CANADA
MUNICIPALITY OF PONTIAC
PROVINCE OF QUEBEC

BY-LAW 26-13

BY-LAW No. 26-13 AMENDING ZONING BY-LAW No. 177-01 TO INCORPORATE NEW STANDARDS FOR AREAS PRONE TO LANDSLIDES

WHEREAS by-law no. 154-11 amending the MRC des Collines-de-l'Outaouais' Land Use and Development Plan to integrate new standards for areas prone to landslides came into force in June 2011;

WHEREAS in accordance with the provisions of the Act Respecting Land Use Planning and Development, any municipality, which is part of the MRC, is required within six months of the coming into force of a by-law amending the Land Use and Development Plan to change its urban planning by-laws to bring them into compliance with the amended Plan;

WHEREAS a notice of motion was filed by Councillor R. Denis Dubé at the special meeting of March 4th 2014;

WHEREAS the by-law was submitted to the Special Meeting of March 4th 2014;

CONSEQUENTLY it is resolved that by-law no. 26-13 be adopted by council, as follows:

Moved by: Brian Middlemiss
Seconded by: Inès Pontiroli

ARTICLE 1

Section 4.11"Mass movement zones" and its subsections 4.11.1 to 4.11.3, which is part of Zoning By-law no. 177-01, is repealed and replaced with the following:

4.11 AREAS PRONE TO LANSLIDES

4.11.1 Normative framework for control of land use in areas prone to landslides

The activities planned in areas prone to landslides shown in Appendix “B” of by-law no. 44-97 enacting the revised MRC des Collines-de-l’Outaouais’ Land Use and Development Plan, which were transferred to map no. ZMM-01-01 titled "Municipality of Pontiac Mass Movement Zones" should be carried out in accordance with the "*Normative framework for control of land use in areas prone to landslides*," that follows.

Each of the activities mentioned in the framework is generally prohibited at the top and at the base of banks and buffer strips whose width is specified in the table. Despite these activities being prohibited, they could be allowed subject to the production of a geotechnical report. This report must comply with the requirements set out in the table titled “*Normative framework for control of land use in areas prone to landslides – Geotechnical report*” in subsection 4.11.2 of this by-law.

NORMATIVE FRAMEWORK FOR CONTROL OF LAND USE IN AREAS PRONE TO LANDSLIDES DE TERRAIN			
TYPE OF ACTIVITY PLANNED	**ZONE**		
	Class I	**Class II**	**Class III**
	High risk area (red zone) **Medium risk area (yellow zone)** **Bank 5 metres or higher with a slope angle of more than 20° (36%)** **Bank 5 metres or higher with a slope angle of 14° (25%) or more but less than 20° (36%) with a watercourse at the base**	**Medium risk area (yellow zone)** **Bank 5 metres or higher with a slope angle of 14° (25%) or more but less than 20° (36%) without a watercourse at the base**	**Low risk area (green zone)**
All activities listed below	Prohibited in the bank	Prohibited in the bank	
CONSTRUCTION OF A MAIN BUILDING (other than an agricultural building)	Prohibited: • At the **top** of a bank, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank **40 metres** high or less, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank higher than **40 metres,** in a buffer strip **as wide** as the height of the bank, up to **60 metres**.	Prohibited: • At the **top** of a bank, in a buffer strip **10 metres** wide. • At the **base** of a bank, in a buffer strip **10 metres** wide.	Prohibited

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EXTENSION OF A MAIN BUILDING GREATER THAN 50% OF THE FOOTPRINT AREA (other than an agricultural building) **RECONSTRUCTION OF A MAIN BUILDING** (other than an agricultural building) **RELOCATION OF A MAIN BUILDING** (other than an agricultural building) **CONSTRUCTION OF A COMPLEMENTARY BUILDING** (other than a complementary building to a residential or agricultural use) **EXTENSION OF A COMPLEMENTARY BUILDING** (other than a complementary building to a residential or agricultural use)	Prohibited: • At the **top** of a bank, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank **40 metres** high or less, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank higher than **40 metres,** in a buffer strip **as wide** as the height of the bank, up to **60 metres.**	Prohibited: • At the **top** of a bank, in a buffer strip **10 metres** wide. • At the **base** of a bank, in a buffer strip **10 metres** wide.	*

* Because of the inaccuracy of the delimitation of the zones to which Class I and Class II standards apply on map no. ZMM-01-01 " Municipality of Pontiac Mass Movement Zones" appended to this by–law, some activities could seem to be located in zones to which Class III standards apply, when they should be subject to Class I or Class II standards. Therefore, it is important that this be verified by taking measurements on the parcel of land or with a land survey.

