

PROGRAM

Sainte-Cath Works

Design competition to minimize the impact of the public works on Sainte-Catherine Street West

Service des infrastructures, de la voirie et des transports of Ville de Montréal
in collaboration with Ville de Montréal's Bureau du design

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1. MISSION, APPROACH AND OBJECTIVES OF THE WORK SITE ENHANCEMENT PROJECT

1.1 PROJECT MISSION

Upgrading underground infrastructure, incorporating new public transit systems, pedestrianizing downtown streets and building large-scale facilities are all situations that require setting up urban work sites, temporarily transforming the way cities function in order to improve their overall appeal and quality of life in the longer term. Although these transitions are necessary to make cities fit for the 21st century, work sites of this nature inevitably upset people's daily routines, interfere with their mobility, block access to shops and services, and disturb the public peace.

If architecture and design expertise were applied within the framework of planning, designing and managing work sites, could they bring creative solutions to this challenge that is as significant as it is universal? Could such expertise improve the collective and individual experience of major urban work sites and mitigate their negative impact on economic activity and the daily lives of workers, merchants, residents and tourists?

These issues and questions were at the heart of the discussions at "Quel chantier! – Le design au secours des grands chantiers urbains," an international symposium held in Montréal in October 2014 as part of the 27th Entretiens Jacques Cartier. Organized by Ville de Montréal's Bureau du design in collaboration with the Cité du design of Saint-Étienne, the event brought together nearly 300 people, including some 20 speakers from Europe, Asia, Canada and the United States. It was an opportunity to share and explore innovative design solutions to address problems inherent in major urban work sites and, as such, represented one of the first steps forward in developing new approaches in Montréal.

In the wake of these discussions, and in an effort to help ensure community well-being, promote economic growth and enhance the city's appeal, Ville de Montréal is once again moving forward by announcing it will integrate a design component into the planning, development and execution of the Sainte-Catherine Street West redevelopment project, slated to start in spring 2017.

The purpose of this major work site, which will extend from Atwater Avenue to Bleury Street, will be to repair the underground infrastructure and come up with a new streetscape. This will inevitably have an impact on the city centre.

Acknowledging that Sainte-Catherine Street is a commercial thoroughfare of vital importance to the city, Ville de Montréal wishes to organize a design competition to minimize the impact of the first phase of the redevelopment project, which will take place over the span of four years.

By bringing ideas together, the competition will seek to generate innovative, high-quality solutions and will result in the selection and commission of a multidisciplinary team that will be awarded a professional services contract for the detailed design, plans and specifications, as well as on-site follow-up during the execution phase.

1.2 PROJECT APPROACH AND OBJECTIVES

The proposed approach must be consistent with the specific context of Sainte-Catherine Street and take into consideration the iconic status of this commercial thoroughfare. In order to maintain a high-quality and attractive urban environment for users throughout the work period, the project should, by virtue of its form and content, meet the following objectives:

- To change users' perceptions of the work site by making it dynamic and appealing
- To define an innovative urban experience within the framework of the work site
- To channel and direct the flow of street users efficiently and safely
- To reduce disruptions associated with the work and various obstructions
- To disseminate information on-site regarding real-time progress of the work
- To inform users about future developments

2. CONTEXT

2.1 STUDIES FOCUSING ON THE SAINTE-CATHERINE STREET WEST WORK SITE AND ON WORK SITES IN GENERAL

Since 2010, Ville de Montréal’s Bureau du design and its Service du développement économique have undertaken a series of initiatives and studies to better understand the problem of work sites and find solutions to mitigate adverse impacts.

A study conducted by Moment Factory in the summer of 2014 identified possible approaches and laid the groundwork for a creative concept to minimize the impact of the Sainte-Catherine Street West redevelopment project. This study is available to competitors in Appendix D. It does not, however, take into account all of the needs and restrictions that have subsequently been stated in more precise terms and that can be found in the appendices of this program.

The “**Quel chantier! – Le design au secours des grands chantiers urbain**” symposium was held in Montréal in October 2014 as part of the 27th Entretiens Jacques Cartier. Organized by Ville de Montréal’s Bureau du design in collaboration with the Cité du design of Saint-Étienne, the event brought together nearly 300 people, including some 20 speakers from Europe, Asia, Canada and the United States. It was an opportunity to share and explore innovative design solutions to improve the collective and individual experience of major urban work sites or, at the very least, to help mitigate their negative impact on users’ daily lives. The results of the symposium’s ideation workshop are available [online](#).

A study of the mitigation measures to implement in all work sites, carried out in spring 2015 and included in Appendix A, sheds light on possible solutions for enhancing various work site elements. These elements, which are the responsibility of the construction contractor, include all of the devices that allow users to make their way through and safely move about the work site, in addition to amenities designed to protect worker safety and well-being. Some items, such as traffic signs, visual markers, fences and electronic signs, must adhere to very strict standards set forth by the Ministère des Transports du Québec (MTQ) and may therefore not be altered in any way. Other items, such as access ramps to neighbouring buildings, walkway markers, freestanding fences, amenities for contractors and signage tools, are less heavily regulated, which means design elements can be incorporated into them to enhance the overall appearance of the work site.

