

TOWN OF TILLSONBURG

# **BUILDING CONDITION ASSESSMENT AND CAPITAL PLANNING STUDY 8 ROSS STREET, TILLSONBURG, ON**

OCTOBER 12, 2017





# **BUILDING CONDITION ASSESSMENT AND CAPITAL PLANNING STUDY**

**LAKE LISGAR WATER PARK  
AND SUMMER PLACE  
8 ROSS STREET  
TILLSONBURG, ON**

**TOWN OF TILLSONBURG**

DATE: OCTOBER 2017

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October 12, 2017

Town of Tillsonburg  
200 Broadway Street, Suite 204  
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**Attention: Mr. Corey Hill, Manager of Parks & Facilities**

**Subject:** Facility Condition Assessment and Capital Planning Study  
Lake Lisgar Water Park & Summer Place  
8 Ross Street, Tillsonburg, ON

Dear Mr. Hill:

We are pleased to submit a draft copy of our Facility Condition Assessment and Capital Planning Study Report on the visual evaluation of the associated site, building, structural, mechanical and electrical elements in the Lake Lisgar Water Park and Summer Place buildings located at 8 Ross Street in Tillsonburg, Ontario.

This report was produced by WSP Canada Inc. in accordance with the scope of work outlined in our proposal dated September 15, 2017.

If you have any questions or concerns, please feel free to contact our office.

Sincerely,  
WSP CANADA INC.

A handwritten signature in black ink, appearing to read 'T. Gonsalves', with a large, stylized flourish underneath.

Trevor Gonsalves  
Senior Engineer, Building Sciences

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This report was prepared by WSP CANADA INC. for the account of Town of Tillsonburg, in accordance with the professional services agreement. The disclosure of any information contained in this report is the sole responsibility of the intended recipient. The material in it reflects WSP CANADA INC.'s best judgement in light of the information available

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# 1 EXECUTIVE SUMMARY

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## 1.1 INTRODUCTION

WSP Canada Inc. (WSP) was retained by the Town of Tillsonburg to complete a Facility Condition Assessment (FCA) and Capital Planning study for the Lake Lisgar Water Park and Summer Place buildings located at 8 Ross Street in Tillsonburg, Ontario.

The Lake Lisgar Water Park building is a single storey masonry and wood framed structure with a reception / office area in the central portion and change rooms on the north and south sections. There is a basement area below the central portion of the building. We understand that the original building was constructed in the 1940's and is therefore approximately seventy-seven (77) years old. A canteen was later added on the north side of the building at some time in the early 2000's and is therefore approximately seventeen (17) years old.

The Summer Place building is also a single storey structure with a basement. The south section of the building is a masonry and wood framed structure while the north and west sections are masonry and steel joist structures. The basement area on the east side extends beyond the building footprint and is constructed of reinforced concrete walls and roof slab. The original building was most likely constructed at the same time as the adjacent Lake Lisgar Water Park building and is therefore approximately seventy-seven (77) years old. The age of the basement extension is unknown.

This assessment was completed to review the current condition of the various building systems and an overview of the buildings and potential future capital costs. It should be noted that this investigation was based on a visual inspection only. No destructive testing was completed at this time.

The visual site reviews of the building envelope, structural, accessibility and environmental components were performed on September 26, 2017. The review of the mechanical and electrical systems was conducted on September 29, 2017.

Selected photographs of the conditions noted during our site reviews are included in Appendix A of this report.

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## 1.2 FACILITY CONDITION

In our opinion, the buildings overall are in fair and serviceable condition.

All expenditures associated with repair and replacement of the various building components are presented in the Capital Planning Table in Section 4.

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### 1.2.1 LIFE EXPECTANCY OF FACILITY

It is our opinion that the existing buildings can be maintained and continue in operation for at least another 15 - 20 years, provided that the repairs recommended herein and presented in Section 3 are carried out in a timely manner consistent with the time frames identified in this report.

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## 1.3 OPINION OF PROBABLE COST

The estimated repair replacement costs presented in Section 4 of this report are in 2017 dollars for the work that, in our opinion, is required to maintain the integrity of the property.

All costs provided are opinion of costs only. The costs do not include an inflation factor and soft costs which may be incurred such as professional fees, taxes, insurance permits etc. Opinion of costs are based on good engineering practice and the Consultant's experience with work of a similar nature. However, any opinion of costs provided are subject to

confirmation or adjustment at the time competitive bids are obtained from contractors who specialize in the various items of repair work required. The Consultant makes no representation or warranty expressed or implied as to the reliability of these opinion of costs.

# 2 GENERAL PURPOSE, SCOPE OF WORK AND LIMITATIONS

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## 2.1 GENERAL PURPOSE

The purpose of our condition assessment survey was to visually assess the present physical condition of the on-site property elements, buildings and related structures; identify areas with deteriorating/deficient conditions or with anticipated probable end of service life; make recommendations regarding areas in need of repair or replacement over the evaluation period of this report; and provide our opinion of budget cost estimates. The opinions of costs presented in this report are intended for global budget purposes only. Actual costs for work recommended can only be ascertained after preparation of tender documents, determining site restrictions and establishing a construction schedule. The scope of work recommended in this report must be confirmed with a more detailed site investigation prior to implementation. This report is subject to the included limitations.

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## 2.2 SCOPE OF WORK

The scope of our work included the following:

- Review of available drawings and reports,
- Interview with the current operations manager,
- Visually review and document existing conditions the property/building elements,
- Conduct a visual survey to identify any materials that may potentially contain asbestos, (see Appendix B)
- Carry out an AODA compliance audit, (see Appendix C)
- Identify and recommend repair or replacement of the property/building elements that can be anticipated during the evaluation period of this report.
- Estimate the probable cost associated with recommended repairs/replacements, and
- Prepare report outlining our observations, findings and recommendations.

Our work did not include the following:

- Destructive or non-destructive testing of the building components,
- Review of the concrete pool shell and water slide structure;
- Testing of life safety systems,
- Calculations to confirm the adequacy of the original design,
- Hazardous substance survey,
- Removal of material samples for asbestos testing;
- Detection, testing assessment and reporting on lead paint; and
- Detection, testing assessment and reporting on fungi (including but not limited to yeast, mould, mildew, rust, smut or mushroom).

The major components and systems surveyed included:

- Site Features,
- Building Structure,
- Building Envelope,

- Roofing Systems,
- Interiors,
- Mechanical Systems,
- Electrical Systems, and
- Fire and Life Safety Systems.

Projects or tasks less than a threshold value of \$2,500 are excluded from our capital plan and should be undertaken as operating and maintenance expenditures.

## 2.3 AUDIT TEAM

The following individuals comprise the audit team for this study:

**Table 2.1 Audit Team**

Trevor Gonsalves, P. Eng.	WSP CANADA Inc.	Building Envelope, Interiors, Site Features
Kevin Hu, P. Eng.	WSP CANADA Inc.	Building Structure
Cherisse Vanloo, P. Eng.	WSP CANADA Inc.	Mechanical & Electrical Systems
Danielle Vella, Environmental Officer	WSP CANADA Inc.	Asbestos Review
Val Rogojine, PMP®, M. Arch.	Architecture49 Inc.	Accessibility Review

## 2.4 REFERENCE MATERIALS

No reference materials were available for our review in preparing this report:

## 2.5 LIMITATIONS

The information contained in this report represents the professional opinion of WSP Canada Inc. (the Consultant) and their best judgment under the natural limitations imposed by the Scope of Work.

This report is intended solely for the Client named as an indication of the physical condition of the building components addressed in the report. The material in this report reflects the Consultant’s best judgment in light of the information available to it at the time of preparation.

Any use a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. The Consultant accepts no responsibility for damages, if any suffered by any third party as a result of decisions made or actions based on this report.

This report is limited in scope to only to visual examination of the building and those building components that are specifically referenced in this investigation and was limited to areas that could be safely accessed or viewed. No destructive or non-destructive testing was carried out on building systems or components and no design analysis of the capacity and adequacy of existing systems was carried out unless otherwise indicated. There may be existing deficiencies in this complex that we did not record in this report. Such deficiencies were not apparent to us due to the limitations imposed by the scope of work. We can, therefore, accept no liability for any costs incurred by the Client for subsequent discovery, manifestation or rectification of such deficiencies.

Any costs for repair in this report are the Consultant's opinions of probable construction costs and quantities. Cost estimates are based on good engineering practice and reference costing publications (Means and Yardsticks for Costing) combined with the Consultant's experience with work of a similar nature. These estimates do not include any unforeseen conditions that require repair at the time the repair work is being completed. Any cost estimates provided are subject to confirmation or adjustment at the time competitive bids are obtained from contractors who specialize in the various items of repair work required. The Consultant makes no representation or warranty expressed or implied as to the reliability of these cost estimates.

Do not use any part of this report as a separate entity. The report has been written to be read in its entirety and for the exclusive use of the Client named.

All files, notes, source data, test results and master files are retained in the offices of WSP Canada Inc. and remain the property of the Consultant.

# 3 OBSERVATIONS

A walk-through visual review was carried out of all major systems of the buildings / property including site features, building structure, building envelope, roofing system, mechanical systems, electrical systems, fire and life safety systems and interiors. Access to the building was provided by the operations manager.

The following sections summarize the findings of the visual inspection, assessment and recommendation made for each major system of the complex.

Selected photographs are included in Appendix A to the report for the reader's reference.

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## 3.1 SUMMER PLACE

The Summer Place building is a single storey structure with a basement. The main floor of the building is used for summer camps while the basement is occupied by the Tillsonburg Rowing Club. The main floor of the building is approximately 200 square metres and the basement level is approximately 410 square metres.

Access to the site is provided by a gravel paved entrance driveway off of Ross Street. There is also a gravel driveway on the south side of the site which provides access to the Tillsonburg Rowing Club.

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### 3.1.1 SITE FEATURES

To assess the physical condition of the site features a visual site review was conducted. No destructive or non-destructive testing was conducted. The following sub-sections summarize our findings of the visual inspection and assessment of the site.

#### **FENCING**

A 1.2 metre high metal chain link fence is provided along the perimeter of the site at the west side of the building. The chain link fencing is generally in good condition with local areas of rust noted.

#### **CONCRETE SIDEWALKS AND STAIRS**

A concrete landing is provided at the north entrance to the building. This landing is in good condition.

A cast-in-place concrete stair which provide access to the adjacent parkette is located at the south side of the site. This stair is in serviceable condition with areas of deterioration noted on the sidewalls. These deteriorated areas should be repaired as part on ongoing maintenance.

There is a precast stone stair leading from the gravel paved parking area down to the access driveway to the Tillsonburg Rowing Club. This stair is in good condition. While a guard is not required on this stair, it is suggested that a handrail be installed to assist pedestrians using the stair.

#### **RETAINING WALLS**

There is a boulder retaining wall located along the west side of the access driveway to the Tillsonburg Rowing Club. The retaining wall is generally in good condition although it appears that a section of the wall was removed to accommodate the installation of the precast stone stair. Replacement of the boulders adjacent to the stair should be carried out as part of building maintenance.

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### 3.1.2 BUILDING STRUCTURE

To assess the condition of the building structures, a walk-through visual review was conducted. Some areas of the structure of the buildings were concealed by the roofing, wall cladding from the exterior and by the architectural finishes in the interior areas. No dismantling of any architectural finishes was completed to expose the concealed structural components. No destructive or non-destructive testing was conducted. No calculations were performed to confirm the structural adequacy of the original design.

The Summer Place building is a one-storey building with a basement level and a half below-ground rowing club storage facility on the east side of the main building. The basement of the main building is also used by the Tillsonburg Rowing Club for storage.

The front portion of the main building used to be an office and is measured as approximately 8.1 meters x 7.8 meters (26'-6" x 25'-6"). The rest of the main building consists of two rectangular sections. Directly north of the office is an approximately 7.6 meters (25') wide and 15.3 meters (51') long open space that was once used as a day care facility. There is an approximately 6.8 meters (22'-4") wide and 5.5 meters (18') long washroom addition at the northwest corner.

The exterior of the main building is mostly exposed concrete block walls except the west wall of the office which is clad with vinyl siding and the Summer Place sign. A basement level exists below the day care space. An opening was cut in the concrete foundation wall at the south-east corner in the basement to the rowing club structure, which is roughly 7.2 meters (24') wide and 22.3 meters (73"-3") long.

We were not provided with any original building record drawings at the time of this report. The age of the building was unknown.

#### MAIN BUILDING

An 1800 mm (6') wide precast concrete stair is located at the front door of the office for access. The height at the top landing is approximately 670 mm above grade. A steel railing was only installed on the east side of the stair. A railing should be provided on both sides of the stair.

The interior of the office was covered with ceiling tiles and gypsum wall boards. The floor was covered with vinyl tiles. Ceiling tiles in the office were removed at certain locations to review the structural framing. The roof framing consists of 2x12 wood roof joists spanning in the west-east direction and rest on the west and east perimeter wood stud walls with Simpson joist hangers. The roof joists overhang by approximately 600 mm (2') at the east end. Roof joist cross bridging was found at the one-third points of the joist span. The perimeter walls are framed with 2x4 sawn timbers spaced at 400mm (16") on centre and are clad with 200 mm (8") concrete block on the exterior side.

In the day care space, the walls are covered but most of the ceiling tiles were missing. The building roof framing in this area consists of 38 mm (1-1/2") steel decking supported on 350 mm or 14" deep open web steel joists (OWSJ) spaced at 1,470 mm (4'-10"). The open web steel joists span approximately 7.6 meters (25') from west to east and are supported on the 200 mm (8") thick concrete block exterior walls. There is a stair going down to the basement at the north end of the day care space. There is a considerable amount of mould growth on the drywall in the stairwell (Refer to the Environmental section of this report for more details). The other areas of the basement appears to be dry and no mould was noted.

A T-bar ceiling is present in the basement but the ceiling tiles were missing at multiple locations. The ground floor framing consists of concrete topping on steel pan spanning in the north to south direction between the 300 mm (12") deep open web steel joists at a spacing of approximately 610 mm (2'-0"). The open web steel joists are generally supported by 200 mm (8") thick concrete block walls on top of the reinforced concrete foundation wall. An opening of approximately 2,100 mm (7'-0") wide was cut in the reinforced concrete foundation wall at the north-west corner in the basement for access into the rowing club. This results in a 178 mm (7") deep lintel beam to support the ground floor loads over the 2,100 mm (7'-0") wide door opening. The lintel beam does not have sufficient capacity and therefore failed and cracked at the middle span. A steel reinforcing frame made of 2 – 89 mm (3.5") steel round posts supporting a W150 steel beam was installed to replace the concrete lintel beside the foundation wall and tight against the top chord of the open web steel joists.