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EXTENSION OF A MAIN BUILDING LESS THAN 50% OF THE FOOTPRINT AREA THAT COMES UP TO THE BANK (other than an agricultural building) (the distance between the top of the bank and the extension is shorter than the current distance between the top and the building)	Prohibited: • At the **top** of a bank, in a buffer strip **one and a half time** as wide as the height of the bank, up to **20 metres**. • At the **base** of a bank **40 metres** high or less, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank higher than **40 metres,** in a buffer strip **as wide** as the height of the bank, up to **60 metres**.	Prohibited: • At the **top** of a bank, in a buffer strip **5 metres** wide. • At the **base** of a bank, in a buffer strip **10 metres** wide.	*
EXTENSION OF A MAIN BUILDING LESS	Prohibited:	No standard	*

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	ZONE		
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THAN 50% OF THE FOOTPRINT AREA THAT MOVES AWAY FROM THE BANK (other than an agricultural building) (the distance between the top of the bank and the extension is greater or equal to the current distance between the top and the building)	• At the **base** of a bank **40 metres** high or less, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank higher than **40 metres,** in a buffer strip **as wide** as the height of the bank, up to **60 metres**.		
EXTENSION OF A MAIN BUILDING WHOSE	Prohibited:	Prohibited:	*

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WIDTH MEASURED AT RIGHT ANGLE TO THE BUILDING'S FOUNDATION IS EQUAL TO OR LESS THAN 2 METRES AND COMES UP TO THE BANK[1] (other than an agricultural building) (the distance between the top of the bank and the extension is shorter than the current distance between the top and the building)	• At the **top** of a bank, in a buffer strip **5 metres** wide. • At the **base** of a bank **40 metres** high or less, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank higher than **40 metres,** in a buffer strip **as wide** as the height of the bank, up to **60 metres**.	• At the **base** of a bank, in a buffer strip **5 metres** wide.	
EXTENSION OF A MAIN BUILDING WITH THE ADDITION OF A SECOND STOREY (other than an agricultural building)	Prohibited: • At the **top** of a bank, in a buffer strip **10 metres** wide.	Prohibited: • At the **top** of a bank, in a buffer strip **5 metres** wide.	*
CANTILEVERED EXTENSION OF A MAIN BUILDING WHOSE WIDTH MEASURED AT	Prohibited:	No standard	*

this by–law, some activities could seem to be located in zones to which Class III standards apply, when they should be subject to Class I or Class II standards. Therefore, it is important that this be verified by taking measurements on the parcel of land or with a land survey.

[1] Extensions whose width measured at right angle to the building's foundation is equal to or less than 2 metres and moves away from the bank are allowed.

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RIGHT ANGLE WITH THE BUILDING'S FOUNDATION IS MORE THAN 1 METRE[2] (other than an agricultural building)	• At the **base** of a bank **40 metres** high or less, in a buffer strip **as wide** as the height of the bank, up to **40 metres**.		
CONSTRUCTION OF A COMPLIMENTARY BUILDING[3] (garage, shed, garden shed, etc.) **OR BUILDING OF AN ACCESSORY CONSTRUCTION TO A RESIDENTIAL USE** (above-ground pool, etc.) **EXTENSION OF A COMPLIMENTARY BUILDING** (garage, shed, garden shed, etc.) **OR OF AN ACCESSORY CONSTRUCTION TO A RESIDENTIAL USE** (above-ground pool, etc.)	Prohibited: • At the **top** of a bank, in a buffer strip **10 metres** wide.	Prohibited: • At the **top** of a bank, in a buffer strip **5 metres** wide.	*

[2] Cantilevered extensions whose width measured a right angle with the building's foundation are equal to or less than 1 metre are allowed.

[3] Garages, sheds and garden sheds with a surface area of less than 15 square metres that do not require fill at the top of the bank or cut or excavation work in the bank are allowed in all zones.

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CONSTRUCTION OF AN AGRICULTURAL BUILDING (main building, complimentary or secondary building, grain or silage silo, etc.) **OR OF AN AGRICULTURAL STRUCTURE** (animal waste structure, etc.) **EXTENSION OF AN AGRICULTURAL BUILDING** (main building, complimentary or secondary building, grain or silage silo, etc.) **OR OF AN AGRICULTURAL STRUCTURE** (animal waste structure, etc.) **RECONSTRUCTION OF AN AGRICULTURAL BUILDING** (main building, complimentary or secondary building, grain or silage silo, etc.) **OR OF AN AGRICULTURAL STRUCTURE** (animal waste structure, etc.) **RELOCATION OF AN AGRICULTURAL BUILDING** (main building, complimentary or secondary building, grain or silage silo, etc.) **OR OF AN AGRICULTURAL STRUCTURE** (animal waste structure, etc.)	Prohibited: • At the **top** of a bank, in a buffer strip **as wide** as the height of the bank, up to **40 metres**. • At the **base** of a bank, in a buffer strip **15 metres** wide.	Prohibited: • At the **top** of a bank, in a buffer strip **as wide** as the height of the bank, up to **20 metres**. • At the **base** of a bank, in a buffer strip **10 metres** wide.	*