Based on the document “**Communication de la Ville de Montréal relative aux chantiers**” (January 2015) prepared on behalf of Ville de Montréal and on various observations made by the City, the **main nuisances associated with urban work sites in Montréal** are the following:

- Noise
- Dirt
- Interrupted water and power supply (foreseen but poorly communicated or unforeseen)
- Difficulty using walkways adjacent to a work site, especially for people with reduced mobility (people with a visual or motor disability, families with baby strollers, senior citizens, children, etc.)
- Difficulty navigating through the work site (inadequate signage)
- Lack of information about where shops are located and when they are open for business
- Reduction in customer traffic for merchants
- Lack of information about the work in progress
- Insufficient information concerning real or perceived work interruptions (e.g. when workers are underground and hence not visible to the public or during pipe sanitization or testing operations)
- Difficulty getting to establishments (makeshift ramps that are not universally accessible)
- Space in the contractor’s area that is not optimized (for materials, equipment, workers’ vehicles, etc.)
- Cleanliness of the site
- Difficulty parking near the site

- Detours and traffic congestion attributable to the work site
- Lack of information on alternate routes for people with reduced mobility

Although some nuisances are the direct responsibility of the City or the contractor, several adverse outcomes can be eliminated or minimized through strategic work site planning and judiciously chosen design elements.

The program [PR@M – Artères en chantier](#) adopted in December 2015 is the result of pilot tests to assist the business community while Parc Avenue was under construction in 2010. These tests were conducted by the Service du développement économique while discussions were held on work site appearance and accessibility.

Specifically as concerns the Sainte-Catherine Street West project, the City administration has adopted a program similar to PR@M – Artères en chantier, albeit adapted to the scope of the project and the importance of the downtown core to Montréal. The program, known as [PR@M – Sainte-Catherine](#), is intended exclusively for the business community and consists of three parts, each with its own budget.

The goal of the first two parts of this financial assistance program is to stimulate business during and after the redevelopment project. They will be jointly overseen by Ville de Montréal and downtown Montréal’s leading business association, SDC Destination Centre-Ville. Financial contributions earmarked in the municipal program will complement the efforts undertaken by the business community to maximize its visibility while the work site is active. The first budget comprises an amount of close to \$800,000 to help SDC Destination Centre-Ville implement various tactics in terms of economic development, member engagement, market positioning and branding, which it will develop throughout the project. The second budget will make \$1.5 million available for an advertising campaign to shine the spotlight on the downtown core and highlight reasons for continuing to visit the area while work is under way. The third part of the PR@M – Sainte-Catherine program specifically targets merchants and property owners in and adjacent to the work site. It constitutes a program in and of itself, with \$2.6 million set aside to renovate commercial buildings and spaces. These funds will be made available just before the redevelopment wraps up, which is currently slated for 2019.

2.2 SAINTE-CATHERINE STREET WEST PROJECT

Ville de Montréal will take advantage of the opportunity afforded by the work on the underground infrastructure along Sainte-Catherine Street West to rethink this iconic commercial thoroughfare and incorporate features designed to support its development. The streetscaping project will not only reflect the street’s unique personality and history, it will also make it ready to face the challenges of the coming decades.

Major infrastructure and redevelopment work has already been carried out along Sainte-Catherine Street West (central section) between Bleury Street and Saint-Dominique Street as part of the Quartier des spectacles initiative, in the area around Place des Arts. This new project, to be overseen by Ville de Montréal’s Service des infrastructures, de la voirie et des transports, will focus on the stretch of Sainte-Catherine Street West between Atwater Avenue and Bleury Street.

Given how long this stretch is, construction work will be completed in phases in order to limit the impact of the work site:

- **Phase 1, Lot 1:** Sainte-Catherine Street West between Mansfield and Bleury streets, i.e. 670 linear metres;
- **Phase 1, Lot 2:** Phillips Square and the surrounding streets (Union, Cathcart and Phillips Square up to René-Lévesque Blvd.);
- **Phase 2 and subsequent phases:** Sainte-Catherine Street West between Atwater Avenue and Mansfield Street, i.e. 1,530 linear metres.

Phase 1 (Lots 1 and 2) will be a four-year endeavour and constitutes the focus of this competition.

The objectives of the Sainte-Catherine Street West redevelopment project are:

- To upgrade obsolete underground infrastructure, including utilities, to avoid the need to perform major repairs to the street in the decades to come
- To redesign the street to ensure safety and functionality and enrich users' experience
- To reinforce the distinctive character of Sainte-Catherine Street West
- To incorporate the “Montréal Smart and Digital City” strategy by creating a smart urban space



The Sainte-Catherine Street West project will unfold in the heart of the downtown core, in an area that boasts a rich historical legacy and is home to a thriving business, cultural and retail community. Bearing this in mind, the City initiated a consultative process in summer 2014 in order to engage Montrealers in the process of defining how the streetscape would look. The goal is to come to a broad-based consensus on a vision for the Sainte-Catherine Street West of the future. The large-scale project will draw inspiration from key development priorities set out in the *Montréal Development Plan*, the *Transportation Plan*, the *Economic Development Strategy* and the *Master Plan*. This consultation will be followed by close collaboration between Ville de Montréal and the community when the redevelopment gets under way to minimize the impacts of the project on users and neighbouring establishments and residents. All of the briefs submitted and the documentation made available in connection with this consultative process is available [online](#).

