



SYNALOVSKI ROMANIK SAYE
Architecture • Planning • Interior Design

May 16, 2018

Ms. Christy Dominguez
Planning and Zoning
City of Hallandale Beach
400 South Federal Highway
Hallandale Beach, FL 33009

**RE: David Posnack Jewish Day School
c/o S.W. 11th Street School
412 SW 11th Street. Hallandale Beach, FL 33009.**

Dear Christy,

We are the Architect of Record for the above referenced project. We are providing submittal for the proposed Major Development and Variance Applications.

As you are aware, the property is located in the northwest quadrant of the intersection at SW 11th Street and SW 4th Terrace. The previous existing commercial building has been demolished and the site is currently vacant. The Owner now proposes to develop the property for a School from Kindergarten through 5th grade with a maximum enrollment of 288 students (48 students per grade).

Note, the School Operator and Successor Owner of the property will be the David Posnack Jewish Day School.

The project consists of a two story 26,859 square foot building with 9 classrooms (Kindergarten through 2nd grade), Library, Administration, Cafeteria and Play Area at the ground floor; and 9 classrooms (3rd grade through 5th grade), Music Lab, Art Lab, and Science Lab at the second floor.

The proposed Roof Deck Height is 28'-0". Said height will require a Height Variance in lieu of the required 25'-0" max. Associated Parking and Landscaping in compliance with City Code/Regulations has also been provided.

The property is currently zoned B-L Business Limited District. The lot has an approximate area of 52,856 square feet (1.21 acres). The Zoning and Land Use are both currently appropriate for the proposed development.

Should you have any questions regarding the above, do not hesitate to contact me.

Respectfully,

Jose Saye, Principal.
Synalovski Romanik Saye, LLC.

SYNALOVSKI ROMANIK SAYE
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**DAVID POSNACK JEWISH DAY SCHOOL
C/O SW 11TH STREET SCHOOL
BUILDING HEIGHT VARIANCE**

03/01/18

1. As to the land, the subject property is adjacent to the right of way (SW 11th Street) that delineates the southern municipal limit of the City of Hallandale Beach. Said Municipal limit is defined by a physical traffic barrier that clearly separates the subject property from any neighboring properties to the south. Also, the subject property is adjacent to a right of way (SW 4th Terrace) to the east and a right of way to the north (SW 10th Street). Further, the proposed two (2) story building has its least “height impact” to the west as the buildings main assembly space is actually only one (1) story and lower than 25’ in height with a 25’ setback along the subject property’s west property line. Note the proposed educational use, requires greater floor to floor elevations in order to satisfy the infrastructure and technology requirements of the 21st century “school house”. Where other uses may “fit” a two (2) story building in 25’ of building height, the educational use demands the greater height.
2. The proposed application is not intended to add density to the project. Specifically, the intended use requires greater height to achieve the minimum requirements for the educational use. Note, said use is permitted by right.
3. The existing district allows the proposed educational use, nonetheless, the 25’ height limit of the district, intended to allow two (2) story solutions without variance, does not respond to the infrastructure and technology requirements of the 21st century “school house”. Therefore, no special privilege is being requested. Specifically, the granting of the height variance provides parity for the proposed educational use.
4. The existing 25’ height limit allows two (2) story structures as evidenced by existing two (2) story buildings in the zoning district. Nonetheless, the proposed use requires a greater floor to floor elevation causing the need for the height variance. Where other uses would develop the two (2) story structures within the 25’ height limit, said limit is an “unnecessary and undue hardship” for the applicant and the proposed educational use.
5. The variance requested does not promote greater density in height or floor area. It is clearly the minimum height required to satisfy infrastructure and technology needs for an appropriate learning environment.

6. By not exceeding a two (2) story building solution, the granted variance will be in harmony with the general intent and purpose of the code. The proposed educational use has a proven demand and brings a 21st century “school house” to a community in need of significant learning institutions. Further, the use of landscaping, covered pedestrian walkways, ample setbacks, appropriate lighting, outdoor play areas and attractive architecture further promotes the harmony with City regulations and enhance the public’s , health, safety, comfort, good order and community appearance.

7. The granting of the requested variance will add “value” to the neighboring properties. Purposely, the replacement of a previous commercial use, incompatible with the neighboring residential community, with a learning institution is a win for the community. A 21st century “school house”, appropriately scaled to the existing context of the neighborhood will be an asset to the community. The public welfare will be immensely improved with the addition of this civic use to the neighborhood.

