



Jeff Elliot Playground Inspection

212 Bellehaven Drive, Waterloo, Ontario N2J 3L2. Phone: (519) 883-8224 Fax: (519) 883-0467
Email: jeffelliotplaygroundinspection@live.com

Annual Playground Inspection Report

Prepared for

**Matthew-John Day Care
135 First Avenue
Toronto, Ontario
M4M 1W9**

October 6, 2017



Jeff Elliot Playground Inspection

ANNUAL PLAYGROUND INSPECTION REPORT

Matthew-John Day Care

Inspection Date: October 6, 2017
Time: 7:30 a.m.

Inspector: Jeff Elliot, CPSI, NPSI, Certified

Conditions at Time of Inspection:

Weather: Overcast, Cloudy

Temperature: 15°C

Inspection Overview:

This annual playground inspection report provides a complete comprehensive detailed evaluation of the playground and playspace site, equipment and surfacing. The evaluation of the play site is a review of the condition of site features such as, but not limited to, fencing, street furnishings, pathways, building fixtures, landscape features, park amenities (where applicable), protection from sun and ultra violet light, signage, lighting and washroom facilities (where applicable).

Protective surfaces under and around play equipment are evaluated to the compliance requirements of the 2003 CSA Standard, effective July 15, 2003, 2007 CSA Standard effective April 10, 2007 and 2014 CSA Standard effective April 15, 2014. For play equipment installed prior to April 10, 2007, energy absorbance testing is performed to the requirements of the 2003 CSA Standard. For play equipment installed after April 10, 2007 and prior to April 15, 2014, energy absorbency testing is performed to the requirements of the 2007 CSA Standard. For play equipment installed after April 15, 2014, energy absorbency testing is performed to the requirements of the 2014 CSA Standard.

Play equipment installed prior to April 10, 2007 is evaluated to the compliance requirements of the 2003 CSA Standard, effective July 15, 2003 with references to the revised 2007 CSA Standard provided. For play equipment installed or retrofitted prior to July 15, 2003, reference to the compliance requirements of the previous 1998 CSA Standard is provided. Play equipment installed after April 10, 2007 and prior to April 15, 2014 is evaluated to the compliance requirements of the 2007 CSA Standard. Play equipment installed after April 15, 2014 is evaluated to the compliance requirements of the 2014 CSA Standard.

General Comments on Playground Site

Location:

The play site is located within the rear west yard of St. Matthew's and St. John's Anglican Church, which accommodates the day care centre, located south of the pastor's residence.

Access to the play site is from an entrance door of the church, which accommodates the daycare, along an interlocking brick path through the northeast fence gates. Users can also enter the play site from an entrance door of the church directly into the play site.

Fencing:

A 1.60 metre steel picket fence containing a set of double steel picket fence gates surrounds the northeast corner of the play site. The fence spans between the southeast corner of the pastor's residence and the northwest corner of the south wing of the church building.

- The spaces between the pickets of the northeast fence range between 90mm and 100mm. The individual spaces greater than 90mm may present an entrapment hazard to users.
- A newer gate latch was previously installed onto the main northeast steel picket fence gates.
- Installed onto the east and west gate posts of the double gates are angle steel braces which reinforce the gate posts.

The exterior wall of a neighbouring commercial building forms the south boundary of the play site. Adjacent to the portion of the exterior wall of the commercial building which forms the west part of the south boundary of the play site is a 1.74 metre wood panel fence. The wood panel fence separates the play site from the asphalt shingle siding of the exterior wall of the building.

- There is rot and decay within the bottoms of the 1x6 fence boards of the wood panel fence; particularly at the exposed bottoms of the fence boards at the east end section of the fence, which extends beyond the southeast corner of the wood chip protective surface of the Henderson play structure, and within the exposed bottoms of the individual fence boards at the section of fence which extends beyond the southwest corner of the wood chip protective surface of the Henderson play structure.