The future Sainte-Catherine Street West is the brainchild of the architectural and urban design firm Daoust Lestage. The streetscaping concept will be flexible. Sidewalks will be wider to accommodate a wide range of uses depending on the season and the event. This versatility will make it possible, for example, to transform the street into a pedestrian mall in the summer – complete with *terrasses* and cultural events – and limit street parking to non-peak times. The speed limit will be reduced to 30 km/h. The street will also be more accessible to people with reduced mobility, who will be able to negotiate the open sidewalks alongside the buildings with ease. This approach will make it possible to meet the challenges of the coming decades in terms of improved mobility and energy consumption. In keeping with Ville de Montréal's pledge to becoming a smarter city, Sainte-Catherine Street West will set the pace in this regard, with such features as free Wi-Fi, energy-efficient lighting and smart parking systems.

Additional information is available on the Sainte-Catherine Street West project [website](#).



2.3 SAINTE-CATHERINE STREET WEST WORK SITE – A DYNAMIC WORK SITE FACING MULTIPLE CHALLENGES

Generally speaking, construction sites are considered to be noisy, dirty, impractical for users and disruptive for the community. They are often perceived as “black holes” of sorts – rips in the urban fabric. And infrastructure rehabilitation sites in dense urban areas, such as Saint-Catherine Street West, are considered to be the worst offenders of all. They create widespread disturbance and cause problems for road users, pedestrians, workers, business clients and customers.

The work along Saint-Catherine Street West will involve every type of underground facility: sewers, water mains, electrical and telecommunication duct banks, gas pipes, connections and so forth. The entire surface of the street will also be redesigned, including Phillips Square and Place du Frère-André.

Upgrading the underground infrastructure on Saint-Catherine Street West requires extensive excavation over the complete length of the street and along the sidewalks. It will also be necessary to extend the work all the way to building frontages to install service connections. Lastly, the redevelopment work will take up a great deal of space, including roads, sidewalks and public squares. When “crosswise” service connections are being put in and when work is being carried out on sidewalks, business establishments will be difficult to get to, making it necessary for ramps to be installed over excavated areas.

This type of work site, overtop hundred-year-old underground infrastructure, is unique because of the many unknown factors (e.g. precise location of a facility) and will require numerous adjustments on the spot, as opposed to new developments (no existing underground infrastructure or known recent infrastructure) or buildings (work site limited in space).

These work areas are expansive in size and may cover several street sections. The resulting traffic hindrances may last for an extended period of time, with lane closures and detours, thereby having a profound impact on local business. Construction supplies and contractor equipment (trailers, portable toilets, dumpsters, etc.) are generally visible from outside the work area, which significantly affects users’ perceptions.

The Saint-Catherine Street West work site may proceed in an east-west direction. It is nevertheless possible that more than one stretch of road will be blocked at the same time by multiple work teams.

Work at the intersections will be treated as a separate project component and, for the most part, will be ongoing 24 hours a day, seven days a week. Incidentally, the City is studying the possibility of, and interest in, a round-the-clock work schedule for the entire project to optimize delivery time frames.

At this time, the City plans to completely close all lanes to motor vehicles on the streets affected by the work. This would result in four scenarios:

- Excavation work would start in the middle of the street, with pedestrians directed to the areas in front of businesses, with crossings at intersections or strategic areas throughout the work area.
- Service connection work would then follow, with excavations near building facades (one side at a time or both sides simultaneously), and pedestrians would be redirected to the centre of the street, with ramps installed to provide access to commercial establishments.
- During the final stage of streetscaping and surface work, pedestrians would continue to use the middle of the street, with ramps and paths to commercial establishments.
- Work at an intersection would take place on a continuous basis, with deteriorated and constantly changing conditions for pedestrian crossings and traffic.

Although these basic assumptions are already formulated, the actual breakdown of the project stages for the on-site work will be confirmed with the selected contractor. In the first place, it is impossible for Ville de Montréal to know what the selected contractor's capacities or work methods are. In the second place, contractors often tap into their experience and operational knowledge to streamline the initial schedule proposed by the City. Naturally, specific obligations in terms of anticipated results will be outlined in the contract documents.

Following the tendering process to select a general construction contractor to manage the work site on Sainte-Catherine Street West, the winning competitor's plans and specifications will be near complete. Accordingly, special instructions, technical clauses, plans, blueprints and all other design elements will be included in the plans and specifications for the on-site work to ensure that a contractual link is in place and to allow the general contractor to include these elements in the bid.

Given the aforementioned considerations, it is essential that the proposed design be flexible and adaptable to any work sequence. This versatility is all the more important in view of the fact that unforeseen contingencies during the project may force work teams to rearrange the schedule at any given time.

2.4 SAINTE-CATHERINE STREET

With 1,200 businesses over a 3.2-kilometre stretch, Sainte-Catherine Street is Montréal's main commercial thoroughfare. Similar to 5th Avenue in New York and Michigan Avenue in Chicago, "Sainte-Cath" enjoys a well-established reputation among locals and tourists alike as one of Canada's top commercial streets. For more than 100 years, Sainte-Catherine has been home to a considerable number of shops, stores, restaurants and entertainment venues that provide multiple opportunities to bring people together. Located in the heart of the city, Sainte-Catherine Street crosses several points of interest, including the Quartier des spectacles, the central business district and the Gay Village, making it a major tourist draw. In addition to intersecting with the underground pedestrian network at numerous spots, Sainte-Catherine Street is near three universities, namely UQAM, McGill and Concordia.

