

APPENDIX C

Domestic Water Demands Calculations

DRAFT

Existing Domestic Water Demand

Site Area: 14.5
 Approx. Area Lost to Public Open Space: 2.6
 Remaining Area: 11.9 ha
 Population Density: 2.91 persons/unit
 Number of units: 150
 Population: 437

Design Parameters

| Average Demand (L/capita/d) |
|-----------------------------|
| 300 |

Water Demand:

Average Daily Demand = 130,950 L/day
1.52 L/s

Peaking Factors (Residential)

Max Day = 2.0
 Peak Hour = 4.0

Average Day = 1.52 L/s
 Max Day = **3.03** L/s
 Peak Hour = **6.06** L/s

Notes & References

Region of Niagara Development Charge
 Background Study Appendix A

Niagara Region Water & Wastewater Master Servicing Plan
 (2016) Volume 3

Niagara Region Water & Wastewater Master
 Servicing Plan (2016) Volume 3

Max Day = Average Day Demand * Max Day
 Peak Hour = Average Day Demand * Peak Hour

| Municipality | Average Daily Water Demand (L/s) | Max Day Demand (L/s) | Peak Hourly Demand (L/s) |
|----------------|----------------------------------|----------------------|--------------------------|
| Niagara Region | 1.52 | 3.03 | 6.06 |