The washroom addition was enclosed by 200 mm (8") concrete blocks walls on all sides with the roof framing being 38mm (1-1/2") steel deck on W200 steel beams running west to east. The W200 beams are supported in the masonry concrete

block wall pockets. The steel deck is supported by 150 mm (6") deep steel channels that are bolted to the face of the concrete block walls on the south and north sides. The concrete floor slab in this area appear to be in sound condition.

Our visual review of the interior finishes and the exterior cladding did not reveal any indications or signs of structural distress due to structural deficiencies, deterioration or previous overloading of the building structure. Where exposed, no significant cracks or signs of settlement were noted with the perimeter foundation walls. There were no indications of significant deformations in the roof structure.

The overall condition of the building framing was considered in good condition except the following deficiencies noted during the site review that will require remediation:

- The face shell of 3 concrete blocks were demolished in the 8" load bearing wall adjacent to the bearing pocket of the W200 beam from the addition possibly when installing the copper pipes. As a result, the closure angle of the roof deck is now unsupported for a length of approximately 750 mm (30"). The wall openings need to be closed by restoring the concrete blocks.
- We also recommend that a steel railing be installed on the west side of the stair at the south entrance to the building to prevent a fall hazard.

## **ROWING CLUB**

The foundation walls of the rowing club structure are 300 mm (12") thick reinforce concrete walls all around. Precast concrete hollow-core planks 1,890 mm (4'-0") wide with a concrete topping were placed on the concrete foundation walls and span in the west to east direction. The walls and slabs generally appear to be in good condition on the interior side. The interior slab-on-grade exhibits very mild scaling, especially close to the south overhead door, but is generally in fair condition. South-north spanning W410 steel beams on HSS 150 x 150 columns were erected as intermediate supports for the roof slab. Horizontal arms were also attached to the vertical HSS columns as the boat single sided storage racks.

- Extensive water stains were observed on the roof steel beam. This has not caused the steel beam to rust as yet. Signs of water ponding was also noticed on the roof directly above the steel beams with water stains.
- The steel stair that leads to the roof is showing extensive paint peeling and rust. The top landing of the stair is tilted due to the lack of one supporting leg. This has resulted in a step of almost 50 mm (2") to the top surface of the roof, which presents a tripping hazard for anyone who is accessing the rowing club roof. We suggest that a new stair that is supported by steel posts on concrete caisson foundations be installed at this location.
- At a few locations, concrete parging on the side of the roof slab showed cracking and spalling. This occurs mostly at the joints between the concrete topping and the precast slab due to their different material properties and shrinkage rates. We suggest that the concrete parging be removed and reapplied in these areas with new parging. There are also long cracks along the joints between the precast concrete planks. These cracks had been repaired and the planks are in reasonable service condition.
- The metal railings around the roof slab are showing peeling paint, and rusts at some locations. We suggest that the railing be cleaned with a wire brush down to bare steel and repainted with zinc-rich paint and a top coat.

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### **3.1.3 BUILDING ENVELOPE**

The building envelope consists of above grade exterior walls, glazing and doors. To assess the condition of the building envelope a walk-through visual site review was conducted. We reviewed the exterior walls and glazing from grade level. No dismantling of any architectural finishes was done. No destructive or non-destructive testing was conducted. No calculations were performed to confirm the adequacy of the original design.

The following sub-sections summarize our findings of the visual inspection and assessment at the building.

## **EXTERIOR WALLS**

The exterior walls of the building generally consist of painted masonry blocks on the north section of the building. The walls of the south section are covered with horizontal vinyl siding. The walls on the north, east and south elevations of the Tillsonburg Rowing Club section of the building are exposed cast-in-place concrete walls. No test openings were made to confirm the wall composition or levels of insulation, if any.

The masonry block walls are generally in good condition. There are local areas of spalled blocks and minor deterioration of the mortar joints on the east elevation of the building.

The paint finish on the walls at the north east corner of the building as well as at the west elevation is deteriorated in local areas. The deterioration noted at the north east corner may be due to a leak through the roof membrane at this location.

The horizontal vinyl siding on the south section of the building is generally in good condition. There is one area of impact damage on the east elevation. The cost of this repair is below the threshold value and should therefore be repaired as part of regular building maintenance. No test openings were made to confirm the wall composition or levels of insulation, if any

The concrete walls of the Tillsonburg Rowing Club are painted. The concrete walls are in good condition but there is minor graffiti on the east wall.

## **WINDOWS**

Windows are provided on the east and south elevations of the building. The windows consist of double glazed operable units in vinyl frames. The vinyl window frames have been retrofitted into the original framing and are in serviceable condition although they are generally not plumb within the frames. This may be due to insufficient support beneath the frames which has caused the frames to sag. Replacement of the windows has been allowed for in the Capital Plan.

The exterior of the windows have been capped with aluminum flashing. Metal security guards are installed on the exterior of the windows. The guards are in good condition although there are minor areas of rust present. The guards should be cleaned and repainted as part of building maintenance. However, it may be necessary to replace them with the new windows.

## **DOORS**

The south entrance door is a wood door with a wood framed screen door. The wood door is in good condition with some deterioration of the paint finish. The door binds on the frame. The screen door is in poor condition and should be replaced.

There are two (2) metal exit doors on the north elevations which provide access to the main section of the building as well as to the washrooms. The door to the washrooms has a wired glass insert in the upper section. The doors are generally in good condition with typical minor scratches present. The closer on the east door at the north elevation is missing and should be replaced.

There is also a metal door on the south elevation which provides access to the Tillsonburg Rowing Club. This door is in fair condition. The paint finish is peeling and the weather-stripping is torn. Minor rust was noted on the hinges. Caulking material has not been installed around the perimeter of this door frame.

There is one (1) sectional metal overhead door on the south elevation that provides access to the Tillsonburg Rowing Club section of the building. This door is in good condition with minor dents noted. Replacement of the door will be required within the planning period.

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### **3.1.4 ROOFING SYSTEM**

To assess the condition of the roofing system, a visual site review was conducted from roof level. No dismantling of any roofing materials or elements was done. No destructive or non-destructive testing was conducted. No calculations were performed to confirm the adequacy of the original design.

#### **BUILDING ROOF**

The roof system installed on the building consists of a built-up felt and asphalt membrane with pea gravel surfacing. The roof system is in fair to poor condition. There are local areas of blisters present as well as exposed asphalt. The membrane is also split at the north side of the roof area.

There is suspected mould growth and water damage on the wall and ceiling finishes in the basement stairwell as well as deterioration of the paint finish on the exterior walls at this location. These conditions are the result of suspected roof leaks.

The perimeter of the roof areas is covered with metal cap flashing. The flashing is generally in good condition. There is a section of damaged flashing at the north side of the west elevation.

Scupper drains are provided at several locations around the perimeter of the roof. The downspouts are missing / disconnected at several of the scupper drains. The downspouts on the north elevation discharge adjacent to the foundation wall of the building. The downspouts should be repositioned to discharge water away from the building.

Roof systems of this type generally have a service life of 30 – 35 years with regular maintenance. Although the age of the roof membrane is unknown, based on the current conditions observed, we recommend planning for roof replacement with replacement of metal flashing and reworking of the downspouts in the short term of the planning period.

#### **BASEMENT ROOF**

The precast concrete panel roof slab over the east section of the basement which extends beyond the footprint of the building is protected by a thin system waterproofing membrane with a wear surface. The membrane is in poor condition. Active water penetration through the roof slab and evidence of water penetration in the form of staining was noted on the soffit of the roof slab panels during our site review on September 29, 2017.

Areas of worn and debonded membrane are present throughout the area. There is no membrane on the north and south side of the roof. In addition, the membrane does not extend to the edge of the roof slab.

Cracks in the concrete slab which have reflected up through the membrane have been sealed with a caulking material at some locations. However, the sealant material has split. Unsealed cracks are also present in the membrane.

Replacement of the membrane system will be required immediately.

A metal picket railing is installed at the perimeter of the roof area. The railing is in fair to good condition. Corrosion of the metal was noted at locations where the paint finish has deteriorated. The railings should be cleaned and painted with a corrosion inhibiting paint.

The height of the railing is 1080mm which complies with the current edition of the Ontario Building Code. However, the spacing between pickets is 108mm which exceeds the maximum opening size of 100mm. Confirmation should be obtained from local building officials whether this variance is acceptable.

The metal access stair at the north side of this roof has settled and currently presents a trip hazard to pedestrians. This stair should be replaced within the short term of the planning period.

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### **3.1.5 INTERIOR FINISHES**

The walls in the building are painted. The paint finish is generally in fair condition with typical scratches noted. The painted block masonry walls in the washrooms are in good condition. The gypsum board finish on the walls and ceiling of the basement stairwell have mould growth and water damage on them.

The ceiling in the main area consists of ceiling tiles in a suspended metal framework. This frame is in fair condition. All ceiling tiles in the north section of the building have been removed from the support frame. We assume that these tiles will be replaced when the space is prepared for future use.

Vinyl composite tiles are installed on the floors in the building except for the washrooms which have unfinished concrete floors. The condition of this finish is consistent with the use of the building and is in fair condition

The basement area is generally unfinished. The floor is an exposed concrete slab-on-grade which is generally in good condition with typical hairline cracks present.

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### **3.1.6 MECHANICAL SYSTEMS**

A visual inspection and site review of the base building mechanical elements was carried out on September 29, 2017. Areas reviewed include the exterior and interior service areas. Service rooms include: the service areas located in the basement; washrooms; and the roof top. Record drawings were not available during the site review.

Quantitative measurements for space temperature were not taken. Sanitary and domestic water pipe sizes and capacities were not evaluated, and the natural gas consumption was not investigated. Intrusive testing was beyond the scope of this assignment.

No major deficiencies were observed. The details of the investigations, findings and recommendations are included below.

#### **HVAC SYSTEM**

There is no central heating or cooling. Heating is provided by electric baseboard heaters. The classroom is ventilated by a roof-mounted exhaust fan. The washrooms are ventilated by wall-mounted exhaust fans. These fans should be inspected on a monthly basis. We assume repairs and replacements will be completed as-needed as part of routine maintenance.

#### **PLUMBING SYSTEM**

There is a 5/8-inch diameter main domestic water service located in the server room. There is no backflow preventer installed. Many municipalities are starting to enact bylaws requiring the installation of backflow preventers on the incoming water line. We expect the cost of installation will not exceed the report threshold.

Sanitary drains inside the building and storm drains all appeared to be in functional condition and no problems were reported. We understand the building is about 70 years old. Based on age, we recommend that there be an allowance for repairs to the drainage piping over the report term.

Domestic water piping is copper, where observed. No domestic piping leaks were reported. The facility manager was not aware of any recent distribution pipe replacement. Based on the age of the piping (about 22 years old), we have included a budget for domestic water piping replacement within the report term. We assume isolated pinhole leaks, should they occur, will be addressed as part of ongoing maintenance.

Domestic hot water is provided by a 20L electric hot water tank located in the lower level. According to the data plate, the unit was replaced in 2003. We expect end of service life replacement will be managed as a maintenance expense.

There is a sump pump located on the lower/basement level. The pump is estimated to be about 22 years old with a service life of about 20 to 25 years. Based on age, we have included a replacement budget.

There is a lake adjacent to the property. The building is equipped with a lake aeration system. We did not review any equipment or tubing located in the lake. We have included a preliminary budget for maintenance of the concealed tubing components within the report term. The accessible equipment located in the lower level includes two fractional hp pumps. We expect that the pumps will be replaced as needed as a maintenance item.

## **FIRE PROTECTION SYSTEM**

The building is not sprinklered. There are battery operated smoke detectors and fire extinguishers located throughout the building. No capital expenditures are anticipated. We assume the limited suppression system can be repaired as-needed under regular maintenance.

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### **3.1.7 ELECTRICAL SYSTEMS**

The building electrical system was reportedly replaced around 1995. No major issues were noted or reported.

Quantitative measurements of voltage and amperages were not taken. Destructive testing of any equipment was not performed. A thermographic scan of the electrical panel was not conducted to determine if there are any potential electrical issues. These evaluations are considered to be maintenance items.

## **MAIN SERVICE AND POWER DISTRIBUTION**

The main disconnect panel is rated at 200A, 120/240V.

No performance issues were reported. The main electrical equipment is about 22 years old. Major electrical equipment has an average service life of about 40 to 50 years. The building is approaching an age where some capital expenditures are likely to be needed within the report term, but the scope and timing of such work is difficult to predict. Based on the reported age of the equipment, we have included budget to replace the main disconnect panel. Replacement of smaller panels and individual components may also be needed, but we expect the costs to be below the capital threshold of this report.

We recommend that Thermography Scans and an Arc Flash Hazard Analysis be conducted to verify there are no problems with the current system.

## **LIGHTING SYSTEM**

The interior lighting systems include 2x4 foot strip fluorescent fixtures with T12 lamps and incandescent lamps controlled by manual switches. T12 lamps are being phased out and in some areas ballasts and lamps are becoming difficult to obtain. Ideally, these lamps would be replaced with more energy efficient or readily available fixtures or lamps (T8, T5 or LED). We have included a preliminary budget to replace the T12 fixtures with a modern alternative. Lighting retrofit incentives/rebates may be available to offset the cost of this work but change over time so they have not been considered in this budget.

Exterior lighting consists of pole mounted and wall pack flood lighting that illuminate around the building. These lights appear to be controlled by a timer. No issues were noted or reported. We expect maintenance will be carried out as an operation expense.

## **FIRE ALARM**

The building is not equipped with a central fire alarm panel.

## **EMERGENCY POWER**

There is no permanent emergency generator.

Emergency lighting consists of emergency heads and battery units located throughout the building. Where reviewed, the battery pack lighting systems appear to be in serviceable condition. The system is reported to be maintained regularly. With good maintenance practices restored and/or followed, we do not anticipate any capital expenditures during the 25 year report term.

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### **3.1.8 ASBESTOS MATERIAL SURVEY**

Our review of the building indicated that there are approximately twenty-five (25) building materials which are suspected of containing asbestos. Refer to the Potential Asbestos Material Survey included in Appendix B of this report.

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### **3.1.9 ACCESSIBILITY**

An AODA review of the building was performed at the Town of Tillsonburg's Summer Place buildings located at 8 Ross Street in Tillsonburg. It also identifies prospective areas of upgrades required to improve accessibility for the building's public space users.

