



Town of Huntsville Staff Report

Meeting Date: January 11, 2023

To: Council

Report Number: OPS-2023-1

Confidential: No

Author(s): Tarmo Uukkivi, Director of Operations and Protective Services

Subject: River Mill Park Permanent Washroom Design and Site Preparation Update

Report Highlights

Report presenting the final design plans for the permanent washroom solution for River Mill Park. This report also presents options for Council to consider related to site preparation for the selected washroom site. The report further recommends the addition of a new segment of walking trail to access River Mill Park and the New Washroom facility.

Recommendation

That: Council accept the final exterior design of the washroom as attached to report OPS-2023-1;

And Further That: Council directs staff to proceed with the necessary site preparation - including the recommended removal of all trees to ensure public and property safety;

And Further That: Council directs staff to proceed with clearing a walking trail from West Street North - Between Susan Street East and Caroline Street East - into River Mill Park - terminating at the site of the new washroom facility;

And Further That: Council directs staff to complete the Washroom Facility installation with landscaping that includes planting of traditional Indigenous Peoples' medicines - including cedar and sweetgrass - together with replacement trees of appropriate species in appropriate locations.

Background

General Background

River Mill Park is a year-round premiere event and play space in the Town of Huntsville. The Park plays host to several high profile events each year. The park attracts small and large crowds alike.

Event organizers are required to provide ample washroom facilities using portable toilets during large events. Washroom facilities previously available to park users located at the Coldwell Banker building are no longer available for public use. The only publicly available washroom facility on a daily basis are located at Town Hall.

The Town Hall washrooms remain available for public use. The location of the Town Hall relative to the Park is not ideal for park users - especially park users with accessibility considerations.

The Town Hall Washrooms are limited in availability primarily restricted to business hours.

Council Direction

Staff have been directed to work on a design and build new, permanent washrooms in River Mill Park. The selected site is in a clearing, behind trees and shrubbery, located on the north end of the parking lot that is located between the band shell and the children's play structures. The build of the new facilities is to be funded thanks to a generous donation from an anonymous donor.

Since Staff received Council direction on September 26, 2022 (previous term of Council), the contract for the ready-built solution has been awarded, a purchase order issued, and site preparation and planning work is underway.

This report provides an overview of project progress to date and seeks further Council direction, including delegated authority to fully manage this project to completion.

Discussion

Current Project Status

The design, build, and installation of the Permanent Washroom Facility in River Mill Park has been awarded to Niu Smart Toilet operating from Montreal, Quebec.

- The contract has been awarded through a competitive process.
- Purchase Order has been issued including all contractual requirements.
- Concept design renderings in River Mill Park have been provided (attached to this report).
- Site preparation planning has been started.
- Power line clearing has been completed by Lakeland Power Distribution Ltd.
- The Town of Huntsville has received an arborists report recommending removal of all mature trees along power lines in the northwest corner of River Mill Park (adjacent to children's play structure and parking lot).
- Staff continue to work with Niu Smart Toilet to finalize design, build, delivery, and installation details.

Staff, working with Niu Smart Toilet, have determined a final installation date - on or before - May 1, 2023. The goal is to have the new permanent washroom facility fully open and functioning for the peak summer season.

Site Preparation - Tree and Shrub Removal

The preparation of the site has begun. The first step has been the clearing of the power distribution lines that enter into River Mill Park. These power lines are required to connect the new washroom to electrical service.

Results of Power Line Clearing Work

Necessary line clearing work was completed late in 2022. These lines have received regular clearing work over many years. The results of the most recent clearing work have opened up the lines, revealing significantly imbalanced and misshapen trees. The trees are misshapen and unbalanced due to line clearing work. The line clearing work also left trees with no remaining limbs, looking very much like wooden poles.

A quick inspection by our Town Parks team together with the Director of Operation and Protective Services and the CAO led staff to request a formal assessment of the condition of the remaining trees.