Sainte-Catherine also boasts a rich history and distinctive atmosphere. Originally a residential street, it transformed into a commercial thoroughfare with the opening of Morgan's department store on Phillips Square in 1891 (now The Bay). The multi-storey commercial buildings erected in the neighbourhood in the 1920s densified the street and gave it its new identity. It gradually evolved into the city's main commercial street, a role that was cemented with the construction of a series of

underground shopping centres in the 1960s. The buildings lining Sainte-Catherine Street hail from different eras and boast unique characteristics.

Every year, the western part of Sainte-Catherine Street is taken over by a series of annual events that add to the vitality and appeal of the downtown core. In addition to the multitude of festivals held in the Quartier des spectacles, Sainte-Catherine Street is the backdrop for the Santa Claus Parade, the St. Patrick's Day Parade, "La Sainte-Catherine célèbre" and Grand Prix Week.

The Santa Claus Parade is a spectacular annual celebration designed to kick off the holiday season in downtown Montréal. Young and old alike line the streets of Sainte-Catherine Street West, between Fort and Saint-Urbain streets, to be a part of Quebec's most popular Christmas-themed event. The St. Patrick's Day Parade, a tradition since 1824, welcomes more than 4,000 participants every year, with 20 floats and 25 marching bands, from Fort Street to Phillips Square, to celebrate Irish heritage. "La Sainte-Catherine célèbre" is a two-day event in July that is touted as Canada's largest sidewalk sale. For the occasion, the street is transformed into a pedestrian mall between Guy and Bleury streets to give Montrealers and visitors the chance to shop while they soak up the summer rays. Grand Prix activities are held primarily on Crescent Street, between Sherbrooke and Sainte-Catherine streets, attracting hordes of visitors for three days of high-octane excitement.

In addition to all of this, Sainte-Catherine's many cross streets are home to a countless variety of goods and services.

2.5 MONTRÉAL'S DOWNTOWN CORE

Sainte-Catherine Street West is in the heart of Montréal's downtown core. Located in the borough of Ville-Marie, this is both the central business district and the city's cultural hub. It is a mix of corporate headquarters, office towers, underground shopping centres and world-renowned institutions. This epicentre of economic vitality is full of life and all manner of activities. The live entertainment venues, performance halls, movie theatres, restaurants, hotels, museums and festivals bring in nearly 9 million tourists every year. And with 50 office towers, the downtown core is home to Quebec's largest workforce: 580,000 pass through this part of the city every day, including 250,000 workers and 85,000 students. And more than 80,000 residents have chosen to taken advantage of the distinctive lifestyle that Ville-Marie offers.

Downtown Montréal is also home to two key tourism districts: the Quartier des spectacles and the Quartier international de Montréal. Centred on the intersection of Sainte-Catherine and Saint-Laurent streets, the Quartier des spectacles is the heart of the cultural metropolis, with more than 80 cultural venues, including 30 concert halls with over 20,000 seats. The Quartier des spectacles is also the backdrop for numerous cultural events, both indoor and outdoor, with eight public squares that accommodate close to 40 festivals a year. No other place in North America offers a more diverse array of cultural facilities. To the south lies the Quartier international de Montréal, the transition toward the historical part of the city. Anchored by the Palais des congrès de Montréal and home to a number of international organizations, the Quartier international is a testament to made-in-Montréal expertise and an exceptional showcase of design, architecture and culture.

2.6 RÉSO

RÉSO is a 32-kilometre-long network of pedestrian tunnels, businesses and shopping promenades that together form one of the world's largest underground cities. Nearly 500,000 visitors and users pass through this network every day. RÉSO is the culmination of the vision of real estate developers and owners who understood that interconnectivity between buildings, shopping centres and the metro would add value to their properties and the downtown core as a whole. The underground city currently links 63 buildings, 2,000 merchants and 10 university pavilions.

RÉSO is where metro, commuter train and bus lines serving the downtown area converge. It comprises no fewer than eight metro stops and five train/bus stations. The RÉSO logo incorporates

the metro symbol to clearly establish its relationship with Montréal's subway system. There are over 190 entrances to the underground city and 300 wayfinding signs to guide users.

As part of the work site enhancement efforts, and following an agreement with the STM, small-scale redevelopment operations could be carried out in the areas near the McGill and Peel metro exits. However, there are no plans to do any work in the section of the underground city that is privately owned.