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CONSTRUCTION OF AN INFRASTRUCTURE[4] (street, water system, sewer, bridge, etc.), **A STRUCTURE** (retaining wall, groundwater catchment work, etc.) **OR INSTALLATION OF STATIONARY EQUIPMENT** (tank, etc.) **REPAIR TO THE INFRASTRUCTURE**[5] (street, water system, sewer, bridge, etc.), **TO A STRUCTURE** (retaining wall, groundwater catchment work, etc.) **OR STATIONARY EQUIPMENT** (tank, etc.) **CONNECTION OF AN EXISTING BUILDING TO AN INFRASTRUCTURE**	Prohibited: • At the **top** of a bank, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank, in a buffer strip **15 metres** wide.	Prohibited: • At the **top** of a bank, in a buffer strip **as wide** as the height of the bank, up to **20 metres**. • At the **base** of a bank, in a buffer strip **10 metres** wide.	*

[4] The installation of all types of power systems is not subject to the normative framework. However, if these activities require fill, cut or excavation work, the standards that apply to these types of undertakings must be followed. Infrastructures that do not require fill, cut or excavation work are allowed (e.g., above-ground pipe). All work carried out by Hydro-Québec (including cut, fill and excavation work) is not subject to the normative framework (Act Respecting Land Use Planning and Development, section 149, paragraph 2, subsection 2).

[5] Maintenance and repair of all types of power systems are not subject to the normative framework. Provincial road network maintenance and preservation work is not subject to this framework as stated in section 149, paragraph 2, subsection 5 of the Act Respecting Land Use Planning and Development.

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SEPTIC FIELD, TILE FIELD, LEACHING FIELD, SAND FILTER, DRAIN WELL, SEEPAGE PIT, ABSORPTION FIELD	Prohibited: • At the **top** of a bank, in a buffer strip **as wide** as the height of the bank, up to **20 metres**. • At the **base** of a bank, in a buffer strip **15 metres** wide.	Prohibited: • At the **top** of a bank, in a buffer strip **as wide** as the height of the bank, up to **10 metres**. • At the **base** of a bank, in a buffer strip **10 metres** wide.	*
FILL WORK[6] (permanent or temporary) **COMMERCIAL, INDUSTRIAL OR PUBLIC WITHOUT A BUILDING NOT OPEN TO THE PUBLIC USE**[7] (storage, snow disposal site, retention pond, water concentration, sanitary landfill, agricultural drainage network outlet, etc.)	Prohibited: • At the **top** of a bank, in a buffer strip **as wide** as the height of the bank, up to **40 metres**.	Prohibited: • At the **top** of a bank, in a buffer strip **as wide** as the height of the bank, up to **20 metres**.	*

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[6] Fill work less than 30 centimetres thick that follow the natural outline of the parcel of land are allowed in the bank, the buffer strip or the safety margin at the top of the bank. Fill can be applied in successive layers as long as the total thickness does not exceed 30 centimetres.

[7] If the activity requires fill, cut or excavation work, the standards that apply to these types of undertakings must be followed.

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CUT OR EXCAVATION WORK[8] (permanent or temporary) **INGROUND POOL**	Prohibited: • At the **base** of a bank, in a buffer strip **15 metres** wide.	Prohibited: • At the **base** of a bank, in a buffer strip **10 metres** wide.	No standard
WITHOUT A BUILDING OPEN TO THE PUBLIC USE (campground or trailer campground, etc.)	Prohibited: • At the **top** of a bank, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank **40 metres** high or less, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank higher than **40 metres,** in a buffer strip **as wide** as the height of the bank, up to **60 metres**.	No standard	Prohibited
TREE CUTTING[9] (other than sanitation cutting and	Prohibited:	No standard	No standard

[8] Excavation work less than 50 centimetres deep or in an area less than 5 square metres is allowed in the bank and the buffer strip or safety margin at the base of the bank (example of an activity subject to this exception: excavation work to prevent frost damage to constructions using augered piles or concrete tube forms (Sonotubes).

