# **PROGRAM**

Playful furniture collection for esplanade Clark

Multidisciplinary design competition

Service de la culture de la Ville de Montréal In collaboration with the Partenariat du Quartier des spectacles

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# 1. PROJECT DESCRIPTION

- 1.1. Project mission and objectives
- 1.2. Elements to be designed

# 2. INTERVENTION CONTEXT

- 2.1. Quartier des spectacles
- 2.2. Place des Arts hub development project
- 2.3. Esplanade Clark
- 2.4. Users target publics

# 3. VISION AND CONCEPTUAL APPROACH FOR THE PLAYFUL FURNITURE

- 3.1. Modularity of installation and evolution
- 3.2. Playful experience and approach
- 3.3. Storyline and visual identity in the spirit of a backyard

# 4. SPECIFIC DESIGN CRITERIA

- 4.1. Reinvented carousel
- 4.2. Reinvented fountain or fountains
- 4.3. Series of complementary playful furniture elements

# 5. GENERAL DESIGN CRITERIA

- 5.1. Manufacturing context
- 5.2. Transport and storage
- 5.3. Grounding
- 5.4. Security
- 5.5. Maintenance
- 5.6. Resistance, climatological conditions and material quality
- 5.7. Lighting and technology
- 5.8. Universal access
- 5.9. Sustainable development
- 5.10. Useful life
- 5.11. Regulations and certifications

# 6. IMPLEMENTATION OBJECTIVES

- 6.1. Project cost objectives
- 6.2. Completion schedule

LIST OF APPENDICES

APPENDIX A	Plan for esplanade Clark With hyperlink to download Autocad and SketchUp files
APPENDIX B	Design concept for esplanade Clark With hyperlink to download document
APPENDIX C	Conventional furniture collection (under development) for esplanade Clark With hyperlink to download high-resolution images

IMPORTANT: Information contained in the Program prevails over that in the appendices, which were completed at a time prior to the Program.

# 1. PROJECT DESCRIPTION

#### 1.1.PROJECT MISSION AND OBJECTIVES

The purpose of this competition is to design a collection of playful furniture for esplanade Clark, in the Quartier des spectacles, downtown Montréal.

Creation of esplanade Clark, also called îlot Clark, constitutes the last phase of the Quartier des spectacles major project, at the Place des Arts hub. Esplanade Clark, situated west of rue Clark, between Sainte-Catherine and De Montigny, will have a complementary use to those of the other public places in Quartier des spectacles; it is to be a more intimate space. This new public space will include an exterior refrigerated skating rink, which in the summer will become a grand urban terrace. It will become a special place to host citizen and cultural activities as well as performances including, primarily, those of the major festivals and events of the summer period.

Inspired by the spirit of the Montréal backyard where people enjoy hanging out together and chatting, the space is to be intimate, friendly and human-scaled. It will truly be a space for life, encouraging its appropriation by citizens. It welcomes residents, workers, district regulars, tourists and will also provide a particular space for families. This goal is one of the results of the adoption of the municipal <u>Politique de l'enfant</u>, which places children (0–17) at the heart of priorities. Esplanade Clark will become one of the rare public spaces downtown planned to be particularly interesting and welcoming for families and children.

The public place will include conventional urban furniture, typical for the use of such a plaza, in particular chairs and tables (that furniture is outside of the current mandate - appendix C). As an adjunct to this furniture, through this competition the Ville de Montréal seeks to add to the space playful, movable furniture adapted to a variety of types of users, including families. This furniture collection will contribute to making the space lively, convivial and warm, and extend the length of time users stay in the space, during all seasons of the year. The playful furniture family will act as a support for imagination; its configuration will evolve through the seasons and with respect to needs. We are looking for opportunities for playing, interaction, encounters, movement, strolling, rest, refreshment and similar experiences. This playful furniture is designed to provide experiences for the inner child, no matter the age. The term playful may sometimes be overused in design, but here it is truly the goal.

The Service de la culture de la Ville de Montréal and the Partenariat du Quartier des spectacles are responsible for implementation of the competition and the project.