**DAVID POSNACK JEWISH DAY SCHOOL
SUSTAINABILITY STATEMENT**

05/09/2018

BUILDING

1. Efficient Envelope Volume
2. Minimized Building Footprint
3. Reflective Roof(s)
4. Low E Glazing
5. Light Color Selection(s)
6. Canopies, Window treatment for Shading
7. Large amount of Natural Light
8. Sustainable Interior Finish Materials
9. Above Flood Plain Finish Floor Level
10. Use of Recycled Concrete (Fly Ash)
11. Termite Treatment
12. Rain Water Leaders to Storm System
13. Construction Waste Management Plan
14. Waterproofed all Exterior Openings/Penetrations
15. High Insulation(s) Value(s)
16. Hurricane Hardened Construction
17. High Efficiency HVAC (SEER 13)
18. High Efficiency Lighting (Energy Star)
19. Water Efficient Plumbing fixtures (Low Flow)
20. No VOC Finishes (Air Quality)

SITE LIGHTING

1. No Glare (Lamps)
2. No Spill (Shields)
3. Energy Efficient (Energy Star)
4. Time Clocks/Light Sensors (Controls)

LANDSCAPE

1. New Native Material (Florida Friendly Designation)
2. Low Irrigation Requirements (Florida Water Star Standards)
3. Minor Mitigation Requirements
4. Organic Mulch

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May 10, 2018

Ms. Christy Dominguez
Principal Planner
City of Hallandale Beach
400 S. Federal Highway
Hallandale Beach, FL 33009

**Re: David Posnack Jewish Day School
c/o SW 11th Street School – Operational Plan
Hallandale Beach, Florida**

The David Posnack Jewish Day School at SW 11th Street is a proposed Kindergarten through 5th Grade (K-5) school to be located in the northwest quadrant of the intersection at SW 11th Street and SW 4th Terrace in the City of Hallandale Beach, Broward County, Florida. More specifically, the site is located approximately 1,500 feet to the west of S. Dixie Highway at 412 SW 11th Street. A similar elementary school development scenario was proposed for this site in 2016/2017. Recently, this new project team has revisited the previously proposed development scenario and has proposed several revisions. The purpose of this technical memorandum is to analyze and document the proposed operational plan for the currently proposed development scenario.

Student Enrollment

The previously proposed development program consisted of a Pre-Kindergarten through 5th Grade school with a maximum enrollment of 420 students with 60 students per grade in three (3) classes of 20 students each. The currently proposed development scenario for the David Posnack Jewish Day School at SW 11th Street consists of a proposed K-5 school with a maximum enrollment of 288 students with 18 classrooms and an average of 16 students per classroom. (The latest site plan for this project is presented in Attachment A to this memorandum.)

Queuing Analyses & Operational Plan

With a maximum enrollment of 288 students and an average of 16 students in each classroom, there will be approximately 48 students per grade in three (3) classrooms. There will also be a before-care (“Early Drop-Off”) and an aftercare program available to all students. It is estimated that approximately 25% of the students will be dropped off early beginning at 7:15 AM. (Older Students attending the Davie Campus, with siblings at The David Posnack Jewish Day School in Hallandale Beach, will travel west via one bus at 7:20 am.) The remaining students will be dropped off according to their grade. Grades 3 – 5 (38%) will be dropped off between 7:45 AM and 8:00 AM while the grades K – 2 (37%) will be dropped off between 8:00 AM and 8:15 AM. The proposed pick-up times will be between 3:15 PM and 3:30 PM for grades 3 – 5 (25%) and between 3:30 PM and 3:45 PM for grades K – 2 (25%). It is estimated that the remaining student enrollment (50%) will participate in the aftercare program. These students may be picked-up anytime between 3:30 PM and 6:00 PM.

Vehicle queuing at schools is typically more critical during the afternoon pick-up time period as opposed to the morning drop-off period. During the mornings, students simply exit their vehicle upon arrival (which is a quick process). In addition, it is common for the drivers of these vehicles to be on their way to work which further quickens the pace of the drop-off procedure. The pick-up procedure, on the other hand, is generally more complicated and more time consuming. Students must be matched to their vehicle and this does not typically occur in the order of the vehicle arrivals. The result of this condition is delays and extended vehicle queues.

Our research in this area has revealed that the maximum number of vehicles in the queue during the afternoon pick-up period is roughly equivalent to 10% to 15% of the number of students being released. In other words, if 100 students are being released at one time, a maximum queue of 10 to 15 vehicles would be expected. The proposed staggered drop-off and pick-up times are intended to help manage the traffic impacts to the surrounding roadway network and residential community and to minimize the resulting vehicle queues on-site.

A key characteristic of this school, as with most elementary schools, will be the aftercare program. As mentioned previously, it is estimated that 50% of the students will participate in the aftercare program. This yields 144 students that will be released at various times between 3:30 PM and 6:00 PM. Because these releases are random throughout the two and one-half hour time period, vehicle queuing is not anticipated to be a concern for this program.

Table 1 below presents a preliminary afternoon release schedule for the David Posnack Jewish Day School that incorporates the aforementioned operational characteristics. This schedule contemplates two (2) primary release times. Additionally, this analysis takes into consideration that it is common for approximately 25% of the students at a school to have at least one sibling in another release time period. The result of this is that all siblings are picked up once at the later release time.

Table 1 Student Release Times David Posnack Jewish Day School - Hallandale Beach, FL		
Grade	Release Time	Number of Students
3rd Grade - 5th Grade <i>(+/- 25% Deferral to Later Pick-Up)</i>	3:15 PM	72 <u>-18</u> 54
Kindergarten - 2nd Grade <i>Deferral from Previous Release</i>	3:30 PM	72 <u>18</u> 90
Aftercare Program	3:30 PM - 6:00 PM	144
Total		288

Note: All times are preliminary and subject to change.