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cutting for vegetation control without grubbing)	• At the **top** of a bank, in a buffer strip **5 metres** wide.		
PROTECTIVE MEASURE (riprap counterweight, reshaping, drainage blanket, dike, protection barricade, diversion barricade, etc.)	Prohibited: • At the **top** of a bank, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank **40 metres** high or less, in a buffer strip **twice** as wide as the height of the bank, up to **40 metres**. • At the **base** of a bank higher than **40 metres,** in a buffer strip **as wide** as the height of the bank, up to **60 metres**.	Prohibited: • At the **top** of a bank, in a buffer strip **as wide** as the height of the bank, up to **20 metres**. • At the **base** of a bank, in a buffer strip **10 metres** wide.	*

[9] Outside the urbanization perimeters, tree cutting is allowed in the bank and the buffer strip at the top of the bank provided there are no buildings or streets located in the buffer zone at the base of the bank.

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* À cause de l'imprécision de la délimitation des zones auxquelles s'appliquent les normes de classe I et II sur le plan « Éléments structurants » annexé au Plan d'urbanisme numéro 267-05, certaines interventions pourraient sen

4.11.2 Geotechnical report

Although the table in subsection 4.11.1 of this by-law provides a list of activities that are prohibited; these activities could be allowed subject to the presentation of a geotechnical report which complies with the requirements set out in the table that follows. This report must be prepared by a member of the *Ordre des ingénieurs du Québec* (corporation of engineers) specifically trained in geotechnics.

To be valid, the geotechnical assessment must have been conducted after the coming into force of this by-law, which integrates the new governmental normative framework. In addition, the report must be produced in the 5-year period preceding the date of the application for a permit or a certificate. This period is reduced to 1 year in the case of a watercourse on a site located within the limits of an area prone to landslides when the report recommends that work be done to ensure the stability of the site and the safety of the study area. The 1-year period is returned to 5 years if all the work specifically recommended for the activity indicated in the application for a permit or a certificate is done within 12-months of the presentation of this report.

NORMATIVE FRAMEWORK FOR CONTROL OF LAND USE IN AREAS PRONE TO LANDSLIDES **GEOTECHNICAL REPORT**				
GROUP	**ACTIVITY**	**GOAL**	**CONCLUSION**	**RECOMMENDATION**
1	**LOCATED IN ALL AREAS, EXCEPT IN BUFFER STRIPS AT THE BASE OF A BANK 5 METRES OR HIGHER WITH A SLOPE ANGLE OF MORE THAN 20º (36%) LOCATED IN MEDIUM RISK AREAS (SEE GROUP 1A), AS WELL AS IN MEDIUM RISK AREAS WHERE A BANK IS 5 METRES OR HIGHER WITH A SLOPE ANGLE OF 14º (25%) OR MORE BUT LESS THAN 20º (36%) WITHOUT A WATERCOURSE AT THE BASE (SEE GROUP 2)** **CONSTRUCTION OF A MAIN BUILDING** (other than an agricultural building) **EXTENSION OF A MAIN BUILDING GREATER THAN 50% OF THE FOOTPRINT AREA** (other than an agricultural building) **EXTENSION OF A MAIN BUILDING LESS THAN 50% OF THE FOOTPRINT AREA THAT COMES UP TO THE BANK** (other than an agricultural building) (the distance between the top of the bank and the extension is shorter than the current distance between the top and the building) **EXTENSION OF A MAIN BUILDING LESS THAN 50% OF THE FOOTPRINT AREA THAT MOVES AWAY FROM THE BANK** (other than an agricultural building) (the distance between the top of the bank and the extension is greater or equal to the current distance between the top and the building)	• Assess current site stability conditions. • Check for signs of impending instability (such as cracks, cracks with vertical displacement and bulging) and for landslides on the site. • Assess the impact of the planned activities on the stability of the site. • Propose protective measures (group 3), if required.	The report must confirm that: • In the case of an extension, no sign of instability preceding a landslide putting at risk the existing main building has been observed on the site. • The proposed activity is not threatened by a landslide. • The proposed activity will not act as a trigger by destabilizing the site and the adjacent parcels of land. • The proposed activity will not constitute an aggravating factor by unduly reducing the safety factors associated to it.	The report must include the following recommendations: • The precautions to be taken and, if need be, the protective measures[10] required to maintain the stability of the site and the safety of the study area, at all times.

[10] If protective measures are recommended, a geotechnical assessment that meets the criteria for Group 3 must be conducted before the activity is allowed.