The inspected building has a variety of accessibility issues ranging from total noncompliance to partial compliance with various accessibility standards. While some of these issues are relatively inexpensive to mitigate, the others, such as issues with washrooms and barrier free access most likely will require extensive renovations.

Capital costs for this work are presented in the Accessibility Report in Appendix C. Since this work is dependent on potential future uses and whether the Town of Tillsonburg decides to bring the building up to current accessibility standards, we have not allocated a time frame in which the work is to be carried out. Refer to the Accessibility Report included in Appendix C of this report.

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## **3.2 LAKE LISGAR WATER PARK**

The Lake Lisgar Water Park building is a single storey structure with a partial basement. The main floor of the building contains an administration area and men's and women's change rooms. The original section of the main floor of the building is approximately 264 square metres. The canteen addition at the north side is approximately 38 square metres.

Pedestrian access to the site is provided by asphalt paved walkways off of Ross Street and the gravel paved parking lot for the adjacent playground / park. We have assumed that maintenance and repair of the asphalt walkways are carried out as part of operations of the playground / park area.

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### **3.2.1 SITE FEATURES**

To assess the physical condition of the site features a visual site review was conducted. No destructive or non-destructive testing was conducted. The following sub-sections summarize our findings of the visual inspection and assessment of the site.

The north one-third of the area within the complex is a grassed area with a standalone storage shed. The south part of the fenced area consists of a swimming pool on the east side and a one-storey structure with a basement level on the west side.

#### **FENCING**

A 2 metre high metal chain link fencing with barbed wire strands along the top is provided at the perimeter of the complex. The chain link fencing is in fair condition. The fencing is rusted but is still serviceable. Replacement will be required within the planning period.

#### **CONCRETE PAVING AND CURBS**

There is a concrete pad at the main entrance to the building. The concrete is generally in good condition with typical hairline cracks noted but these do not affect the serviceability of the concrete.

The concrete deck around the pool is generally in good condition with typical hairline cracks noted. However, more severe cracking was noted in the concrete at the seating area at the north side of the pool. Replacement of the concrete in this area will be required within the planning period.

Control joints between sections of the concrete deck are sealed with a flexible sealant material. However, the sealant material is split and has debonded in many areas of the deck. Replacement of the sealant will be required in the short term of the planning period.

Refer to the Structural section for additional information.

There is a concrete curb planter on either side of the main entrance to the building. The curbs are in fair to poor condition. The south curb is cracked and has minor displacement and spalling was noted on the north curb. Replacement of the curbs should be carried out within the planning period.

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### **3.2.2 BUILDING STRUCTURE**

To assess the condition of the building structures, a walk-through visual review was conducted. No dismantling of any architectural finishes was completed to expose the concealed structural components. No destructive or non-destructive testing was conducted. No calculations were performed to confirm the structural adequacy of the original design.

The building under review is located in a chain-link fenced area within the Memorial Park in the Town of Tillsonburg. This building is the service facility of the waterpark with washrooms and change rooms, and a reception area on the ground level. The pool mechanical / electrical room is located in the basement. There is a wood-framed addition against the north wall of the main building that is used as a canteen / ice cream shop. An outdoor sitting area with a few tables were placed at the northwest side of the pool. There is a waterslides between the pool and the service building at the south end.

#### **SWIMMING POOL AND WATERSLIDES**

The swimming pool consists of a near rectangular shaped deep water area and a fan-shaped splash pad at the north end. A waterslide with a steel stair was erected on a steel support frame at the south end between the service building and the pool. We understand from the Operations Manager of the Town of Tillsonburg that the swimming pool and waterslide structure have been reviewed by a specialized aquatic consultants on an annual basis and there had been no major structural issues reported in the most recent review.

#### **POOL DECK**

The concrete deck around the pool appears to be in generally good condition with a few scattered cracks. More severe cracking of the concrete slab occurs at the sitting area. Signs of previous repairs were observed but many of the cracks had reappeared. Based on the severity of the condition, we suggest the following:

- Slab injection crack repairs should be carried out for the more scattered cracks found around the pool.
- Temporary slab injection crack repairs can be performed in the sitting area where more severe and densely located cracks occur, so that the facility can be kept in use in the next season. Eventually, we would suggest that the concrete deck be replaced with a new slab on grade with saw-cut joints that are more closely spaced. A geotechnical Engineer should be also be consulted for the soil condition and treatment in this area for the slab replacement.

We have allowed for slab repair and replacement in the short term of the planning period before deterioration worsens which will impede the normal usage of the facility.

#### **MAIN BUILDING**

The rectangular shaped main building on the west side of the pool has load bearing concrete block perimeter walls erected on concrete footings. The building exterior dimensions are measured as approximately 11.2 meters x 24.4 meters (36'-9" x 80'), except with the middle one-third of the building width being 13 meters (42'-8"). There is a basement under the middle section of the building. The basement is used as the pool mechanical room and has a concrete underground service tunnel

that connects the basement to the pool. We were advised that the original service building was constructed in the 1940's and has undergone several major retrofits over the years. It was believed that the only structural components kept from the original construction are the foundations, exterior concrete block walls and wood roof framing.

The original construction of the building roof framing mostly used 2x8 joists spaced at 400 mm (16") in three 3,700 mm (12'-2") spans. At the middle section where the building is wider, the roof joists used are 2x10 spaced at 400 mm (16") with an end span of approximately 4,600 mm (15'-1"). The wood joists are supported on perimeter concrete block walls and steel beams in the middle supports. The overall condition of the wood frame appears to be in fair to good condition.

The floor slab in the south and north sections of the building is a concrete slab-on-grade as is the floor slab in the basement. The floor slab over the basement area is a 150 mm (6") reinforced concrete slab supported on W360 steel beams spanning north to south between the foundation walls. The foundation walls in the basement are cast-in-place concrete walls.

The overall condition of the building framing was considered in fair to good condition except the following deficiencies noted during the site review that will require remediation:

- Extensive rust was observed on the steel angle lintel over the exterior wall window/door openings. Rusting of the steel angle lintels had caused diagonal block wall cracks and / or outward displacement of concrete blocks. Evidence of previous repairs to the block walls were observed and the repaired walls are generally in reasonable working condition. With the lintel rusting worsening, it is our concern that the concrete displacement or cracking will further deteriorate. We suggest that the steel lintels be replaced with hot-galvanized steel angles in the short term.
- The cross bridging of the roof wood joists were missing at three locations. The cross bridging at these locations should be re-installed to match the existing. This work should be carried out as part of building maintenance.
- The steel beams under the ground floor slab over the basement have peeling paint and surface rust, especially at the north end of the beam at the stair opening where the pool rescue poles were stored. We suggest that the rusted areas be wire brushed down to bare steel and then repaint the beams with a zinc-rich paint and a top coat.
- The planter concrete curbs in front of the building showed full width cracks at multiple locations. At one spot, severe concrete spalling had occurred. We suggest that the concrete curbs be removed and rebuilt.
- Concrete spalling or cracks were observed at the concrete ramps on the east side of the building due to rusted railing posts that are embedded in the concrete. Previous repairs such as concrete patching were observed where concrete wedges spalling off occurred. At the south ramp, a horizontal crack occurred across the entire ramp. We recommend that the concrete ramps be rebuilt with new steel railings.

## **CANTEEN / ICE CREAM SHOP**

A 4.2 meter (14') wide and 7.5 meter (25') long one-storey wood-framed addition was built against the north wall of the building and is used as a canteen / ice cream shop. The sloped roof framing of the addition consists of 2x8 rafters running in the north-south direction at a spacing of 400 mm (16"). Wood planks of unknown sizes are used for the roof deck. The roof rafters were supported by a 2x4 at 400 mm (16") O/C wood stud walls at the north end and a 2x12 perimeter beam at the south end with Simpson strong-tie joist ties. The 2x12 perimeter beam was fastened to the north building concrete wall with masonry anchors at 400 mm (16") spacing. The raised floor framing could not be assessed due to floor coverings and exterior sidings. A wood ramp with railing was built in front of the north side service window of the canteen / ice cream shop. Based on the conditions observed during our site review, it is our opinion that the canteen / ice cream shop addition is generally in fair service condition.

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### **3.2.3 BUILDING ENVELOPE**

The building envelope consists of above grade exterior walls, glazing and doors. To assess the condition of the building envelope a walk-through visual site review was conducted. We reviewed the exterior walls and glazing from grade level. No dismantling of any architectural finishes was done. No destructive or non-destructive testing was conducted. No calculations were performed to confirm the adequacy of the original design.

The following sub-sections summarize our findings of the visual inspection and assessment at the building.

## **EXTERIOR WALLS**

The exterior walls of the building generally consist of painted masonry blocks on the north and south sections of the west elevation as well as the south and east elevations of the building. The masonry blocks at the central section of the west elevation have been covered with metal lath and a cementitious material. The walls of the canteen addition are clad with Hardi board siding. No test openings were made to confirm the wall composition or levels of insulation, if any.

The masonry block walls are generally in fair condition. There are areas of step cracks in the mortar joints and areas of deteriorated paint finish on the exterior walls. Displacement of the masonry was noted on the central section of the east elevation. The steel lintels above the windows are severely rusted. Metal channels have been installed above the windows presumably in an attempt to divert water away from the lintels and prevent further deterioration. Masonry repairs and replacement of the corroded lintels should be carried out within the short term of the capital planning period.

The cementitious material on the west elevation is cracked and delaminated from the substrate. Minor damage was also noted on these walls. We recommend that this cladding system be replaced with an Exterior Insulation Finish System (EIFS) instead. Replacement of the cementitious material with an EIFS cladding has been allowed for in the Capital Plan.

The concrete sills below the windows are cracked and delaminated at several location around the building. Repairs to the sills will be required.

A sealant material has been applied at the joint between the base of the masonry walls and the pool deck. This material is split and debonded and is in poor condition. Replacement of this sealant has been allowed for in the short term of the Capital Plan.

The concrete foundation wall at the south east corner of the building is cracked and delaminated and should be repaired.

The Hardi board siding on the canteen is in fair condition. The sealant in the vertical joint between the main building and the canteen is in good condition.

## **WINDOWS**

Windows are provided on the north, south, east and west elevations of the building. The windows consist of single glazed operable units in aluminum frames. The windows in the change rooms on the south and east elevations are opaque for privacy. Two of the windows on the north elevation of the main building have been block off by the addition of the canteen. The windows are in fair to poor condition. Replacement of the windows has been allowed for in the Capital Plan.

The caulking material at the perimeter of the windows is generally hard and split. Replacement of the caulking materials has been allowed for in the Capital Plan in conjunction with the window replacement.

## **DOORS**

The main entrance metal double doors on the west elevation are generally in good condition. There are four (4) metal doors on the east elevation which provide access to the basement, maintenance and change rooms of the building as well as metal double doors which provide access to the canteen. The doors are generally in fair condition with typical minor scratches present. The doors should be cleaned and painted as part of regular building maintenance.

There is a wood framed screen door at one of the entrance doors on the west side of the canteen. The screen door is in poor condition and should be replaced or removed.

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### **3.2.4 ROOFING SYSTEM**

To assess the condition of the roofing system, a visual site review was conducted from roof level. No dismantling of any roofing materials or elements was done. No destructive or non-destructive testing was conducted. No calculations were performed to confirm the adequacy of the original design.

## **MAIN ROOF**

The roof system installed on the main section of the building consists of either a Thermoplastic Polyolefin (TPO) or Polyvinyl Chloride (PVC) single ply membrane. No visible defects or damage were noted on the membrane; however, there are indications of water penetration (staining) on the underside of the exposed wood roof deck. Plastic sheets have been installed on the underside of the roof deck above the entrance vestibule presumably to prevent water from dripping onto users of the facility.

Roof systems of this type generally have a service life of 20 – 25 years with regular maintenance. Although the age of the roof membrane is unknown, based on the current conditions observed, we anticipate that replacement will be required within the short term of the capital planning period.

The perimeter of the roof area is covered with metal cap flashing. The flashing is generally in fair condition but should be replaced with the roof replacement.

## **NORTH ROOF**

The sloped roof over the canteen addition at the north side of the building is covered with asphalt shingles. The shingles are in poor condition with curling and granule loss noted. Replacement of this roof will be required in the short term of the planning period.

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### **3.2.5 INTERIOR FINISHES**

The concrete block walls in the building are painted. The paint finish is generally in good condition with minor scratches noted.

The ceiling in the building is unfinished with exposed wood joists and roof deck.

The concrete floor throughout the building is unfinished. Control joints in the floor are filled with a sealant material which is generally debonded in many areas. Replacement of this material will be required within the planning period.

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### **3.2.6 MECHANICAL SYSTEMS**

A visual inspection and site review of the base building mechanical elements was carried out on September 29, 2017. Areas reviewed include the exterior and interior service areas. Service rooms include: the main electrical room; the boiler room; and the roof top. Record drawings were not available during the site review.

Quantitative measurements for space temperature were not taken. Sanitary and domestic water pipe sizes and capacities were not evaluated, and the natural gas consumption was not investigated. Intrusive testing was beyond the scope of this assignment.

No major deficiencies were observed. The details of the investigations, findings and recommendations are included below.

## **HVAC SYSTEM**

One natural gas-fired hot water boiler provides heating for the swimming pool. According to the data plate, the unit has an input heating capacity of 1,670 MBH. The unit was manufactured by Teledyne Laars in 1995. No performance issues were reported with the boiler. The unit is about 22 years old and has an average service life of about 20 to 25 years. Based on age, we have included a replacement budget, assuming the unit will be replaced by a mid-efficiency boiler, as is modern standard.

The canteen area and janitor's closet are ventilated by roof-mounted exhaust fans. According to the data plates, the units were installed in 1995. These fans should be inspected on a monthly basis. End of service life replacement is expected to be below the report threshold.

There is a split air-conditioning system serving the canteen area. The unit was manufactured by Goodman, however the data plate was illegible to determine the unit's age or cooling capacity. According to Management, the canteen extension was built in the 2000's, as such we estimate the unit is about 17 years old with a cooling capacity of about 2-tons. Split air-conditioning systems have an average service life of about 20 years. Based on age, we have included a replacement budget.

The swimming pool equipment includes: 1 sediment box, 2 sand filters and 3 pumps rated 7.5 hp, 15 hp, and 25 hp. The pool equipment is estimated to be about 22 years old. Based on age, we have included a budget to replace the pool mechanical equipment. We could not review the buried pool equipment and have included a repair allowance.

