

## **Water Tower Infrastructure Sharing – Program Improvements**

### **Objective**

The objective of York Region's infrastructure sharing program is to share space on its existing structures with telecommunication service providers ('Carrier') in adherence to Industry Canada's regulations on the matter, maintain service levels, and generate revenue from rental fees. The Carrier is granted permission to install and operate telecommunications antenna and associated equipment on existing structures of the Region, specifically water tower structures, under a predetermined agreement and established rental rate.

Managing the program has involved challenges and drawbacks, including security issues, health & safety concerns, electro-magnetic interference (EMI) with the Region's water tower systems, code adherence, fee structures, installation guidelines, inspection responsibilities and procedures, agreements with stakeholders, and staffing of the program. Because of the complexity of this program, and the ongoing problems that are being faced, the Region needs to update and enhance the program to address all the related issues.

The objective of this project is to identify the program elements, issues and the steps necessary to build on and enhance the program.

A final document will provide a guide to reach the goals of the infrastructure sharing program providing clear documentation of the program mandate and the alignment between the mandate and the department strategic goals.

Objectives are to:

- Identify the existing program elements
- Identify the existing issues in the program
- Identify and Develop the necessary steps to build on and enhance the program

### **Summary**

The Regional Municipality of York shares space on its water towers with telecommunication service providers such as Bell and Rogers (the Licensee). The Licensee is granted permission to install and operate telecommunications antenna and associated equipment on water tower storage structures of the Region under a predetermined agreement and established fee structure. This is in compliance with a corporate directive that intends to minimize the visual effect of infrastructure required for antennae; it limits the number of communication towers throughout the Region. This generates significant revenue for the Region but does present operational issues for the Environmental Service Department.

In general, the main problems the Region staff identified are staff roles and responsibilities, public concerns over safety and unsightliness, multiple electrical services on the same site, security, contract violations, application processing period too long, code violations, electro-magnetic interference (EMI) and health & safety issues. Managing the issues and interest of the many stakeholders involved in the program adds to the difficulty in maintaining safety and security. A final solution and recommendation for each of these problems is addressed, however, the main recognized issue with the program is the management and lack of overall effort contributed which is leading to a majority of these problems.

It has been identified that currently the operating staff from the Department appear to only get involved when problems arise, they do not actively partake in the Design & Construction stage. The Telecommunications Account Representative (TAR) sends out monthly updates on the program, however, these may not receive the full attention required due to resource limitations. As a result, issues that may exist may not be found out until after the Carrier has installed and is operating the system. Rather than just

be a collection of individuals called upon when issues arise, the team must have the management, technical, functional, policy, and public skills necessary to address the variety of challenges that are encountered with the water tower Infrastructure Sharing Program. Management of resources also includes the specialist sub-consultants required to assist with technical reviews such as EMI assessment, coating inspection, and structural evaluation.

Our principle suggestion before moving forward with the recommended solutions is to shift the Region's overall attitude towards this program and realize its potential. There is considerable revenue from this program, and if managed appropriately with a little more effort the underlying issues can be mitigated.

This report presents recommendations to address the problems the Region has identified. The next step is for the Region to identify the resources they will have available for the program and what recommendations they want to adopt. The recommendations will be updated based on the Region's available resources, decisions, and overall comments.