NORMATIVE FRAMEWORK FOR CONTROL OF LAND USE IN AREAS PRONE TO LANDSLIDES **GEOTECHNICAL REPORT**				
GROUP	**ACTIVITY**	**GOAL**	**CONCLUSION**	**RECOMMENDATION**
1	**EXTENSION OF A MAIN BUILDING WHOSE WIDTH MEASURED AT RIGHT ANGLE TO THE BUILDING'S FOUNDATION IS EQUAL TO OR LESS THAN 2 METRES AND COMES UP TO THE BANK** (other than an agricultural building) (the distance between the top of the bank and the extension is shorter than the current distance between the top and the building) **EXTENSION OF A MAIN BUILDING WITH THE ADDITION OF A SECOND STOREY** (other than an agricultural building) **CANTILEVERED EXTENSION OF A MAIN BUILDING WHOSE WIDTH MEASURED AT RIGHT ANGLE WITH THE BUILDING'S FOUNDATION IS GREATER THAN 1 METRE** (other than an agricultural building) **RECONSTRUCTION OF A MAIN BUILDING** (other than an agricultural building) **RELOCATION OF A MAIN BUILDING** (other than an agricultural building) **CONSTRUCTION OF A COMPLEMENTARY BUILDING** (other than a complementary building to a residential or agricultural use) **EXTENSION OF A COMPLEMENTARY BUILDING** (other than a complementary building to a residential or agricultural use) **WITHOUT A BUILDING OPEN TO THE PUBLIC USE** (campground or trailer campground, etc.)	• Assess current site stability conditions. • Check for signs of impending instability (such as cracks, cracks with vertical displacement and bulging) and for landslides on the site. • Assess the impact of the planned activities on the stability of the site. • Propose protective measures (group 3), if required.	The report must confirm that: • In the case of an extension, no sign of instability preceding a landslide putting at risk the existing main building has been observed on the site. • The proposed activity is not threatened by a landslide. • The proposed activity will not act as a trigger by destabilizing the site and the adjacent parcels of land. • The proposed activity will not constitute an aggravating factor by unduly reducing the safety factors associated to it.	The report must include the following recommendations: • The precautions to be taken and, if need be, the protective measures [11] required to maintain the stability of the site and the safety of the study area, at all times.

[11] If protective measures are recommended, a geotechnical assessment that meets the criteria for Group 3 must be conducted before the activity is allowed.

NORMATIVE FRAMEWORK FOR CONTROL OF LAND USE IN AREAS PRONE TO LANDSLIDES **GEOTECHNICAL REPORT**				
GROUP	**ACTIVITY**	**GOAL**	**CONCLUSION**	**RECOMMENDATION**
1	**CONSTRUCTION OF AN INFRASTRUCTURE**[12] (street, water system, sewer, bridge, etc.), **A STRUCTURE** (retaining wall, groundwater catchment work,, etc.) **OR INSTALLATION OF STATIONARY EQUIPMENT** (tank, etc.) **REPAIR TO AN INFRASTRUCTURE**[12] (street, water system, sewer, bridge, etc.), **A STRUCTURE** (retaining wall, groundwater catchment work, etc.) **OR STATIONARY EQUIPMENT** (tank, etc.) **CONNECTION OF AN EXISTING BUILDING TO AN INFRASTRUCTURE**	• Assess current site stability conditions. • Check for signs of impending instability (such as cracks, cracks with vertical displacement and bulging) and for landslides on the site. • Assess the impact of the planned activities on the stability of the site. • Propose protective measures (group 3), if required.	The report must confirm that: • In the case of an extension, no sign of instability preceding a landslide putting at risk the existing main building has been observed on the site. • The proposed activity is not threatened by a landslide. • The proposed activity will not act as a trigger by destabilizing the site and the adjacent parcels of land. • The proposed activity will not constitute an aggravating factor by unduly reducing the safety factors associated to it.	The report must include the following recommendations: • The precautions to be taken and, if need be, the protective measures [13] required to maintain the stability of the site and the safety of the study area, at all times.

[12] All provincial road network development and improvement work that requires a geotechnical assessment before a permit is delivered can be carried out based on the geotechnical reports (advice, assessment, report, recommendation, etc.) produced by the *Service de la géotechnique et de la géologie* (geotechnics and geology branch) of the *ministère des Transports* (MTQ) (Department of Transport) or one of the MTQ's authorized agent, because they meet the requirements stated above and comply with the normative framework.

[13] If protective measures are recommended, a geotechnical assessment that meets the criteria for Group 3 must be conducted before the activity is allowed.