Arborists Assessment of Remaining Trees

Coulson Bros. Arboriculture was retained to have a certified arborist complete an assessment of the remaining trees. The arborist's report is attached to this report. The arborist is certified as a Master Arborist with 20 years of tree assessment experience and is specially qualified by the American Society of Consulting Arborists and is Tree Risk Assessment qualified.

The arborist's report provides an inventory of the species and types of trees that remain, including pictures. The report outlines five (5) categories of concerns:

1. Live Crown Ratio - heavy weight of remaining limbs at top of tree with no limbs lower around trunk increases risk of falling over (imbalanced weight).
2. Uneven Weight Distribution around the trees - remaining limbs are predominantly on the north side over the clearing planned for the new washroom. This increases risk of falling over (imbalanced weight).
3. Weak "sucker" growth of new limbs - these are large limbs that grow out of the tree's attempt to live. These limbs can be very heavy and are high risk for breaking off - especially in already diseased trees (imbalanced weight and risk of injury to public or damage to property).
4. Large cuts from past pruning - opens trees up to disease, inability to heal and rot (risk of tree falling, injury to public or damage to property).
5. Planned, required excavation for site preparation - this risk is an unavoidable risk that disturbs the remaining tree's root structures (weakening tree, risk of falling, injury to public or damage to property).

The overall result of the assessment is that the remaining trees are at a high risk for falling or losing large limbs. This result could happen at any time but the risk is increased in windy or stormy weather.

The arborist notes that there is no way that further pruning or clearing work would make the trees safe. In fact, the arborist's report notes that further work would only make trees more susceptible to disease and rot, further increasing the risks associated with leaving remaining trees in place. The final assessment when combining the risk of failure with the amenities and traffic in the park is a moderate to high risk.

The arborist's report recommends **complete removal of the trees** prior to beginning any work on the new washroom structure.

Concepts to Consider to Replace Greenspace

Staff have developed a plan, for Council's consideration, to help mitigate the loss of these trees.

The plan includes:

- Landscaping work around the new Washroom Facility including the planting of Indigenous Peoples' traditional medicines - cedar and sweetgrass.
- Planting of additional trees - species appropriate for location and in places that will not interfere with power lines or the washroom building.
- Clearing and restoring a walking trail from West Street North (between Caroline Street East and Susan Street East) down into River Mill Park through the established forest - accessing the washroom facility building and the park.

The staff-proposed plan re-establishes a former walking trail through the existing thicket of trees on the north-western boundary of River Mill Park. This walking trail will improve access to the park and the new washroom facility. The walking trail also aligns with active transportation principles and increasing the walkable trail system within the Town of Huntsville.

Trees that would be considered for planting are already in parks inventories. The most important factor that staff will consider in re-planting of trees is that the new locations not interfere with the existing power lines or the new washroom facility. Strategically locating these trees avoids the need for pruning and other work that may damage trees in the future, keeping trees strong and healthy.

Cedar and sweetgrass are two traditional Anishinaabe - among other Indigenous Peoples' - medicines. The Town of Huntsville purchased cedar and sweetgrass for planting as part of its continuing commitment toward reconciliation and occupying traditional Indigenous lands. These plants were originally intended to be planted near the Commitment Rock beside Town Hall. Planting of these plants was not possible because the root structures would likely have been damaged and the plants would not have survived. Planting of these plants provides another opportunity to affirm the Town's commitment toward true reconciliation.

The removal of shrubs and brush and the planting of new trees allows for replacement of non-native and invasive species, e.g., buckthorn, with native species of trees.

Project Management - Moving Forward

As the project moves ahead, there will be many decisions that need to be made. These decisions will require quick responses. There are only four (4) regular Council and Committee cycles between now and the targeted opening of the new Washroom facility. While special Council and Committee meetings can be called to make service-level and budget-related decisions, the regular Council cycles are far enough apart that Staff cannot maintain the agility and responsiveness required to make project-level decisions if all project-level decisions need to be brought to Council.