As indicated in Table 1, the maximum number of students likely to be released at one time will be 90. Based upon the referenced experience and research at similar schools in south Florida, a maximum queue of approximately 9 to 14 vehicles during this time period is expected. As such, a staggered school schedule and a vehicle circulation plan should be implemented to accommodate this projected demand. And, although vehicle accumulation is typically less during the morning drop-off period, a similar staggered start time and a similar vehicle circulation plan should also be implemented in the mornings to process the anticipated vehicular demand.

In order to optimize the traffic circulation plan and maximize the on-site vehicle storage, the vehicular entry and exit point to the school will be the driveway on SW 11th Street. Vehicles entering the site will immediately turn right to travel eastbound, then turn left and the end of the aisle to travel northbound. At the end of this aisle, vehicles will turn left again and proceed west along the front of the building. The first drop-off / pick-up position will be at the southeast corner of the cafeteria. Students will enter and exit their vehicles along the sidewalk that will be located to the east of the cafeteria and south of the administrative offices and classrooms 2, 4, 6, and 8.

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The drop-off / pick-up process will be facilitated by eight (8) staff members along the covered walkway and traffic control personnel that will monitor / oversee these operations. Concurrently, an armed security guard stationed at the pedestrian school entry will control the single point pedestrian building access while another armed security guard, stationed at the SW 11th Street entry gate, will control the single point vehicular campus access. The proposed traffic circulation plan will provide for a queuing area that will accommodate 17 vehicles between the entry point and the first drop-off / pick-up point near the cafeteria. Based upon the anticipated school release times and the maximum number of students to be released at one time, the vehicle storage capacity of 17 vehicles is expected to be adequate. The drop-off and pick-up circulation plan is presented in Attachment B.

It is also noted that, during the drop-off and pick-up process, armed security personnel will be stationed at the SW 11th Street vehicular entry gate and the pedestrian school entry. No vehicles will be permitted on-site that are not properly identified. In addition to proper school identification, each vehicle will identify, by name, the child(ren) riding inside the vehicle. No visitors or deliveries will be permitted during the drop-off or pick-up time periods. Furthermore, no visitors or deliveries will be permitted on-site without prior scheduling with school administrators. Daily schedules will be issued to the security personnel for the purposes of access control. Furthermore, the armed security personnel will carry 2-way radio communication and have remote access to the Campus Closed Circuit Video System.

During the school day, the SW 11th Street gate will remain closed except during the drop-off and pick-up time periods. Any visitors and deliveries will have controlled access only at the SW 4th Terrace gate. All visitors will park in the eight (8) parking spaces reserved for visitors and all deliveries will occur at the service driveway at the southwest corner of the campus. Note that the SW 4th Terrace gate will be controlled by the armed security guard stationed at the security post located in the southeast corner of the building adjacent to the gate.

Due to security concerns, student walkers and student bicycle riders will not be permitted at the David Posnack Jewish Day School in Hallandale Beach. Furthermore, no bus or van traffic will be permitted during regular drop-off or pick-up time periods. Any bus or van arriving during early drop-off or late pick-up time periods (or, during the course of the school day) will be limited to access the campus from SW 4th Terrace and egress to SW 11th Street.

Conclusions

In accordance with an evaluation of the detailed operational plan developed for the David Posnack Jewish Day School to be located on SW 11th Street in Hallandale Beach, it is apparent that the vehicle queuing area will be more than adequate to accommodate the likely peak vehicular demand. This conclusion is based upon the proposed student enrollment (i.e. 288 students), a staggered drop-off and pick-up plan that will effectively manage the number of students arriving to and departing from the campus at one time, and an early drop-off / aftercare program that will further minimize the peak time periods by allowing students to be dropped-off and picked-up over longer time periods before and after the regular school day. If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

KBP CONSULTING, INC.



Karl B. Peterson, P.E.