NORMATIVE FRAMEWORK FOR CONTROL OF LAND USE IN AREAS PRONE TO LANDSLIDES **GEOTECHNICAL REPORT**				
GROUP	**ACTIVITY**	**GOAL**	**CONCLUSION**	**RECOMMENDATION**
1A	**LOCATED IN BUFFER STRIPS AT THE BASE OF BANKS 5 METRES OR HIGHER WITH A SLOPE ANGLE OF MORE THAN 20° (36%) THAT ARE SITUATED IN MEDIUM RISK AREAS** **CONSTRUCTION OF A MAIN BUILDING** (other than an agricultural building) **EXTENSION OF A MAIN BUILDING GREATER THAN 50% OF THE FOOTPRINT AREA** (other than an agricultural building) **EXTENSION OF A MAIN BUILDING LESS THAN 50% OF THE FOOTPRINT AREA THAT COMES UP TO THE BANK** (other than an agricultural building) (the distance between the top of the bank and the extension is shorter than the current distance between the top and the building) **EXTENSION OF A MAIN BUILDING LESS THAN 50% OF THE FOOTPRINT AREA THAT MOVES AWAY FROM THE BANK** (other than an agricultural building) (the distance between the top of the bank and the extension is greater or equal to the current distance between the top and the building) **EXTENSION OF A MAIN BUILDING WHOSE WIDTH MEASURED AT RIGHT ANGLE TO THE BUILDING'S FOUNDATION IS EQUAL TO OR LESS THAN 2 METRES AND COMES UP TO THE BANK** (other than an agricultural building) (the distance between the top of the bank and the extension is shorter than the current distance between the top and the building)	• Check for signs of impending instability (such as cracks, cracks with vertical displacement and bulging) and for landslides on the site. • Assess if the activity is protected against possible landslide debris. • Assess the impact of the planned activities on the stability of the site. • Propose protective measures (group 3), if required.	The report must confirm that: • In the case of an extension, no sign of instability preceding a landslide putting at risk the existing main building has been observed on the site. • The proposed activity is protected against possible landslide debris because of the natural topography of the site or the extension is protected by the main building or the proposed activity will be protected from possible debris by protective measures. • The proposed activity will not act as a trigger by destabilizing the site and the adjacent parcels of land. • The proposed activity and its subsequent use will not constitute aggravating factors by unduly reducing the safety factors associated to this activity.	The report must include the following recommendations: • The precautions to be taken and, if need be, the protective measures [14] required to maintain the safety of the proposed activity, at all times.

[14] If protective measures are recommended, a geotechnical assessment that meets the criteria for Group 3 must be conducted before the activity is allowed.

NORMATIVE FRAMEWORK FOR CONTROL OF LAND USE IN AREAS PRONE TO LANDSLIDES **GEOTECHNICAL REPORT**				
GROUP	**ACTIVITY**	**GOAL**	**CONCLUSION**	**RECOMMENDATION**
1A	**CANTILEVERED EXTENSION OF A MAIN BUILDING WHOSE WIDTH MEASURED AT RIGHT ANGLE WITH THE BUILDING'S FOUNDATION IS MORE THAN 1 METRE** (other than an agricultural building) **RECONSTRUCTION OF A MAIN BUILDING** (other than an agricultural building) **RELOCATION OF A MAIN BUILDING** (other than an agricultural building) **CONSTRUCTION OF A COMPLEMENTARY BUILDING** (other than a complementary building to a residential or agricultural use) **EXTENSION OF A COMPLEMENTARY BUILDING** (other than a complementary building to a residential or agricultural use) **WITHOUT A BUILDING OPEN TO THE PUBLIC USE** (campground or trailer campground, etc.) **CONSTRUCTION OF AN INFRASTRUCTURE** [15] (street, water system, sewer, bridge, etc.), **A STRUCTURE** (retaining wall, groundwater catchment work, etc.) **OR INSTALLATION OF STATIONARY EQUIPMENT** (tank, etc.) **REPAIR TO AN INFRASTRUCTURE** [15] (street, water system, sewer, bridge, etc.), **A STRUCTURE** (retaining wall, groundwater catchment work, etc.) **OR STATIONARY EQUIPMENT** (tank, etc.) **CONNECTION OF AN EXISTING BUILDING TO AN INFRASTRUCTURE**	• Check for signs of impending instability (such as cracks, cracks with vertical displacement and bulging) and for landslides on the site. • Assess if the activity is protected against possible landslide debris. • Assess the impact of the planned activities on the stability of the site. • Propose protective measures (group 3), if required.	The report must confirm that: • In the case of an extension, no sign of instability preceding a landslide putting at risk the existing main building has been observed on the site. • The proposed activity is protected against possible landslide debris because of the natural topography of the site or the extension is protected by the main building or the proposed activity will be protected from possible debris by protective measures. • The proposed activity will not act as a trigger by destabilizing the site and the adjacent parcels of land. • The proposed activity and its subsequent use will not constitute aggravating factors by unduly reducing the safety factors associated to this activity.	The report must include the following recommendations: • The precautions to be taken and, if need be, the protective measures[16] required to maintain the safety of the proposed activity, at all times.

[15] All provincial road network development and improvement work that requires a geotechnical assessment before a permit is delivered can be carried out based on the geotechnical reports (advice, assessment, report, recommendation, etc.) produced by the *Service de la géotechnique et de la géologie* (geotechnics and geology branch) of the *ministère des Transports* (MTQ) (Department of Transport) or one of the MTQ's authorized agent, because they meet the requirements stated above and comply with the normative framework.

