



June 1, 2015

Ms. Latika Bhide
Development Planner
Village of Arlington Heights
33 South Arlington Heights Road
Arlington Heights, IL 6005-1499

RE: Bright Horizons, 1120 N. Arlington Heights Road
Petition Application Department Comment Response

Dear Ms. Bhide,

Bright Horizons is in receipt of your May 13, 2015 letter and emails with comments on Bright Horizons May 4, 2015 petition application. The following is our response to these questions. Also Bright Horizons team would like to schedule a meeting this week with departments having comments to ensure their comments are responded to and closed.

1 Building Department

No comments at this time

Response: None required

1A Building Department

1. This building will be reviewed as an I-4(Day Care Facility) per the 2009 International Building Code, (I.B.C) and the 2009 International Fire Code.

Response: Renovation will be designed to meet I-4 (Day Care Facility) per the 2009 International Building Code, (I.B.C.) and the 2009 International Fire Code.

2. Full compliance with the 2000 NFPA-101, Life Safety Code, Chapter 16 is required per the Illinois State Fire Marshal's Office.

Response: Renovation will be designed for compliance with 2000 NFPA-101, Life Safety Code, Chapter 16 per the Illinois State Fire Marshall's Office.

3. Provide an automatic fire sprinkler system throughout the building.

Response: Building will be designed to include an Automatic Fire Sprinkler System.

4. Fire department connection shall be located at the main front entrance.

Response: Acknowledged. See sheet A0.0 for the location at the front door.

5. Provide a fire hydrant within 100 feet of the fire department connection.

Response: Acknowledged. See sheet A0.0 for the location in front of the building.

6. Provide a manual fire alarm system that activates the occupant notification system throughout the building.

Response: Renovation will include a manual fire alarm system that activates the occupant notification system throughout the building.

7. A remote fire alarm enunciator shall be located at the main front entrance.

Response: Acknowledged. See sheet A0.0 for the location at the front door.

8. Installation of a Type 1 kitchen hood exhaust system is required for the commercial kitchen installed in accordance with the 2009 International Mechanical Code.

Response: Acknowledged. See the attached cut sheet.

2 Public Works Department

1. The existing RPZ needs to be replaced with a new one.

Response: Acknowledged. See the attached sheet P4.0.1 for details.

3 Engineering Department

1. The petitioner is notified that these comments are being provided to ensure that the project meets the requirements for submittal to the Plan Commission. Approval by the Plan Commission is not an endorsement or approval of these documents to obtain the required building permits, engineering approval, or permits required by other government or permitting agencies for construction. Detailed plan review with associated comments will be provided upon submittal of plans for a building permit. The petitioner shall acknowledge that they accept this understanding.

Response: Acknowledged.

2. The proposed plan shows a reduction in the overall impervious area for this site. According to the project description on sheet C1, some of the area is "...permeable rubberized safety play surfaces." Provide a cross determination can be made as to whether or not this can be considered permeable.

Response: See attached detail of the safety plan surface.

3. When on-site lighting is proposed, provide a site photometric lighting diagram indicating lighting intensities. Also provide the associated catalog cuts for all roadway, parking lot, and building mounted luminaires. All fixtures must be flat bottom, sharp cut-off, and no wall pack style fixtures will be permitted.

Response: See attached light level calculations and cut sheets.

4. Provide an exhibit to engineering scale showing the turning path of the Fire Department's responding vehicle, in this case the tower truck. Exhibit must show front and rear wheel paths and the extent of the front and rear overhangs, as provided in an "autoturn" exhibit. The vehicle shall be shown maneuvering through the site in all possible directions of travel. Attached are the specifications for the tower apparatus.

Response: See the attached fire truck turn diagrams showing the existing and proposed conditions.

5. Preliminary discussions about this site included talk of a new water service line. Plans do not show this. Are there any plans for a new water service line?

Response: See sheet C5 for the approximate location of the new water service. Note that this work is being permitted and performed by the property owner.

6. The existing site is located within the combined sewer area. The proposed storm sewers will require an MWRD permit.

Response: Acknowledged.