Delegating authority for project-level decisions to the most appropriate Staff representative maintains the required project agility to complete the project on-time and on-budget. The appropriate Staff representative should be tasked with regularly updating Council and seeking guidance and direction from Council should service-level or increases in budget be required.

Options

Option 1 (Recommended): Remove all trees recommended in the arborists report (attached) to prevent potential injury to public or damage to property. After diseased and damaged trees have been removed, complete site preparation and installation of permanent washroom facility. Finish project with landscaping that includes the planting of traditional Indigenous Medicines (cedar, sweetgrass), and plant additional trees in appropriate locations, replacing trees removed.

Option 2 (Not Recommended): Leave existing trees in place - clearing out brush under tree canopy - continuing with site preparations, minimizing changes to park landscape.

Option 3 (Not Recommended): Remove only trees that have had all limbs removed by Lakeland or that present an immediate risk to the new washroom building, leaving as many trees in place as possible - clearing out brush under tree canopy - continuing with site preparations.

Capital

Capital implications relate to the site preparation work approved at an estimated cost of \$60,000 included in previous Council direction (212-22). The removal of the trees, based on Council direction received as a result of this report, would be included in this \$60,000 estimate. Other site preparation works include the installation of services that includes water, electrical, and wastewater to the site.

The estimated \$300,000 capital cost of the new, permanent washroom is being funded through a private donation.

Operational

Operating costs associated with the removal of the trees is minimal and includes staff time to co-ordinate the work and can be done within the existing base level 2023 operating budget.

Council Strategic Direction / Relevant Policies / Legislation / Resolutions

Reports:

CAO - 2016 - 09
CAO - 2016 - 11
CAO - 2016 - 12
OPS - 2017 - 10
OPS - 2021 - 42
OPS - 2022 - 11
CS - 2022 - 18
OPS - 2022 - 25
OPS - 2022 - 36

General Council Resolutions:

GC72-17
GC199-21

Council Resolutions:

39-15
110-16
152-16
172-16
212-22

Lease Agreement - River Mill Park

2.2 Culture and Wellness

2.2.2 Recreation and Leisure

- a. Goal: CW 2.1: Create a comprehensive community services master plan that promotes long-term strategies for healthy and active living in Huntsville

Relevant Policies:

Budget & Financial -18: Strategic Asset Management Policy

By-law #[2021-21](#) Procurement Policy

By-law #2016-31 Accountability and Transparency Policy

Legislation:

Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure

Plans & Studies:

The Asset Management Plan for the Town of Huntsville

Attachments

[River Mill Park Washroom - Coulson Bros Arborist Report](#)

[River Mill Park Washroom - Niu Smart Exterior Design Concept Rendering - Front](#)

[River Mill Park Washroom - Niu Smart Exterior Design Concept Rendering - Rear](#)

[River Mill Park Washroom - Lakeland Power Distribution Plans](#)

Consultations

Denise Corry, Chief Administrative Officer

Julia McKenzie, Director of Finance/Treasurer

Tina Scott-Burns, Parks Lead Hand

Jeremy Sayers, Board Certified Master Arborist, Coulson Bros. Arboriculture

Respectfully Submitted: Tarmo Uukkivi, Director of Operations and Protective Services

Manager Approval (if required): _____

Director Approval: _____

CAO Approval: Denise Corry - Chief Administrative Officer, Town of Huntsville



Coulson Bros.

ARBORICULTURE

TREE CARE SOLUTIONS

Dec 13, 2022

Greetings from Coulson Brothers Arboriculture,

My name is Jeremy Sayers. I am a Board-Certified Master Arborist, Tree Risk Assessment Qualified (TRAQ) and a member of the American Society of Consulting Arborists with over 20 years experience evaluating trees. I was asked to evaluate a row of evergreen trees at River Mill Park in Huntsville. Below are my findings.