## **PLUMBING SYSTEM**

There is a 2-inch diameter main domestic water service located in the main electrical room. There is no backflow preventer installed. Many municipalities are starting to enact bylaws requiring the installation of backflow preventers on the incoming water line. We have included a budget to have the device installed.

Domestic hot water is produced by a 210 US gallon gas-fired hot water heater. According to the data plate, the unit was manufactured by A.O. Smith (Model No. BT25-880S) in 1995 and has an input heating capacity of 251MBH. The average service life of this equipment is about 15 to 20 years. Based on age, we have included a replacement budget.

Sanitary drains inside the building and storm drains all appeared to be in functional condition and no problems were reported. We understand the building is about 70 years old. It is recommended that there be an allowance for repairs to the drainage piping over the report term.

Domestic water piping appears to be copper where observed. No domestic piping leaks were reported. The facility manager was not aware of any recent distribution pipe replacement. Based on the age of the piping (about 22 years), we have included budget for domestic water piping replacement within the report term. We assume isolated pinhole leaks, should they occur, will be addressed as part of ongoing maintenance.

There is an array eight of coiled plastic tubes reportedly used for free solar heating. According to the facility manager, the pipes provide supplemental heating to the swimming pool. The pipes are routed into the pool using the natural flow and pressure of the exiting pool filter pump. We assume the pipes can be replaced on an as-needed basis as a maintenance item.

## **FIRE PROTECTION SYSTEM**

The building is not sprinklered. There are battery operated smoke detectors, heat detectors and fire extinguishers located throughout the building. No capital expenditures are anticipated. We assume the smoke detectors, heat detectors and fire extinguishers will be maintained as part of regular maintenance.

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### **3.2.7 ELECTRICAL SYSTEMS**

The building electrical system was reportedly replaced around 1995. No major issues were noted or reported.

Quantitative measurements of voltage and amperages were not taken. Destructive testing of any equipment was not performed. A thermographic scan of the electrical panel was not conducted to determine if there are any potential electrical issues. These evaluations are considered to be maintenance items.

## **MAIN SERVICE AND POWER DISTRIBUTION**

Electricity is supplied to the building underground. The main electrical room is located in the basement. The data plate on the main disconnect is not legible, however, the splitter box it feeds located immediately downstream is rated at 225A, 600V. We've assume the main disconnect is rated at 225A, 600V, this should be confirmed by an electrician. The splitter box has two disconnects: (1) 60A and (1) 100A. Downstream of the 60A disconnect is a 30kVA step-down transformer and downstream of the 100A disconnect is a motor control center (MCC). According to the data plate the MCC is rated at 600A, 600V and has four disconnect switches: slide pump, pump 1, pump 2 and pump 3. Electrical power is distributed to breaker panels located throughout the building and house panels.

No performance problems were reported. No major issues were noted. The main electrical equipment is about 22 years old, according to the data plates. Based on an average life span of 40 to 50 years, replacement of major components including the main disconnect, MCC, and transformer is expected within the report term. Replacement of smaller panels and individual components may also be needed, but we expect the costs to be below the capital threshold of this report.

We recommend that Thermography Scans and an Arc Flash Hazard Analysis be conducted to verify there are no problems with the current system.

## **LIGHTING SYSTEM**

The interior lighting systems include 2x4 foot strip fluorescent fixtures with T12 lamps and incandescent lamps controlled by manual switches. T12 lamps are being phased out and in some areas ballasts and lamps are becoming difficult to obtain. Ideally, these lamps would be replaced with more energy efficient or readily available fixtures or lamps (T8, T5 or LED). We have included a preliminary budget to replace the T12 fixtures with a modern alternative. Lighting retrofit incentives/rebates may be available to offset the cost of this work but change over time so they have not been considered in this budget.

Exterior lighting consists of three pole mounted and wall pack flood lighting that illuminate around the building and swimming pool. These lights appear to be controlled by a timer. There are recessed pot lights with incandescent lamps at the soffit. We assume the wall and soffit mounted fixtures can be maintained as a maintenance expense. The pole mounted lights have an average service life of about 40 years. Based on age (currently about 22 years), we have included a replacement budget.

## **FIRE ALARM**

The building is not equipped with a central fire alarm panel.

## **EMERGENCY POWER**

The building is not equipped with an emergency generator.

Emergency lighting consists of emergency heads and battery units located throughout the building. Where reviewed, the battery pack lighting systems appear to be in serviceable condition. The system is reported to be maintained regularly. With good maintenance practices restored and/or followed, we do not anticipate any capital expenditure during the report term.

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### **3.2.8 ASBESTOS MATERIAL SURVEY**

Our review of the building indicated that there are approximately twenty-three (23) building materials which are suspected of containing asbestos. Refer to the Potential Asbestos Material Survey included in Appendix B of this report.

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### **3.2.9 ACCESSIBILITY**

An AODA review of the building was performed at the Town of Tillsonburg's Lake Lisgar Water Park building located at 8 Ross Street in Tillsonburg. It also identifies prospective areas of upgrades required to improve accessibility for the building's public space users.

The inspected building has a variety of accessibility issues ranging from total noncompliance to partial compliance to various accessibility standards. While some of these issues are relatively inexpensive to mitigate, the others, such as issues with public washrooms and barrier free access most likely will require extensive renovations.

Capital costs for this work are presented in the Accessibility Report in Appendix C. Since this work is dependent on whether the Town of Tillsonburg decides to bring the building up to current accessibility standards, we have not allocated a time frame in which the work is to be carried out. However if extensive renovations are to be carried out to the interior of the building, then the work outlined in the accessibility report would have to be implemented. Refer to the Accessibility Report included in Appendix C of this report.

## 4 CAPITAL PLAN

The following Capital Plan spreadsheets (Tables 4-1 and 4-2) represent the findings of our condition assessment of the Summer Place and Lake Lisgar Water Park properties and opinions of costs. Based on the areas observed, we have estimated present value current capital cost liabilities to repair and replace components where remedial work or replacement is recommended. Recommended repair work costs have been identified for physical deficiencies, which were observed and are considered to be beyond normal or routine maintenance costs or for maintenance procedures, which are currently not in force but are required to maintain the system under consideration. Replacement allowances are for elements that will have exceeded their expected useful life over the 25 year evaluation period.

For the purpose of this report, all costs less than a threshold value \$2,500 have generally been considered to be maintenance costs unless determined by the review team to be important as a capital expenditure. As such, the cost associated with these items may have not been included in the Capital Plan table.

The cost estimates are our opinion of costs based on Year 2017 dollars and do not include taxes, escalation, engineering fees or any unforeseen conditions that require repair at the time the repair work is being completed. Any opinion of costs provided are subject to confirmation or adjustment at the time competitive bids are obtained from contractors who specialize in the various items of repair work required.

The Normal Life values listed in the Capital Plans are based on life expectancy information from the Ministry of Housing and Canada Mortgage and Housing Corporation as well as WSP's experience.

The Remaining Life values presented in the Capital Plans are based on the year of installation and normal life expectancy of the component as well as the condition of the building component or equipment as observed during our site review. Therefore, in some cases, the Remaining Life values are an observed condition judgement which may not necessarily reflect the actual (chronological) age of the component.

**Table 4.1 Summer Place Capital Plan**

Site Name:		Summer Place		13-Oct-17																												
Site Address:		8 Ross Street																														
Site City/Province:		Tillsonburg, Ontario																														
Item	Component	Year Built	Current Age (Years)	Normal Life (Years)	Remaining Life (Years)	Replacement Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25	
							2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	
1.0	Site Features																															
1.1	Chain Link Fencing	Unknown	Unknown	20	8	\$6,500						\$6,500																				
1.2	Concrete Paving	Unknown	Unknown	25	20	\$3,000																				\$3,000						
1.3	Metal Railing / Guard	NA	NA	NA	NA	\$7,000	\$7,000																									
2.0	Building Structure																															
2.1	Interior Masonry Wall Repairs	Unknown	Unknown	30	1	\$2,500	\$2,500																									
2.2	Exterior Metal Stair	Unknown	Unknown	30	1	\$18,000	\$18,000																									
2.3	Metal Railings - Repaint	Unknown	Unknown	5	1	\$2,500	\$2,500					\$2,500																				
2.4	Metal Railings - Replace	Unknown	Unknown	25	12	\$28,000													\$28,000													
3.0	Building Envelope																															
3.1	Vinyl Siding	Unknown	Unknown	25	10	\$7,000													\$7,000													
3.2	Brick Masonry Repairs - Allowance	Unknown	Unknown	15	2	\$5,000			\$5,000															\$5,000								
3.3	Brick Masonry - Paint	Unknown	Unknown	7	2	\$5,000			\$5,000																							
3.4	Windows	1995	22	25	2	\$4,000			\$4,000																							
3.5	Doors - Metal	Unknown	Unknown	25	10	\$8,000																										
3.6	Overhead Door	Unknown	Unknown	20	7	\$2,500							\$2,500																			
4.0	Roofing Systems																															
4.1	Roof Membrane System - Main	Unknown	Unknown	35	3	\$110,000			\$110,000																							
4.2	Roof Membrane System - Rowing Club	Unknown	Unknown	20	1	\$45,000	\$45,000																				\$45,000					
5.0	Interior Finishes																															
5.1	Suspended Ceiling	Unknown	Unknown	20	10	\$17,000													\$17,000													
5.2	Composite Floor Tiles	Unknown	Unknown	30	5	\$15,500					\$15,500																					
5.3	Painting	Unknown	Unknown	7	4	\$8,000				\$8,000																						
6.0	Mechanical Systems																															
6.1	Drainage Repair	1940	77	10	5	\$10,000					\$10,000																					
6.2	Hot Water Piping	1995	22	25	3	\$23,000			\$23,000																							
6.3	Sump Pump	1995	22	20	1	\$6,000	\$6,000																									
6.4	Lake Aeration System - Repair	Unknown	Unknown	10	8	\$11,000									\$11,000																	
7.0	Electrical Systems																															
7.1	Interior Lighting	1995	22	20	1	\$6,000	\$6,000																									
7.2	Main Electrical Disconnect Panel	1995	22	45	23	\$4,000																										
7.3	Thermographic Scan	NA	0	8	9	\$1,800									\$1,800																	
8.0	Accessibility																															
8.1	Accessibility Modifications	1940	77	NA	NA																											
	<b>Total</b>					<b>\$356,300</b>	<b>\$87,000</b>	<b>\$14,000</b>	<b>\$133,000</b>	<b>\$8,000</b>	<b>\$25,500</b>	<b>\$9,000</b>	<b>\$2,500</b>	<b>\$11,000</b>	<b>\$8,800</b>	<b>\$32,000</b>	<b>\$8,000</b>	<b>\$28,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$10,000</b>	<b>\$7,000</b>	<b>\$6,800</b>	<b>\$19,000</b>	<b>\$0</b>	<b>\$48,000</b>	<b>\$12,000</b>	<b>\$2,500</b>	<b>\$11,000</b>	<b>\$8,000</b>	<b>\$11,800</b>	



**Table 4.2 Lake Lisgar Water Park Capital Plan**

Site Name:		Lake Lisgar Water Park		13-Oct-17																											
Site Address:		8 Ross Street																													
Site City/Province:		Tillsonburg, Ontario																													
Item	Component	Year Built	Current Age (Years)	Normal Life (Years)	Remaining Life (Years)	Replacement Cost	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	Year 20	Year 21	Year 22	Year 23	Year 24	Year 25
							2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
1.0	Site Features																														
1.1	Chain Link Fencing	Unknown	Unknown	20	5	\$25,000					\$25,000																			\$25,000	
1.2	Concrete Paving	1995	22	25	8	\$16,000								\$16,000																	
1.3	Concrete Planter Curbs	Unknown	Unknown	25	2	\$5,000		\$5,000																							
1.4	Pool Deck Joint Sealant	Unknown	Unknown	12	1	\$18,000	\$18,000												\$15,000											\$15,000	
2.0	Building Structure																														
2.1	Pool Deck - Slab Replacement (Partial)	Unknown	Unknown	30	1	\$75,000				\$75,000																					
2.2	Window Linels	1940	77	50	1	\$35,000	\$35,000																								
2.3	Steel Beams - Repaint	1995	22	7	1	\$5,000							\$5,000								\$5,000							\$5,000			
2.4	Pool deck - Ramps / Railings	Unknown	Unknown	30	1	\$25,000	\$25,000																								
3.0	Building Envelope																														
3.1	Masonry Repairs - Allowance	1940	77	15	1	\$15,000	\$15,000															\$15,000									
3.2	Brick Masonry-Paint	Unknown	Unknown	7	2	\$6,000	\$6,000							\$6,000							\$6,000							\$6,000			
3.3	Concrete Window Sills	1940	77	25	1	\$6,000	\$6,000																								
3.4	Windows	1995	22	25	3	\$15,000			\$15,000																						
3.5	Doors - Metal	1995	22	25	7	\$17,000							\$17,000																		
3.6	Sealant Replacement	Unknown	Unknown	10	1	\$2,500	\$2,500																					\$2,500			
3.7	EIFS Cladding	1995	22	25	2	\$35,000		\$35,000																							
4.0	Roofing Systems																														
4.1	Roof Membrane System - Main	1998	19	25	1	\$165,000	\$165,000																								
4.2	Asphalt Shingle Roof	2000	17	20	1	\$5,000	\$5,000																					\$5,000			
5.0	Interior Finishes																														
5.1	Painting	1995	1995	7	5	\$6,000					\$6,000								\$6,000							\$6,000					
6.0	Mechanical Systems																														
6.1	Heating Boiler	1995	22	20	3	\$56,500				\$56,500																			\$56,500		
6.2	Split Air Conditioner	2000	17	20	3	\$6,000			\$6,000																			\$6,000			
6.3	Pool Equipment	1995	22	20	4	\$15,000				\$15,000																			\$15,000		
6.4	Back Flow Preventer	NA	NA	NA	1	\$3,500	\$3,500																								
6.5	Hot Water Heater	1995	22	15	2	\$11,000		\$11,000														\$11,000									
6.6	Drainage System Repairs	1940	77	10	5	\$10,000					\$10,000										\$10,000									\$10,000	
6.7	Buried Pool Equipment - Repairs	1995	22	30	8	\$30,000								\$30,000																	
6.8	Hot Water Piping	1995	22	25	3	\$36,500			\$36,500																						
7.0	Electrical Systems																														
7.1	Transformer	1995	22	40	18	\$5,000																					\$5,000				
7.2	Motor Control Center	1995	22	45	22	\$32,000																						\$32,000			
7.3	Main Disconnect Switch	1995	22	45	22	\$3,500																						\$3,500			
7.4	Interior Lighting	1995	22	20	1	\$5,000	\$5,000																				\$5,000				
7.5	Exterior Lighting	1995	22	40	18	\$10,000																				\$10,000					
7.6	Thermographic Scan	NA	NA	8	1	\$1,800	\$1,800							\$1,800									\$1,800								
8.0	Accessibility																														
8.1	Accessibility Modifications	1940	77	NA	NA																										
	<b>Total</b>					<b>\$702,300</b>	<b>\$292,800</b>	<b>\$51,000</b>	<b>\$114,000</b>	<b>\$90,000</b>	<b>\$41,000</b>	<b>\$0</b>	<b>\$17,000</b>	<b>\$57,000</b>	<b>\$1,800</b>	<b>\$0</b>	<b>\$2,500</b>	<b>\$6,000</b>	<b>\$15,000</b>	<b>\$0</b>	<b>\$21,000</b>	<b>\$15,000</b>	<b>\$12,800</b>	<b>\$15,000</b>	<b>\$6,000</b>	<b>\$0</b>	<b>\$12,500</b>	<b>\$11,000</b>	<b>\$98,000</b>	<b>\$15,000</b>	<b>\$50,000</b>