ANNUAL PLAYGROUND INSPECTION REPORT

Matthew-John Day Care

The masonry brick wall of the neighbouring commercial building forms the east portion of the south boundary of the play site.

- Attached onto the top northwest corner of the masonry brick wall, above the east end of the south wood panel fence, is a 310mm wide by 1.52 metre high piece of fine steel mesh wire. The piece of fine steel mesh wire closes a space between the exterior walls of two neighbouring buildings.

Within the southeast corner of the play site is a 2.40 metre wood panel fence which spans between the east side of the masonry brick wall of the neighbouring commercial building and a storage shed.

A 1.70 metre to 1.74 metre wood panel fence surrounds the west side of the play site.

- There is splintering and decay within the bottoms of the individual 1x6 fence boards of the west boundary fence. Particularly, at the exposed bottom portions of the fence boards of the sections of fence located immediately north of the storage shed and within the centre sections of the fence located between a triangular shaped garden containing two cedar trees located within the southwest corner of the play site and the storage shed. Where the rot and decay is present within the bottoms of the fence boards, located north of the storage shed, there are openings or spaces which measure up to 130mm high between the decayed portions at the bottoms of the fence boards and ground.
- The first fence post of the west fence, north of the southwest corner post, is leaning in a west direction. There is some slight sway and movement of the fence post in an east-west direction.
Note: The fence post is located behind the triangular shaped garden within the southwest corner of the play site which contains the two cedar trees.

Street Furniture:

A wood barn style storage shed is located within the northwest corner of the play site.

- The storage shed was previously painted. Small portions of paint applied to the front east wall panel, located north and south of the doors, have begun to peel, flake and blister.

A steel frame wood park bench is located within the south side of the play site.

Two Step 2 portable plastic picnic tables.

A wood sided storage locker is located within the southeast corner of the play site and is attached onto the exterior west wall of the church building.

- The storage locker contains two retractable tables, which fold into the exterior wall of the locker. The tables are secured and anchored by means of latch bolts into the exterior wall of the storage locker.
- A 1.50 metre wood panel gate is installed between the south wall of the storage locker and the south fence.

Eleven junior stacking chairs.

One plastic patio chair.

An outdoor wood play kitchen or mud kitchen containing a double stainless steel sink.

Two triangular shaped mesh fabric style awnings are installed and span over a sandbox located within the southeast corner play site and span over a portion of the interlocking brick path located within the west side of play site.

- The awning which spans over the sandbox is attached to the exterior wall of a neighbouring commercial building which forms the east part of the south boundary the play site and to a 4x4 post installed within the interlocking brick pathway or tarmac located within the east side of play site.
- The awning which spans over the interlocking brick pathway area within the west side of play site is attached to a 4x4 post located adjacent to the west fence and immediately south of the storage shed, to a telephone pole located outside the play site and adjacent to the southwest corner fence post and to a support upright of the Henderson play structure located south of the double bed slide.
- **Street Furniture Location Fault, Protective Surfacing Zone Fault (Annex F, Clause 14.5.2, 14.1.1 of the 1998, 2003, 2007 and 2014 CSA Standards):** The strap at the east side of the triangular shaped awning installed within the west side of the play site is tied or attached to a support upright of the Henderson play structure located immediately south of the double bed slide, which places the strap and the east part of the awning within the 1.80 metre protective surfacing zones of the play structure and of the slide.

ANNUAL PLAYGROUND INSPECTION REPORT

Matthew-John Day Care

- **Playspace Inspection/Maintenance Fault (Clause 11.4 of the 1998, 2003, 2007 and 2014 CSA Standards):** Play equipment shall be inspected on a high-frequency, daily and weekly basis, specifically for items such as strings and ropes tied to the play equipment, and such items shall be removed.

Pathways:

An interlocking brick tarmac and bike track covers the balance of the play site and surrounds the north, east and west sides of the wood chip protective surface of the Henderson play structure.