Florida Registration Number 49897

Engineering Business Number 29939

Attachment A

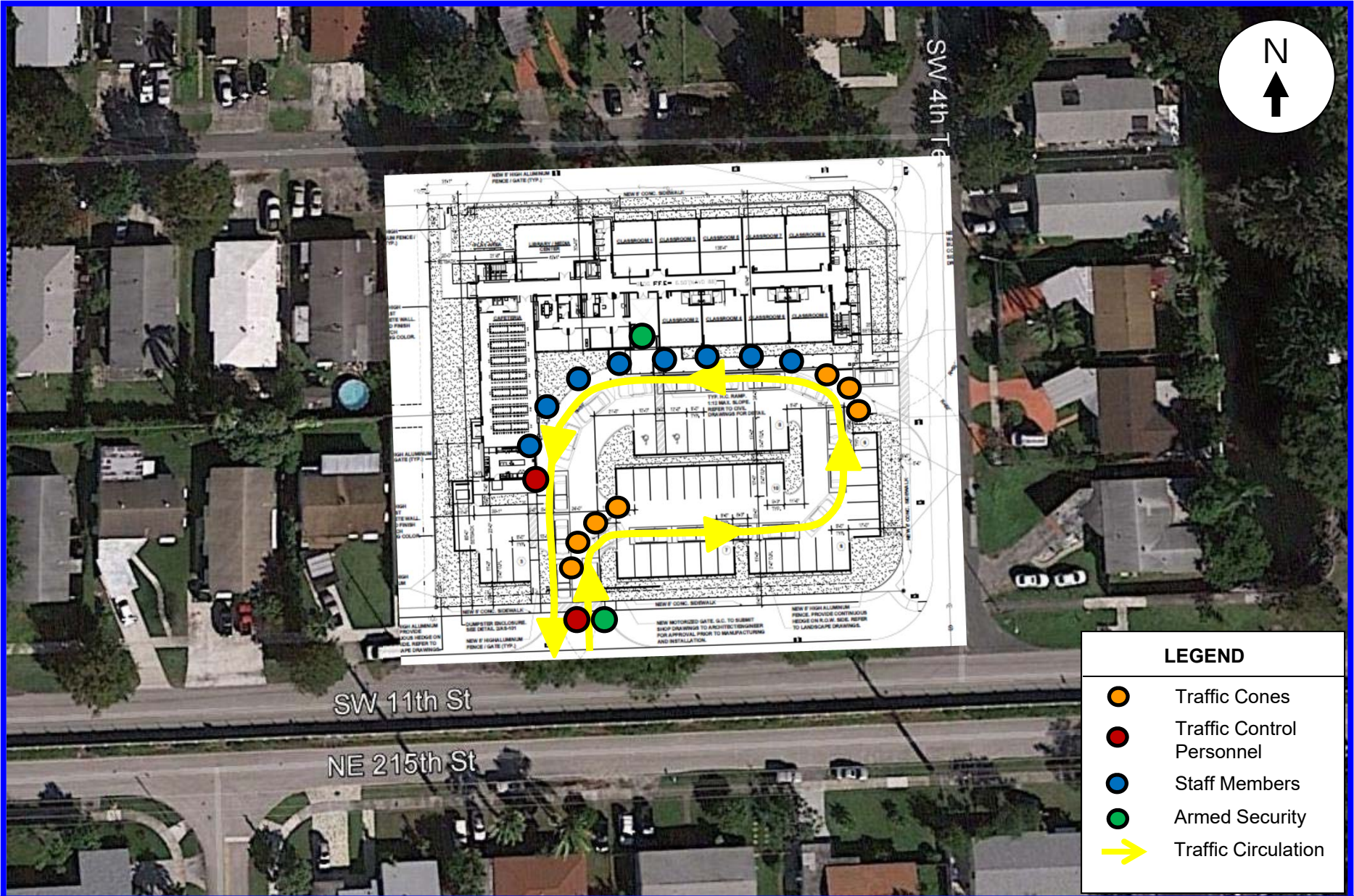
David Posnack Jewish Day School at SW 11th Street

Proposed Site Plan

Attachment B

David Posnack Jewish Day School at SW 11th Street

Traffic Circulation Plan



LEGEND	
	Traffic Cones
	Traffic Control Personnel
	Staff Members
	Armed Security
	Traffic Circulation

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Traffic Circulation Plan

Attachment B
David Posnack Jewish Day School
Hallandale Beach, Florida

May 10, 2018

Ms. Christy Dominguez
Principal Planner
City of Hallandale Beach
400 S. Federal Highway
Hallandale Beach, FL 33009

**Re: David Posnack Jewish Day School
c/o SW 11th Street School – Traffic Impact Analysis
Hallandale Beach, Florida**

The David Posnack Jewish Day School at SW 11th Street is a proposed Kindergarten through 5th Grade (K-5) school to be located in the northwest quadrant of the intersection at SW 11th Street and SW 4th Terrace in the City of Hallandale Beach, Broward County, Florida. More specifically, the site is located approximately 1,500 feet to the west of S. Dixie Highway at 412 SW 11th Street. A similar elementary school development scenario was proposed for this site in 2016/2017. Recently, this new project team has revisited the previously proposed development scenario and has proposed several revisions. The purpose of this traffic impact analysis is to document the trip generation characteristics of the currently proposed development scenario and the general operating conditions of the surrounding roadway network.

Previous Traffic Analysis

In December 2016, a traffic impact study was prepared for the proposed SW 11th Street School. This study compared the trip generation characteristics of the proposed school with those of the previous commercial development on the site. At that time, the development program consisted of a proposed Pre-Kindergarten through 5th Grade school with a maximum enrollment of 420 students with 60 students per grade in three (3) classes of 20 students each. The results of this analysis are presented in Table 1 below.

Table 1 Trip Generation Summary SW 11th Street School - Hallandale Beach, Florida								
Land Use	Size	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
Previous Use								
Commercial	13,100 SF	1,812	28	17	45	73	80	153
Proposed Use								
Elementary School	420 Students	542	104	85	189	53	65	118
Difference (Proposed - Previous)		(1,270)	76	68	144	(20)	(15)	(35)

Source: KBP Consulting, Inc., December 2016.
Institute of Transportation Engineers (ITE) Trip Generation Manual (9th Edition).

As indicated in Table 1 above, the new external vehicle trips anticipated to be generated by the proposed SW 11th Street School project consisted of approximately 542 vehicle trips during a typical weekday, 189 vehicle trips during the school’s entering / drop-off (AM) peak (104 inbound and 85 outbound), and approximately 118 vehicle trips during the school’s exiting / pick-up (PM) peak (53 inbound and 65 outbound). When compared with the previous use on this site, this represented a decrease of 1,270 trips on a daily basis and a reduction of 35 trips in the PM peak hour. During the AM peak hour, the previously proposed school would have resulted in an increase of approximately 144 trips.

