Franklin Township

Somerset County, New Jersey

Township Technical Review Committee (TRC)

Municipal Building 475 DeMott Lane Somerset, NJ 08873 732.873.2500 Fax: 732.873.0844

www.franklintwpnj.org

MEMORANDUM

To: Zoning Board of Adjustment

From: Technical Review Committee (TRC)

Date: August 16, 2021

Re: Cedar Hill Prep School (ZBA-19-00041)

152 Cedar Grove Lane, Somerset (Block 424.12, Lot 6.03)

The applicant has submitted the application materials listed below:

- 1-sheet "Use Variance Plan" prepared by VanCleef Engineering dated 10/10/19
- Letter addressing traffic prepared by Dolan & Dean dated 1/20/20 (the "Traffic Letter")
- Letter addressing traffic prepared by Dolan & Dean dated 8/3/20 (the "Updated Traffic Letter")

Project History

The site was approved for construction of a private school in 2007 (PLN 2006-00031). Per the resolution:

- Enrollment limited to: 160 students.
- Generally operates: 7:00 a.m. to 7:00 p.m.
- Licensed to provide "before care," "after care" and enrichment programs and also offers tutoring; aside from after care and enrichment program the Applicant does not offer any night programs. Saturday's are limited to tutoring and enrichment programs which are generally from 10 a.m. to 2 p.m. and usually draw about 30 students.

The applicant returned in 2011 (ZBA-11-00013) for expansion of one of the buildings on the property to add floor area for classroom use. Per the resolution:

- No mention of change to number of students or staff
- Applicant was required to provide a written statement of agreement with the neighboring swim club regarding shared parking

The applicant returned in 2012 (ZBA-11-00020) for expansion of the school. Per the resolution:

- New Building "D": One story, 14,066 square foot building consisting of roughly 3,000 square foot gym and 12 classrooms
- Elimination of expansion approved under ZBA-11-00013
- Expansion of Building "C": 1,922 second floor addition containing office space, nurse's office, break room and conference room
- Enrollment limited to 330 students
- Applicant agreed to investigate providing a walking path between the school parking lot and the adjacent swim club to facilitate the shared parking

Current Application

Per the application form, the applicant is "applying to the Zoning Board of Adjustment for Use 'D' Variance approval to allow a summer camp on the property. No site modifications are proposed."

Day camps are not a permitted use in the R-40 zone and the day camp was not incorporated into the approvals previously sought for the site. Thus, continued use of the site for a summer day camp requires D(1) Use Variance approval. As no site plan modifications are proposed, no change to the approved site plan is requested.

The Traffic Letter provides the following with respect to the summer camp:

- Camp enrollment: 250 to 300 children
- Staff members: 50 to 60
- Campers attend 3, 4 or 5 days a week
- Camp day starts: 7 am (arrivals vary from 7am to 8am); the supplemental traffic letter indicates that peak driveway hour was later than anticipated at 8am to 9am.
- Camp day ends: 4 pm (by 4:15 pm the majority of the campers are picked up)
- Approximately 5% stay later for aftercare and are picked up by 6:30 pm
- Traffic-related figures:
 - o 280 campers on average (not all attend every day and there are absences)
 - Morning drop-off:
 - 3 vans: 30 campers @ 10 campers per van
 - 125 parent cars: 250 campers dropped off by parents @ 2 campers per car
 - 25 staff vehicles: staff members typically college students who carpool
 - Afternoon pick-up:
 - 3 vans: 30 campers @ 10 campers per van
 - 118 parent cars: 235 campers picked by parents @ 2 campers per car
 - 25 staff vehicles: staff members typically college students who carpool
 - 15 campers stay for after care and are picked up during the evening peak hour

Review Comments

1. <u>Traffic Impact Letter.</u> While the number of campers is in-line with the number of students proposed at the school, Township staff has observed that the overall traffic flow is noticeably more active in the summer months while the summer day camp is in operation.