# APPENDIX

## A PHOTOGRAPHS





Photograph 1. Chain link fence at Summer Place



Photograph 2. Local rust on chain link fence at Summer Place



Photograph 3. Cracked and spalled concrete on concrete stair at south side of Summer Place



Photograph 4. Precast stair at Summer Place



Photograph 5. Missing railing at south entrance to Summer Place



Photograph 6. Typical wood framing in south section of Summer Place



Photograph 7. Typical open web steel joist and metal deck framing in north section of Summer Place



Photograph 8. Unsupported closure angle in north section of Summer Place



Photograph 9. Additional structural framing at foundation wall opening in basement of Summer Place



Photograph 10. Typical open web steel joist and metal deck framing for ground floor at Summer Place



Photograph 11. West elevation of Summer Place



Photograph 12. North elevation of Summer Place



Photograph 13. East elevation of Summer Place



Photograph 14. South elevation of Summer Place



Photograph 15. South east elevation of Tillsonburg Rowing Club



Photograph 16. Local spalling of block masonry on east elevation of Summer Place



Photograph 17. Deteriorated paint on exterior wall at north east corner of Summer Place



Photograph 18. Damaged vinyl siding at west elevation of Summer Place



Photograph 19. Windows not plumb at Summer Place



Photograph 20. Wood screen door at south entrance to Summer Place



Photograph 21. Metal doors on north elevation of Summer Place



Photograph 22. Missing closer on east door at north elevation of Summer Place



Photograph 23. Deteriorated paint finish on door to Tillsonburg Rowing Club



Photograph 24. Missing perimeter caulking around door to Tillsonburg Rowing Club



Photograph 25. Minor dents on overhead door at Tillsonburg Rowing Club



Photograph 26. General view of roof area at Summer Place



Photograph 27. Exposed asphalt membrane and blisters at south section of Summer Place roof



Photograph 28. Blister in roof membrane at south section of Summer Place



Photograph 29. Split membrane at north section of roof at Summer Place



Photograph 30. Missing downspouts at scupper drains on east side of Summer Place



Photograph 31. Missing downspout at scupper drains on west side of Summer Place



Photograph 32. Dented flashing on west elevation of Summer Place



Photograph 33. Suspected mould growth and water damage in basement stairwell at Summer Place



Photograph 34. East roof area above Tillsonburg Rowing Club



Photograph 35. South roof area above Tillsonburg Rowing Club



Photograph 36. Damaged waterproofing membrane on roof over Tillsonburg Rowing Club



Photograph 37. Worn waterproofing membrane on roof over Tillsonburg Rowing Club



Photograph 38. Split sealant in crack on roof over Tillsonburg Rowing Club



Photograph 39. Unsealed crack in concrete topping on roof over Tillsonburg Rowing Club



Photograph 40. Typical rust on railings at perimeter of roof over Tillsonburg Rowing Club



Photograph 41. Misaligned access stair to roof over Tillsonburg Rowing Club



Photograph 42. Typical interior finishes in south section of Summer Place



Photograph 43. Typical interior finishes in north section of Summer Place



Photograph 44. Typical interior finishes in basement of Summer Place



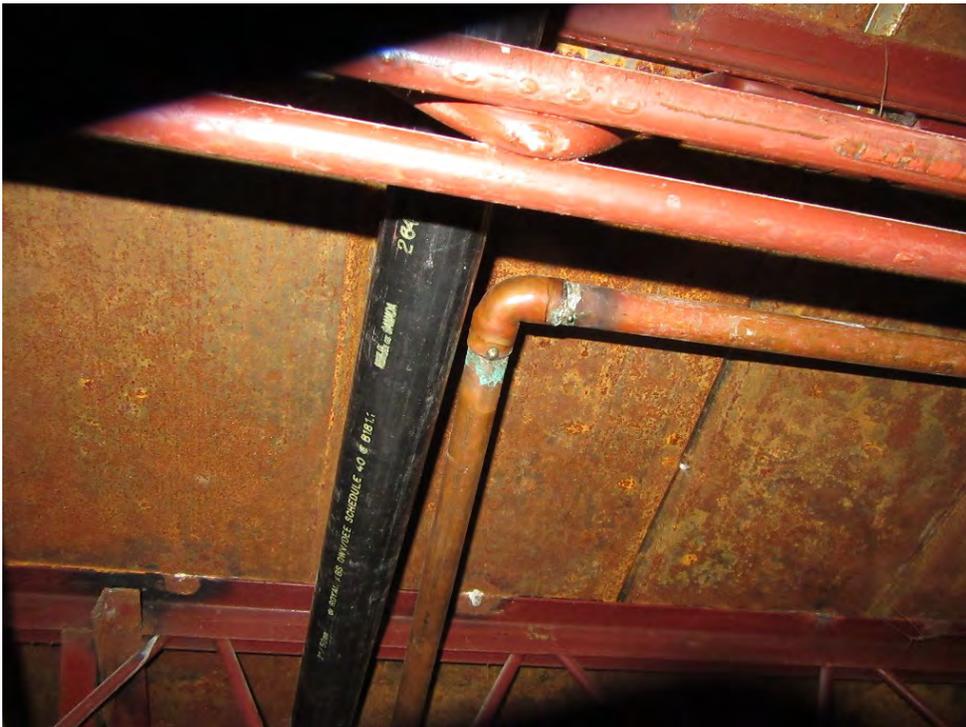
Photograph 45. Washroom exhaust fan in Summer Place



Photograph 46. Roof drainage at Summer Place



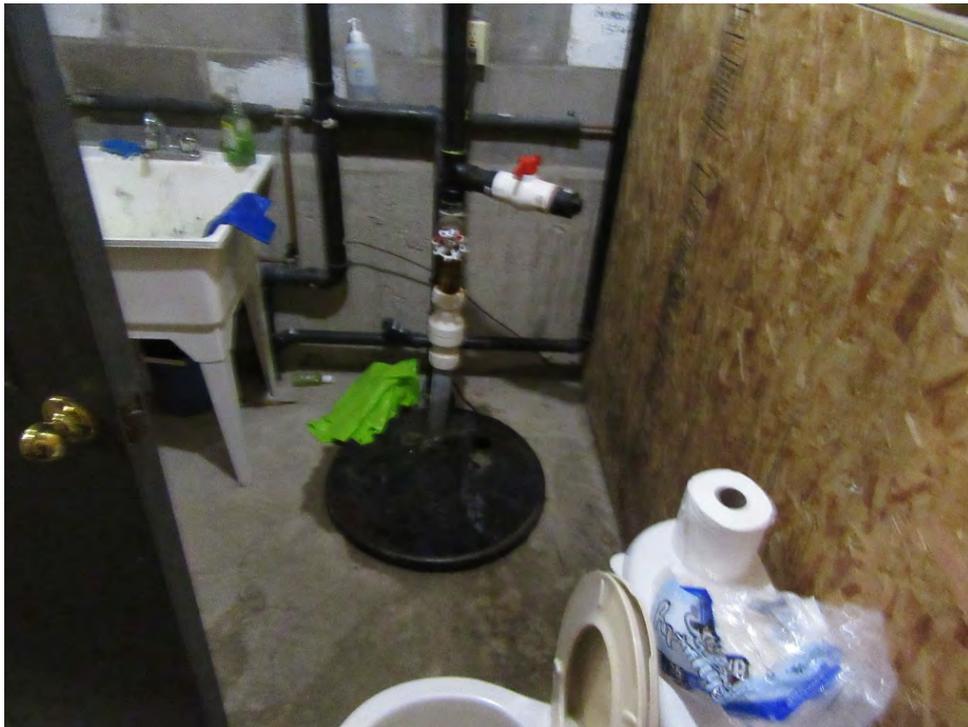
Photograph 47. Domestic water service disconnect at Summer Place



Photograph 48. Typical supply and drainage piping at Summer Place



Photograph 49. Domestic water heater at Summer Place



Photograph 50. Sump pump at Summer Place



Photograph 51. Lake aeration system equipment at Summer Place



Photograph 52. Main electrical breaker panel at Summer Place



Photograph 53. Perimeter chain link fence at Lake Lisgar Water Park



Photograph 54. Rusted chain link fence at Lake Lisgar Water Park



Photograph 55. Concrete curb planter at west side of Lake Lisgar Water Park building



Photograph 56. Cracked planter curb at west side of Lake Lisgar Water Park building



Photograph 57. Debonded sealant between joints in pool deck at of Lake Lisgar Water Park



Photograph 58. Cracked concrete deck at sitting area at Lake Lisgar Water Park



Photograph 59. Typical rusted steel lintels above windows at Lake Lisgar Water Park building



Photograph 60. Cracked mortar joints and displaced masonry on the east elevation of the Lake Lisgar Water Park building



Photograph 61. Typical wood framing in the Lake Lisgar Water Park building



Photograph 62. Missing cross bracing between joists in the Lake Lisgar Water Park building



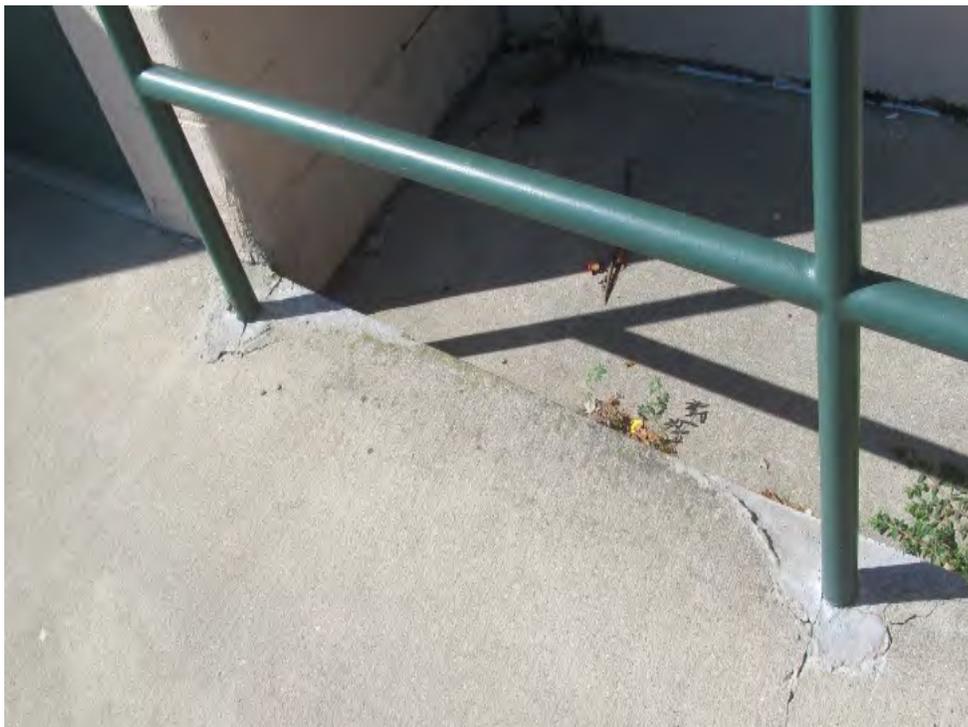
Photograph 63. Steel framing in the Lake Lisgar Water Park building



Photograph 64. Rusted steel beam in basement of the Lake Lisgar Water Park building



Photograph 65. Rusted steel beam in basement of the Lake Lisgar Water Park building



Photograph 66. Cracked and delaminated concrete around railing support posts at Lake Lisgar Water Park building



Photograph 67. West elevation of Lake Lisgar Water Park building



Photograph 68. South elevation of Lake Lisgar Water Park building



Photograph 69. East elevation of Lake Lisgar Water Park building



Photograph 70. North elevation of Lake Lisgar Water Park building



Photograph 71. North east elevation of canteen at Lake Lisgar Water Park building



Photograph 72. Step cracks in masonry on east elevation of Lake Lisgar Water Park building



Photograph 73. Typical rusted steel lintel above windows at Lake Lisgar Water Park building



Photograph 74. Cracked and delaminated cementitious material on west elevation of Lake Lisgar Water Park building



Photograph 75. Typical cracked and delaminated concrete sill at Lake Lisgar Water Park building



Photograph 76. Deteriorated sealant at base of wall at Lake Lisgar Water Park building



Photograph 77. Cracked and delaminated concrete at Lake Lisgar Water Park building



Photograph 78. Entrance doors to Lake Lisgar Water Park building



Photograph 79. Deteriorated wood screen door at canteen at Lake Lisgar Water Park building



Photograph 80. General view of roof at Lake Lisgar Water Park building



Photograph 81. Evidence of water penetration on soffit of roof deck at Lake Lisgar Water Park building



Photograph 82. Evidence of water penetration on soffit of roof deck at Lake Lisgar Water Park building



Photograph 83. General view of roof over canteen at Lake Lisgar Water Park building



Photograph 84. Deteriorated asphalt shingles on canteen roof at Lake Lisgar Water Park building



Photograph 85. Typical interior finishes in vestibule of Lake Lisgar Water Park building



Photograph 86. Heating boilers at Lake Lisgar Water Park



Photograph 87. Pool circulation pump at Lake Lisgar Water Park



Photograph 88. Pool filtration equipment at Lake Lisgar Water Park



Photograph 89. Domestic water service at Lake Lisgar Water Park



Photograph 90. Domestic hot water heater at Lake Lisgar Water Park



Photograph 91. Electrical distribution equipment at Lake Lisgar Water Park



Photograph 92. Interior lighting at Lake Lisgar Water Park

# APPENDIX

## **B** POTENTIAL ASBESTOS MATERIAL SURVEYS



**WSP Project No:** 171-13728-00

October 6, 2017

Mr. Rick Cox  
Director of Recreation, Culture & Parks  
Town of Tillsonburg  
200 Broadway Street, Suite 204  
Tillsonburg, ON N4G 5A7

Subject: **Potential Asbestos Material Survey  
8 Ross Street, Tillsonburg, ON  
Summer Place**

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## INTRODUCTION

WSP Canada Inc. (WSP) was retained by the Town of Tillsonburg to conduct an investigative survey of the Summer Place Building located at 8 Ross Street in Tillsonburg, ON (subject building) to determine which building materials are suspected to contain asbestos.