These traffic counts were prepared with those collected at this same location in November 2016. The results of this prior data collection effort are presented below:

- Wednesday, November 16, 2016 5,558 vehicles
- Thursday, November 17, 2016 5,494 vehicles
- **Two-Day Average** **5,526 vehicles**

The 2018 traffic counts are approximately 0.6% higher than the 2016 traffic counts at the subject location. As a result, it is apparent that the traffic volumes within the section of SW 11th Street near SW 4th Terrace have been generally steady. Therefore, the operational conclusions of the previous traffic study remain valid. (The traffic count data for 2016 and 2018 is presented in Attachment B to this memorandum).

Updated Traffic Analyses

The previously documented intersection and link analyses were updated in order to reflect the revised trip generation information for the currently proposed enrollment (i.e. 288 students). The results of the revised intersection analyses are presented in Table 3 below.

Table 3 Intersection Levels of Service David Posnack Jewish Day School at SW 11th Street - Hallandale Beach, Florida						
Intersection	Existing (2016) Conditions		Future (2019) Conditions Without Project Traffic		Future (2019) Conditions With Project Traffic	
	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
	SW 8th Ave / SW 11th St *	B	B	B	B	C
Project DW / SW 11th St *	--	--	--	--	C	B
SW 4th Terr / SW 11th St *	B	B	B	B	B	B
SW 2nd Ave / SW 11th St *	C	B	C	B	E	C
W Dixie Hwy / SW 11th St **	F	E	F	F	F	F
E Dixie Hwy / SW 11th St **	F	E	F	E	F	E

Source: Highway Capacity Manual and SYNCHRO.

Legend: D (37.7) = LOS (Average Delay - Seconds / Vehicle)

* At two-way & all-way stop-control intersections, the LOS for the critical movement is documented in this table.

** At signalized and all-way stop-control intersections, the LOS for the intersection as a whole is documented in this table.

As indicated in Table 3, with the exception of the intersection at SW 11th Street and E/W Dixie Highway, each of the study intersections are currently operating adequately during the AM and PM peak hours and will continue to do so in the year 2019 with the proposed school traffic.

Regarding the intersection of SW 11th Street and E/W Dixie Highway, the level of service (LOS) is currently “F” in the AM peak hour and “E” in the PM peak hour. The PM peak hour for the west intersection is anticipated to degrade to LOS “F” in the future background condition; while the other time periods for both (E/W) intersections are expected to remain at their current LOS. The future total conditions are expected to remain unchanged with the project traffic.

These LOS conditions are attributed to the green time allocation at this intersection which heavily favors the north-south corridor. In other words, the north-south approaches are operating at LOS “A” while the side-street (east-west) approaches are operating at LOS “F”. This is a timing preference established by the County and once the project traffic volumes materialize, the signal timings may be reviewed and optimized.

The results of the updated roadway link analyses are presented in Tables 4A and 4B below.

Table 4A Roadway Link Levels of Service - AM Peak Hour David Posnack Jewish Day School at SW 11th Street - Hallandale Beach, Florida										
Roadway Section	Lanes	LOS "C" Volume	LOS "D" Volume	LOS "E" Volume	Existing (2016) Conditions		Future (2019) Conditions w/out Project Traffic		Future (2019) Conditions with Project Traffic	
					Volume (vph)	LOS	Volume (vph)	LOS	Volume (vph)	LOS
SW 11th St (From SW 8th Ave to School Driveway) ¹	2L	252	875	1,183	569	D	613	D	661	D
SW 11th St (From School DW to SW 2nd Ave) ¹	2L	252	875	1,183	569	D	613	D	758	D

Source: FDOT 2018 Quality / Level of Service (LOS) Handbook Tables.

¹ Roadway classified as "principal" with a capacity adjustment of -30% per referenced FDOT Tables.

Table 4B Roadway Link Levels of Service - PM Peak Hour David Posnack Jewish Day School at SW 11th Street - Hallandale Beach, Florida										
Roadway Section	Lanes	LOS "C" Volume	LOS "D" Volume	LOS "E" Volume	Existing (2016) Conditions		Future (2019) Conditions w/out Project Traffic		Future (2019) Conditions with Project Traffic	
					Volume (vph)	LOS	Volume (vph)	LOS	Volume (vph)	LOS
SW 11th St (From SW 8th Ave to School Driveway) ¹	2L	252	875	1,183	479	D	516	D	541	D
SW 11th St (From School DW to SW 2nd Ave) ¹	2L	252	875	1,183	479	D	516	D	589	D

Source: FDOT 2018 Quality / Level of Service (LOS) Handbook Tables.

¹ Roadway classified as "principal" with a capacity adjustment of -30% per referenced FDOT Tables.

As indicated in Tables 4A and 4B, both roadway links within the project study area are currently operating at an acceptable level of service (LOS) and will continue to operate at an acceptable LOS in 2019 with and without the traffic associated with the proposed David Posnack Jewish Day School.