We offer the following comments with regard to the Traffic Impact Letter and/or need for additional information:

- The Applicant stated that camp enrollment is 250 to 300 children and then uses 280 for the basis for trip generation citing absences and not everyone is attending every day. The Applicant's Engineer should provide data to verify this.
- It is too expansive to claim 2 children per car for drop off without count data.
- The 30% figure of children using the van should be verified by counts. That would be 75-90 children per the numbers listed in the report. This is in conflict with the 30 students listed using the vans on page 2 of the report.
- Counts should be provided verifying that 50-60 staff members only use 20-25 vehicles. Assuming that nearly half of the staff car pools is too expansive.
- In addition, the applicant should provide additional information regarding whether school staff occupies the building while the summer day camp is in session. The school parking lot currently contains 50 parking spaces, yet overflow parking occurs on the swim club lot.
- Analyses needed to confirm the lack of delays.
- Traffic Counts for the 2017 trip generation data are necessary.
- Applicant indicated camp trip generation was comparable to the Cedar Hill Trip Generation during the school year. A previous report indicated that the trip generation prior to the Cedar Hill Prep School Expansion led to capacity analyses of LOS E during the PM peak hour driveway and F during the AM peak hour driveway, and post expansion to be LOS F for both peak hours. Comparable trip generation would indicate a LOS F at the same driveway for both peak hours. In addition, the applicant should specify how the student body arrives/departs the school during school year, i.e. are they dropped off in a similar manner to the Summer Day Camp or is there busing services for the school.
- There is a discrepancy in the Applicant's table where the applicant describes 25 parents entering and 15 parents exiting during the evening peak hour.
- The applicant needs to demonstrate adequacy of the site to accommodate the operational characteristics of the site which was designed for a school use/ not day camp 51 spaces (assuming staff cars is correct at 25) that leaves only 26 spaces for 125 parent vehicles. The Applicant should provide testimony regarding how this functions. TRC has observed a noticeably higher number of parents using the adjacent swim club site compared to the school that suggests a difference in drop-off/ pick-up operations and/or time frame compared to the school.
- The Applicant's table indicates the entire camp staff leaves during the Evening peak hour. This should be verified since only 5% of campers stay for after care. It would seem more likely that a majority of the staff would leave during the afternoon peak hour.
- 2. <u>Shared Parking Agreement with Adjacent Swim Club.</u> As indicated above, previous approvals for the school address use of the parking lot of the adjacent swim club. One

resolution requires proof of a written statement of agreement between the school and the adjacent swim club regarding shared parking and another requires that the applicant investigate provision of path between the parking lots to allow this shared parking.

On a daily basis, Township staff has observed an average of 5 to 10 cars associated with the school parked in the swim club parking lot. That number becomes higher during school events and in association with the summer day camp held at the school in the summer.

It must be noted that there is currently pending an application before the ZBA for modifications to the swim club parking lot that would eliminate 73 parking spaces from the swim club parking. The parking spaces proposed to be removed are in the area of the site currently used by the school.

The applicant should address the existence of such an agreement and should address the impact of the loss of these spaces on the operation of the day camp (in terms of parking needs, drop off/pick-up and traffic circulation).

3. The applicant performed traffic counts on Wednesday, July 22, 2020, from 3:45 pm to 4:30 pm, Tuesday, July 28, 2020, from 6:45 am to 8:15 am and from 3:45 pm to 4:45 pm, and Thursday, July 30, 2020, from 8:00 am to 9:00 am. The Trip Generation noted that during the morning peak hour (8:00 am to 9:00 am) that 97 vehicles entered the Cedar Hill Preparatory School parking lot and 76 vehicles exited for a total of 173 trips. The evening peak hour was determined to be from 4:00 pm to 5:00 pm, with 43 vehicles entering the site and 100 vehicles exiting for a total of 143 trips. The trip generation does not appear to account for any day camp related traffic with the adjacent swim club parking lot. In addition, these traffic counts were performed during the COVID-19 pandemic and did not appear to account for the day camp at full operation/capacity.

Due to the limited information submitted on the active day camp, the Township's consulting engineering office oversaw traffic counts that were performed at the Cedar Hill Preparatory School and adjacent Swim Club driveways, respectively, on Tuesday, August 3, 2021, between 7:00 am and 10:00 am, and 3:00 pm and 6:00 pm. As can be seen below, the morning peak hour contained a total of 550 trips generated, vs. the 173 trips in the application's traffic letter. The afternoon/evening peak hour flow contained a total of 508 trips generated which also is significantly higher than the applicant's trip generation of 143 trips.