Traffic Comments:

17. The explanation regarding the gap study is concerning the following areas:

- Utilization of the minimum 'critical gap' permitted by the HCM is not practicable when considering the cars are transporting children.
- Is this 'critical gap' based upon clearing one approach lane of opposing traffic or two?
- Does the minimal gap time account for the speed of approaching traffic?
- The first two gap times on page 7 are both shown for 'Left turn in' traffic, please clarify.
- The Gap Study Summary in Table 1 simply cannot be accurate. Assuming there are 900 seconds in a 15 minute period, divided by 7 seconds suggest only 128 possible gaps for one direction of traffic possible in one direction. For a 4.1 second allowable gap, there are 29 possible gaps in the same time period. The chronicling of the 'follow-up time' and addition of this metric into the gap study table improperly represents true useable clear and safe gaps for parents accessing this site. Several 15 minute periods exceed these potential values, and the others suggest that the entire 15 minute periods is one continuous gap, and that no traffic is moving along Arlington Heights Rd. The break down for gaps in traffic should be presented in each time spectrum for more reasonable 'critical gap' time periods. The identifications of the morning peak hour is different between Table 1 & 2. Based upon this critique, the values shown in Tables 8 & 9 need revision.

Response: The critical gap presented in the HCM is based on numerous studies throughout the United States that represents a broad range of conditions. As stated in the HCM manual, "The critical headway is defined as the minimum time interval in the major-street traffic stream that allows intersection entry for one minor-street vehicle. Thus, the driver's critical headway is the minimum headway that would be acceptable." Furthermore, the critical gaps (headway) and follow up times required to perform various maneuvers in and out of the access drive take into account that Arlington Heights is a four-lane undivided roadway and is based upon the vehicles clearing the intersection in one movement.

Regarding the gap study summary Table concern, we offer the following:

- The 4.1 second critical gap allows one vehicle to turn left into the site crossing the two southbound lanes. The follow up time of 2.2 seconds is the time needed for a vehicle queued behind the first vehicle to make the same turn. Based on this, if there is a gap of 8.5 seconds then three consecutive vehicles could use this gap. Because of this, it is possible to have more than the 219 potential 4.1 second gaps in a 15 minute period.

- Based on a review of the data collected, there were numerous instances in which the gaps in the southbound through traffic stream exceeded 20 seconds which can accommodate up to (9) inbound left-turning vehicles. These large gaps are the results of the existing traffic signal at Olive Street (approximately 900 feet to the north) which effectively platoons traffic and creates these gaps in the through traffic stream.
- For the left-turn out movement, the 7.1 second critical gap allows one vehicle to turn left out of the site, cross the two southbound lanes and merge into the northbound through traffic stream. The follow up time 3.5 seconds is the time needed for a vehicle queued behind the first vehicle to make the same turn.
- The traffic study presents a conservative (worst case) scenario in that it superimposes the peak hour volumes of the Bright Horizons daycare cent (8:00 to 9:00 A.M.) on the peak hour volumes along Arlington Heights Road (7:30 to 8:30 A.M.).

18. The traffic report suggests that parents are required to walk their children into and out of the facility, however no indication of reserving or signing parking stalls close to the entrance has been provided to safely accommodate this pedestrian movement.

Response: The plan has been revised to show dedicated parking spaces close to the entrances

19. Although the findings of the traffic analysis indicated that the southbound queue at the Oakton Street signal will not back up as far as the site driveway, however there are occasions when this average condition is exceeded. If not across this driveway the proximity of the queue approaching this driveway requires left turning vehicles to have to filter sight distance through passing vehicles to see northbound traffic. Similarly for northbound vehicles trying to turn left into the site immediately after a traffic signal will result in cascading slowed vehicles in the center turn lane through the Oakton intersection. It is understood that the report discounts the severity of impact on adjacent roadway traffic, however it is still of concern for a daycare site.

Response: Based on a review of the traffic count video and additional observations, the southbound traffic queues at Oakton Street during the morning peak backed up twice to the access drive for approximately 10 seconds. The rest of the hour, the observed backups were very minimal, if any, and did not extend to the access drive. During the evening peak hour while southbound traffic queues extended a few more times past the access drive (less than 10 times out of a possible 26 cycles per hour), it was also observed that these queues lasted for approximately five seconds or less and as such will have a minimal impact on the ability of site traffic to exit and enter the site. Furthermore, as indicated by the results of the gap study, numerous gaps in the through traffic stream are created by the existing traffic signals to the south (Oakton Street) and to the north (Olive Street), which will allow site traffic to enter and exit efficiently and without significant delays.