Assignment: The row of trees was recently pruned away from the power lines. There is a plan to install bathrooms directly behind the trees. Some excavation and trenching will be necessary to run water, septic and electricity to the new bathrooms. The town would like to elevate the canopy of these trees to 12 feet and has asked me to evaluate the safety and stability of these trees especially considering the proposed construction of a bathroom near these trees.

Findings: The row of trees consists of 2 scotch pines (one with no limbs on the trunk), 7 Norway spruce trees (1 with almost no limbs on it) and 1 white pine tree. These trees have an average estimated height of 80 feet with trunk diameters averaging between 16 and 24 inches. These trees were recently pruned to clear the power lines. The pruning removed all of the limbs on the middle 20 feet of the trees on the side towards the wires (see for example picture 3 below). Some pruning removed the entire tops of the trees. This amounted to removal of approximately 25% of the canopy of each tree. Some of the limbs that were removed were major branches over 12 inches in diameter (see picture 2). Previous pruning from many years ago has resulted in large "sucker" growth that is weakly attached to the trees and unbalanced the tree canopies (see picture 3). The overall result of repeated line clearance pruning is that two thirds of the remaining live canopy is in the top third of the tree. Last, several of the trees have visible decay and open cavities in the trunks of the trees (see picture 1).

Concerns:

1. Live Crown Ratio: A useful measure of tree vigor and stability is live crown ratio. This is the ratio of the living branches to the overall height of a tree. For example, if a tree is 100 feet tall and the living crown is the top 30 feet, the tree has a LCR of 30. If the same tree had branches all the way to the ground the LCR would be 100. The higher the LCR the more stable and vigorous a tree is. This is largely because a tree with more limbs is better able to dampen the effects of wind. The trees at River Mill Park have a low crown ratio due to repeated power line clearance and this gives them a higher risk of tree failure. Removing lower limbs to a height of 12 feet would further reduce the LCR which would increase the likelihood of failure.
2. Most of the limbs that were removed were on the power line side of the trees. This results in an uneven distribution of weight around the tree. An unbalanced tree is more likely to fail than a balanced tree.
3. For some of the trees, past pruning has encouraged the trees to regrow branches on top. These new branches are often referred to as “sucker” growth. These branches are an emergency attempt by the tree to survive but the new limbs are weakly attached to the tree compared to regular branch attachment strength. All of the upright branches in picture 3 are examples of sucker growth.
4. Large cuts, like those in picture 2, are too big to heal. As a result they often lead to decay which can spread into the trunk of the tree. For example, the trunk decay visible in picture 1 is the long term result of past pruning cuts. Not all decay is visible and it is likely that some decay exists in the other trees.
5. Construction, excavation and trenching (for a new bathroom building) will negatively impact the health of the roots of these trees. Some roots will be cut or torn and others will suffer from compaction due to heavy equipment. This will add to tree stress and will further reduce the stability of the tree as it is the roots that hold a tree upright.

Recommendations: There is no way to mitigate the risks associated with my observations while retaining the trees. More pruning would only make things worse and there's no treatment for decay. Construction would compound tree health problems and increase the likelihood of tree failure. Because trees are tough, they often surprise us and stay standing despite the odds. However, these trees do have numerous risk factors that should be taken seriously. When evaluating tree risk arborists must also consider the likelihood of impacting valuable targets if there was a failure and the consequences of any failure. In this case, the likelihood of impact is high since the trees exist in a park next to a parking area that is usually full of cars and people. Further, any tree failure would certainly impact the power lines and create additional electrical hazards and damage.

Because of the large size of the trees and the existence of numerous valuable targets, the consequences of failure would be severe.

When possible tree failure is combined with a high likelihood of impacting a target and the impact would result in significant or severe consequences, I must conclude that these trees present a moderate to high risk level. The building of a new bathroom underneath these trees would increase the likelihood of failure due to root damage and further, the new bathroom would create an additional new potential target. It is my recommendation that these trees be completely removed before building a new structure under their canopies.

Picture 1: Decay and open cavities in main trunks of trees.



Picture 2: Large cuts of major limbs.