## 1.2. ELEMENTS TO BE DESIGNED

All furniture elements to be designed and developed in this project must be movable. These furniture elements include but are not limited to the following:

- The carousel reinvented (amazement, contemplation, play);
- The reinvented fountain or fountains (be refreshed, playful);

- A series of complementary furniture elements acting as connection between the two above-mentioned major elements of the family (for sitting, climbing, resting, creating, strolling, expressing and amusing oneself, etc.).

# 2. INTERVENTION CONTEXT

## 2.1. QUARTIER DES SPECTACLES

The Quartier des spectacles is an approximately one-square-kilometre district located in downtown Montréal, immediately east of the central business district. The cultural heart of the metropolis, it offers one of North America's greatest concentrations and diversities of cultural spaces. Throughout the year, day and night, Montrealers and visitors come here, seduced by 80 cultural distribution spaces, 8 public spaces with programming, and no fewer than 40 festivals. During their visits, they can also discover a creative light show that highlights all the effervescence of the district and reflects the vitality of this unique destination.

Additional information on the Quartier des spectacles can be found at: <a href="https://www.quartierdesspectacles.com/en/">https://www.quartierdesspectacles.com/en/</a>

## 2.2. PLACE DES ARTS HUB DEVELOPMENT PROJECT

The Quartier des spectacles project took shape thanks to the implementation of partnerships among the different levels of government, as well as with cultural and social stakeholders located in the development area. Its planning and implementation are led by the central departments of the Ville de Montréal but they are realized in collaboration with multiple players: the Ville Marie Borough, the governments of Québec and Canada, festival promoters, cultural organizations, as well as the Partenariat du Quartier des spectacles (PQDS). The PQDS, created in 2003, is a not-for-profit organization that comprises about 60 members active in the district. In particular, the PQDS has formulated a vision for the development of the Quartier des spectacles and implemented the first joint projects in the district.

Begun in 2008, the project to develop the Place des Arts hub of the Quartier des spectacles was designed to support the cultural function of this downtown district and to transform it into an area that is lively and attractive from day to day. Another aim of the project was to make the district a world-class destination. This grand development project, under the aegis of the Ville de Montréal, focuses primarily on the addition of new public spaces, redesign of streets and reconstruction of underground infrastructure around Place des Arts (see figure 1 - No. 1).

Now completed, the first three phases of the project transformed place des Festivals (2), promenade des Artistes (3), rue Sainte-Catherine (4) and the Parterre (5). The îlot Clark (6) represents the last feature of this major design project, adding a new public space. Development of esplanade Clark (6), located southeast of the Place des Arts block (1), will mean the completion of all the public spaces that surround this hub.

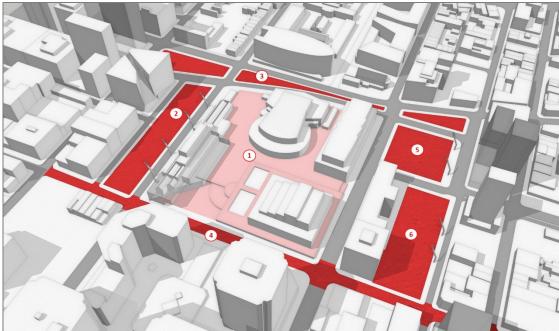


Figure 1: Public spaces surrounding Place des Arts. Credit: Ville de Montréal

The design concept for the district was the fruit of intense creative efforts in which the public domain is conceived as a space for performance, like a theatre or performance hall. Each of its characteristics, including form, materials and functions of the urban furniture as well as the distribution of trees, seeks to consolidate and sustain the Quartier des spectacles. They are also designed to foster harmonious cohabitation among residents, workers, and creators. The design of each new space, urban furniture and specialized facilities will allow exterior cultural activities to take place with increased efficiency while also giving Quartier des spectacles residents and the rest of the city the possibility of reappropriating the spaces, no matter the season.

Further information on the Quartier des spectacles design project can be found on the <u>Ville</u> de <u>Montréal project website</u> as well as the <u>Quartier des spectacles site</u>.