20. It's unclear why there is a value shown for Morning Peak Hour, however, based upon the previous medical office use, please provide estimates of what the this site would have generated from this driveway based upon the previous occupant use.

Response: The building is approximately 16,500 square feet in size and was used as a medical office building. Below is a table showing the estimated number of trips to be generated by the site assuming it would be used as a medical office building. It should be noted that while a

daycare facility will generate higher volume of traffic during the morning and evening peak periods, a medical office use generates continuous traffic throughout the day thus having a greater impact on the area roadways as a result.

Table 2

SITE TRAFFIC GENERATION			(ASSUMING MEDICAL OFFICE BUILDING)					
		ITE	Weekday A.M			Weekday P.M.		
		Land	Peak Hour			Peak Hour		
Land Use	Density	Use Code	In	Out	Total	In	Out	Total
Medical Office	16,500 s.f.	720	32	8	40	16	42	58

4 Fire Department

1. Building to be fully sprinkled.

Response: Acknowledged, building will have sprinkler system

2. Fire Department Connection (FDC) to be located at the main entrance.

Response: Acknowledged. See sheet A0.0 for the location at the front door.

3. Fully functional annunciator panel or alarm panel to be locate inside the main entrance.

Response: Acknowledged. See sheet A0.0 for the location at the front door.

4. Fire hydrant located within 100' of the FDC.

Response: Acknowledged. See sheet A0.0 for the location in front of the building.

5. Provide an auto turn diagram utilizing the vehicle information provided by the engineering department for the proposed parking lot configuration.

Response: Acknowledged, See sheet 1

5 Police Department

1. Character of use:

The character of use is consistent with the area and is not a concern.

Response: Acknowledged.

2. Are lighting requirements adequate?

Lighting should be up to Village of Arlington Heights code.

Response: Acknowledged.

3. Present traffic problems?

There are no traffic problems at this location.

Response: Acknowledged.

4. Traffic accidents at particular location?

This not a problem area in relation to traffic accidents.

Response: Refer to Traffic Comment Response.

5. Traffic problems that may be created by the development.

This development may create additional traffic problems especially during drop off and pick up times. The traffic light at Arlington Heights Road and Oakton is in close proximity to the property's driveway. Vehicles exiting the lot should be restricted to right turns only during drop off/pick up time frames.

Response: Refer to Traffic Comment Response.

6. General comments:

The proposed Bright Horizons sign should include the address of "1120 N Arlington Heights Road"

The access gates to the play areas around the building should be locked/secured nightly to reduce unauthorized access- i.e. trespassing, vandalism, underage drinking etc. - to the area after hours.

The north side sidewalk and play areas should be illuminated during nighttime hours to increase surveillance/visibility- potentially reducing trespassing, vandalism, underage drinking, etc.

Response: Acknowledged. All gates have lockable exit devices and will be secured at all times.

Acknowledged. See sheet A0.0 for light locations around the building perimeter.

6 Health Services Department

Refer to the Plan Review requirements sheet for this Department for development of Building Permit plans.

Plan approval must also be obtained from Illinois DCFS.

1. In relocating Reserved Accessible Parking Spaces for persons with disabilities designate those spaces that are the shortest distance from the entrance per IAC Section 400.310(c)(2) and Illustration B., Figure 9(a).

Response: The handicap space was relocated from the front of the building because the slope of the existing pavement exceeds what the handicap code allows. The spaces as shown now are the closest spaces available with a permissible slope.

2. Each Reserved Accessible Parking Space shall consist of a sixteen foot wide parking space including an eight feet wide diagonally striped access aisle. Adjacent Reserved Accessible Parking Spaces shall not share a common access aisle per IAC Section 400.310(c)(3) and Illustration B., Figure 9(a).

Response: The handicap spaces are 9 feet wide. Each space has its own 9 foot wide access aisle.