The Summer Place Building at 8 Ross Street is approximately 205m<sup>2</sup> (2,200ft<sup>2</sup>) in size and is a one-storey structure with a full basement, concrete foundation and a built-up roofing system. The basement is occupied by a rowing club with interior finishes consisting of steel trusses as ceiling supports, a drop ceiling with acoustic ceiling tiles, cement block and gypsum wall boards with poured cement floors. The main floor is occupied by a summer youth camp with interior finishes consisting of cement block and some gypsum board walls, a drop ceiling with acoustic ceiling tiles, steel trusses as ceiling supports, and vinyl tile flooring. The exterior finishes consist of a cement block and aluminium flashing.

The preliminary survey was conducted by WSP on September 26, 2017.

## ASBESTOS INVESTIGATION

Approximately twenty-five (25) building materials within the subject building were suspected to potentially contain asbestos.

**Table 1 Summary of Potential Asbestos Materials**

FUNCTIONAL SPACE	BUILDING SYSTEM (I.E. FLOOR, WALLS, ETC.)	POTENTIAL ASBESTOS- CONTAINING MATERIAL
Employee Area, Top of Stairs to Basement	Flooring	12" x 12" beige vinyl floor tiles with red and white blots
Employee Area, Top of Stairs to Basement	Flooring	Mastic associated with 12" x 12" beige vinyl floor tiles with red and white blots
Employee Area	Drop Ceiling	2'x4' acoustic ceiling tile with long length wise fissures with pinpricks

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wsp.com



Employee Area	Above Drop Ceiling on Wooden Beams	Black Tar on Residual Insulation Paper
Youth Camp Area	Flooring	12" x 12" off-white vinyl floor tiles with maroon and brown streaks
Youth Camp Area	Flooring	Mastic associated with 12" x 12" off-white vinyl floor tiles with maroon and brown streaks
Youth Camp Area	Flooring	12" x 12" off-white vinyl floor tiles with grey blots
Youth Camp Area	Flooring	Mastic associated with 12" x 12" off-white vinyl floor tiles with grey blots
Woman's and Men's Washrooms on Main Floor	Between Concrete on Floor	Fibrous expansion joint caulking on floor at base of wall
Door to Woman's and Men's Washrooms on Main Floor	Door Frame	Caulking around door
Stairs to Basement and Basement	Drop Ceiling	2' x 4' acoustic ceiling tile with length wise fissures with pin pricks
Basement Washroom	Wall penetration	Grey puddy around vent wall penetration
Throughout Building	Walls	Drywall joint compound
Throughout Building	Within concrete block walls	Vermiculite insulation
Throughout Building	Fire doors	Insulation within fire rated doors
Exterior Concrete Roof Over Rowing Club	Flashing	Caulking along flashing
Exterior Concrete Roof Over Rowing Club	Sealant on Concrete	Sealant between concrete pads
Exterior Concrete Roof Over Rowing Club	Sealant on Concrete	Sealant over concrete pads
Building Exterior	Wall penetration	Cementitious parging around wall penetration
Building Exterior	Windows	Caulking on windows and around frames
Exterior Roof	Built-Up Roofing System	Roof core - layered roofing materials
Exterior Roof	Roof Vents	Tar coating on vents
Exterior Roof	Building roof seam	Roofing shingles on roof seam
Building Exterior	Roof Drains	Caulking around roof drains on side of building
Interior/Exterior of Building	Concrete Block Walls	Mortar between concrete block walls

1. For more detail of the encountered materials refer to attached – **Suspected Asbestos Sampling Table**
2. For relevant photographs taken during the survey refer to attached – **Project Photographs**

It should be noted that asbestos-containing material (ACM), Designated Substances or hazardous materials may be concealed by existing building finishes, components or fixtures. If demolition or construction activities uncover materials suspected to contain asbestos, lead, other Designated Substances or hazardous materials, all work must stop prior to the disturbance of these materials, and the suspect materials should either be sampled by a qualified person,



or presumed to contain the suspected substance. Whether the suspect material(s) are confirmed, or presumed, to contain these substances, they must be handled and disposed of in accordance with the appropriate and applicable guidelines and regulations including, but not limited to: O. Reg. 278/05, O. Reg. 490/09 and R.R.O. 1990, Regulation 347 (as amended).

## OBSERVED WATER DAMAGED MATERIALS

It should be noted that mould and water damage was noted on gypsum wall boards and acoustic ceiling tiles within the stairwell to the basement. During renovation/demolition, mould contaminated materials should be removed/handled in accordance with the Canadian Construction Association document CCA 82/2004. Contractors should be warned of the presence of mould and every precaution should be taken to prevent airborne exposure to workers where mould is present and where workers are likely to inhale or ingest mould.

## CLOSING

This report is not intended to be a standalone document, and does not list all possible asbestos-containing materials present within the units or the subject areas. This report is intended to supplement, and must be used in conjunction with, the buildings' existing asbestos and designated substances survey report.

We trust that the above is satisfactory for your purposes at this time. Please contact the undersigned should you have any questions or concerns.

Please do not hesitate to contact the undersigned should you have any questions.

Yours truly,

**WSP**

A handwritten signature in black ink, appearing to read 'Danielle Vella'.

Danielle Vella  
Environmental Officer

*Encl. Suspected Asbestos Sample Summary, Project Photographs*



**SUSPECTED ASBESTOS SAMPLING TABLE**

**Location: 8 Ross Street - Summer Place**

Functional Space(s)	Building System (i.e. floor, walls, etc.)	Suspected Asbestos-Containing Material	No. of Required Samples	ACM Friability	Material Condition	Accessibility (destructive or non destructive)	Approximate Material Quantity	Photo #
Employee Area, Top of Stairs to Basement	Flooring	12" x 12" beige vinyl floor tiles with red and white blots	3	Non-Friable	Fair	Non-destructive	≈ 375 ft <sup>2</sup>	1
Employee Area, Top of Stairs to Basement	Flooring	Mastic associated with 12" x 12" beige vinyl floor tiles with red and white blots	3	Non-Friable	N/A	Non-destructive	≈ 375 ft <sup>2</sup>	N/A
Employee Area	Drop Ceiling	2'x4' acoustic ceiling tile with long length wise fissures with pinpricks	3	Non-Friable	N/A	Non-destructive	≈ 375 ft <sup>2</sup>	2
Employee Area	Above Drop Ceiling on Wooden Beams	Black Tar on Residual Insulation Paper	3	Non-Friable	N/A	Non-destructive	N/A	3
Youth Camp Area	Flooring	12" x 12" off-white vinyl floor tiles with maroon and brown streaks	3	Non-Friable	Poor to Fair	Non-destructive	≈ 775 ft <sup>2</sup>	4
Youth Camp Area	Flooring	Mastic associated with 12" x 12" off-white vinyl floor tiles with maroon and brown streaks	3	Non-Friable	N/A	Non-destructive	≈ 775 ft <sup>2</sup>	N/A
Youth Camp Area	Flooring	12" x 12" off-white vinyl floor tiles with grey blots	3	Non-Friable	Fair	Non-destructive	≈ 8 ft <sup>2</sup>	5
Youth Camp Area	Flooring	Mastic associated with 12" x 12" off-white vinyl floor tiles with grey blots	3	Non-Friable	N/A	Non-destructive	≈ 15 ft <sup>2</sup>	N/A
Woman's and Men's Washrooms on Main Floor	Between Concrete on Floor	Fibrous expansion joint caulking on floor at base of wall	3	Friable	Fair	Non-destructive	≈ 40 linear feet	6
Door to Woman's and Men's Washrooms on Main Floor	Door Frame	Caulking around door	3	Non-Friable	Good	Non-destructive	≈ 15 linear feet	7
Stairs to Basement and Basement	Drop Ceiling	2' x 4' acoustic ceiling tile with length wise fissures with pin pricks	3	Non-Friable	Poor to Fair	Non-destructive	≈ 600 ft <sup>2</sup>	8
Basement Washroom	Wall penetration	Grey puddy around vent wall penetration	3	Non-Friable	Good	Non-destructive	N/A	9
Throughout Building	Walls	Drywall joint compound	7	Non-Friable	Good	Non-destructive	≈ 3200 ft <sup>2</sup>	10
Throughout Building	Within concrete block walls	Vermiculite insulation	7	Friable	N/A	Destructive	N/A	11
Throughout Building	Fire doors	Insulation within fire rated doors	3	Friable	N/A	Destructive	N/A	12
Exterior Concrete Roof Over Rowing Club	Flashing	Caulking along flashing	3	Non-Friable	Fair	Non-destructive	≈ 60 linear feet	13



### SUSPECTED ASBESTOS SAMPLING TABLE

Location: 8 Ross Street - Summer Place

Functional Space(s)	Building System (i.e. floor, walls, etc.)	Suspected Asbestos-Containing Material	No. of Required Samples	ACM Friability	Material Condition	Accessibility (destructive or non destructive)	Approximate Material Quantity	Photo #
Exterior Concrete Roof Over Rowing Club	Sealant on Concrete	Sealant between concrete pads	3	Non-Friable	Fair	Non-destructive	≈ 250 linear feet	14
Exterior Concrete Roof Over Rowing Club	Sealant on Concrete	Sealant over concrete pads	3	Non-Friable	Poor to Fair	Non-destructive	≈ 1000 ft <sup>2</sup>	15
Building Exterior	Wall penetration	Cementitious parging around wall penetration	3	Non-Friable	Fair	Non-destructive	N/A	16
Building Exterior	Windows	Caulking on windows and around frames	3	Non-Friable	Fair	Non-destructive	≈ 500 feet	17
Exterior Roof	Built-Up Roofing System	Roof core - layered roofing materials	3	N/A	Fair	Destructive	≈ 1,700 ft <sup>2</sup>	18
Exterior Roof	Roof Vents	Tar coating on vents	3	Non-Friable	Fair	Non-destructive	N/A	19
Exterior Roof	Building roof seam	Roofing shingles on roof seam	3	Non-Friable	Fair	Non-destructive	≈ 20 feet	20
Building Exterior	Roof Drains	Caulking around roof drains on side of building	3	Non-Friable	Fair	Non-destructive	N/A	21
Interior/Exterior of Building	Concrete Block Walls	Mortar between concrete block walls	7	Non-Friable	Fair	Non-destructive	N/A	11



Photo #1: 12"x12" beige vinyl floor tiles with red and white blots within the employee area and top of stairs to basement.



Photo #2: 2'x4' acoustic ceiling tiles long length wise fissures with pinpricks within the employee area.



Photo #3: Black tar on residual insulation paper within the employee area.



Photo #4: 12"x12" off-white vinyl floor tile with maroon and brown streaks within the youth camp area.



Photo #5: 12"x12" off-white vinyl floor tile with grey blots within the youth camp area.

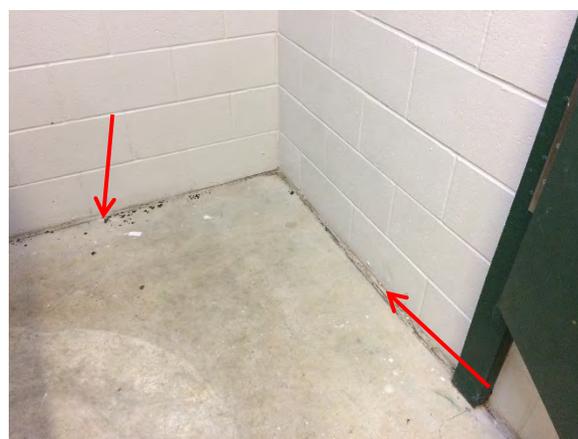


Photo #6: Fibrous expansion joint in main floor washrooms



Photo #7: Caulking around door to washroom area on main floor



Photo #8: 2'x4' acoustic ceiling tiles with length wise fissures with pinpricks in the stairwell to the basement and the basement

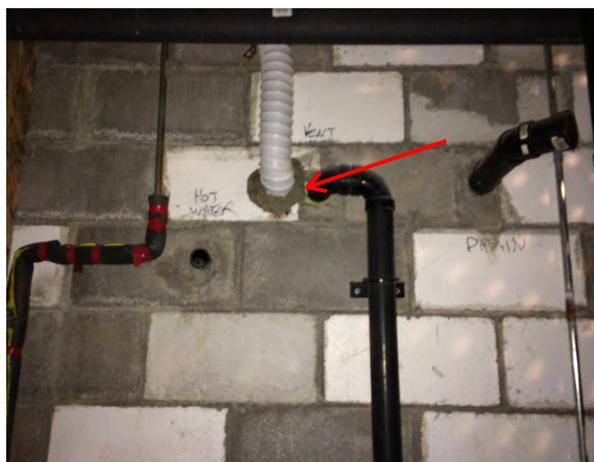


Photo #9: Grey puddy around vent wall penetration within the basement washroom



Photo #10 Drywall joint compound on walls throughout the building..



Photo #11: ACM vermiculite may exist within, as well as mortar between the concrete blocks throughout the building.

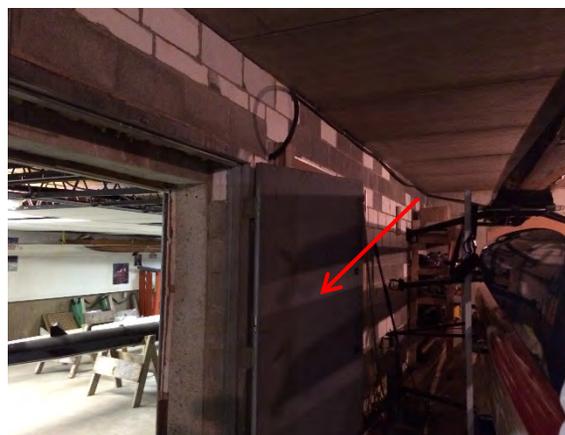


Photo #12: Fire doors throughout the building may contain ACM insulation.