- The interlocking bricks within the portion of the tarmac area that covers the east side of the play site and which surround the north, west and south sides of a raised planter box containing two large, mature maple trees have heaved, where the grade of the tarmac area is uneven. The heaving of the interlocking bricks may be attributed to the growth of tree roots under the interlocking brick tarmac area. The majority of the heaving within the interlocking brick tarmac area has occurred south of the planter box, between the planter box and the southeast storage shed.
- As a result of the installation of the 4x4 wood post that supports a triangular shaped mesh fabric style awning which spans over a sandbox located within the southeast portion play site, three individual interlocking bricks were removed from the pathway or tarmac to accommodate the installation of the post. The space surrounding the base of the post, where the bricks are removed, is filled with sand.

Landscape Features:

Two large mature maple trees are growing within a planter box constructed of two layer 6x6 retaining walls, located adjacent to the exterior west wall of the church building within the northeast corner of the play site.

- Newer replacement 6x6 retaining wall members were previously installed along the diagonal southwest side and west side of the planter box.
- The ground covers or garden bedding within the planter box or garden consists predominantly of sand over soil.

Two young cedar trees are growing within a triangular shaped planter box constructed of one and half layers of 6x6 retaining walls located within the southwest corner of the play site.

- Wood mulch is placed as garden bedding within the planter box.

Building Fixtures:

The exterior south wall of the pastor's residence forms the north boundary of the play site.

- Attached to the exterior wall of the pastor's residence within the northwest corner of the play site are telephone and cable television wires. The wires are secured onto the wall with wire clamps.
- At ground level, within the exterior wall of the pastor's residence, are two basement windows. Wood barriers are installed over the window wells to cover the window wells. Lexan panels are installed onto the exterior wall over the windows to provide protection from the windows. The windows and window wells are completely enclosed.
 - There is splintering within the plywood that forms the window well covers. Particularly, along the top surfaces and edges of both covers. A 50mm wide by 450mm long strip of plywood is removed from the southeast corner of the window well cover installed over the east window well.

The exterior west wall of the south wing of the church building forms the east boundary of the play site. Attached to the exterior wall of the church building above the east side of the play site is a light.

Protection from Sun and Ultraviolet Light:

The church building provides shade for the play site.

Two neighbouring commercial buildings, which form part of the south boundary of the play site, provide shade.

Two large maple trees within the northeast corner of the play site provide shade.

Large trees within the neighbouring properties south and west of the play site provide shade.

The two cedar trees within the southwest corner of the play site provide shade.

ANNUAL PLAYGROUND INSPECTION REPORT

Matthew-John Day Care

Two triangular shaped mesh fabric style awnings which span over a sandbox located within the southeast corner play site and span over the portion of the interlocking brick path located within the west side of play site provide areas of shade.

Site Recommendations:

- Recommend repairs to the bases of the individual 1x6 fence boards of the south and west wood panel fences, which are located adjacent to the southeast and southwest corners of the wood chip protective surface of the Henderson play structure and north and south of the storage shed to correct the rot and decay.
Note: An alternative to repairing the rot and decay is to install a wood skirting horizontally along the bottom of the fence to cover the areas where decay is present and to close spaces between the bottoms of the fence boards and ground.
- Continue to monitor the interlocking bricks, particularly the interlocking bricks within the portion of the tarmac area located within the east side of the play site and which surround the south, north and west sides of the raised planter box containing two large mature maple trees, for continued heaving.
- Continue to monitor the first fence post of the west fence, north of the southwest corner post, which is leaning in a west direction to ensure the post remains stable and secure.
- Reposition the triangular shaped mesh fabric style awning installed within the west side of play site so that no portion of the awning is attached to the Henderson play structure and that the awning is located beyond the 1.80 metre protective surfacing zones of the play structure.
- Manage the 4x4 support post where the north side of the triangular shaped awning installed over the sandbox is attached and which is installed within the interlocking brick tarmac or pathway area so that the post does not present an obstruction to users.
- Replace the strip of plywood which is removed from the southeast corner of the plywood window well cover installed over the east window well of the pastor's residence located within the north side of play site.
- Suggest replacement of both plywood window well covers which are installed over the window wells of the pastor's residence located within the north side of play site to correct the splintering of the existing covers.