2.7 NEIGHBOURS AND USERS

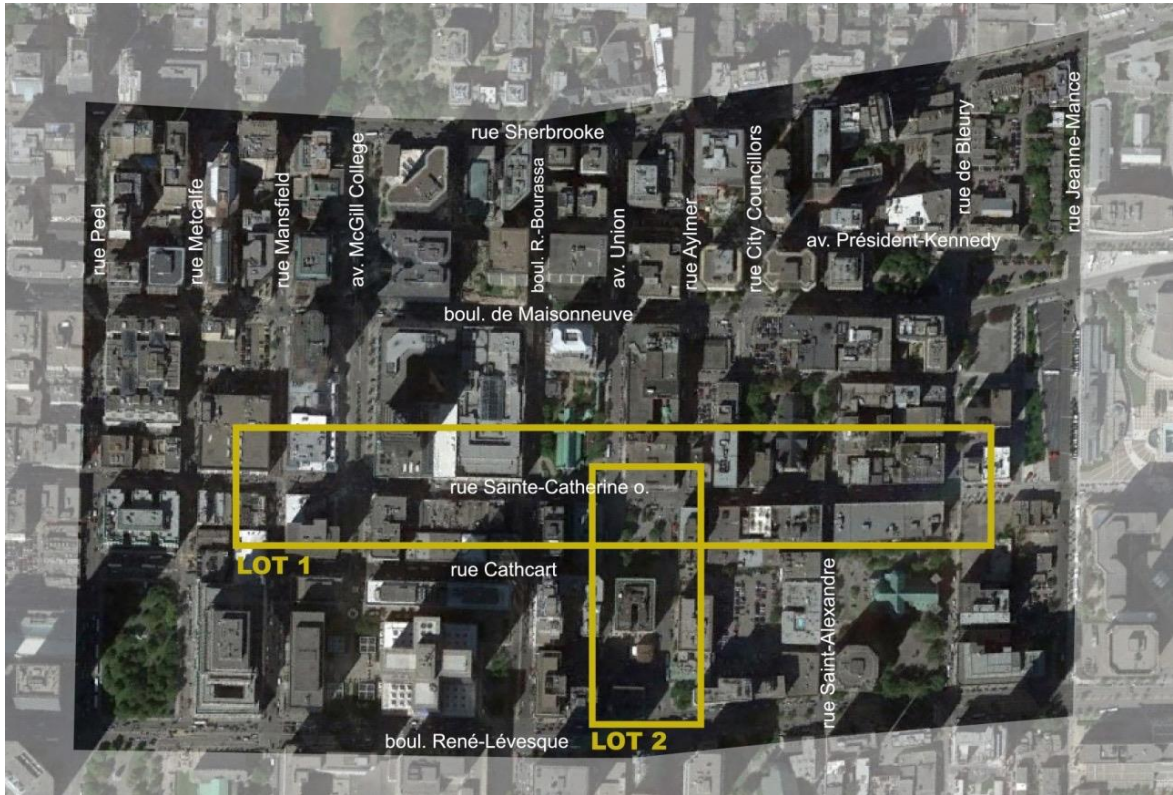
Commercial establishments and offices are key draws to this area, as are the numerous cultural venues that are found here. Many users and neighbouring establishments and residents will be affected by the Sainte-Catherine Street West work site, including workers, students, merchants, residents and tourists. Any nuisance arising from work in commercial zones thus requires special care and attention. The site must remain accessible to all users throughout the duration of the project, and ongoing communications must be maintained with all neighbouring establishments and residents at all times. Measures to minimize adverse impacts of the work site on neighbours and users are vital for a project of this magnitude.

Merchants on Sainte-Catherine Street and the areas adjacent to the work site will be the most seriously affected by the redevelopment work. There are more than 1,200 merchants and services in the project zone, 450 of which have frontage on Sainte-Catherine Street (ground floor and upper levels). In addition to the noise and dirt on the street and sidewalks, these businesses will have to put up with fewer parking spaces, lane or road closures, and sidewalk closures that will interfere with deliveries and the free flow of customers travelling by car, foot, public transit or bicycle.

3. TARGET AREA

Although the streetscaping work will cover the area between Atwater Avenue and Bleury Street, this competition will focus solely on Phase 1 of the project, that is, Sainte-Catherine Street West between Mansfield and Bleury streets (670 linear metres) as well as Phillips Square and the surrounding streets (Union, Cathcart and Phillips Square up to René-Lévesque Boulevard). However, the design project will extend beyond the work site, in particular regarding the signage directed at users as they approach the work site.

The target area will therefore cover the entire Phase 1 work site, including fences and spaces around the perimeter, most of which are located in the rectangle formed by René-Lévesque Boulevard to the south, Sherbrooke Street to the north, Jeanne-Mance Street to the east and Peel Street to the west.



See Appendix B for 2-D plans of Sainte-Catherine Street.

4. FUNCTIONAL AND TECHNICAL NEEDS

4.1 ATTRACTIVE APPEARANCE AND USER EXPERIENCE

The project must have the potential to create an attractive appearance and help maintain the number of visitors to the area to uphold the economic vitality of Sainte-Catherine Street and the downtown core. Standardized signs that mirror the look of the project's design elements must be made available to merchants so they can share messages (special deals, etc.) with their customers (near their establishment or at intersections or work site entrances).

The project must also focus specifically on the experience of users who frequent the work site and the surrounding areas. It must attempt to improve the quality of life of neighbouring establishments and residents affected by the work and galvanize public support for the project by promoting a sense of engagement with respect to the work site and the surrounding area. In this regard, the project must be more than a sequence of one-off components. It needs to be a sustained series of actions that, on a daily basis, improve the experience and quality of life of users who frequent this area.