# 2.3. ESPLANADE CLARK

# 2.3.1. Project site boundaries

The limits of esplanade Clark are rue Sainte-Catherine to the south, rue De Montigny (continuation of boulevard De Maisonneuve) to the north, rue Clark on the east and the rear of the police headquarters building, located at 1441, rue Saint-Urbain.

The location of this public place, whose four surrounding streets are not well defined, gives it a particular character. Attached to the rear of the police headquarters and rue Clark (which

acts more like the back alley to boulevard Saint-Laurent), the space is similar to a cozy Montréal courtyard. From this stems the idea of transposing the spirit of the backyard into the design concept and its furniture.

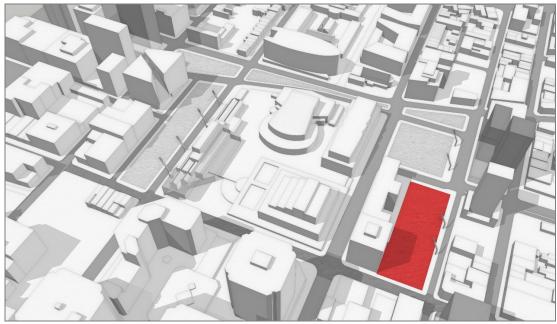


Figure 2: Location of esplanade Clark Credit: Ville de Montréal

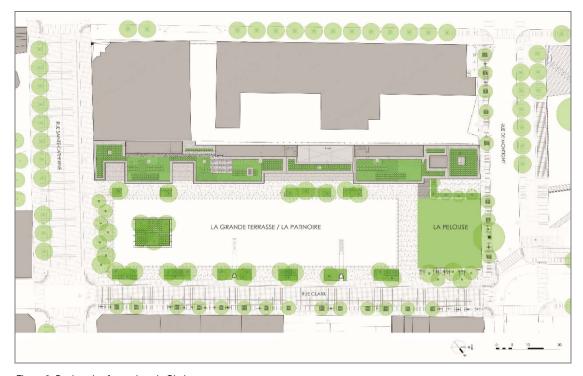


Figure 3: Design plan for esplanade Clark Credit: Fauteux et associés + Les architectes FABG

The plan for esplanade Clark can be found in appendix A. A hyperlink can be used to download the 2D (Autocad) and 3D (SketchUp) files.

# 2.3.2. Design project

Developed by the team of Fauteux et associés + Les architectes FABG + WSP Canada, esplanade Clark will include:

- Construction of a 1890-sq.-m.-refrigerated exterior skating rink which in the summer will be transformed into a grand urban terrace equipped with conventional and playful urban furniture. The planted area will act as the boundary between the two distinct refrigeration zones of the concrete slab, allowing two different rink configurations. They will offer the possibility of adjusting the size of the rink and enlarging the space available on the edge of rue Sainte-Catherine for activities occurring at the beginning or the end of the season;
- Construction of a multipurpose building with a floor area of 4925 sq. m., including an urban chalet, food services, multipurpose rooms as well as technical and storage spaces;
- Creation of a vast public space with a total area of 3850 sq. m. It will include extensive vegetation as well as the equipment required for multimedia and theatre systems;
- Completion, in rue Clark and rue De Montigny, of resurfacing work in addition to certain improvements to underground municipal infrastructure and utilities; rue Clark, resurfaced in concrete blocks in continuity with the plaza, may become an integral part of the public space during certain events (closed to vehicular traffic).

Within the urban context of the Saint-Laurent/Sainte-Catherine intersection, this public plaza will have a vocation complementary to that of place des Festivals. Esplanade Clark is designed to be a particularly convivial and welcoming public space, in the spirit of a Montréal backyard. It is subdivided into three distinct portions, each of which has linkages that unify the public space and the multipurpose building.