TRIP GENERATION

	5	i:00 – 6:00 p.m).	4	:00 5:00 p.m	4	4:00 5:00 p.m.					
Evening	53	49	102	51	83	134	43	100	143			
	2	:45 – 3:45 p.n	1.	3	:15 – 4:15 p.m							
Afternoon	74	79	153	88	103	191						
8	7	7:45 – 8:45 a.m	١,	7	:30 – 8:30 a.m	.*	8:00 – 9:00 a.m.					
Morning	142	127	269	164	141	305	97	76	173			
11001	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total			
Peak Hour	ł	11 School Y 219 Enrolled			17 School Ye 252 Enrolled		2020 Summer Camp					

TRIP GENERATION - COUNTS PERFORMED ON AUGUST 3, 2021

	2021 SUMMER CAMP										
PEAK HOUR	CEDAR HI	CEDAR HILL PREP. DRIVEWA									
	ENTER	EXIT	TOTAL								
MORNING	183	167	350								
	8:15	AM - 9:1	5 AM								
AFTERNOON	101	151	252								
	4:00	PM - 5:00	0 PM								

	2021	SUMMER	CAMP							
PEAK HOUR	POOL 0	POOL CLUB DRIVEW								
	ENTER	EXIT	TOTAL							
MORNING	108	92	200							
	8:15	AM - 9:15	5 AM							
AFTERNOON	102	154	256							
	4:00	PM - 5:00) PM							

	2021 9	SUMMER	CAMP								
PEAK HOUR	COMBINED	COMBINED DRIVEWAY TRAF									
	ENTER	EXIT	TOTAL								
MORNING	291	259	550								
	8:15	AM - 9:1	5 AM								
AFTERNOON	203	305	508								
	4:00	PM - 5:0) PM								

In addition, on July 29, 2021, between 8:00am and 8:30am, the Township Consulting Engineering office visited the site and observed the following:

- Camp staff dropped off at the driveway entrance along Cedar Grove Lane,
- Camp traffic traveling southbound along Cedar Grove Lane requiring a left turn into either driveway led to traffic queues (up to 8 or 9 cars) along the main roadway

since there is only one lane of traffic in each direction of Cedar Grove Lane. The traffic counts performed on August 3, 2021 documented there were a total of 169 left turns during the morning peak hour for both driveways, causing major disruptions to the traffic flow.

- No van traffic was observed in this period but a full school bus accessed the site.
- There is an existing 'No Left Turn' restriction, between 7:00am and 9:00am, at the Cedar Hill Preparatory parking lot that was violated multiple times. The traffic counts performed on August 3, 2021 documented that 15 vehicles violated this restriction. In addition, another 15 vehicles made this turn between 9:00am and 9:15am.
- The Cedar Hill Preparatory school parking lot operationally does not appear to have sufficient capacity to handle the number of trips and the supplemental parking at the adjacent swim club is critical to the operation of the summer camp.

As can be seen the existing traffic volumes (2021) from the summer camp is substantially more than the 2020 Summer Camp counts and the 2017 School Year Trip Generation shown in the applicant's engineer's supplemental traffic letter dated August 3, 2020.

We recommend the traffic report be revised to utilize the traffic generation established as part of the August 3, 2021 traffic counts. The initial traffic letter states that 3 vans, 125 parent cars and 25 staff cars for a total of 153 vehicles; however, the traffic counts show that 291 vehicles entered both the Summer Camp and Swim Club parking lot. In addition, the traffic report should be updated further to evaluate two active driveways being utilized by the Summer Camp. The raw traffic data and supplemental trip generation figures are attached to the end of the report. The summation of the traffic letter dated January 20, 2020 states, "Camp trip generation is comparable to trip generation at Cedar Hill Prep School during the school year...When camp is in session, the site driveways are expected to operate comparable to, or better than the school year." The supplemental letter supports this position; however, same should be further evaluated with the counts performed earlier this month since the site driveways operate worse than the school year during the morning and afternoon peak hours.

4. If the Board is included to approve the application then the resolution should state that the application remains subject to any and all conditions imposed under the original approvals (except as may be specifically modified or waived by this approval).





