# **District of Lantzville**

## REPORT TO CAO

Regular Meeting Agenda Item April 25, 2016

File No. 5600-08

DISTRICT OF LANTZVILLE\Reports to Council\2016\2015 Water Study Clarity.doc

**AUTHOR:** 

Fred Spears, Director of Public Works

SUBJECT:

2015 Koers Water Supply and Distribution Study Clarification

### **RECOMMENDATIONS**

**THAT** Council receives this report for information.

### **ALTERNATIVE**

N/A

## **PURPOSE**

To provide clarity on the boundary defined by "The Winds" as presented in the Water Supply and Distribution System Study and, confirm the number of homes covered in "the winds" catchment areas, as presented in the Water Supply and Distribution System Study.

## **BACKGROUND**

Council at its April 11, 2016 meeting made the following motions:

WHEREAS in the 2015 Water Supply & Distribution System Study from Koers & Associates Engineering, one of the items listed in the scope of work for the report was "Servicing Northwind/Southwind Area" (excerpt attached to Councillor Coulson's submission);

AND WHEREAS in the August 27, 2015 revision to the Water Supply & Distribution System Study a class D cost estimate was presented for supplying water to the Winds area;

AND WHEREAS during the September 14, 2015 regular meeting, the delegation from Koers stated that the number of homes covered in the Winds area is 190;

AND WHEREAS Figure 10 of the Water Supply & Distribution System Study shows a coverage area for 190 lots being much broader than just the Northwind/Southwind area (as attached to Councillor Coulson's submission);

THEREFORE, BE IT RESOLVED THAT Council requests that staff clarify the extent of the design estimate with Koers & Associates Engineering and report back to Council, and provide:

- Clarity on the area/boundary defined by "the Winds", as presented in the Water Supply & Distribution System Study;
- Confirmation on the number of homes covered in "the Winds" catchment area, as presented in the Water Supply & Distribution System Study.

#### DISCUSSION

Staff have spoken to the author of the study and they have provided clarity on the boundary of "the Winds" identified within the Koers 2015 Water Supply and Distribution System Study (the study) and is as follows:

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Figure 10 (attached) identifies areas in the OCP that is within the Water Service Area Boundary, but is not currently serviced by the existing water system (areas within the bold blue lines). The polygon that includes properties on Northwind and Southwind Drives, Lorenzen Lane, Superior Road, Hobsons Road and also includes properties on the north side of the highway on Aats Road that make up the 190 total, which all are in the OCP Water Service Area Boundary.

In addition to the above, table 18 of the study indicates "Northwind/Southwind Rd area", number of connections at 190. It should be noted as above, included in the 190 connections are properties along Superior, Aats, Hobson's, Lorenzen, Southwind, and Northwind which are all identified in the polygon on Figure 10 but were not identified in Table 18.

Northwind, Southwind, Eastwind, and Westwind are included within the polygon in figure 10 and again in table 18 however, this does not constitute the identity of "the Winds" within table 31 proposed works in the study.

The "Winds" that are identified in the study within table 31 are shown on the attached drawing, Figure 1. The total properties within "the Winds" as it pertains to the 2015 Water Supply and Distribution Study equals 124.

As the local term "the Winds" is commonly used to identify an area in Lantzville, it may be prudent if Council was to delineate a specific area as "the Winds" for future use, failing that, Council may wish to direct staff to identify every street in future plans instead of referring to areas as "the Winds".

## **FINANCIAL IMPLICATIONS**

N/A

## **SUMMARY**

Respectfully submitted

As noted above, Figure 10 identifies areas that are not serviced by the existing water system but is within the OCP Water Service Area.

The attached drawing outlines "the Winds" as it pertains to the cost allocation in Table 31 of the 2015 Koers Water Supply and Distribution Study.

As issues arise from studies and agreements regarding local terms such as "the Winds" it may be in the best interest of the municipality to not include such terms in the wording of future documents and identify areas by street names only.