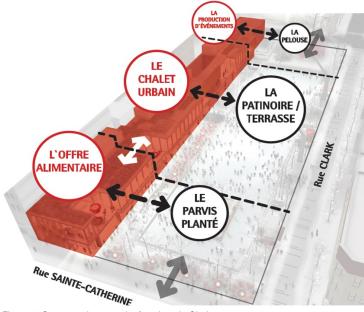


Figure 4: Conceptual approach of esplanade Clark Credit: Ville de Montréal

The first of the three sections provides **food service** and includes the **vegetated forecourt**. Directly connected to rue Sainte-Catherine, they act as the urban entrance portal to îlot Clark. The presence of a restaurant in the public plaza (including its exterior terrace) along the street, a vegetated area bordered by a line of trees, and a planted block within the rink, will all help provide urban character and animation to rue Sainte-Catherine. This portion is designed to attract the attention of passersby. Since it is visible from the intersection of rue Sainte-Catherine and boulevard Saint-Laurent, it will act as the visual prelude to the entire îlot Clark.

The second section contains the **urban chalet**, **skating rink and the terrace**. The section includes the civic usages of îlot Clark and the building. The publicly accessible urban chalet includes in particular a large salon for relaxation, a space for the skaters which becomes an activity room during the summer, reception areas for school groups, washrooms, etc. Outside of this season when the skating rink is open, the terrace will be punctuated with various pieces of furniture for relaxation and family activities, permitting casual and informal occupation of the spaces.

The third portion of esplanade Clark includes spaces in the building needed for event programming in the Quartier des spectacles, i.e. **event productions, and the lawn.** Toward the exterior, the lawn faces the rest of the terrace and constitutes the setting for the installation of temporary stages during events and festivals. Access to this portion of the building is restricted because it will include technical spaces for the operation of the rink and events, production rooms for the festivals as well as storage space in the basement for urban furniture to be used during the festivals as well as the playful furniture that will be designed as part of this competition.

The description of the design concept for esplanade Clark, and its urban chalet, can be found in appendix B. A hyperlink can be used to download high-resolution perspectives.

The public plaza will include conventional urban furniture such as plant boxes, braseros, easy chairs, tables and chairs. The furniture is currently being selected and a representation is provided in appendix C. The playful furniture must harmoniously cohabit with the conventional furniture.



Figure 5: Conventional furniture for the plaza (non-definitive proposal) Credit: Fauteux et associés

#### 2.3.3. Vision and genius loci

Complementary to the other public spaces of Quartier des spectacles's Place des Arts hub, îlot Clark is defined by the following characteristics:

- A lively place, encouraging strong citizen appropriation and welcoming the public on a daily basis throughout the year. Above all, a place where people feel good, a place that you do not want to leave, a place which evokes reflection as well as laughter and pleasure;
- Inspired by the spirit of a home backyard; a cozy space, human-scaled, with a family feel to it; warm and inviting;
- Celebrating Montréal's Nordic character; promoting connections between the interior and exterior, and unfolding over the four seasons;
- A third place, i.e. a space for socializing, different from the home (the first place) and the workplace (second place), a place that is easy to access, open to all, neutral and convivial, in which people can talk and meet informally, pick up the news or do nothing. Citizen appropriation is a priority, the space welcomes its habitués, people of all ages, from all walks of life and social strata;
- A space designed to welcome and hold artistic and cultural activities and performances, including those of the major festivals and events. Îlot Clark will bring to life the vision for the development of the Quartier des spectacles—living, creating, learning and enjoying downtown. Îlot Clark is for the arts and culture, but also aspects related to urban public space; the relationship with the city, with society.
- Îlot Clark Is located on what was the site of *Librairie Tranquille*; it takes inspiration from this bookstore, evoking in the public: curiosity, critical thinking, discovery, communication, amusement, learning, and debate;
- A citizens' space that incarnates the principles of social and urban movements which
  are increasingly becoming part of the DNA of cities: the participatory city (collective
  actions and social economy), the smart city (connected, at the service of citizen wellbeing) and the inclusive and sustainable city (environmental awareness, resilience,
  social equity).

People go there for amusement, diversion, encounters, food, drink, sharing, hanging out, daydreaming, learning, discovery...

# 2.4. USERS - TARGET PUBLICS

In the heart of downtown, esplanade Clark is for all Montrealers. Users of the Esplanade will reflect the diversity of Montrealers; a particular emphasis will be placed, however, on young people and families because there are very few spaces for them downtown. More particularly, the following clienteles are the target:

- Montrealers;
- Children, adolescents, families;
- Quartier des spectacles workers and students;
- Quartier des spectacles residents;
- Festival-goers and aficionados of art, culture and discovery; flâneurs; game enthusiasts and those who enjoy collective projects, including those who already frequent spaces in Quartier des spectacles;

- School groups visiting Quartier des spectacles institutions;
- Tourists.