2021 AM Peak Traffic Volumes at Cedar Prep. Driveway

8:15 AM TO 9:15 AM

CEDAR GROVE LANE

RIGHT THRU LEFT

117

N

(SE)

N

(SE)

2021 PM Peak Traffic Volumes at Cedar Prep. Driveway

4:00 PM TO 5:00 PM **CEDAR GROVE LANE RIGHT** THRU **LEFT** 62 RIGHT 39 DRIVEWAY THRU LEFT 39 THRU LEFT **RIGHT CEDAR GROVE LANE**

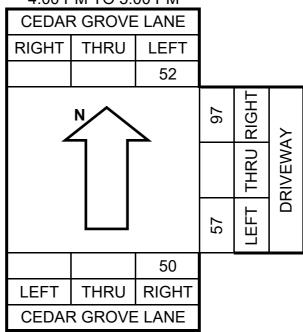
2021 AM Peak Traffic Volumes at Swim Club Driveway

8:15 AM TO 9:15 AM

		•		
R GROVE	LANE			
THRU	LEFT			
	52			
N/	_	29	RIGHT	١٢
			NAHT	DRIVEWAY
		25	LHHT	DF
	56			
THRU	RIGHT			
R GROVE				
	THRU	52 N 56	THRU LEFT 52 N 25 25 25 THRU S6 THRU RIGHT	THRU LEFT 52

2021 PM Peak Traffic Volumes at Swim Club Driveway

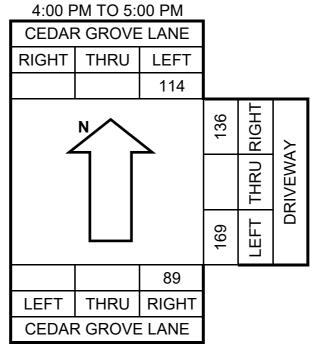
4:00 PM TO 5:00 PM



Combined 2021 AM Peak Traffic Volumes at Cedar Prep. & Swim Club Driveways

8:15 AM TO 9:15 AM **CEDAR GROVE LANE RIGHT THRU LEFT** 169 THRU RIGHT 206 DRIVEWAY LEFT 53 122 **THRU** LEFT **RIGHT CEDAR GROVE LANE**

Combined 2021 PM Peak Traffic Volumes at Cedar Prep. & Swim Club Driveways



TRIP GENERATION - COUNTS PERFORMED ON AUGUST 3, 2021

	2021 SUMMER CAMP										
PEAK HOUR	CEDAR HILL PREP. DRIVEWA										
	CEDAR HI	LL PREP. L	RIVEWAY								
	ENTER	EXIT	TOTAL								
MORNING	183	167	350								
MORNING											
	0.15	3:15 AM - 9:15 AM									
	8:15	AIVI - 9:13	O AIVI								
AFTERNOON	404	454	050								
AFTERNOON	101	151	252								
	4:00	PM - 5:00) PM								

	2021 SUMMER CAMP										
PEAK HOUR	POOL C	POOL CLUB DRIVEWAY									
	ENTER	EXIT	TOTAL								
MORNING	108	92	200								
	8:15	AM - 9:15	5 AM								
AFTERNOON	102	154	256								
	4:00	PM - 5:00) PM								

	2021 \$	SUMMER	CAMP		
PEAK HOUR	COMBINE	D DRIVEWA	Y TRAFFIC		
	ENTER	EXIT	TOTAL		
MORNING	291	259	550		
	8:15	AM - 9:15	5 AM		
AFTERNOON	203	305	508		
	4:00	PM - 5:00) PM		