[16] If protective measures are recommended, a geotechnical assessment that meets the criteria for Group 3 must be conducted before the activity is allowed.

NORMATIVE FRAMEWORK FOR CONTROL OF LAND USE IN AREAS PRONE TO LANDSLIDES **GEOTECHNICAL REPORT**				
GROUP	**ACTIVITY**	**GOAL**	**CONCLUSION**	**RECOMMENDATION**
2	**CONSTRUCTION OF A COMPLIMENTARY BUILDING** (garage, shed, garden shed, etc.) **OR BUILDING OF AN ACCESSORY CONSTRUCTION TO A RESIDENTIAL USE** (above-ground pool, etc.) **EXTENSION OF A COMPLIMENTARY BUILDING** (garage, shed, garden shed, etc.) **OR OF AN ACCESSORY CONSTRUCTION TO A RESIDENTIAL USE** (above-ground pool, etc.) **CONSTRUCTION OF AN AGRICULTURAL BUILDING** (main building, complimentary or secondary building, grain or silage silo, etc.) **OR OF AN AGRICULTURAL STRUCTURE** (animal waste structure, etc.) **EXTENSION OF AN AGRICULTURAL BUILDING** (main building, complimentary or secondary building, grain or silage silo, etc.) **OR OF AN AGRICULTURAL STRUCTURE** (animal waste structure, etc.) **RECONSTRUCTION OF AN AGRICULTURAL BUILDING** (main building, complimentary or secondary building, grain or silage silo, etc.) **OR OF AN AGRICULTURAL STRUCTURE** (animal waste structure, etc.) **RELOCATION OF AN AGRICULTURAL BUILDING** (main building, complimentary or secondary building, grain or silage silo, etc.) **OR OF AN AGRICULTURAL STRUCTURE** (animal waste structure, etc.) **SEPTIC FIELD, TILE FIELD, LEACHING FIELD, SAND FILTER, DRAIN WELL, SEEPAGE PIT, ABSORPTION FIELD** **FILL WORK** (permanent or temporary)	• Assess the impact of the planned activities on the stability of the site.	The report must confirm that: • The proposed activity will not act as a trigger by destabilizing the site and the adjacent parcels of land. • The proposed activity and its subsequent use will not constitute aggravating factors by unduly reducing the safety factors associated to this activity.	The report must include the following recommendations: • The precautions to be taken and, if need be, the protective measures [17] required to maintain the current stability of the site.

[17] If protective measures are recommended, a geotechnical assessment that meets the criteria for Group 3 must be conducted before the activity is allowed.

NORMATIVE FRAMEWORK FOR CONTROL OF LAND USE IN AREAS PRONE TO LANDSLIDES **GEOTECHNICAL REPORT**				
GROUP	**ACTIVITY**	**GOAL**	**CONCLUSION**	**RECOMMENDATION**
2	**CUT OR EXCAVATION WORK** (permanent or temporary) **INGROUND POOL** **COMMERCIAL, INDUSTRIAL OR PUBLIC WITHOUT A BUILDING NOT OPEN TO THE PUBLIC USE** (storage, snow disposal site, retention pond, water concentration, sanitary landfill, agricultural drainage network outlet, etc.) **TREE CUTTINGS** (other than sanitation and vegetation control cuts) **ACTIVITY IN MEDIUM RISK AREAS WHOSE BANK IS 5 METRES HIGH OR MORE WITH A SLOPE ANGLE OF 14° (25%) OR MORE BUT LESS THAN 20° (36%) WITHOUT A WATERCOURSE AT THE BASE** **CONSTRUCTION OF A MAIN BUILDING** (other than an agricultural building) **EXTENSION OF A MAIN BUILDING GREATER THAN 50% OF THE FOOTPRINT AREA** (other than an agricultural building) **EXTENSION OF A MAIN BUILDING LESS THAN 50% OF THE FOOTPRINT AREA THAT COMES UP TO THE BANK** (other than an agricultural building) (the distance between the top of the bank and the extension is shorter than the current distance between the top and the building)	• Assess the impact of the planned activities on the stability of the site.	The report must confirm that: • The proposed activity will not act as a trigger by destabilizing the site and the adjacent parcels of land. • The proposed activity and its subsequent use will not constitute aggravating factors by unduly reducing the safety factors associated to this activity.	The report must include the following recommendations: • The precautions to be taken and, if need be, the protective measures [18] required to maintain the current stability of the site.

[18] If protective measures are recommended, a geotechnical assessment that meets the criteria for Group 3 must be conducted before the activity is allowed.