The playful furniture will be designed for this public, who may come alone, in organized or informal groups, as a family, among friends or colleagues.

#### 3. VISION AND CONCEPTUAL APPROACH FOR THE PLAYFUL FURNITURE

## 3.1. MODULARITY OF INSTALLATION AND EVOLUTION

The public plaza is modulated primarily in three periods, which guide its configuration and, consequently the arrangement of the elements of the fun furniture collection:

- No-rink-nor-event mode Spring, summer (alternating) and fall;
- Event mode Primarily summer (festival season, alternating);
- Skating-rink mode Primarily winter.

Playful furniture elements will be deployed to a greater extent during the **no-rink-nor-event** seasons, because that is when more space will be available in the public plaza. They will be placed primarily on the concrete surface area of the rink.

In event mode, in particular when festivals are held, some furniture elements may remain on the site, on the periphery, or in the heart of the Esplanade, depending on the nature of the event and the space required to host the public. For a creative use of some of the furniture, promoters may choose elements as a function of their programming, and as a function of needs in terms of space configuration.

In **rink mode**, in winter (also at the end of fall and the beginning of spring), some furniture elements may be arranged on the southern part of the plaza, along rue Sainte-Catherine. It is also possible that some elements may be designed to be integrated with the skating rink.

During event mode and rink mode, furniture not to be used should be relocated elsewhere in Quartier des spectacles or stored away. The proposal must evolve through the seasons and with events. Configurations of the furniture must be flexible and non-limiting. This modulation through time will create moments that are strong and evocative throughout the year, maintaining users' interest and curiosity and encourage them to return. Strategies to configure or combine furniture elements are strongly encouraged in order to allow for changing experiences.

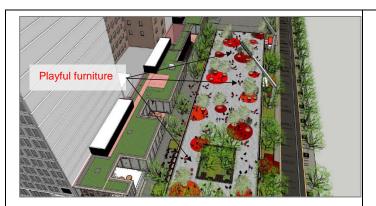


Figure 6: Configuration without rink or events Credit: Fauteux et associés

No-rink-nor-event mode: In this configuration, the playful furniture will be interspersed among the conventional furniture elements. Competition participants are, however, free to propose a particular layout (for example grouping all the playful furniture at one location and not disbursed among the conventional furniture pieces).



Figure 7: Configuration with skating rink Credit: Fauteux et associés

With-rink mode: In this configuration, and particularly when the rink does not occupy the southern part, elements of playful furniture can be interspersed among the conventional furniture on the south portion. Only some elements from the playful furniture collection, winterresistant and safe for such a use, may be installed. If the function allows this, there could be playful furniture on the rink.

# 3.2. PLAYFUL EXPERIENCE AND APPROACH

With its outdoor skating rink, the plaza is naturally a place where people come together for enjoyment. The playful aspect must continue throughout the year in order to contribute to the attraction and popularity of the district. As its name indicates, the playful furniture collection will provide experiences in which the pleasure of playing will be foremost. The concepts of signature furniture and play furniture are combined in this approach. The playful furniture collection becomes a support to the imagination, encouraging the notion of free play, and the right to transform and determine how the space is staged.

Coming together, reinventing, creating different perspectives, playing with the senses—these are keywords to guide the design of the playful furniture collection. Children, adolescents, adults as well as seniors—there must be something for everyone.

#### 3.3. STORYLINE AND VISUAL IDENTITY IN THE SPIRIT OF A BACKYARD

A strong and distinct signature must be developed for the playful furniture collection, reflecting the *genius loci* and imprinting the imagination. The spirit of the Montréal backyard must be the starting point for the storyline (non-literal interpretation). This *genius loci* refers to an intimate space, warm, human-scaled in which people enjoy coming together. This spirit can materialize in several ways but the visual appearance must be contemporary, with quality of materials and execution that communicate permanence. Accordingly, a more ephemeral design (wooden pallets, temporary parklets, etc.) is totally proscribed.