ANNUAL PLAYGROUND INSPECTION REPORT
Matthew-John Day Care

Henderson Play Structure Surface Analysis

Surface Area: 10.4 metres x 12.2 metres

Surface Type: Wood Chip

Surface Depth:

- 250mm at the exit of the single bed slide
- 350mm at the inverted rung arch climber
- 320mm at the exit of the double bed slide
- 370mm at the base of the stair
- 370mm under the crawl tunnel

Defined Fall Height:

The defined fall height is the height from a piece of the equipment within or on a protective surface to which energy absorbency must be achieved. The defined fall height is determined according to the compliance requirements of the edition of the CSA Standard (2003, 2007 or 2014) applicable at time of the installation of the play equipment.

- 1.42 metres from the platform accessing the single bed slide.

Surface Conditions:

- The protective surface is in a clean condition at time of inspection.
- There is a mixture of sand within the wood chip surfacing. It appears that sand has spread from the sandbox into the wood chip surfacing.

Energy Absorbency of a Surfacing Material

Testing to determine the energy absorbency of the surfacing material was performed using the Triax 2000, in accordance to the compliance requirements of Clause 10.1 of the 2003, 2007 and 2014 CSA Standards and ASTM F1292 Standard. The energy absorbency testing is performed to the compliance requirements of the edition of the CSA Standard (2003, 2007 or 2014) applicable at time of the installation of the play equipment. Energy absorbency of the surface is achieved when the GMAX (Maximum Gravitational Force of Impact) is less than 200 and the HIC (Head Injury Criteria) is less than 1000 from the defined critical height of the play equipment.

At 1.42 metres from the platform north of the single bed slide.			At 1.42 metres from the platform south of the single bed slide.			At 2.145 metres, representing the defined fall height of the 2007 and 2014 CSA Standards, north of the arched climber.		
Drop	GMAX	HIC	Drop	GMAX	HIC	Drop	GMAX	HIC
1	50	138	1	54	202	1	46	134
2	47	141	2	53	174	2	45	156
3	47	149	3	57	188	3	43	148
Average	47	145	Average	55	181	Average	44	152

**The Average is calculated from the test results of drops 2 and 3 at each location.*

Onsite readings indicate that the energy absorbency of the surface was achieved at the drop locations.

Retaining Walls:

The protective surface is surrounded by 300mm high Landscape Structures plastic timber retaining walls.

- The four centre retaining wall members which surround the north side of the surface are leaning slightly in a north direction.
- There are two small (5mm and 10mm diameter) holes within the top of the west end of the centre retaining wall member along the north side of the surface.

Protective Surfacing and No-Encroachment Zones:

Protective surfacing zones are not met to the triangular shaped mesh fabric style awning installed within the west side of the play site which is attached to the support upright of the play structure, located immediately south of the double bed slide.

No-encroachment zones are met.

ANNUAL PLAYGROUND INSPECTION REPORT
Matthew-John Day Care

Safety Concerns:

- Lack of protective surfacing zones as a result of a mesh fabric style awning being attached to the play structure.

Recommendations and Opinion of Compliance:

Upon removal of the mesh fabric style awning which is currently attached to the play structure, in the opinion of the inspector, the protective surface would meet the compliance requirements of the 1998, 2003, 2007 and 2014 CSA Standards.

- Reposition the triangular shaped mesh fabric style awning installed within the west side of play site so that no portion of the awning is attached to the Henderson play structure and that the awning is located beyond the 1.80 metre protective surfacing zones of the play structure.
- Suggest a plan to repair the two small holes within the west end at the top of the centre retaining wall member along the north side of the surface.
- Continue to monitor the retaining wall members which surround the centre portion of the north side of the protective surface, which are leaning slightly in a north direction.