Photo #13: Caulking along flashing on the concrete rowing club roof.



Photo #14: Sealant between concrete pads on the concrete rowing club roof.



Photo #15: Sealant over concrete pads on the concrete rowing club roof.



Photo #16: Cementitious parging around wall penetration on the exterior of the building.



Photo #17: Window caulking around exterior window frames of the building.



Photo #18: Built up roofing system observed on the roof of the building.



Photo #19: Tar coating on roof vents.



Photo #20: Roofing shingles observed on roofing seam.



Photo #21: Caulking observed around roof drains on the exterior of the building.



Photo #22: Mould and water damaged drywall and ceiling tiles observed within the stairwell to the basement.



Photo #23: Mould and water damaged drywall and ceiling tiles observed within the stairwell to the basement.



**WSP Project No:** 171-13728-00

October 6, 2017

Mr. Rick Cox  
Director of Recreation, Culture & Parks  
Town of Tillsonburg  
200 Broadway Street, Suite 204  
Tillsonburg, ON N4G 5A7

**Subject: Potential Asbestos Material Survey  
8 Ross Street, Tillsonburg, ON  
Lake Lisgar Waterpark Building**

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## INTRODUCTION

WSP Canada Inc. (WSP) was retained by the Town of Tillsonburg to conduct an investigative survey of the Lake Lisgar Waterpark Building located at 8 Ross Street in Tillsonburg, ON (subject building) to determine which building materials are suspected to contain asbestos.

The Lake Lisgar Waterpark Building at 8 Ross Street is approximately 315m<sup>2</sup> (3,400ft<sup>2</sup>) in size and is a one-storey structure with a partial basement, concrete foundation and a built-up roofing system with a wood addition on the north end of the building. The subject building consists of two sections. The first section is the main building with changerooms, pool storage and an administration area. The interior finishes consist of steel ceiling supports, cement block and some gypsum wall board sections with poured cement floors. The second section is a cantina with wood interior finishes and laminate flooring with an asphalt shingled sloped roof. The exterior finishes of the main building consist of a concrete block and textured plaster with aluminum flashing.

The preliminary survey was conducted by WSP on September 26, 2017.

## ASBESTOS INVESTIGATION

Approximately twenty-three (23) building materials within the subject building were suspected to potentially contain asbestos.

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**Table 1 Summary of Potential Asbestos Materials**

FUNCTIONAL SPACE	BUILDING SYSTEM (I.E. FLOOR, WALLS, ETC.)	POTENTIAL ASBESTOS-CONTAINING MATERIAL
Men's and Woman's Changerooms	Flooring	Textured sealant over concrete flooring
Men's and Woman's Changerooms	Sealant on Concrete	Sealant between concrete
Interior windows throughout	Window frames	Caulking on window frames
Office Area	Ventilation Ducts	Sealant on ductwork
Interior Doors	Door Frame	Caulking around door frames
Basement	Wall penetration	Cementitious parging around wall penetrations
Throughout Building	Walls	Drywall joint compound
Throughout Building	Within concrete block walls	Vermiculite insulation
Throughout Building	Fire doors	Insulation within fire rated doors
Exterior Doors	Door Frame	Caulking around door frames
Exterior Concrete Around Pool	Sealant on Concrete	Grey Sealant over /between concrete pads
Exterior Concrete Around Pool	Sealant on Concrete	Black Sealant over /between concrete pads
Building Exterior Around Main Entrance	Façade	Textured plaster over main entrance
Building Exterior	Window frames	Caulking on window frames
Building Exterior	Caulking around building	Caulking around base of building
Exterior Waterpark Building Roof	Flashing Caulking	Caulking along the seams of the flashing
Exterior Waterpark Building Roof	Roof Vents	Tar / caulking around vents
Exterior Waterpark Building Roof	Roof Vents/ Ductwork	Black tar / caulking around vents
Exterior Waterpark Building Roof	Built-Up Roofing System	Roof core - layered roofing materials
Exterior Cantina	Window frames	Caulking on window frames
Exterior Cantina Roof	Roof Vents	Caulking around vents
Exterior Cantina Roof	Roofing Shingles	Asphalt roofing shingles
Interior/Exterior of Building	Concrete Block Walls	Mortar between concrete block walls

1. For more detail of the encountered materials refer to attached – **Suspected Asbestos Sampling Table**
2. For relevant photographs taken during the survey refer to attached – **Project Photographs**

It should be noted that asbestos-containing material (ACM), Designated Substances or hazardous materials may be concealed by existing building finishes, components or fixtures. If demolition or construction activities uncover materials suspected to contain asbestos, lead, other Designated Substances or hazardous materials, all work must stop prior to the disturbance of these materials, and the suspect materials should either be sampled by a qualified person, or presumed to contain the suspected substance. Whether the suspect material(s) are confirmed, or presumed, to contain these substances, they must be handled and disposed of in accordance with the appropriate and applicable



guidelines and regulations including, but not limited to: O. Reg. 278/05, O. Reg. 490/09 and R.R.O. 1990, Regulation 347 (as amended).

## CLOSING

This report is not intended to be a standalone document, and does not list all possible asbestos-containing materials present within the units or the subject areas. This report is intended to supplement, and must be used in conjunction with, the buildings' existing asbestos and designated substances survey report.

We trust that the above is satisfactory for your purposes at this time. Please contact the undersigned should you have any questions or concerns.

Please do not hesitate to contact the undersigned should you have any questions.

Yours truly,

**WSP**

A handwritten signature in black ink, appearing to read 'Danielle Vella'.

Danielle Vella  
Environmental Officer

*Encl. Suspected Asbestos Sample Summary, Project Photographs*



**SUSPECTED ASBESTOS SAMPLING TABLE**

**Location: 8 Ross Street - Waterpark Building**

Functional Space(s)	Building System (i.e. floor, walls, etc.)	Suspected Asbestos-Containing Material	No. of Required Samples	ACM Friability	Material Condition	Accessibility (destructive or non destructive)	Approximate Material Quantity	Photo #
Men's and Woman's Changerooms	Flooring	Textured sealant over concrete flooring	3	Non-Friable	Fair	Non-destructive	≈ 2000 ft <sup>2</sup>	1
Men's and Woman's Changerooms	Sealant on Concrete	Sealant between concrete	3	Non-Friable	N/A	Non-destructive	≈ 150 linear feet	2
Interior windows throughout	Window frames	Caulking on window frames	3	Non-Friable	Fair	Non-destructive	≈ 300 linear feet	3
Office Area	Ventilation Ducts	Sealant on ductwork	3	Non-Friable	N/A	Non-destructive	N/A	4
Interior Doors	Door Frame	Caulking around door frames	3	Non-Friable	Good	Non-destructive	≈ 150 linear feet	5
Basement	Wall penetration	Cementitious parging around wall penetrations	3	Non-Friable	Good	Non-destructive	≈ 25 ft <sup>2</sup>	6
Throughout Building	Walls	Drywall joint compound	7	Non-Friable	Good	Non-destructive	≈ 3000 ft <sup>2</sup>	7
Throughout Building	Within concrete block walls	Vermiculite insulation	7	Friable	N/A	Destructive	N/A	8
Throughout Building	Fire doors	Insulation within fire rated doors	3	Friable	N/A	Destructive	N/A	9
Exterior Doors	Door Frame	Caulking around door frames	3	Non-Friable	Good	Non-destructive	≈ 100 linear feet	10
Exterior Concrete Around Pool	Sealant on Concrete	Grey Sealant over /between concrete pads	3	Non-Friable	Fair	Non-destructive	≈ 150 linear feet	11
Exterior Concrete Around Pool	Sealant on Concrete	Black Sealant over /between concrete pads	3	Non-Friable	Fair	Non-destructive	≈ 20 linear feet	12
Building Exterior Around Main Entrance	Façade	Textured plaster over main entrance	3	Non-Friable	Fair	Non-destructive	≈ 450 ft <sup>2</sup>	13
Building Exterior	Window frames	Caulking around window frames	3	Non-Friable	Fair	Non-destructive	≈ 300 linear feet	14
Building Exterior	Caulking around building	Caulking around base of building	3	Non-Friable	Fair	Non-destructive	≈ 300 linear feet	15
Exterior Waterpark Building Roof	Flashing Caulking	Caulking along the seams of the flashing	3	N/A	Good	Non-destructive	N/A	16



### SUSPECTED ASBESTOS SAMPLING TABLE

Location: 8 Ross Street - Waterpark Building

Functional Space(s)	Building System (i.e. floor, walls, etc.)	Suspected Asbestos-Containing Material	No. of Required Samples	ACM Friability	Material Condition	Accessibility (destructive or non destructive)	Approximate Material Quantity	Photo #
Exterior Waterpark Building Roof	Roof Vents	Tar / caulking around vents	3	N/A	Good	Non-destructive	N/A	17
Exterior Waterpark Building Roof	Roof Vents/ Ductwork	Black tar / caulking around vents	3	N/A	Good	Non-destructive	N/A	18
Exterior Waterpark Building Roof	Built-Up Roofing System	Roof core - layered roofing materials	3	N/A	Good	Destructive	≈ 3000 ft <sup>2</sup>	19
Exterior Cantina	Window frames	Caulking on window frames	3	Non-Friable	Fair	Non-destructive	≈ 20 linear feet	20
Exterior Cantina Roof	Roof Vents	Caulking around vents	3	Non-Friable	Fair	Non-destructive	N/A	21
Exterior Cantina Roof	Roofing Shingles	Asphalt roofing shingles	3	Non-Friable	Fair	Non-destructive	≈ 360 ft <sup>2</sup>	21
Interior/Exterior of Building	Concrete Block Walls	Mortar between concrete block walls	7	Non-Friable	Fair	Non-destructive	N/A	8



Photo #1: Textured sealant over concrete flooring within the men and woman's changerooms.



Photo #2: Sealant between concrete within the men and woman's changerooms.



Photo #3: Window caulking observed around interior window frames throughout the building.



Photo #4: Sealant on ductwork in the office area.



Photo #5: Caulking around interior door frames throughout the building.



Photo #6: Cementitious parging around wall penetrations

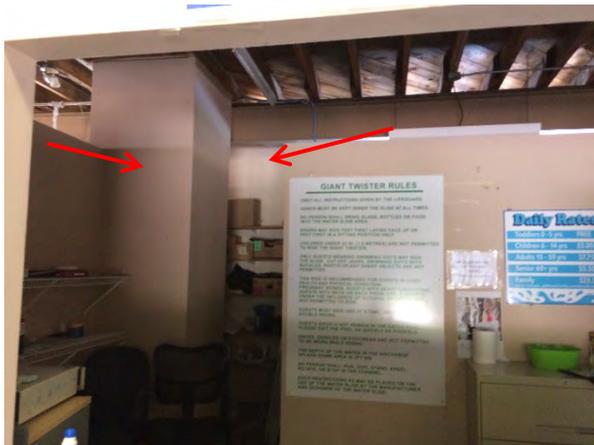


Photo #7: Drywall joint compound on walls throughout the building.



Photo #8: ACM vermiculite may exist within, as well as mortar between the concrete blocks throughout the building.



Photo #9: Fire doors throughout the building may contain ACM insulation.



Photo #10: White caulking around exterior door frames.



Photo #11: Grey sealant over/around concrete pads around the pool area.



Photo #12: Black sealant over/between concrete pads around the pool area.

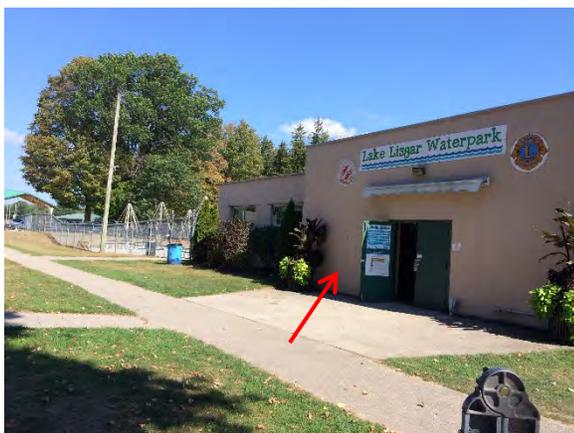


Photo #13: Exterior textured plaster over main entrance.



Photo #14: Exterior caulking around window frames.



Photo #15: Caulking around the base of the building.



Photo #16: Caulking on the seams of the main building roof flashing.



Photo #17: Tar/caulking on vents on the main building roof.



Photo #18: Black tar/caulking around ductwork and vents on the main building roof.



Photo #19: Built up roofing system on the main building roof.



Photo #20: Caulking around window frame on the exterior of the cantina.



Photo #21: Caulking around vents on the cantina roof. Exterior roofing shingles on the cantina roof.

# APPENDIX

## C ACCESSIBILITY REPORT



## TOWN OF TILLSONBURG LAKE LISGAR WATERPARK AND SUMMER PLACE BUILDINGS 8 Ross Street, Tillsonburg ACCESSIBILITY REPORT

### 1.0 GENERAL

This accessibility report outlines the findings of the buildings AODA review performed on Tuesday, September 26 at Town of Tillsonburg Lake Lisgar Waterpark and Summer Place buildings located at 8 Ross Street, Tillsonburg, ON. It also identifies prospective areas of upgrades required to improve accessibility for the buildings' users.

The recommendations from the Consultants' Team are based upon the requirements of the standards referenced below, as well as recognized best practices from the consultant's experience. In an effort to provide an environment that is accessible by people of all abilities, a review of the accessibility requirements of these documents has been conducted in relation to the building. This report outlines the buildings deficiencies identified by the consultants specifically for this project. Not all of the "Best Practice" recommendations outlined in the referenced standards are recommended for implementation in their entirety.

Since these facilities were constructed before the new accessibility related revisions to the Ontario Building Code came into effect (January 2015), currently the buildings only required to be compliant with the Ontario Building Code in case of major renovations. Therefore this report analyses each building element based on its compliance with the Ontario Building Code and accessibility standards, listed below. Further recommendations on how to improve accessibility are based on current standards and best practices and are identified as such.