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Conclusions

As indicated by the updated trip generation analysis, the reduction in the proposed student enrollment (i.e. 132 fewer students) will result in 282 fewer daily vehicle trips, 88 fewer AM peak hour vehicle trips, and 45 fewer PM peak hour vehicle trips when compared with the previously proposed enrollment levels. And, recent traffic counts in the SW 11th Street corridor suggest that the previous intersection and link analyses conducted in the study area remain valid.

If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

KBP CONSULTING, INC.

A handwritten signature in blue ink, appearing to read "Karl B. Peterson", with a large, stylized flourish extending to the right.

Karl B. Peterson, P.E.

Florida Registration Number 49897

Engineering Business Number 29939

Attachment A

David Posnack Jewish Day School at SW 11th Street

Proposed Site Plan

Attachment B

David Posnack Jewish Day School at SW 11th Street

Traffic Count Data

Crossroads Engineering

CLIENT:KBP CONSULTING
 JOB NO:2016-021
 PROJECT:HALLANDALE BEACH
 COUNTY:BROWARD

8320 SW 90TH St Miami, FL 33156 786-236-2857

11TH ST VOLUME

SW 11TH ST WEST OF SW 4TH AVE

Date Start: 16-Nov-16
 Date End: 17-Nov-16

Start Time	16-Nov-16 Wed	EB		Hour Totals		WB		Hour Totals		Combined Totals	
		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		7	25			7	27				
12:15		3	33			3	18				
12:30		1	32			2	26				
12:45		5	44	16	134	7	31	19	102	35	236
01:00		0	52			4	27				
01:15		1	52			0	30				
01:30		1	49			0	20				
01:45		0	58	2	211	1	51	5	128	7	339
02:00		0	62			5	58				
02:15		1	65			0	44				
02:30		2	80			2	54				
02:45		2	77	5	284	1	43	8	199	13	483
03:00		0	50			1	50				
03:15		1	32			1	45				
03:30		0	41			1	49				
03:45		1	43	2	166	1	60	4	204	6	370
04:00		1	42			0	54				
04:15		1	44			0	79				
04:30		4	43			2	82				
04:45		7	36	13	165	1	59	3	274	16	439
05:00		6	37			1	86				
05:15		3	52			3	82				
05:30		11	61			4	99				
05:45		13	45	33	195	4	78	12	345	45	540
06:00		15	64			1	75				
06:15		17	35			10	60				
06:30		34	30			13	66				
06:45		51	29	117	158	16	41	40	242	157	400
07:00		60	26			17	43				
07:15		87	27			25	39				
07:30		114	28			25	24				
07:45		121	21	382	102	36	28	103	134	485	236
08:00		109	15			26	25				
08:15		83	13			29	26				
08:30		79	15			34	14				
08:45		107	8	378	51	23	20	112	85	490	136
09:00		96	17			34	14				
09:15		79	21			23	20				
09:30		54	15			26	15				
09:45		70	9	299	62	20	19	103	68	402	130
10:00		47	4			13	21				
10:15		41	9			20	10				
10:30		42	7			19	4				
10:45		39	2	169	22	25	10	77	45	246	67
11:00		33	5			21	12				
11:15		26	5			28	5				
11:30		38	9			28	7				
11:45		28	2	125	21	28	5	105	29	230	50
Total		1541	1571			591	1855			2132	3426
Percent		49.5%	50.5%			24.2%	75.8%			38.4%	61.6%
AM Peak		07:15				07:45					
Vol.		431				125					
P.H.F.		0.890				0.868					
PM Peak			02:00				05:00				
Vol.			284				345				
P.H.F.			0.888				0.871				

Crossroads Engineering

CLIENT:KBP CONSULTING
 JOB NO:2016-021
 PROJECT:HALLANDALE BEACH
 COUNTY:BROWARD

8320 SW 90TH St Miami, FL 33156 786-236-2857

11TH ST VOLUME

SW 11TH ST WEST OF SW 4TH AVE

Date Start: 16-Nov-16
 Date End: 17-Nov-16

Start Time	17-Nov-16		EB		Hour Totals		WB		Hour Totals		Combined Totals	
	Thu		Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00			6	33			7	32				
12:15			5	28			6	26				
12:30			2	35			3	20				
12:45			1	34	14	130	2	31	18	109	32	239
01:00			4	41			5	36				
01:15			1	48			3	27				
01:30			2	37			1	32				
01:45			0	19	7	145	2	40	11	135	18	280
02:00			0	35			2	35				
02:15			1	49			1	41				
02:30			1	54			0	32				
02:45			1	62	3	200	0	43	3	151	6	351
03:00			0	30			1	45				
03:15			0	45			1	67				
03:30			2	41			0	69				
03:45			1	40	3	156	1	52	3	233	6	389
04:00			0	45			1	58				
04:15			3	50			1	71				
04:30			4	50			3	83				
04:45			6	40	13	185	0	73	5	285	18	470
05:00			7	56			2	72				
05:15			4	45			5	87				
05:30			6	59			2	78				
05:45			12	68	29	228	7	84	16	321	45	549
06:00			18	53			7	78				
06:15			19	55			14	78				
06:30			35	47			13	78				
06:45			49	43	121	198	17	42	51	276	172	474
07:00			51	42			18	50				
07:15			79	16			29	37				
07:30			108	21			32	34				
07:45			109	26	347	105	32	26	111	147	458	252
08:00			102	18			19	17				
08:15			90	19			37	22				
08:30			97	14			39	23				
08:45			99	11	388	62	24	18	119	80	507	142
09:00			103	15			29	19				
09:15			73	5			26	6				
09:30			83	13			29	13				
09:45			49	14	308	47	24	15	108	53	416	100
10:00			45	8			22	12				
10:15			48	8			18	11				
10:30			40	4			18	17				
10:45			22	9	155	29	28	12	86	52	241	81
11:00			33	4			25	13				
11:15			25	4			24	9				
11:30			27	3			26	3				
11:45			22	0	107	11	30	0	105	25	212	36
Total			1495	1496			636	1867			2131	3363
Percent			50.0%	50.0%			25.4%	74.6%			38.8%	61.2%
AM Peak			07:30				08:15					
Vol.			409				129					
P.H.F.			0.938				0.827					
PM Peak				05:30				05:15				
Vol.				235				327				
P.H.F.				0.864				0.940				
Total			3036	3067			1227	3722			4263	6789
Percent			49.7%	50.3%			24.8%	75.2%			38.6%	61.4%