NORMATIVE FRAMEWORK FOR CONTROL OF LAND USE IN AREAS PRONE TO LANDSLIDES **GEOTECHNICAL REPORT**				
GROUP	**ACTIVITY**	**GOAL**	**CONCLUSION**	**RECOMMENDATION**
2	**EXTENSION OF A MAIN BUILDING WHOSE WIDTH MEASURED AT RIGHT ANGLE TO THE BUILDING'S FOUNDATION IS EQUAL TO OR LESS THAN 2 METRES AND COMES UP TO THE BANK** (other than an agricultural building) (the distance between the top of the bank and the extension is shorter than the current distance between the top and the building) **EXTENSION OF A MAIN BUILDING WITH THE ADDITION OF A SECOND STOREY** (other than an agricultural building) **RECONSTRUCTION OF A MAIN BUILDING** (other than an agricultural building) **RELOCATION OF A MAIN BUILDING** (other than an agricultural building) **CONSTRUCTION OF A COMPLEMENTARY BUILDING** (other than a complementary building to a residential or agricultural use) **EXTENSION OF A COMPLEMENTARY BUILDING** (other than a complementary building to a residential or agricultural use) **CONSTRUCTION OF AN INFRASTRUCTURE** [19] (street, water system, sewer, bridge, etc.), **A STRUCTURE** (retaining wall, groundwater catchment work,, etc.) **OR INSTALLATION OF STATIONARY EQUIPMENT** (tank, etc.) **REPAIR TO AN INFRASTRUCTURE** [19] (street, water system, sewer, bridge, etc.), **A STRUCTURE** (retaining wall, groundwater catchment work, etc.) **OR STATIONARY EQUIPMENT** (tank, etc.) **CONNECTION OF AN EXISTING BUILDING TO AN INFRASTRUCTURE**	• Assess the impact of the planned activities on the stability of the site.	The report must confirm that: • The proposed activity will not act as a trigger by destabilizing the site and the adjacent parcels of land. • The proposed activity and its subsequent use will not constitute aggravating factors by unduly reducing the safety factors associated to this activity.	The report must include the following recommendations: • The precautions to be taken and, if need be, the protective measures [20] required to maintain the current stability of the site.

[19] All provincial road network development and improvement work that requires a geotechnical assessment before a permit is delivered can be carried out based on the geotechnical reports (advice, assessment, report, recommendation, etc.) produced by the *Service de la géotechnique et de la géologie* (geotechnics and geology branch) of the *ministère des Transports* (MTQ) (Department of Transport) or one of the MTQ's authorized agent, because they meet the requirements stated above and comply with the normative framework.

[20] If protective measures are recommended, a geotechnical assessment that meets the criteria for Group 3 must be conducted before the activity is allowed.

NORMATIVE FRAMEWORK FOR CONTROL OF LAND USE IN AREAS PRONE TO LANDSLIDES **GEOTECHNICAL REPORT**				
GROUP	**ACTIVITY**	**GOAL**	**CONCLUSION**	**RECOMMENDATION**
3	**PROTECTIVE MEASURE** (riprap counterweight, reshaping, drainage blanket, dike, protection barricade, diversion barricade, etc.)	• Assess the impact of the protective measures on the safety of the site.	**In the case of stabilization work** (riprap counterweight, reshaping, drainage blanket, etc.) the report must confirm that: • The stabilization method chosen is appropriate for the site; the stability of the slope has been improved in keeping with good practice. **In the case of passive protective measures** (dike, protection barricade, diversion barricade, etc.), the report must confirm that: • The work done protects the future activity. **In both cases, the report must confirm that:** • The activity will not be damaged by a landslide. • The proposed activity will not act as a trigger by destabilizing the site and the adjacent parcels of land. • The proposed activity and its subsequent use will not constitute aggravating factors by unduly reducing the safety factors associated to this activity.	The report must include the following recommendations: • The processes and timeframe required to carry out the work. • The precautions to be taken to maintain the stability of the site and the safety of the study area at all times, after the protective measures are carried through.

4.11.3 Areas subject to hypothetical landslide risk

In areas subject to hypothetical landslide risk (gray zone), shown in Appendix “B” of by-law no. 44-97 enacting the revised MRC des Collines-de-l’Outaouais’ Land Use and Development Plan, which were transferred to map no. ZMM-01-01 titled "Municipality of Pontiac Mass Movement Zones," all that is required is a certificate prepared by a member of the *Ordre des ingénieurs du Québec* (corporation of engineers) specifically trained in geotechnics indicating that the parcel of land is suitable for the proposed structure considering its pedological, hydrological and geological characteristics.

ARTICLE 2

This by-law will come into force upon completion of the formalities required by law.

Carried

_____ _____

MAYOR ASSISTANT DIRECTOR GENERAL

Notice of motion by-law: March 4, 2014

Adoption of by-law: April 8, 2014

Coming into force: May 20, 2014