Picture 3: Large “sucker” growth from old cuts. These limbs are weakly attached and unbalance the trees.

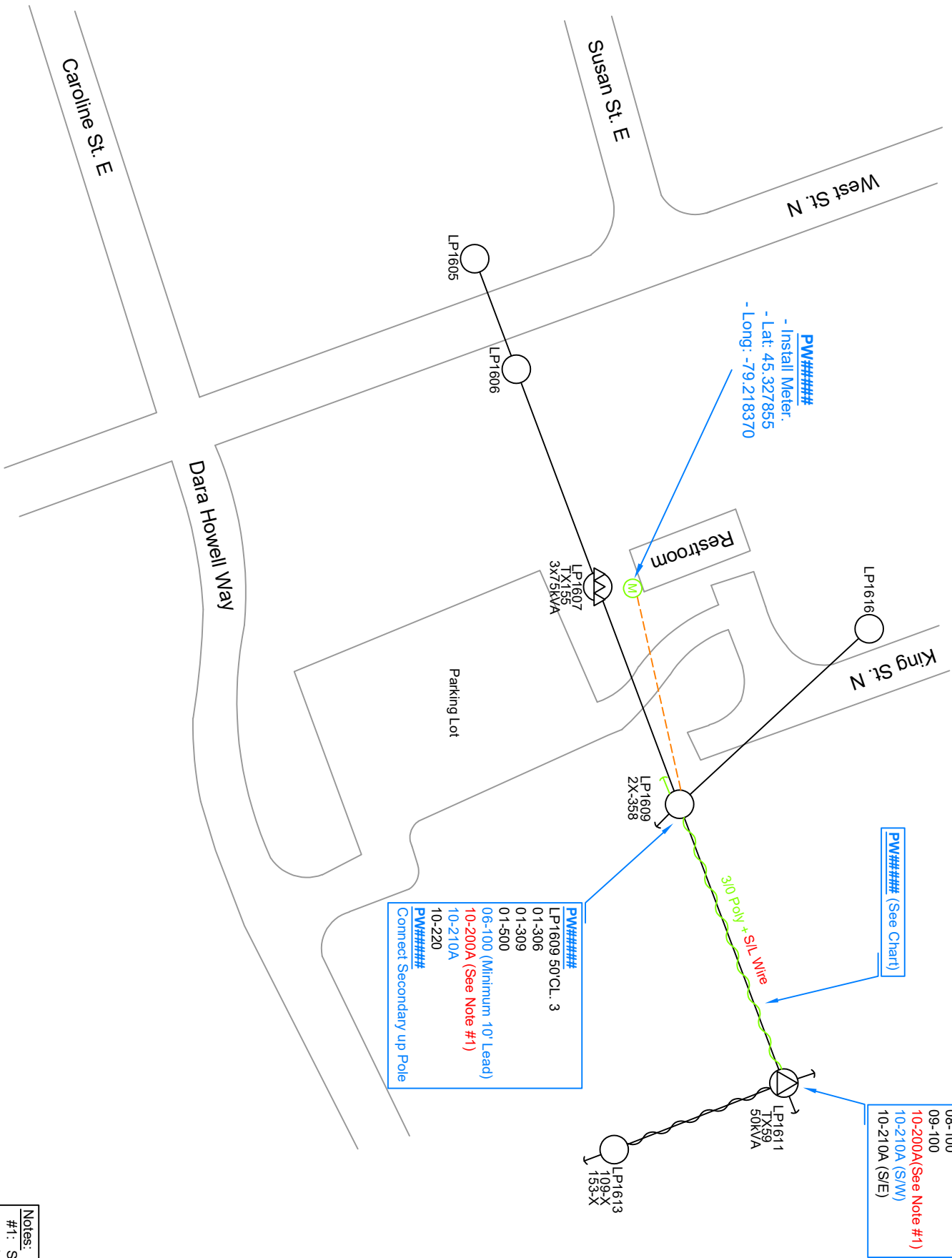
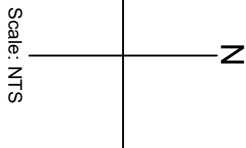


