



August 20, 2024

Forest Glen Shopping Centre
Ltd. 3427 Fieldgate Dr.,
Mississauga ON, L4X 2J4

Re: 3403-3445 Fieldgate Drive Development

To whom it may concern:

The shadow studies prepared and submitted by onespace unlimited inc. have been prepared in accordance with the City of Mississauga Terms of Reference standards for shadow studies. 3403-3445 Fieldgate Drive Development is located at 43.624047825889605, -79.58824849615979 and north was determined using the survey provided to us by Genesis Land Surveying Inc. The base plan for this site model was derived from Google Earth in conjunction with the existing site survey.

3.1 Residential Private Outdoor Amenity Spaces

As part of this shadow study analysis, we assessed the impact of the proposed development on the private rear yards of the adjacent low-rise neighborhood. The test periods on June 21st shows that the proposed development's shadows encroached into a small portion of the "no impact zone" from 7:07 to 8:20 but did not affect the area for the remainder of the day. On September 21st, shadows briefly overlapped into this zone starting at 8:35, occurring for no more than two consecutive hourly test times. Similar results were observed on December 21st, with shadows entering the "no impact zone" as early as 9:19 but quickly moving out of the zone for each home. Based on these findings, we conclude that the proposed development meets the requirements of this criterion.

3.2 Communal Outdoor Amenity Areas

We reviewed the Sun Access Factor for the private amenity areas within the proposed development which includes the roof top amenity spaces on the 2nd & 6th Floors. June 21st complies with Sun Access Factor of 0.56. September achieved a Sun Access Factor of 0.45 and December achieved 0.32. Although the December study did not achieve a Sun Access Factor of 0.50 or higher, the September study came close to the required number, and the June study fully complied. Overall, the proposed building imposes minimal shadows on the proposed outdoor amenity space. Although not technically part of the private development, the dedicated parkland area off Bloor St provides alternate spaces that can be accessed when the private amenity is partially shaded.

The study of the private amenity areas within the proposed development yielded the following Sun Access Factors:

June 21st: Average Area of Sunshine: 1,067m² (Sun Access Factor: 0.56)

September 21st: Average Area of Sunshine: 866m² (Sun Access Factor: 0.45)

December 21st: Average Area of Sunshine: 620m² (Sun Access Factor: 0.32)

Overall, the average area of sunshine for majority of the test times indicates that there is still a significant amount of amenity area provided with good sun exposure.

3.3 Public Realm, Public Open Spaces, Parks and Plazas

The criteria for maximizing the use of the public realm were studied for the proposed development. On September 21st, we concluded that the proposed building casts shadows onto the Low and Medium Residential streets only at the 9:12 test time and does not cast any shadows during the rest of the required times. Furthermore, there is little to no shading on the north side of the property, where the High Density Residential Streets are situated, as shadows primarily fall on the property's parking lots during the specified times.

3.4 Turf and Flower Gardens in Public Parks

The only public park area surrounding the proposed development site is Forest Glen Park, located to the northwest of the property. It is at a significant distance from the proposed site, such that the development does not cast any shadows during any test times in the September 21st study. Therefore, it can be concluded that the proposed development has no impact on the park.

3.5 Building Faces to allow for the possibility of using solar energy

We reviewed the impact of the proposed development on the adjacent low-rise neighbourhood and the possibility of harvesting solar energy. We note that the proposed development shadows reach the “no impact zone” at 8:35 on September 21st but does not linger on each home for more than 2 consecutive hourly test times. From this we can conclude that the proposed development meets the requirements of this criteria.

Summary Conclusion

Our analysis indicates that the impact on adjacent properties from shadowing is acceptable in both duration and placement. The orientation of the proposed development on the site ensures that the building casts narrow shadows towards the adjacent low-rise neighborhood, minimizing prolonged shadowing on any one property. Additionally, situating one of the proposed amenity spaces at a higher elevation (Level 6) maximizes sun exposure for communal outdoor areas. Areas benefiting from direct sunlight receive ample exposure during relevant timeframes. In conclusion, it can be determined that the proposed development does not significantly increase existing shadows.

I trust this is satisfactory.

Yours truly,
onespace unlimited inc . architecture + interior design



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