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Site: D1

Loc: Cedar Grove La at Southern Driveway

Machine: 1591 Surveyor: PH

File Name: DI Site Code : D1

Start Date : 8/3/2021

Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

Driveway South of School Cedar Grove Lane

			ar Grove					y South		ol l			ar Grove								
		S	<u>Southbou</u>	nd			\	<u> Vestbour</u>	nd				<u> Northboui</u>	nd			Į.	Eastbour	nd		
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	90	0	0	90	0	0	0	0	0	90
07:15 AM	1	0	0	0	1	0	0	1	0	1	0	147	0	0	147	0	0	0	0	0	149
07:30 AM	5	0	0	0	5	0	0	0	0	0	0	175	4	0	179	0	0	0	0	0	184
07:45 AM	14	0	0	0	14	2	0	9	0	11	0	187	2	0	189	0	0	0	0	0	214
Total	20	0	0	0	20	2	0	10	0	12	0	599	6	0	605	0	0	0	0	0	637
00.00.444	7		0	0	- 1		0	0	0	4.1	0	474	-	0	470	0	0	0	0	0	400
08:00 AM 08:15 AM	7 12	0	0	0	7 12	0	0	3 4	0	4 4	0 0	174 191	5 15	0	179 206	0 0	0 0	0	0	0	190
08:30 AM		_	0	-		-	-	-	-	- 1	_	173	15	0	186	_	-	_	-	-	222
08:30 AM 08:45 AM	20	0	0	0	20	10	0	23	0	33	0		13	0		0	0	0	0	0	239
Total	<u>15</u> 54	0 0	0	0	15 54	<u>8</u> 19	0	30 60	0	38 79	<u> </u>	205 743	20 53	0	225 796	0 0	0	0	0	0 0	278 929
TOtal	34	U	U	U	34	19	U	60	U	79	U	743	33	U	790	U	U	U	U	U	929
09:00 AM	5	0	0	0	5	7	0	10	0	17	0	153	8	0	161	0	0	0	0	0	183
09:15 AM	7	0	0	0	7	2	0	7	0	9	0	134	4	0	138	0	0	0	0	0	154
09:30 AM	5	0	0	0	5	2	0	5	0	7	0	119	1	0	120	0	0	0	0	0	132
09:45 AM	0	0	0	0	0	0	0	4	0	4	0	119	0	0	119	0	0	0	0	0	123
Total	17	0	0	0	17	11	0	26	0	37	0	525	13	0	538	0	0	0	0	0	592
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	3
03:30 PM	18	0	0	0	18	2	0	5	0	7	0	141	17	0	158	0	0	0	0	0	183
03:45 PM	24	0	0	0	24	3	0_	2	0	5	0	155	20	0	175	0	0	0	0	0	204_
Total	42	0	0	0	42	5	0	7	0	12	0	301	37	0	338	0	0	0	0	0	392
04:00 PM	39	0	0	0	39	16	0	37	0	53	0	142	26	0	168	0	0	0	0	0	260
04:15 PM	7	0	0	0	7	27	0	31	0	58	0	177	18	0	195	0	0	0	0	0	260
04:30 PM	5	0	0	0	5	6	0	19	0	25	0	161	3	0	164	0	0	0	0	0	194
04:45 PM	1_	0	0	0	1	8	0	10	0	18	0	193	3	0	196	0	0	0	0	0	215
Total	52	0	0	0	52	57	0	97	0	154	0	673	50	0	723	0	0	0	0	0	929
05:00 PM	3	0	0	0	3	4	0	2	0	6	0	261	1	0	262	0	0	0	0	0	271
05:15 PM	1	0	0	0	1	2	0	3	0	5	0	226	2	0	228	0	0	0	0	0	234
05:30 PM	3	0	0	0	3	2	0	2	0	4	0	163	1	0	164	0	0	0	0	0	171
05:45 PM	1	0	0	0	1	1	0	3	0	4	0	171	2	0	173	0	0	0	0	0	178_
Total	8	0	0	0	8	9	0	10	0	19	0	821	6	0	827	0	0	0	0	0	854

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> File Name: DI Site Code : D1

Start Date : 8/3/2021

Page No : 2

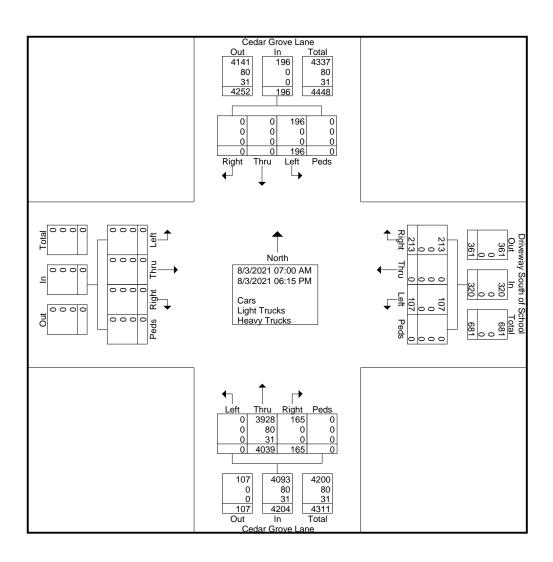
Groups Printed- Cars - Light Trucks - Heavy Trucks