The playful furniture collection must stand out from the conventional furniture and furniture integrated in the plaza; those will be more sober, in harmony with the general urban furniture found in Quartier des spectacles (wood and metal with natural and/or homogeneous finishes). The differences between the plaza furniture and the playful furniture must be unambiguous and clearly legible.

The Ville de Montréal seeks a clear proposal for the concept, one that successfully links the various furniture elements. Particular attention should be paid to avoid a clash among elements. Harmonious cohabitation among all the different components (reinvented carousel, reinvented fountain(s) and the series of complementary playful furniture elements), while taking into account the existing design, is mandatory. A reflection on volumes and the legibility of the space is essential. This is one of the principal challenges of the project.

## 4. SPECIFIC DESIGN CRITERIA

## 4.1. REINVENTED CAROUSEL

The carousel has always been synonymous with amazement and the awakening of the imagination. Typically a carousel is a ride consisting of a platform that rotates (manually or not) with seats for users. The carousel will be the flagship element of the playful furniture. The following design criteria are to be considered:

- Reinvent the carousel with a contemporary approach; the visual appeal must be revised and the functioning mechanism may also be modified;
- Plan the optimal size taking into account available space and the necessity to move and store the apparatus;
- Design a carousel that does not require supervision and personnel to function;
- Limit the mechanical and technological complexity (low-tech approach) given the available budget (manufacturing and fees) and the desired durability;
- Include lighting;
- Include sound (soft) which will play upon start-up;
- Provide a "plug-and-play" electrical connection;
- Provide a levelling system (to correct the mild slope of the plaza);
- Provide a mechanism nighttime closure, to avoid undesirable usage;
- Take into account safety issues;
- Include wheels to allow for easy and rapid moving on the site;
- Provide for easy disassembly and storage (for winter and during large festivals, as needed):
- Preferred location on the plaza: the large terrace [grande terrasse] or the vegetated forecourt [parvis planté];
- Time of year: summer, spring and fall; storage during winter to increase its useful life.

## 4.2. REINVENTED FOUNTAIN OR FOUNTAINS

During the summer, fountains and water play areas are sure to please children. Given the requirements for the refrigerated ice rink, the grand urban terrace will be faced in concrete, adding to the urban heat island effect. One or several reinvented fountains (fountain, water play area or mister) must be integrated in the design.

The following design criteria are to be considered:

- Include a standard certified fountain system, available on the market, with a water filtration and recovery system; purchase price of this mechanism must be included in the project budget:
- Provide "plug-and-play" water and electrical connections;
- Provide for easy takedown and storage;
- Location on the plaza: grande terrasse;

Time of year: summer; storage during other seasons.

## 4.3. SERIES OF COMPLEMENTARY PLAYFUL FURNITURE ELEMENTS

A series of complementary playful furniture elements to serve as a kind of connector between the reinvented fountain(s) and the carousel must be developed. These furniture elements should allow for sitting, relaxing, creating, strolling, expressing and amusing oneself, etc. The following design criteria are to be considered:

- Design a series of elements supporting the storyline;
- Offer flexibility with regard to arrangement on the site;
- Envisage the possibility of using the ground (without modifying the concrete surface);
- Limit technologies used, given the necessity for frequent transfer;
- Provide for easy takedown and storage;
- Location on the plaza: grande terrasse, parvis planté or rue Clark (in certain situations);
- Time of year: primarily spring, summer and fall; some elements could also be used during festivals or winter (near the îlot planté).

#### 5. GENERAL DESIGN CRITERIA

#### **5.1. MANUFACTURING CONTEXT**

The principles of modularity, repetition and optimization must be followed in designing the furniture elements (in particular the complementary playful furniture).

These elements will not be manufactured in great numbers, which constrains designers to use easily accessible materials, available in small quantities, and also to make use of manufacture processes that do not require high production volumes. Consequently no equipment (or only of low-cost) should be required for the manufacture of the furniture because these tools will have to be included within the cost of the furniture elements themselves.

