcare Facility Expansion

289 Mt Pleasant Avenue

Township of West Orange, Essex County, New Jersey

Wednesday, October 18, 2023

RUT-230300

Weekday Morning Peak Period

Supply	45	Utilization	Open Spaces
Time	Parked Vehicles		
7:00 AM	1	2%	44
7:10 AM	2	4%	43
7:20 AM	3	7%	42
7:30 AM	3	7%	42
7:40 AM	4	9%	41
7:50 AM	5	11%	40
8:00 AM	5	11%	40
8:10 AM	8	18%	37
8:20 AM	16	36%	29
8:30 AM	12	27%	33
8:40 AM	23	51%	22
8:50 AM	22	49%	23
9:00 AM	17	38%	28

Weekday Midday Peak Period

Supply	45	Utilization	Open Spaces
Time	Parked Vehicles		
9:30 AM	13	29%	32
10:00 AM	14	31%	31
10:30 AM	15	33%	30
11:00 AM	14	31%	31
11:30 AM	14	31%	31
12:00 PM	14	31%	31
12:30 PM	12	27%	33
1:00 PM	14	31%	31
1:30 PM	10	22%	35
2:00 PM	11	24%	34
2:30 PM	9	20%	36
3:00 PM	12	27%	33
3:30 PM	11	24%	34

Weekday Evening Peak Period

Supply	45	Utilization	Open Spaces
Time	Parked Vehicles		
4:00 PM	10	22%	35
4:10 PM	10	22%	35
4:20 PM	10	22%	35
4:30 PM	14	31%	31
4:40 PM	11	24%	34
4:50 PM	14	31%	31
5:00 PM	12	27%	33
5:10 PM	13	29%	32
5:20 PM	12	27%	33
5:30 PM	16	36%	29
5:40 PM	16	36%	29
5:50 PM	11	24%	34
6:00 PM	9	20%	36
6:10 PM	8	18%	37
6:20 PM	4	9%	41
6:30 PM	1	2%	44

Exhibit A2

Maximum Observed Parking Demand – Weekday Morning (Child Drop-Off) Peak Period

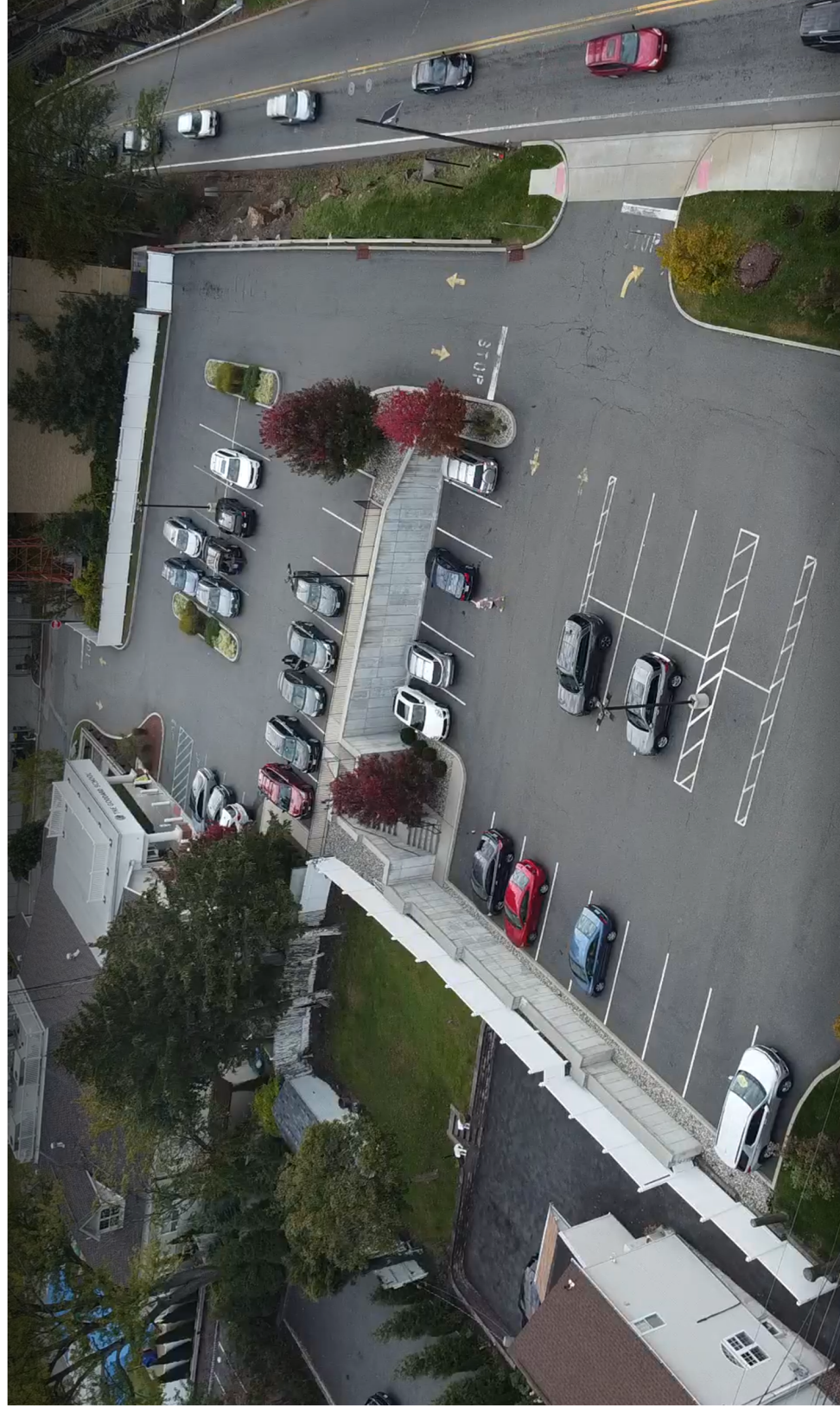


Exhibit A3

Maximum Observed Parking Demand – Weekday Evening (Child Pick-Up) Peak Period