Fred Spears
Director of Public Works

Reviewed By

CAO

Dir. CA

Dir. FS



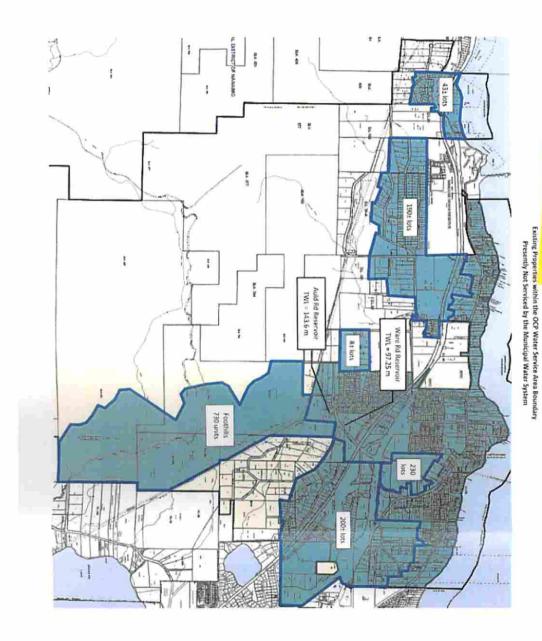
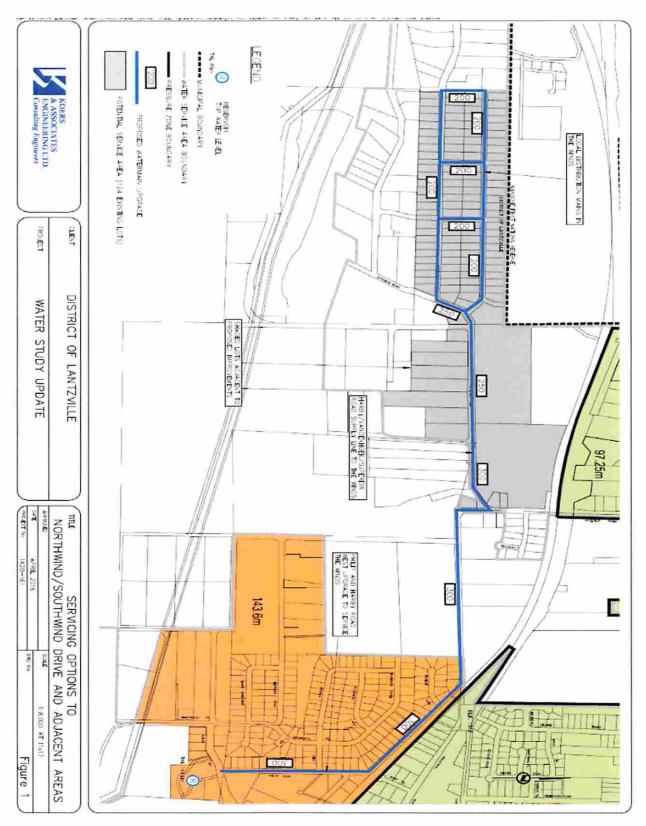


FIGURE 10



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Table 18
Service Area Water Demands based on 2014 Per Connection Demands

| SERVICE STATE OF STAT | Number of   | Average Day |            | Maximum Day |        | Maximum Week |        | Wellfield Capacity<br>m³/day* |            |
|--|-------------|-------------|------------|-------------|--------|--------------|--------|-------------------------------|------------|
| Description  | Connections | Individual  | Cumulative | Ind.        | Cum.   | Ind.         | Cum.   | Current                       | Estimated  |
|  | (#)         | m³/day      | m³/day     | m³/day      | m³/day | m³/day       | m³/day | Pumps                         | Safe Yield |
| YEAR 2014 - Existing System Total:   | 885         | 687         | 687        | 1,421       | 1,421  | 1,227        | 1,227  | 2,027                         | 2,424      |
| Extrapolated Demands if all existing properties in Lantzville were serviced (based on Year 2014 average demand per service connection)   |             |             |            |             |        |              |        |                               |            |
| Northwind/Southwind Rd area  | 190         | 148         | 148        | 305         | 305    | 263          | 263    | 2,027                         | 2,424      |
| Aulds/Elm Rd area  | 80          | 62          | 210        | 128         | 433    | 111          | 374    | 2,027                         | 2,424      |
| Clark/Blackjack Rd area  | 70          | 54          | 264        | 112         | 545    | 97           | 471    | 2,027                         | 2,424      |
| Owen Rd area   | 50          | 39          | 303        | 80          | 625    | 69           | 541    | 2,027                         | 2,424      |
| Bayview Park/Rumming/Sabre Rd area   | 43          | 33          | 336        | 69          | 694    | 60           | 600    | 2,027                         | 2,424      |
| Fernmar Rd area  | 8           | 6           | 342        | 13          | 707    | 11           | 612    | 2,027                         | 2,424      |
| Existing Developed areas<br>Extrapolated Total:  | 441         |             | 342        |             | 707    |              | 612    | 2,027                         | 2,424      |
| Existing System + Existing Developed areas Extrapolated Total:   | 1,326       | L           | 1,029      |             | 2,128  |              | 1,839  | 2,027                         | 2,424      |
| Extrapolated Demands for Foothills and Village development (based on Year 2014 average demand per service connection)  |             |             |            |             |        |              |        |                               |            |
| Foothills  | 730         | 567         | 567        | 1,172       | 1,172  | 1,012        | 1,012  | 2,027                         | 2,424      |
| Village (Ware Rd) area   | 230         | 179         | 746        | 369         | 1,541  | 319          | 1,331  | 2,027                         | 2,424      |
| Foothills + Village Development Total:   | 960         |             | 746        |             | 1,541  |              | 1,331  | 2,027                         | 2,424      |
| Existing + Existing Developed + Foothills + Village Extrapolated Total:  | 2,286       |             | 1,775      |             | 3,669  |              | 3,170  | 2,027                         | 2,424      |