Jeremy Sayers
Board-Certified Master Arborist
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New Conductors - PW#####			
Type	From	To	Length
3/0 Poly	LP1611	LP1609	2x50m



POLE

POLE MOUNTED TRANSFORMER

POLE MOUNTED 3ø TRANSFORMER

POLE MOUNTED TRANSFORMER

PAD MOUNTED 3ø TRANSFORMER

METER

GUY & ANCHOR

PRIMARY OH

PRIMARY U/G

SECONDARY OH

SECONDARY U/G

SPAN GUY

BUS BREAK

EXISTING PLANT

INSTALL PLANT

REMOVE PLANT

HYDRO WORK

CONTRACTOR WORK

EASEMENTS

CONSTRUCTION INSPECTION

This certifies that the construction recorded on these documents for LP is consistent with the Approved Plan, Standard Designs, Work Instructions or Legacy Construction and that approved equipment was used. Construction meets the safety requirement of section 4 of Ontario Reg. 22/04.

CONTACT: MARK DAWOOD

SIGNATURE:

SERVICE & CUSTOMER INFORMATION

JOB TYPE: NEW 100A U/G SERVICE

CONTACT: TINA SCOTT-BURNS

PHONE: 705-783-9254

COMPANY:

ADDRESS: 10 KING ST. HUNTSVILLE

CUSTOMER: TOWN OF HUNTSVILLE

Notes:

#1: S/L Wire to be Removed from LP1611 to LP1609. Energize existing S/L off New 3/0 Poly.

LakelandPower

PROJECT: NEW SERVICE FOR PUBLIC RESTROOM

DWG BY: MARK DAWOOD

REVIEWED BY: JORDAN NICKASON

DWG TYPE: LAYOUT

WORK ORDER: PW20340

DATE: DECEMBER 9th 2022

REVISION:

PROJECT ID: GEN SER

Lakeland Power Responsibilities:

1. Refer to drawing for details:

Customer Responsibilities:

1. Install meter base in accessible location to be approved by Lakeland Power.

2. Demarcation Point between Lakeland Power to be at the Secondary Connections at Pole LP1609.

3. Meter base shall be located 1.0m minimum from windows, doors and other openings.

4. Meter base and conduits shall have a 1.0m radial obstruction-free area from gas meters, communication structures, fences, trees, plants, shrubs and other structures that owners may install.

5. Meter base shall be located a minimum of 3.0m from propane tanks.

6. Note that Lakeland Power will not take ownership of ACWU cable.

7. Supply and install customer-owned secondary cable per Ontario Electrical Safety Code.

8. Supply and install Buried Cable Warning Tape at 8" below finished grade spanning full length of trench.

9. For AWCU cable, provide a PVC weather head and minimum 10 metal saddle clips per run of cable for installation on pole.

10. Secondary cable to be coiled a minimum of 35' at the base of pole for connection.

11. Cables to be trenched to a location at the pole that does not interfere with existing equipment or attachments.

12. Customer is to inform Lakeland Power of cable sizing immediately to ensure Lakeland Power has sufficient connectors in stock.

Conditions/Notes:

13. Drawing is not to scale. All locations of buildings, driveway, new infrastructure, etc. may not be exactly as shown on the drawing.

14. Additional charges will apply above estimate for work not anticipated.

15. Customer is responsible for all required surveys, easements, permits, or other requirements from all parties.

16. Work may be subject to approval from the applicable road authority.

17. Customer is responsible for ensuring work area is accessible and clear of all vehicles, snow, fill, debris or other obstructions.

18. Service layout is valid for 6 months from the time received by the customer.

19. Customer is responsible for obtaining underground locates from all utilities.

20. All work to be done to Ontario Electrical Safety Code where applicable. ESA Connection Authorization required before connection.

21. Customer to restore all existing finishes to like condition or better.