Moreover, the project must enhance the visitor experience as well as focus on the individuals who "work" close to the site every day. It must encourage people to enter the work area, return to the area more than once, prompt users to request information and spark dialogue about the redevelopment and what makes it tick. It must also include lighting systems for nighttime visibility.

In addition, the project must include scalable elements that encourage people to monitor the work site's progress and follow the transformation first-hand. This may involve programming that promotes user participation, maintains their interest throughout the duration of the project and invites them to keep coming back. This may be achieved by taking advantage of some of the major annual events that take place in the area (see section 2.4), retail cycles (peak periods throughout the

year, with an emphasis on the holiday season) or important milestones in terms of project deliverables.

4.2 MAINTENANCE AND OPTIMIZATION OF USER MOVEMENTS – SIGNAGE

Commercial establishments, residential dwellings, offices and businesses adjacent to the work site will be affected by the redevelopment project. Signage that makes it easier for customers and tourists to find their way around the site and locate parking facilities is essential in making them feel comfortable and welcome.

A visual and signage concept for the work site must be developed for all of the corresponding physical and communication-oriented elements. Clarity, consistency and simplicity are the keywords that should guide the design of communication tools that help users navigate the work site and adapt their habits accordingly.

At a minimum, signage must provide:

- Instructions for getting around the work site or alternative routes for pedestrians at the approach to the work site and in the immediate vicinity
- Information for people with reduced mobility as they approach the work site so they can plan accordingly and choose whether to negotiate the work site or opt for an alternative route (especially important for people with wheelchairs, motorized mobility aids or strollers)
- Instructions for getting to public transit facilities
- Information on changes in Bixi terminal locations
- Directions and designated areas for alternative parking, as required
- Directions and designated areas for deliveries to commercial establishments
- Information on access to commercial establishments: the name of each establishment (nearby and approaching, by way of a directory/map or the equivalent) must be clearly indicated within the visual system developed for the project (no logos or brands)
- Standardized display systems (physical mounts), using the same look as the rest of the project, must be made available to merchants to share messages (special deals, etc.) with customers (near their establishment or at intersections and work site entrances)
- Integration or covering of fences for walkways and crowd control purposes (see Appendix A, section 1.6) – optional depending on the work site layout and proposed concept

This signage must coexist with the standardized signage required by the MTQ (see Appendix A, section 1.1). Solutions must therefore limit the number of stands required and take universal accessibility issues into account in all graphics and visual materials. Solutions must also be flexible because the contractor will need to move the stands and the signage they contain on a frequent basis.

4.3 WORK SITE LIMITS – BARRICADES AND FENCES

Safety barricades will be used to prevent vehicles from entering the work site. Freestanding fences will be used to separate the work area (often an excavation) from various users. Fences will also be used to delineate supply storage areas.

The project must include covers or a complementary use of these barriers (see Appendix A, sections 1.5 and 1.7) in line with MTQ requirements. This could include covers for work site fences designed to improve their integration with the surrounding landscape and to minimize dirt and noise. Treatments that are transparent or contain perforations are recommended to avoid interfering with police surveillance, to make it possible to see commercial establishments and to facilitate eye contact between workers and passersby. These treatments should be applied at such places as work site exits and street intersections where safety cones are required 5 metres before a pedestrian crossing. If fence covers with graphics are used, the content must be designed so it can be displayed

independently, that is, the elements can be used in any order or in any quantity, depending on the needs of the work site and the status of the project.

One or more spaces in the work site must also be set aside for contractors' needs (trailers, dumpsters, portable toilets, backfill materials, etc.). This must be delineated by a fence within the work area. Fences in this section must be covered in order to improve the visual appearance of the work site. An opaque treatment may be used for the material storage area, as long as this area is fully contained within an enclosed space (see Appendix A, section 1.8).

The City recently initiated a pilot project for work site fence covers (see Appendix C). Although these models are still in the development phase, they will be made available to the winning competitor if they wish to incorporate or adapt them into their concept, and if they are consistent with the project's overall visual identity.

4.4 ACCESS TO SIDEWALKS, TEMPORARY WALKWAYS, COMMERCIAL ESTABLISHMENTS, INSTITUTIONS, BUSINESSES AND RESIDENTIAL DWELLINGS

The project must not block access to neighbouring properties in any way and must facilitate access to them. Because there are no alleys along this section of the street, deliveries must continue to be made from Sainte-Catherine Street.

No matter what the nature of the obstructions or excavation, especially if it involves the installation of service connections, residents must always have safe access to their homes. Similarly, merchants, businesspeople and visitors must be able to get in and out of commercial buildings at all times.

Some commercial establishments, such as restaurants, receive goods on a daily basis. For others, the frequency of deliveries varies. Either way, these practices must be maintained by designating specific delivery areas, which may be relocated depending on work site needs (via alleys or the street itself, in certain cases).

On work sites, the materials used to create temporary ramps are often crude, cumbersome and ill-adapted to universal accessibility requirements. One of the project requirements will be to provide a design or recommendations for a solution (ramp) that ensures uninterrupted access to buildings in the event of an obstruction or excavation, in a manner that meets safety standards and criteria. In addition to facilitating access, the ramp must be safe and inviting for users of all ages and physical capabilities. If a ramp is designed for this purpose, the winning competitor will be responsible for providing the corresponding preliminary drawings signed by an architect or engineer. The technical clauses prepared by the winning competitor must require that the workshop drawings used for construction be overseen by an engineer retained by the contractor.