										zais - Light Hucks - Heavy Hucks												
		Ced	ar Grove	Lane			Drivewa	y South	of Scho	ol		Ced	ar Grove	Lane								
			Southbou	nd			\	Vestbou	nd		Northbound						Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total	
06:00 PM	1	0	0	0	1	4	0	2	0	6	0	202	0	0	202	0	0	0	0	0	209	
06:15 PM	2	0	0	0	2	0	0	1	0	1	0	175	0	0	175	0	0	0	0	0	178	
Grand Total	196	0	0	0	196	107	0	213	0	320	0	4039	165	0	4204	0	0	0	0	0	4720	
Apprch %	100	0	0	0		33.4	0	66.6	0		0	96.1	3.9	0		0	0	0	0			
Total %	4.2	0	0	0	4.2	2.3	0	4.5	0	6.8	0	85.6	3.5	0	89.1	0	0	0	0	0		
Cars	196	0	0	0	196	107	0	213	0	320	0	3928	165	0	4093	0	0	0	0	0	4609	
% Cars	100	0	0	0	100	100	0	100	0	100	0	97.3	100	0	97.4	0	0	0	0	0	97.6	
Light Trucks	0	0	0	0	0	0	0	0	0	0	0	80	0	0	80	0	0	0	0	0	80	
% Light Trucks	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1.9	0	0	0	0	0	1.7	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	31	0	0	31	0	0	0	0	0	31	
% Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0	0.7	0	0	0	0	0	0.7	

TechniQuest Corporation 4105 US Route 1, Suite 10

Monmouth Junction, NJ 08852

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File Name: DI Site Code : D1

Start Date : 8/3/2021

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Start Date : 8/3/2021

			r Grove outhbour			Driveway South of School Westbound					Cedar Grove Lane Northbound						Eastbound					
Start Time	Left	Thru	Right	Peds A	pp. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total	
Peak Hour Analys	is From 0	7:00 AM	to 09:45	AM - Peal	< 1 of 1	•												•				
Peak Hour for Ent	ire Interse	ction Be	gins at 08	3:00 AM																		
08:00 AM	7	0	0	0	7	1	0	3	0	4	0	174	5	0	179	0	0	0	0	0	190	
08:15 AM	12	0	0	0	12	0	0	4	0	4	0	191	15	0	206	0	0	0	0	0	222	
08:30 AM	20	0	0	0	20	10	0	23	0	33	0	173	13	0	186	0	0	0	0	0	239	
08:45 AM	15	0	0	0	15	8	0	30	0	38	0	205	20	0	225	0	0	0	0	0	278	
Total Volume	54	0	0	0	54	19	0	60	0	79	0	743	53	0	796	0	0	0	0	0	929	
% App. Total	100	0	0	0		24.1	0	75.9	0		0	93.3	6.7	0		0	0	0	0			
PHF	.675	.000	.000	.000	.675	.475	.000	.500	.000	.520	.000	.906	.663	.000	.884	.000	.000	.000	.000	.000	.835	
Peak Hour Analys Peak Hour for Ent					k 1 of 1																	
04:15 PM	7	0	0	0	7	27	0	31	0	58	0	177	18	0	195	0	0	0	0	0	260	
04:30 PM	5	0	0	0	5	6	0	19	0	25	0	161	3	0	164	0	0	0	0	0	194	
04:45 PM	1	0	0	0	1	8	0	10	0	18	0	193	3	0	196	0	0	0	0	0	215	
05:00 PM	3	0	0	0	3	4	0	2	0	6	0	261	1	0	262	0	0	0	0	0	271	
Total Volume	16	0	0	0	16	45	0	62	0	107	0	792	25	0	817	0	0	0	0	0	940	
% App. Total	100	0	0	0		42.1	0	57.9	0		0	96.9	3.1	0		0	0	0	0			
PHF	.571	.000	.000	.000	.571	.417	.000	.500	.000	.461	.000	.759	.347	.000	.780	.000	.000	.000	.000	.000	.867	