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Tuesday, 04/03/2018

Unit ID:

Location: SW 11th Street West of SW 4th Terrace

Comments: Hallandale, Florida

	Eastbound Volume	Westbound Volume	Total Volume
00:00 - 00:14	3	9	12
00:15 - 00:29	3	2	5
00:30 - 00:44	4	1	5
00:45 - 00:59	4	6	10
01:00 - 01:14	1	5	6
01:15 - 01:29	1	5	6
01:30 - 01:44	1	4	5
01:45 - 01:59	1	1	2
02:00 - 02:14	0	3	3
02:15 - 02:29	3	1	4
02:30 - 02:44	5	1	6
02:45 - 02:59	0	3	3
03:00 - 03:14	0	1	1
03:15 - 03:29	1	1	2
03:30 - 03:44	3	0	3
03:45 - 03:59	1	0	1
04:00 - 04:14	1	2	3
04:15 - 04:29	1	3	4
04:30 - 04:44	1	0	1
04:45 - 04:59	3	1	4
05:00 - 05:14	5	4	9
05:15 - 05:29	8	1	9
05:30 - 05:44	10	5	15
05:45 - 05:59	15	8	23
06:00 - 06:14	8	7	15
06:15 - 06:29	20	7	27
06:30 - 06:44	38	7	45
06:45 - 06:59	57	13	70
07:00 - 07:14	50	18	68
07:15 - 07:29	57	22	79
07:30 - 07:44	85	18	103
07:45 - 07:59	101	32	133
08:00 - 08:14	72	27	99
08:15 - 08:29	81	30	111
08:30 - 08:44	78	41	119
08:45 - 08:59	85	28	113
09:00 - 09:14	102	25	127
09:15 - 09:29	67	13	80
09:30 - 09:44	78	33	111
09:45 - 09:59	54	12	66
10:00 - 10:14	59	22	81
10:15 - 10:29	48	20	68
10:30 - 10:44	36	26	62
10:45 - 10:59	36	25	61
11:00 - 11:14	38	20	58
11:15 - 11:29	30	25	55
11:30 - 11:44	31	21	52
11:45 - 11:59	24	18	42
12:00 - 12:14	28	42	70
12:15 - 12:29	34	25	59
12:30 - 12:44	43	21	64
12:45 - 12:59	34	33	67

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Tuesday, 04/03/2018

Unit ID:

Location: SW 11th Street West of SW 4th Terrace

Comments: Hallandale, Florida

	Eastbound Volume	Westbound Volume	Total Volume
13:00 - 13:14	42	26	68
13:15 - 13:29	36	34	70
13:30 - 13:44	34	36	70
13:45 - 13:59	39	38	77
14:00 - 14:14	48	31	79
14:15 - 14:29	37	47	84
14:30 - 14:44	48	46	94
14:45 - 14:59	54	55	109
15:00 - 15:14	45	60	105
15:15 - 15:29	27	75	102
15:30 - 15:44	33	67	100
15:45 - 15:59	39	65	104
16:00 - 16:14	52	74	126
16:15 - 16:29	43	70	113
16:30 - 16:44	31	75	106
16:45 - 16:59	38	70	108
17:00 - 17:14	50	75	125
17:15 - 17:29	41	72	113
17:30 - 17:44	43	106	149
17:45 - 17:59	51	83	134
18:00 - 18:14	52	98	150
18:15 - 18:29	38	78	116
18:30 - 18:44	52	55	107
18:45 - 18:59	41	49	90
19:00 - 19:14	41	36	77
19:15 - 19:29	19	33	52
19:30 - 19:44	34	36	70
19:45 - 19:59	34	28	62
20:00 - 20:14	19	26	45
20:15 - 20:29	18	20	38
20:30 - 20:44	19	21	40
20:45 - 20:59	23	34	57
21:00 - 21:14	19	22	41
21:15 - 21:29	7	15	22
21:30 - 21:44	13	19	32
21:45 - 21:59	11	12	23
22:00 - 22:14	14	26	40
22:15 - 22:29	9	16	25
22:30 - 22:44	7	9	16
22:45 - 22:59	13	14	27
23:00 - 23:14	9	13	22
23:15 - 23:29	3	15	18
23:30 - 23:44	6	8	14
23:45 - 23:59	2	12	14
Totals	2883	2598	5481
AM Peak Time	08:21 - 09:20	07:40 - 08:39	08:21 - 09:20
AM Peak Volume	356	131	476
PM Peak Time	17:40 - 18:39	17:24 - 18:23	17:24 - 18:23
PM Peak Volume	196	371	559