Given the context of a public call for tender following production of plans and specifications by the competition winner, it must be possible for more than one supplier to fabricate and install proposed solutions for the urban furniture.

### 5.2. TRANSPORT AND STORAGE

Given requirements regarding the modularity of implementation and evolution of furniture elements (see 3.1 of the Program), the furniture must be designed to be able to be frequently moved and stored. It must be possible to change the location on the plaza or in the Quartier des spectacles (occasionally). It must be possible to store the furniture which does not remain in place permanently, in particular during festivals and the winter season (complete-rink

mode) in the warehouses provided for this purpose (north section of the building, basement). It is also possible that storage of smaller furniture elements will be done in containers, offsite.

Depending on size, furniture elements may be moved via a pallet truck or a forklift. The design must provide for transportation using these types of equipment.

#### 5.3. GROUNDING

A ballast system to keep all furniture elements grounded must be included. No site anchoring equipment can be proposed for this project.

#### 5.4. SAFETY

Furniture elements must respect standards with regard to safety on the public domain. They must be safe both for users and for the workers who transport, handle, install and maintain them. They must not present angles, projections, or bumps which can cause injury. Furniture elements must retain their solidity after years of use and may not use materials for which normal wear and tear would present dangers for the user. Furniture must present minimum chamfering. Exemplary design in terms of safety as expected, in particular to prevent any pinching of members (including fingers, trunk, head). For this purpose design and standards guides (CAN/CSA-Z614-14) establishing requirements for public equipment and play spaces for children must be followed. It is up to the competition winner to ensure that standards currently in effect are respected according to the nature of the planned furniture. Other standards may apply.

# 5.5. MAINTENANCE

Maintenance for the urban furniture elements must be simple. Maintenance will be done annually. Assembly and takedown must be simple for replacement and maintenance of components, if necessary.

#### 5.6. RESISTANCE CLIMATOLOGICAL CONDITIONS AND MATERIAL QUALITY

The choice of materials and their treatment must take into account quality requirements and the useful life of the furniture. The furniture must be resistant to intensive public use. The playful furniture collection must be designed for a minimal usable life of 10 years (with annual maintenance as needed), taking into account the constraints of an urban setting, which may include, but is not limited to the following requirements:

- Resistance to vandalism (breakage, pointed objects) and graffiti;
- Weather resistance (cold, temper variations, UV rays, snow, frozen rain, mildew);
   extreme condition effects must be included in the load calculations according to the combination of loads established in Table A3.2.1 of CSA-S6-14 Standard.
- Resistance to de-icing salt;

- Resistance to impacts caused by municipal maintenance vehicles (for snow removal, cleaning, transportation for removal or storage, etc.);

In addition, the following requirements must apply:

- Resistance calculations for metallic structures, if any, must conform to CSA-S6-14 Standard;
- Calculations for aluminum structures, if any, must meet the requirements of CSA-S157-05 Standard;
- All bolted assemblies must use 316 stainless steel bolts, nuts and washers; no attachment accessory in galvanized steel will be accepted;
- All components must be solidly attached by methods that discourage theft and breakage;
- Requirements of applicable Ville de Montréal standard prescriptions must be respected (including, if applicable and not be limited to, the following fascicles: Galvanisation à chaud et peinturage [hot dip galvanizing and painting]; Soudure, découpage, perçage et restauration [welding, cutting, drilling and restoration]). Applicable standard prescription documents and their fascicles will be transmitted to the competition winner at the kickoff meeting.

## 5.7.LIGHTING AND TECHNOLOGY

Various multimedia equipment elements integrated into the design will allow for the creation of lighting effects for the rink and urban terrace. The equipment planned will also allow for dynamic projections directly on the surface in order to be part of programming of the space.

The carousel must include lighting. Lighting may, optionally, be included in the other elements of the playful furniture. If proposals include lighting, this must not present glare to motorists, nor negatively impact nearby traffic signals.

Complex technological interactivity (launched by users) is to be avoided, in order to provide better cohabitation with adjacent neighbours and greater durability and ease of maintenance of furniture elements. However, simple interaction or programming is authorized. Lighting and control systems, if any, must be durable, dependable and easily maintained.