Phone: 732.274.9500, Fax: 732.274.9510 www.techniquestcorporation.com

Site: D2

Loc: Cedar Grove Lane at Prep School

Machine: 0401 Surveyor: AB

File Name: D2

Site Code : D2

Start Date : 8/3/2021

Page No : 1

Groups Printed- Cars - Light Trucks - Heavy Trucks

			ar Grove I			Drive	eway at (Cedar Hill Westboun	Prep Scl	nool	ucks - 11c	Ceda	ar Grove I								
			Southboun										Northbour					Eastbound			
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	3	60	0	0	63	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	65
07:15 AM	7	72	0	0	79	0	0	4	0	4	0	0	0	0	0	0	0	0	0	0	83
07:30 AM	9	97	0	0	106	0	0	13	0	13	0	0	3	0	3	0	0	0	0	0	122
07:45 AM	4	114	0	0	118	1	0	5	0	6	0	0	4	0	4	0	0	0	0	0	128
Total	23	343	0	0	366	1	0	24	0	25	0	0	7	0	7	0	0	0	0	0	398
08:00 AM	16	95	0	0	111	1	0	10	0	11	0	0	2	0	2	0	0	0	0	0	124
08:15 AM	21	126	0	0	147	2	0	13	0	15	0	0	11	0	11	0	0	0	0	0	173
08:30 AM	34	145	0	0	179	5	0	42	0	47	0	0	18	0	18	0	0	0	0	0	244
08:45 AM	37	108	0_	0	145	6	0	41	0	47	0	0	23_	0	23	0	0	0	0	0	215
Total	108	474	0	0	582	14	0	106	0	120	0	0	54	0	54	0	0	0	0	0	756
09:00 AM	25	129	0	0	154	15	0	43	0	58	0	0	14	0	14	0	0	0	0	0	226
09:15 AM	6	90	0	0	96	3	0	10	0	13	0	0	2	0	2	0	0	0	0	0	111
09:30 AM	3	89	0	0	92	3	0	5	0	8	0	0	2	0	2	0	0	0	0	0	102
09:45 AM	7	65	0	0	72	1	0	3	0	4	0	0	0	0	0	0	0	0	0	0	76_
Total	41	373	0	0	414	22	0	61	0	83	0	0	18	0	18	0	0	0	0	0	515
03:30 PM	15	148	0	0	163	2	0	3	0	5	0	0	6	0	6	0	0	0	0	0	174
03:45 PM	18	167	0_	0	185	1	0	4_	0	5	0	0	5_	0	5	0	0	0	0	0	195_
Total	33	315	0	0	348	3	0	7	0	10	0	0	11	0	11	0	0	0	0	0	369
04:00 PM	20	151	0	0	171	5	0	39	0	44	0	0	15	0	15	0	0	0	0	0	230
04:15 PM	28	130	0	0	158	3	0	32	0	35	0	0	15	0	15	0	0	0	0	0	208
04:30 PM	8	180	0	0	188	8	0	27	0	35	0	0	5	0	5	0	0	0	0	0	228
04:45 PM	6	132	0	0	138	1	0	14	0	15	0	0	4	0	4	0	0	0	0	0	157
Total	62	593	0	0	655	17	0	112	0	129	0	0	39	0	39	0	0	0	0	0	
05:00 PM	6	190	0	0	196	1	0	11	0	12	0	0	3	0	3	0	0	0	0	0	211
05:15 PM	9	161	0	0	170	2	0	6	0	8	0	0	2	0	2	0	0	0	0	0	180
05:30 PM	11	175	0	0	186	2	0	9	0	11	0	0	1	0	1	0	0	0	0	0	198
05:45 PM	2	161	0	0	163	1	0	5	0	6	0	0	4	0	4	0	0	0	0	0	173
Total	28	687	0	0	715	6	0	31	0	37	0	0	10	0	10	0	0	0	0	0	762

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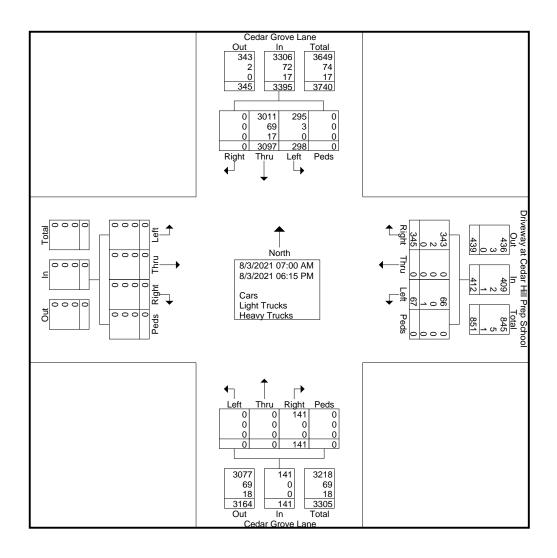
Groups Printed- Cars - Light Trucks - Heavy Trucks