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Wednesday, 04/04/2018

Unit ID:

Location: SW 11th Street West of SW 4th Terrace

Comments: Hallandale, Florida

	Eastbound Volume	Westbound Volume	Total Volume
00:00 - 00:14	2	8	10
00:15 - 00:29	4	10	14
00:30 - 00:44	8	2	10
00:45 - 00:59	2	1	3
01:00 - 01:14	3	2	5
01:15 - 01:29	1	4	5
01:30 - 01:44	0	1	1
01:45 - 01:59	1	3	4
02:00 - 02:14	2	1	3
02:15 - 02:29	0	0	0
02:30 - 02:44	1	0	1
02:45 - 02:59	0	2	2
03:00 - 03:14	2	1	3
03:15 - 03:29	1	1	2
03:30 - 03:44	1	2	3
03:45 - 03:59	2	1	3
04:00 - 04:14	2	1	3
04:15 - 04:29	2	3	5
04:30 - 04:44	0	1	1
04:45 - 04:59	3	0	3
05:00 - 05:14	2	2	4
05:15 - 05:29	7	6	13
05:30 - 05:44	5	3	8
05:45 - 05:59	14	4	18
06:00 - 06:14	17	3	20
06:15 - 06:29	20	8	28
06:30 - 06:44	42	10	52
06:45 - 06:59	42	8	50
07:00 - 07:14	49	20	69
07:15 - 07:29	62	28	90
07:30 - 07:44	94	26	120
07:45 - 07:59	98	35	133
08:00 - 08:14	89	29	118
08:15 - 08:29	73	35	108
08:30 - 08:44	77	30	107
08:45 - 08:59	91	21	112
09:00 - 09:14	102	19	121
09:15 - 09:29	62	17	79
09:30 - 09:44	60	27	87
09:45 - 09:59	47	21	68
10:00 - 10:14	47	31	78
10:15 - 10:29	35	22	57
10:30 - 10:44	51	23	74
10:45 - 10:59	40	31	71
11:00 - 11:14	35	17	52
11:15 - 11:29	29	25	54
11:30 - 11:44	35	15	50
11:45 - 11:59	32	26	58
12:00 - 12:14	42	32	74
12:15 - 12:29	36	29	65
12:30 - 12:44	39	31	70
12:45 - 12:59	47	23	70

Traffic Survey Specialists, Inc. Daily Vehicle Volume Report

Study Date: Wednesday, 04/04/2018

Unit ID:

Location: SW 11th Street West of SW 4th Terrace

Comments: Hallandale, Florida

	Eastbound Volume	Westbound Volume	Total Volume
13:00 - 13:14	37	32	69
13:15 - 13:29	41	40	81
13:30 - 13:44	43	33	76
13:45 - 13:59	44	25	69
14:00 - 14:14	44	54	98
14:15 - 14:29	46	64	110
14:30 - 14:44	35	53	88
14:45 - 14:59	51	60	111
15:00 - 15:14	51	82	133
15:15 - 15:29	39	87	126
15:30 - 15:44	43	97	140
15:45 - 15:59	38	85	123
16:00 - 16:14	39	85	124
16:15 - 16:29	34	76	110
16:30 - 16:44	33	68	101
16:45 - 16:59	36	88	124
17:00 - 17:14	37	93	130
17:15 - 17:29	44	93	137
17:30 - 17:44	55	92	147
17:45 - 17:59	34	77	111
18:00 - 18:14	38	87	125
18:15 - 18:29	51	70	121
18:30 - 18:44	42	53	95
18:45 - 18:59	35	54	89
19:00 - 19:14	36	42	78
19:15 - 19:29	27	25	52
19:30 - 19:44	37	39	76
19:45 - 19:59	28	28	56
20:00 - 20:14	23	26	49
20:15 - 20:29	23	31	54
20:30 - 20:44	21	23	44
20:45 - 20:59	14	23	37
21:00 - 21:14	13	20	33
21:15 - 21:29	13	22	35
21:30 - 21:44	9	14	23
21:45 - 21:59	11	16	27
22:00 - 22:14	11	19	30
22:15 - 22:29	7	21	28
22:30 - 22:44	7	14	21
22:45 - 22:59	4	15	19
23:00 - 23:14	4	16	20
23:15 - 23:29	9	14	23
23:30 - 23:44	12	13	25
23:45 - 23:59	1	8	9
Totals	2858	2778	5636
AM Peak Time	07:31 - 08:30	07:42 - 08:41	07:40 - 08:39
AM Peak Volume	356	136	485
PM Peak Time	14:05 - 15:04	16:50 - 17:49	16:46 - 17:45
PM Peak Volume	192	376	542