ANNUAL PLAYGROUND INSPECTION REPORT
Matthew-John Day Care

Henderson Play Structure
1999 Installation

Age Use: Toddler, Preschool and School Age

Manufacturer's label is present.

General Comments and Faults

Label

A manufacturer's label is installed indicating the manufacturer's name and contact information.

Play Components

Steel Stair

Complies

0.90 metre Platform

Street Furniture Location Fault, Protective
Surfacing Zone Fault

Annex F, Clause 14.5.2, 14.1.1 (1998, 2003, 2007 and 2014 CSA Standards): The strap at the east side of a triangular shaped awning installed within the west side of the play site is tied or attached to a support upright of the platform of the Henderson play structure and located immediately south of the double bed slide, which places the strap and the east part of the awning within the 1.8 metre protective surfacing zones of the play structure and of the slide.

Playspace Inspection/Maintenance Fault

Clause 11.4 (1998, 2003, 2007 and 2014 CSA Standards):

Play equipment shall be inspected on a high-frequency, daily and weekly basis, specifically for items such as strings and ropes tied to the play equipment, and such items shall be removed.

Bubble Panel

Comment

Complies

The red colouring of the barrier of the bubble panel has faded.

Double Bed Plastic Slide

Comment

Complies

The red colouring of the plastic slide has faded.

Elevated Crawl Tunnel

Plastic Materials Comment

Complies

The red colouring of the north entrance panel has faded.

Repair/Retrofit

A replacement entrance panel was previously installed at the south end of the crawl tunnel.

0.90 metre Triangular Platform

Complies

Inverted Rung Arch Climber

Comment

Complies

The design of the climber contains openings of 290mm between the edge of the platform and top rung and 260mm openings between the rungs which may cause younger users to fall through the rungs.

1.20 metre Triangular Platform

Complies

1.42 metre Platform

Complies

Steering Wheel

Complies

Single Bed Plastic Slide

Complies

Comment

The red colouring of the plastic slide has faded.

Two Play Counters

Comply

Safety Concerns:

- A mesh fabric style awning attached to a 4x4 support post of the play structure.

ANNUAL PLAYGROUND INSPECTION REPORT
Matthew-John Day Care

Recommendations and Opinion of Compliance:

Upon removal of the mesh fabric style awning which is currently attached to the play structure, in the opinion of the inspector, the play structure would meet the compliance requirements of the 1998, 2003, 2007 and 2014 CSA Standards.

- Reposition the triangular shaped mesh fabric style awning installed within the west side of play site so that no portion of the awning is attached to the Henderson play structure and that the awning is located beyond the 1.80 metre protective surfacing zones of the play structure.
- Continue supervision policies managing the rung spacing of the arch climber.

Sandbox
1999 Installation

Age Use: Toddler, Preschool and School Age

Manufacturer's label is not present.

General Comments and Faults

Cover

There is a cover on the sandbox at time of inspection.

Sand Play Depth

The depth of the sand play material measures 180mm to 290mm. The 2003, 2007 and 2014 CSA Standards recommend a minimum sand play depth of 200mm and a preferred sand play depth of 450mm.

Sand Play Conditions

The sand play material is in a clean and loose filled condition.

Comment

Silicone is installed to fill seams between the plastic timber retaining walls that surround the sandbox.

Note: A portion of the silicone is removed from one seam between the centre and west end retaining wall members that surround the north side of the sandbox.

Safety Concerns:

None.

Recommendations and Opinion of Compliance:

in the opinion of the inspector, the sandbox meets the compliance requirements of the 1998, 2003, 2007 and 2014 CSA Standards.

- Suggest reinstalling the removed portion of silicone within the seam between the centre and west end retaining wall members that surround the north side of the sandbox.