	C. I. C. I. D. C. I. I. I. D. C. I. J. D. C. D. C. I. J. D. C. I.											Cedar Grove Lane									
	Cedar Grove Lane					Driveway at Cedar Hill Prep School															
	Southbound					Westbound						Northbour	nd		Eastbound						
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
06:00 PM	2	146	0	0	148	4	0	2	0	6	0	0	1	0	1	0	0	0	0	0	155
06:15 PM	1	166	0	0	167	0	0	2	0	2	0	0	1	0	1	0	0	0	0	0	170
Grand Total	298	3097	0	0	3395	67	0	345	0	412	0	0	141	0	141	0	0	0	0	0	3948
Apprch %	8.8	91.2	0	0		16.3	0	83.7	0		0	0	100	0		0	0	0	0		
Total %	7.5	78.4	0	0	86	1.7	0	8.7	0	10.4	0	0	3.6	0	3.6	0	0	0	0	0	
Cars	295	3011	0	0	3306	66	0	343	0	409	0	0	141	0	141	0	0	0	0	0	3856
% Cars	99	97.2	0	0	97.4	98.5	0	99.4	0	99.3	0	0	100	0	100	0	0	0	0	0	97.7
Light Trucks	3	69	0	0	72	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	74
% Light Trucks	1	2.2	0	0	2.1	0	0	0.6	0	0.5	0	0	0	0	0	0	0	0	0	0	1.9
Heavy Trucks	0	17	0	0	17	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	18
% Heavy Trucks	0	0.5	0	0	0.5	1.5	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0.5

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> File Name: D2 Site Code : D2

Start Date : 8/3/2021

	Cedar Grove Lane Southbound					Driveway at Cedar Hill Prep School Westbound						ır Grove I Northboun		Eastbound							
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis	From 07:0	00 AM to	09:45 AN	1 - Peak	1 of 1																
Peak Hour for Entire Intersection Begins at 08:15 AM																					
08:15 AM	21	126	0	0	147	2	0	13	0	15	0	0	11	0	11	0	0	0	0	0	173
08:30 AM	34	145	0	0	179	5	0	42	0	47	0	0	18	0	18	0	0	0	0	0	244
08:45 AM	37	108	0	0	145	6	0	41	0	47	0	0	23	0	23	0	0	0	0	0	215
09:00 AM	25	129	0	0	154	15	0	43	0	58	0	0	14	0	14	0	0	0	0	0	226
Total Volume	117	508	0	0	625	28	0	139	0	167	0	0	66	0	66	0	0	0	0	0	858
% App. Total	18.7	81.3	0	0		16.8	0	83.2	0		0	0	100	0		0	0	0	0		
PHF	.791	.876	.000	.000	.873	.467	.000	.808	.000	.720	.000	.000	.717	.000	.717	.000	.000	.000	.000	.000	.879
Peak Hour Analysis From 03:30 PM to 06:15 PM - Peak 1 of 1 Peak Hour for Entire Intersection Begins at 03:45 PM																					
03:45 PM	18	167	0	0	185	1	0	4	0	5	0	0	5	0	5	0	0	0	0	0	195
04:00 PM	20	151	0	0	171	5	0	39	0	44	0	0	15	0	15	0	0	0	0	0	230
04:15 PM	28	130	0	0	158	3	0	32	0	35	0	0	15	0	15	0	0	0	0	0	208
04:30 PM	8	180	0	0	188	8	0	27	0	35	0	0	5	0	5	0	0	0	0	0	228
Total Volume	74	628	0	0	702	17	0	102	0	119	0	0	40	0	40	0	0	0	0	0	861
% App. Total	10.5	89.5	0	0		14.3	0	85.7	0		0	0	100	0		0	0	0	0		
PHF	.661	.872	.000	.000	.934	.531	.000	.654	.000	.676	.000	.000	.667	.000	.667	.000	.000	.000	.000	.000	.936