## ATTACHMENT 1

## TOWN OF ERIN URBAN CENTRE WATER SERVICING CLASS EA

## SUMMARY TABLES

Table 1: Erin Forecasted Water Demands Corresponding to Revised Growth Forecast

| Year | Erin Village Independent |               |                |          |                              |  |  |  |
|------|--------------------------|---------------|----------------|----------|------------------------------|--|--|--|
|      | System Firm              | MDD Per Unit* | Total Serviced | Max. Day | Reserve                      |  |  |  |
|      | Capacity                 | (m³/d)        | Households     | Demand   | Capacity (m <sup>3</sup> /d) |  |  |  |
|      | (m <sup>3</sup> /day)    |               |                | (m³/d)   |                              |  |  |  |
| 2020 | 1,968                    | 1.45          | 1,019          | 1,473    | 495                          |  |  |  |
| 2031 | 1,968                    | 1.45          | 1,700          | 2,457    | -489                         |  |  |  |
| 2036 | 1,968                    | 1.45          | 2,000          | 2,891    | -923                         |  |  |  |
| 2041 | 1,968                    | 1.45          | 2,500          | 3,614    | -1,646                       |  |  |  |

\* MDD = Maximum Day Demand

Table 2: Hillsburgh Forecasted Water Demands Corresponding to Revised Growth Forecast

|      | Hillsburgh Village Independent      |                         |                              |   |                            |  |  |
|------|-------------------------------------|-------------------------|------------------------------|---|----------------------------|--|--|
| Year | System Firm<br>Capacity<br>(m³/day) | MDD Per Unit*<br>(m³/d) | Total Serviced<br>Households | Max. Day<br>Demand<br>(m <sup>3</sup> /d) | Reserve<br>Capacity (m³/d) |  |  |
| 2020 | 655                                 | 2.31                    | 275                          | 202                                       | 21                         |  |  |
| 2031 | 655                                 | 2.31                    | 700                          | 515                                       | -960                       |  |  |
| 2036 | 655                                 | 2.31                    | 900                          | 662                                       | -1,421                     |  |  |
| 2041 | 655                                 | 2.31                    | 1,100                        | 809                                       | -1,883                     |  |  |

Table 10: Summary of Water Supply Alternatives Evaluation Versus Opportunity Statement:

|   | Opportunity Statement Components  |  |  |   |  |
|---|---|--|--|---|--|
| Alternative Solutions   | Increase<br>Supply<br>Capacity to<br>Meet<br>Requirements<br>of Existing<br>Community | Increase<br>Redundancy in<br>Both<br>Communities | Increase<br>Supply<br>Capacity to<br>Meet Future<br>Requirements | Problem<br>Statement<br>Addressed in<br>its Entirety? |  |
| Alternative 1: Do Nothing   | No  | No   | No   | No  |  |
| Alternative 2: Increase Water<br>Taking from Existing Municipal<br>Wells  | Yes   | Yes  | No   | No  |  |
| Alternative 3: Reinstate Bel-Erin<br>Wells  | Yes<br>Erin Only  | Yes<br>Erin Only                                 | No   | No  |  |
| Alternative 4: Addition of New<br>Wells at Each Existing Municipal<br>System                                    | Yes   | Yes  | Yes  | Yes   |  |
| Alternative 5: Interconnect<br>Existing Erin and Hillsburgh Water<br>Systems                                    | Yes   | Yes  | No   | No  |  |
| Alternative 6: Interconnect<br>Existing Erin and Hillsburgh Water<br>Systems and Addition of New Well<br>Supply | Yes   | Yes  | Yes  | Yes   |  |

Table 3: Reserve Capacity Evaluation of Shortlisted Alternatives Versus the Preferred Growth Allocation Scenario

| Village    | Year                         | Serviced<br>Population           | Supply<br>Requirements<br>(m³/day) | Additional<br>Supply<br>Capacity<br>(m³/day) | New<br>System<br>Firm<br>Capacity<br>(m³/day) | New<br>Reserve<br>Capacity<br>(m³/day) | Alternative |
|------------|------------------------------|----------------------------------|------------------------------------|--|---|--|-------------|
| Erin       | 2020<br>2031<br>2036<br>2041 | 3,100<br>4,500<br>5,600<br>7,100 | 1,473<br>2,457<br>2,891<br>3,614   | 2,765<br>2,765<br>2,765<br>2,765<br>2,765    | 4,128<br>4,128<br>4,128<br>4,128<br>4,128     | 2,655<br>1,671<br>1,237<br>514         | Alternative |
| Hillsburgh | 2020<br>2031<br>2036<br>2041 | 1,500<br>2,000<br>2,500<br>3,200 | 634<br>1,615<br>2,076<br>2,538     | 1,616<br>1,616<br>1,616<br>1,616             | 1,637<br>1,637<br>1,637<br>1,637              | 1,003<br>22<br>-439<br>-901            | 4           |

Table 4: Future Storage Capacity Evaluation of Shortlisted Alternatives Versus the Preferred

|            | Year | Population | Existing<br>Storage<br>(m³) | Required<br>Storage<br>(m <sup>3</sup> ) | Additional<br>Storage<br>Required<br>(m <sup>3</sup> ) |
|------------|------|------------|-----------------------------|--|--|
|            | 2031 | 3,100      | 2,200                       | 1938                                     | -262   |
| Erin       | 2036 | 5,600      | 2,200                       | 2793                                     | 593  |
|            | 2041 | 7,100      | 2,200                       | 3289                                     | 1089   |
|            | 2031 | 2,000      | 790                         | 1315                                     | 525  |
| Hillsburgh | 2036 | 2,500      | 790                         | 1549                                     | 759  |
|            | 2041 | 3,200      | 790                         | 1783                                     | 993  |