4.5 UNIFIED VISUAL IDENTITY

A strong brand image for the work site must be developed. The project must include a unified graphic and visual identity for all corresponding physical, visual and communication-oriented elements. Clarity, consistency and simplicity are the keywords that should guide the design of communication tools that help users navigate the work site and adapt their habits accordingly. In addition, the City's corporate identity (logo and the rosette symbol) must coexist with the graphic signature developed by the winning competitor for the work site.

Ville de Montréal's logo and the standards applicable to its use are available on the City's [website](#).

4.6 INTERPRETATION OF THE WORK SITE

The project must include on-site information integrated into the concept to provide users with a range of factual information on the progress of the redevelopment work. This information includes the nature of the work, work site hours, schedule, explanations of unforeseen contingencies, sources of information and so forth. Depending on the proposed concept, the project may also provide

people with technical information on the site, types of professionals involved in the design and construction, the history of the site and more. If a historical approach is adopted, the content must also have a clear, future-oriented component.

4.7 INTERPRETATION OF THE FUTURE STREETSCAPING PROJECT

The benefits of the redevelopment work and the characteristics of the future Sainte-Catherine Street must be emphasized. The content must not be limited solely to nuisance management. It must stress the strengths and the nature of the public space once it is finalized by making the experience palpable. This will help erase the distinction between the work site and the final project and instead express the initiative as a continuum – a look ahead at things to come. The project must also capture the City’s positioning with regard to the redevelopment: Sainte-Catherine, a 21st-century street – smart, digital, gastronomic, festive and versatile.

4.8 PHYSICAL SOURCE OF INFORMATION

The project must include an on-site source of information (booth) with staff who will provide official information on the status of the redevelopment work. This key facility will encapsulate the project’s identity. It may take any form, provided it is engaging, creative and inspiring. It may evolve as the work progresses and also serve as an interpretation area. The main purpose of this facility will be to provide information to visitors and instant support to neighbouring residents and establishments in the event of any problems and questions associated with the work site. The facility must be equipped with electrical power, as well as a roof and protection from inclement weather, and be able to accommodate five to six visitors and a City employee at the same time. The location of the booth is not predetermined and is apt to change as work progresses (up to four changes over the four-year project).

4.9 COMPLEMENTARY INFORMATION TOOLS

In addition to the previously mentioned communication tools, the project must also include complementary tools that will be used to disseminate information to neighbours and users. These may include brochures, newsletters and the like. The winning competitor’s mandate will eventually include the development of graphic templates for these various elements.

A virtual extension of the project may involve a mobile application or a website (optional) or other technological elements, depending on the nature of the project. Ville de Montréal will nevertheless be responsible for content integration for all tools developed and for printing, as required. For digital tools, it is important to keep the user interface simple so that content can be created and modified by Ville de Montréal without additional coding, for example, or the use of external professional services.

4.10 SUSTAINABILITY

Sustainable development is a priority for Ville de Montréal. All solutions put forward must promote the use of recycled and/or recyclable materials and use supplies with a minimal environmental impact.

Given the temporary nature of these efforts, the competitor must be prepared to reduce the carbon footprint related to the production, setup, implementation, operation and decommissioning of the project. For example, some items may be repurposed and reused in other work sites or one-off events in Montréal.

4.11 UNIVERSAL ACCESSIBILITY

Ville de Montréal's *Municipal Universal Accessibility Policy* addresses all of the facets of municipal operations, including land use and community services. Universal accessibility addresses every aspect of people's lives and is rooted in respect for the rights of all Montrealers. Universal accessibility takes an inclusion-based approach to ensure that all people, no matter what their level of ability, can enjoy the independent, simultaneous use of services that are identical or similar to those offered to the general population.

Disabilities are not an inherent trait of any individual, but rather the result of an inadequate environment, which leads to dysfunctional interaction and reduced social participation. Disabilities can therefore be mitigated by eliminating obstacles or, at the very least, creating environments that are as obstacle-free as possible.

Signage elements and equipment must meet the following criteria in this regard:

- The same information must be available on various media (visual, auditory, tactile) to ensure contents are accessible to all users, regardless of their abilities in terms of sight, hearing, mobility and so on. Information technology can be useful in this context, and its use is becoming more and more widespread among people with disabilities.
- Graphic and visual elements must have sufficient contrast. There must be at least a 70% contrast between the colour of the written content and the colour of the background, preferably a light-coloured text over a dark background. All information must also be visible and accessible for people of below-average height, people in wheelchairs and children.
- All elements must be white cane-detectable, and protruding elements should be avoided in the height range of 150 mm to 2,030 mm. All signs should have an element on the ground that allows white cane users to determine how wide the sign is.
- If crowd control barriers are used, contrasting visual elements should be placed along the whole length of the top of the barriers to make them easier to identify and follow, especially for individuals with visual impairment.