### 2.0 STANDARDS

Referenced Standards include the following:

#### **2.1 Current Standards (Compliance is mandatory if the space is being extensively renovated)**

- **2012 Ontario Building Code [2012 OBC]**

The Ontario government has recently released the new 2012 edition of the Building Code, which came into force on January 1, 2015. The barrier-free design requirements of the Ontario Building Code (OBC), amended in 2015 to include enhancements to accessibility for buildings, are generally recognized as

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representative of a minimum standard for accessibility in new construction. The Ontario Building Code does not require that existing buildings be retrofitted to provide full accessibility. It is important to note that compliance with the building code does not constitute compliance with the Ontario Human Rights Code. This is a key reason why additional accessibility standards for the built environment are required to address the needs of users with varying disabilities.

- **2005 Accessibility for Ontarians with Disabilities Act [2005 AODA]**

- **Design of Public Spaces Standards, Integrated Accessibility Standards Regulation [IASR], Ontario Regulation 191/11.**

This standard focuses on removing barriers in two areas including public spaces and buildings.

- **The Ontario Human Rights Code [OHRC].** Amongst other things, the Ontario Human Rights Code [OHRC] recognizes that people with disabilities have the right to be able to access services and jobs with the right to assume the same responsibilities and duties as everyone else. Employers and service providers have a duty to consider the needs of people with disabilities. This includes ways to apply the principles of inclusive or universal design for the construction or renovation of buildings and facilities, as well as their application to related processes, programs and services. If systems, facilities or other elements of the built environment create discriminatory barriers, then they must be removed or changed. In summary, there are two important considerations related to the Ontario Human Rights Code [OHRC] that are critical to recognize:

1. It has primacy over all other provincial legislation including the Ontario Building Code [OBC] and the Accessibility for Ontarians with Disabilities Act [2005 AODA]; and
2. Its intent is to remedy the situation for the person or group that has been discriminated against and to prevent further discrimination.

## **2.2 Voluntary Standards (Compliance is voluntary based on Owner's discretion)**

- **2012 Canadian Standards Association "Accessible Design for the Built Environment" [CSA B651-12]**

Currently the Canadian Standards Association "Accessible Design for the Built Environment" [CSA B651-12] is recognized as a voluntary national built environment standard for Canada. The CSA requirements were updated in



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2012 and it is considered more comprehensive than the Ontario Building Code (OBC).

### 3.0 OPINION OF COSTS

The costs provided in this report are our opinion of the value of the remedial work required to achieve compliance for the various conditions noted in the building. They do not include applicable taxes, engineering fees or any unforeseen conditions that require repair at the time the repair work is being completed.

Actual costs can only be established by obtaining bids, preferably on the basis of competitive tenders, from specialized contractors. The costs provided herein should only be used for general budgeting purposes.

Actual costs will also vary depending upon the time of tender, schedule of work and conditions under which the work must be carried out. Architecture49 Inc. has not investigated the presence of pollutants, contaminants and hazardous materials that may be encountered during the work. Depending on the materials present, additional funds may be required for remediation measures.

### 4.0 LIMITATIONS

The information contained in this report represents the professional opinion of Architecture49 Inc. and their best judgement under the natural limitations imposed by the Scope of the Audit.

This report is intended solely as an indication of the physical condition of the building components addressed in the report. The material in this report reflects the Consultant's best judgement in light of the information available to it at the time of preparation.

Any use a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. The Consultant accepts no responsibility for damages, if any suffered by any third party as a result of decisions made or actions based on this report.

This report is limited in scope to only those building components that are specifically referenced in this Report. There may be existing deficiencies in the facility that we did not record in this Report. Such deficiencies were not apparent to us due to the limitations imposed by the scope of work. We can, therefore, accept no liability for any costs incurred by the Client for subsequent discovery, manifestation or rectification of such deficiencies.

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Any costs for repair in this report are the Consultant's opinions of probable construction costs and quantities, based on 2017 dollars. These estimates do not include any unforeseen conditions that require repair at the time the repair work is being completed. Any cost estimates provided are subject to confirmation or adjustment at the time competitive bids are obtained from contractors who specialize in the various items of repair work required. The Consultant makes no representation or warranty expressed or implied as to the reliability of these cost estimates.

Do not use any part of this report as a separate entity. The report has been written to be read in its entirety and for the exclusive use of the Client.

All files, notes, source data, test results and master files are retained in the offices of Architecture49 In. and remain the property of the Consultant.

5.0 BUILDINGS REVIEW

*The accessibility design review and recommendations (with projected costs) are as follows:*

**5.1 PARKING AREA FOR BOTH SUMMER PLACE AND LAKE LISGAR WATERPARK BUILDINGS**

**5.1.1 Compliance:**

STANDARDS		ABBR.	COMPLIANCE
MANDATORY	Ontario Building Code general compliance	OBC GENERAL	NONCOMPLIANT
	Ontario Building Code General Compliance to 2015 Accessibility Amendments/Standards	OBC 2015 GENERAL	NONCOMPLIANT FULL COMPLIANCE IS NOT REQUIRED UNLESS THE AREA UNDERGOES EXTENSIVE RENOVATIONS
VOLUNTARY	Canadian Standards Association "Accessible Design for the Built Environment"	CSA B651-12	NONCOMPLIANT
	Best Practices	BP	NONCOMPLIANT

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- \* - Mandatory Standards..... Compliance is mandatory if the space is being extensively renovated.
- Voluntary Standards.....Compliance is voluntary based on Owner's discretion.
- Best Practices.....Best practices are used to maintain quality as an alternative to mandatory legislated standards and can be based on self-assessment or benchmarking. Compliance is not required by law.

**5.1.2 General description:**

**Accessible Parking Spots:**

The parking lot in front of the buildings has no designated accessible parking spots within 30m of the main entrances for both buildings.

**Accessible Route to the Main Entrances:**

The accessible route to the main entrances of both buildings is longer than required 30m.

**5.1.3 Implications to the Owner, if the Owner decides to bring the Parking Area up to current accessibility standards:**

The designated accessible parking spots will have to be created within 30m travel distance of the main entrances to both buildings. Wheelchair transfer spaces will have to be provided for them. Proper accessibility signage will have to be installed.

The cost of this work is estimated to be: **+/- \$10,500**

**5.2 SUMMER PLACE BUILDING**

**5.2.1 Compliance:**

STANDARDS		ABBR.	COMPLIANCE
<b>MANDATORY</b>	Ontario Building Code general compliance	OBC GENERAL	NONCOMPLIANT
	Ontario Building Code General Compliance to 2015 Accessibility Amendments/Standards	OBC 2015 GENERAL	NONCOMPLIANT FULL COMPLIANCE IS NOT REQUIRED UNLESS THE AREA UNDERGOES EXTENSIVE

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			RENOVATIONS
<b>VOLUNTARY</b>	Canadian Standards Association "Accessible Design for the Built Environment"	CSA B651-12	NONCOMPLIANT
	Best Practices	BP	NONCOMPLIANT

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**5.2.2 General description:**

**Entry door:**

The entry door is not compliant with the requirements of current accessibility standards as follows:

- The clear width of the door is less than 860mm;
- There are steps in front of the door and no ramp is provided;

**Administrative Area and Camp Room:**

The Administrative area and Camp Room are not compliant with the current standards. While there is ample space for wheelchair maneuvering and turning, other accessible elements are missing. All exits to the street are not accessible. Lockers are not accessible. There are no accessible benches provided in front of the lockers or anywhere within the space. Sinks are not accessible. Lighting levels are lower than required. Flooring is uneven. There are no visual fire alarm signals (strobes) and audible fire alarm annunciators. Exit signs are missing. All the doors on the barrier-free path of travel are narrower than required and lack power door operators.

**Washrooms:**

There are two sets of washrooms in the building: male and female. Both of them are not compliant with current accessibility standards. They do not have adequate size for all necessary clearances; the lavatory and grab bars are not up to current standards; the accessible stalls are too narrow, the doors do not have an adequate clear width and power door operators are not provided.

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**5.2.3 Implications to the Owner, if the Owner decides to bring the Summer Place Building up to current accessibility standards:**

In order to make the Summer Place Building compliant with the current accessibility standards a full renovation is required. The Administrative Area and Camp Room will need to be equipped with accessible lockers, sinks and benches. Flooring and lighting will have to be replaced. Washrooms will need to be enlarged and completely redesigned. All the doors will need to be replaced. Power door operators will have to be provided for every door along the barrier-free path of travel. All necessary accessible equipment will have to be installed in the washrooms. Lighting levels will have to be increased and exit signs installed.

The cost of this work (depending on the extent of the renovations) is estimated to be: +/- \$100,000

**5.3 LAKE LISGAR WATERPARK BUILDING**

**5.3.1 Compliance:**

STANDARDS		ABBR.	COMPLIANCE
MANDATORY	Ontario Building Code general compliance	OBC GENERAL	PARTIALLY COMPLIANT
	Ontario Building Code General Compliance to 2015 Accessibility Amendments/Standards	OBC 2015 GENERAL	PARTIALLY COMPLIANT FULL COMPLIANCE IS NOT REQUIRED UNLESS THE AREA UNDERGOES EXTENSIVE RENOVATIONS

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VOLUNTARY	Canadian Standards Association "Accessible Design for the Built Environment"	CSA B651-12	PARTIALLY COMPLIANT
	Best Practices	BP	PARTIALLY COMPLIANT

\* - Mandatory Standards..... Compliance is mandatory if the space is being extensively renovated.  
 - Voluntary Standards.....Compliance is voluntary based on Owner's discretion.  
 - Best Practices.....Best practices are used to maintain quality as an alternative to mandatory legislated standards and can be based on self-assessment or benchmarking. Compliance is not required by law.

**5.3.2 General description:**

The Lake Lisgar Waterpark Building is partially compliant with the latest accessibility standards in its current state. While there are a defined barrier-free path of travel, public washrooms with accessible stalls, designated accessible showers, a universal washroom, they are all non-compliant with current accessibility standards. The accessible ramps leading to the pool deck are partially compliant: their length and widths are adequate, but the horizontal landings in front of exit doors are too small for wheelchair turning, and the exit doors themselves are too narrow and are not equipped with power door operators. The service counter at the pool office does not have a barrier-free section. All the doors in the space are narrower than current standards allow and power door operators are missing. The lighting levels are lower, than required by current accessibility standards. The locker area is not accessible, there are no adequate accessible seating and accessible lockers and benches are not provided in the change rooms.

**5.3.3 Implications to the Owner, if the Owner decides to bring the Waterpark Building up to current accessibility standards:**

Several accessibility related improvements can be considered for the Waterpark Building as follows:

- Power door operators should be installed on both leafs of the main entrance door, thus making it accessible without replacing the entire door;
- Main Service counter should be replaced with the new one containing a compliant barrier-free section;
- Universal washroom in front of the main service counter should be enlarged to accommodate for wheelchair turning clearances as well as provide a space for an adult change table. The sink and the grab bars should all be replaced;

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- Locker/Change Area has to be improved and equipped with accessible benches and accessible lockers. The hooks at accessible height should be provided;
- Accessible toilet stalls in both changerooms' washrooms should be enlarged and equipped with new compliant grab-bars. The lavatories should be replaced;
- Accessible showers in both changerooms should be equipped with accessible seats and adjustable showerheads;
- Accessible ramps to the pool deck should be modified to incorporate new enlarged landings with tactile walking indicators by the entrance doors;
- Staff exits to the pool deck should be made accessible, by removing steps;
- All doors along the barrier-free path of travel should be replaced and equipped with power door operators;
- Visual fire alarm signals (strobes) and audible fire alarm annunciators will have to be provided;
- Lighting levels will have to be increased throughout the building;

The cost of this work (depending on the extent of the renovations) is estimated to be: **+/- \$250,000 - \$300,000**

**5.4 SIGNAGE IN BOTH BUILDINGS**

**5.4.1 Compliance:**

STANDARDS		ABBR.	COMPLIANCE
<b>MANDATORY</b>	Ontario Building Code general compliance	OBC GENERAL	NONCOMPLIANT
	Ontario Building Code General Compliance to 2015 Accessibility Amendments/Standards	OBC 2015 GENERAL	FULL COMPLIANCE IS NOT REQUIRED UNLESS THE AREA UNDERGOES EXTENSIVE RENOVATIONS

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VOLUNTARY	Canadian Standards Association "Accessible Design for the Built Environment"	CSA B651-12	NONCOMPLIANT
	Best Practices	BP	NONCOMPLIANT

- \* - Mandatory Standards..... Compliance is mandatory if the space is being extensively renovated.
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- Best Practices.....Best practices are used to maintain quality as an alternative to mandatory legislated standards and can be based on self-assessment or benchmarking. Compliance is not required by law.

**5.4.2 General Description:**

All signage in both buildings is not compliant with the current standards. There are no braille signs, the fonts and colours do not conform to the accessibility regulations and the heights at which signage elements are installed are not adequate.

**5.4.3 Implications to the Owner, if the Owner decides to bring the Signage up to current accessibility standards:**

A specialty company specializing in design and manufacturing of exterior/interior signage will have to be contacted.

The cost of this work is estimated to be: **To be determined by a signage consultant.**

**CONCLUSION:**

The inspected buildings have a variety of accessibility issues ranging from total noncompliance to partial compliance to various accessibility standards as outlined in this report. While some of these issues are relatively inexpensive to mitigate, the others, such as issues with the washrooms most likely will require extensive renovations. All the doors within both buildings will need to be replaced in order to be compliant with the current accessibility standards.

The Design of Public Spaces, the Fire Code and the AODA's Accessible Built Environment Standards (an add-on to the Ontario Building Code) all have mandatory requirements for all built environments in Ontario; whether new buildings or those being renovated, there is now a specified, mandatory requirements for accessible or barrier free design features to be added to the drawings for new buildings and for those being retrofitted & renovated.

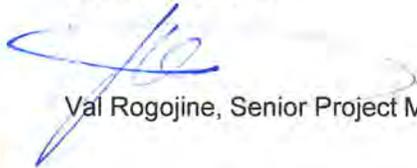
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Also, if a complaint is made by a visitor or an employee to the Ontario Human Rights Commission, the Town of Tillsonburg will be required to take an active role in looking at accommodation solutions that meet the needs of that individual. The Town will be obliged to deal with accommodation requests as quickly as possible, even if it means creating a temporary solution while a long-term one is being developed.

We trust that this report meets your requirements at this time, but should you have any questions, please contact our office.

Yours truly,  
Architecture 49, Inc



Val Rogojine, Senior Project Manager