7 Planning & Community Development Department

7. The property at 1120 N. Arlington Heights Road is zoned B-1. A Special Use for a 'Day Care Center in the B-1 district is required.

Response: Acknowledged.

8. The property is delineated as 'Offices only' per the Comprehensive Plan. The proposal is not consistent with the Comprehensive Plan; however, given the intensity of the use, it is compatible with surrounding land uses.

Response: Acknowledged.

9. The following variations are necessary:

- a. Chapter 28, Section 5.1-10.1 from the requirement that all activities permitted or required in the B-1 district be conducted wholly within an enclosed building to allow an outdoor play area- Staff does not object to the variation, however additional landscaping to screen the residential properties to the west as indicated by the landscape planner are required.
- b. Chapter 28, Section 6.15-1.2 from the requirement that the ends of all rows of car stalls be a landscape island equal in area to at least one parking space to allow the plan to be deficient 2 islands- Staff does not object to this variation, but

recommends that the 3 Eastern Redbud trees proposed for the east edge of the play area be replaced by 4 inch caliper shade trees to meet the intent of the Ordinance for landscape islands at the ends of parking rows.

- c. Chapter 28, Section 6.13-3 from the requirement that fences in the front yard not exceed 36 inches to allow a 5 foot tall metal-fence Staff does not object to this variation.

Please provide a written justification for the zoning variations a. (all activities must be conducted within wholly enclosed buildings) and b. (landscape islands) above by responding to the following criteria:

- a. The property in question cannot yield a reasonable return if permitted to be used only under the conditions allowed by the regulations in that zone.
- b. The plight of the owner is due to unique circumstances.
- c. The variation, if granted, will not alter the essential character of the locality.

Response: See attached sheet LS101 on details for the fencing materials proposed.

- 10. The total code required parking for this site is calculated as:

Response: Day Care Center requires 3 spaces for every 2 employees. There will be 36 employees therefore requiring 54 spaces. Design plans provide for 58 leaving a surplus of 4.

- 11. The location of the accessible spaces on the engineering plan and landscape plan do not coincide. Please identify the correct location of the accessible spaces.

Response: Revised enclosed plans correct coordination between drawings.

- 12. Per Chapter 28, Section 6.15-2.2, a 6 foot high solid screen is required between a property in a business district and adjacent residential district. The property in questions abuts residential property on the west and for a portion of the south property line. Sheet L1.0 identifies the fence as a L501, 6 feet high fence with 8 feet wide panels. The cut-sheet provided in the binder identifies the fence as 'Alabama Style Vinyl Fence' with picket spacing and lattice top. Please revise. Fence must be 6 foot high, solid fencing. Please note that the fence along the south property line that does not abut the residential property must be 5 feet tall, semi-open fence.

Response: Acknowledge, see sheet LS101.

- 13. Please note that any parking lot lighting proposed must meet the provisions of Chapter 28, Section 11.2-12.5, Lighting.

Response: Acknowledge

- 14. The applicant must submit a sign permit application for the proposed signs.

Response: Acknowledge.

7A

- 1. The fence along the rear property line and along the south property line adjacent to the residential district must be 6 feet high at time of installation. Sheet L1.0 indicates a 5 foot high fence.

Response: Acknowledged.

- 2. Along the rear property line, and the side property lines (between the building and the rear property line) it is recommended that a continuous row of 8 foot high Arborvitae that are planted approximately 3.5 feet on center be provided in place of the proposed deciduous shrubs in order to provide a dense buffer.

Response: Acknowledged.

3. Per Chapter 28, Sections 6.15, four inch caliper shade trees are required at the ends of all parking rows. Replace the proposed Redbud trees in the southwest corner of the parking lot with four inch caliper shade trees.

Response: Acknowledged.

Latika, we hope the above written response along with attached plans and details will respond to department comments. Again we would like to schedule meetings this week after your team has reviewed our responses to clear up any remaining issues and to keep our June 24th, 2015 Plan Commission meeting. Please feel free to contact me if you have any questions.

Sincerely,

Robert Ewald

Robert Ewald
Consulting Project Manager

CC: D. Toole
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