The following guidelines on user mobility must be adhered to:

- Whenever possible, routes should be straight, obstacle-free and at least 1,800 mm wide. If this width is impossible to obtain, 1,500 mm is acceptable if there are spaces where a person using a motorized mobility aid has the clearance required to make a 180-degree turn.
- Routes should not have any steps or protrusions of 30 mm or more. Protrusions under 30 mm must be bevelled. All protrusions of 30 mm or more (e.g. demolished or inaccessible curb cuts, electrical conduits and temporary water pipes) must be covered by sturdy, safe ramps (1:12 maximum slope) that are firmly fixed to the ground and equipped with a handrail or a curb.
- Ramps used to access buildings must be at least 1,500 mm wide and equipped with a handrail. They must be sturdy enough to withstand the weight of a motorized mobility aid.

Additional information as well as the precise specifications and required measurements will be provided to the winning competitor shortly after the contract is awarded.

5. RESTRICTIONS

5.1 LAYERING AND MODULAR APPROACH

Versatility and flexibility in work scheduling and work site activities that can change at any moment

are essential to the project. Under no circumstances should any elements obstruct or delay work. Accordingly, they must be installed over existing street elements and independent of the work site and its equipment. The functionality of the work site is the ultimate priority. It should be the main consideration that guides any operations or creative efforts related to this project. Seen from the outside, a construction site may appear to be disorderly and random, but in reality it is an extremely technical, technological and well-organized undertaking. This highly hierarchical ecosystem must be respected, and the project must be very flexible to avoid creating interruptions due to equipment movement.

The project must also be instantly adaptable to obstacles of various types and sizes and traffic areas (pedestrians, cyclists and motorists). Elements must be simple and fast to move around to respect work sequences and schedules. Each of the elements must be easy for the contractor or the producer's operating teams to handle, be compact and be supported by a mobile, modular infrastructure as required.

5.2 SAFETY AND MAINTENANCE

The project must be safe both for users and for staff tasked with transportation, handling, installation and maintenance. The proposal must abide by safety standards applicable to the public domain and construction sites. It is suggested that the project be developed in a way that requires little or no surveillance. This requires selecting items that are unlikely to be stolen or vandalized. The project must also require minimal maintenance.

5.3 COEXISTENCE WITH NEIGHBOURING ESTABLISHMENTS AND RESIDENTS

The project must take into consideration the presence of neighbouring establishments and residents, keep noise levels to a minimum and encourage the coexistence of various types of users.

5.4 NON-INTERFERENCE WITH PUBLIC SERVICES

The project must not, under any circumstances, be a hindrance to emergency vehicles or public waste and recycling pickup services. Although the street will likely be closed to motor vehicle traffic, access to emergency vehicles must be ensured on-site. As a result, a minimum clearance of 6 metres must be maintained at all times.

5.5 WEATHER CONDITIONS

The project must take into consideration changing weather conditions and remain visually interesting both day and night. It must be designed to tolerate seasonal temperature variations (-35° to 35°Celsius) and be resistant to strong winds, rain, ice/sleet and constant or abundant snowfall. Snow is a compulsory consideration in the overall concept, in that if snow removal services are required, these services will have a considerable impact on the project costs. Certain elements may need to be stored during the colder months.

5.6 LEGISLATION AND POLICIES

The project must abide by all applicable legislation, as well as all codes, acts, federal and provincial regulations, municipal bylaws, including but not limited to the following:

- *MTQ standards – Ouvrages routiers*, volumes I through VIII
- *Québec Highway Safety Code*
- *Act Respecting Occupational Health and Safety*

- *Québec Construction Code*, Chapter I – Building, and *National Building Code of Canada 2005* (amended)
- *National Fire Code of Canada*, 2005 edition, plus revisions and ancillary documents
- Urban planning bylaws, Ville de Montréal and Borough of Ville-Marie
- Ville de Montréal’s *Transportation Plan* (and *Pedestrian Charter*)
- Local mobility plans, mobility plans and boroughs’ local transportation plans
- *Guide pour la prise en compte des principes de développement durable*, Ministère du Développement durable, de l’Environnement et des Parcs
- *Municipal Universal Accessibility Policy*
- *Montréal Community Sustainable Development Plan 2010–2015*
- Société Logique and INLB (2013), *Critères d’accessibilité universelle : Déficience visuelle – Aménagements extérieurs*
- Preliminary documents prepared by the Transportation Association of Canada (TAC) on universally accessible work sites, with comments from Ville de Montréal (to be provided to the winning competitor at the kick-off meeting)

6. IMPLEMENTATION OBJECTIVES

6.1 PROJECT COST OBJECTIVES

The total budget for the project is \$3,500,000, taxes included. The implementation budget is \$2,800,000, taxes included. The implementation budget will include production, construction and all costs related to security, operation, maintenance and upkeep. The professional fees to be paid to the winning competitor (design, development and follow-up) amount to \$695,000, taxes included.

6.2 PROJECT TIMETABLE

The project is to be implemented gradually as soon as the work site is set up in May 2017 and remain functional for four (4) years throughout the execution of Phase 1 (Lots 1 and 2). The start date is subject to change. Finalization of plans and specifications is slated for December 2016 to allow the City to issue a call for tender for a producer or construction contractor to oversee the manufacture, installation and maintenance of the design project. Production of design elements and the corresponding validation and testing phase will take place between March and May 2017.