As necessary, furniture elements must conform to current codes, standards, regulations and bylaws related to electricity. Documents signed and sealed by an electrical engineer are required for all electrical work, if applicable.

Electrical connection boxes are located in the trenches separate the grande terrasse from rue Clark.

#### 5.8. UNIVERSAL ACCESS

The Ville de Montréal has adopted a universal accessibility policy which affects all components of municipal activity. Universal access affects all aspects of human life. Adopting an approach based on dignity, inclusion in the respective rights of all citizens, accessibility is defined by the identical or similar, autonomous and simultaneous use of services offered.

The municipal policy establishes general directives for movement, furniture and signage. The various universal accessibility guides of the Ville de Montréal are available here (in French): <a href="http://ville.montreal.qc.ca/portal/page?">http://ville.montreal.qc.ca/portal/page?</a> <a href="page: page: delay58,90439645">page: page: delay58,90439645</a> <a href="mailto: dad=portal&schema=PO">dad=portal&schema=PO</a> <a href="mailto:RTAL">RTAL</a>

Information and publications related to universal accessibility are also available (in English) on the website of a not-for-profit organization, Société Logique: https://societelogique.org/en/

The following physical constraints must be taken into account for inclusion of playful furniture:

- A straight path free of any obstacles, with a minimum width of 1800 mm is required; if such a width is impossible to obtain, a 1500 mm width is acceptable if spaces are created in order to provide the user of a motorized mobility aid (MMA) with sufficient clearance to effect 180-degree turning manoeuvres;
- Furniture components must be detectable by a white cane and projecting elements are to be avoided within a height between 230 mm and 2030 mm. Under each construction element, it is recommended that a component be on the ground so as to allow a pedestrian using a cane to perceive the total width of the furniture.

## **5.9. SUSTAINABLE DEVELOPMENT**

Sustainable development is a concern of the Ville de Montréal. Furniture elements must be durable, both formally and functionally, have reasonable energy consumption (if any) and use materials boosted by mental impacts (lifecycle) are minimized.

### 5.10. USEFUL LIFE

A minimum service life of 10 years is desirable for the playful furniture collection.

#### 5.11. REGULATIONS AND CERTIFICATIONS

Furniture elements must meet all bylaws in effect, as well as all federal, provincial and municipal codes, laws and regulations.

In their designs, finalists and the competition winner must avoid complex or costly certification processes that may result in long delays. Integration of standard, approved components is preferred.

The competition winner agrees, however, to obtain certifications and attestations required in the project, including approvals indicated by stamping by an engineer and architect, if applicable, for acts reserved to those professionals under the law and according to best practices.

#### 6. IMPLEMENTATION OBJECTIVES

#### 6.1. PROJECT COST OBJECTIVES

The proposed budget for the manufacture and installation of all furniture elements is six hundred thousand dollars (\$600,000) before taxes. Allocation of costs by type of furniture is as chosen by the designers. Design of furniture elements must take into account budgets for manufacture and installation as well as the fees for design, technical development and monitoring of manufacture. Consequently, designers are asked to limit the technological and manufacturing complexity of the urban furniture, opting instead for simplicity and high-quality construction, to ensure durability.

More specifically the amount of six hundred thousand dollars (\$600,000), plus taxes, will include:

- Cost of materials;
- Cost of standard equipment (purchase);
- Cost of labour for manufacture and assembly in factory;
- On-site assembly costs, if any;
- Costs for installation and connection (plumbing, electrical), for the initial installation;
- Design contingencies (15%);
- General and administration costs.

This amount excludes professional fees for the detailed design, preparation of plans and specifications, and supervision of manufacture/installation as well as annual maintenance costs for the playful furniture collection.

### 6.2. COMPLETION SCHEDULE

Description	Date
Awarding of contract to competition winner	February 2020
Project kickoff meeting	February 2020
Post-competition review and approval of design	March 2020
Plans and specifications	March to May 2020
Manufacture and installation tendering process	May to August 2020
Manufacture, prototyping, adjustment, installation	August to October 2020
On-site installation	Fall 2020