

Thier + Curran Architects
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Hamilton, ON, L8R 2K7

RE: ZBA
551-1211 Southdale Road E
MEMO – Sanitary Design Flows

As requested as part of the Zoning Bylaw Amendment process, Driven Engineering Inc (Driven) was requested to undertake a site wide study of the sanitary flows and comment on their relation to the existing site build out.

Accordingly, we prepared a Sanitary Design Sheet with the existing services and the proposed services. This is provided enclosed with this memo.

Historic information was gathered from

- ◆ 1975 Haggarty Buist Architects drawings for the internal site,
- ◆ City file number 4692 for the Millbank and Southdale Road PDC information, and
- ◆ City file number 4477s1 for the sanitary area plan

1 Sanitary Capacity Discussion

The site is 4.32 hectares in area. The design infiltration for this area is 0.43 litres per second and does not change based on usage.

The site outlets to the Southdale system through a 200mm PDC at 0.44% with a capacity of 21.76 litres per second. There is a second PDC which outlets at the south of the site to the Millbank system, which, according to records, is unused.

1.1 Existing Site

The site at its current build out is comprised of 166 townhouse units. At a density of 2.4 people per unit, the total population is then 398.4 people. The usage sewage flow for this population is $[2.55 \ 0.43 \] 2.12$ litres per second, for a total design flow of 2.98 litres per second.

1.2 Proposed Site

At full build out of the site with the three proposed residential towers, there will be 98 townhouse units at 2.4 people per unit and 167 apartment units at 1.6 people per unit. The total population is then 502.4 people. The usage flow for this population is $[4.36 \ 0.43 \] 3.93$ litres per second, which is 1.81 litres per second more than the current build out.

1.3 Population Discussion

The area plans from 1970 indicate that the subject property is in two blocks, Block "M" and Block "N". Block "M" has an area of 6.53 acres and an allowance of 100 people per acre, for a population of 653 people and block "N" has an area of 4.15 acres and an

allowance of 90 people per acre for a population of 373.5 people, for a total allowance of 1026.5 people.

While the design information is not included in the plans, the proposed site is less than 50% of the original design population.

1.4 Conclusion

Based on the foregoing information, and with respect to the site alone, the proposed development does not appear to be of concern with respect to sanitary design.

2 Closing

2.1 Passage of Time and Information

The findings, conclusions and recommendations contained herein are based on the information known at the time of the fact gathering. Those findings, conclusions and recommendations may be subject to changes or modifications with the passage of time and are for the sole use of the City of London, Thier + Curran Architects and London & Middlesex Community Housing with respect to this project alone.

The document is accurate to the best of the information provided to Driven Engineering Inc. If any information contained within is obsolete, changes or is otherwise no longer relevant, this needs to be made known to Driven and Driven reserves the right to edit or modify this document to suit the new information. It is never the responsibility of Driven to stay current of the information used in the production of this report.

2.2 Closing

We trust that this report meets your satisfaction. Should you have any questions or require further information, please do not hesitate to contact the undersigned.

Sincerely,

Alan Johnson, P.Eng.
President, Principal Engineer
Driven Engineering Inc.

