

Figure 1. Official Souvenir Map Expo 67 (Montreal; Maclean-Hunter, 1966).

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|---|--|
| A | Pont Victoria Bridge                   |
| B | Pont de la Concorde / Concordia Bridge |
| C | Pont des Iles Bridge                   |
| D | Pont du Cosmos Bridge                  |
| E | Pont du Expo-Express Bridge            |
| F | Pont Jacques-Cartier Bridge            |

## Cosmos Bridge

Sean Rosengarten

INTERNATIONAL EXHIBITIONS OFTEN serve their host cities in a paradoxical manner; while these events act as catalysts for urban development, they frequently leave an unwanted legacy. Montreal's Expo '67, while providing the city with important infrastructure, also left the residual problem of what to do with the site after the event, including all the bridges that made the island site accessible. With the decision to hold the Universal and International Exhibition of 1967 in the heart of the Saint Lawrence River, planners ensured that bridges would form an important part of the site's landscape. Of the twenty-seven built for the exhibition, four offered entirely new ways of crossing the Saint Lawrence River (fig. 1). Downstream from the Victoria Bridge, the Pont du Cosmos (Cosmos Bridge) links Île Sainte-Helene with Île Notre-Dame. The evolution of the Cosmos Bridge over the last 40 years exemplifies the way that Expo's infrastructure has had to adapt in order to survive.

The Cosmos Bridge story begins almost a decade before visitors flooded onto the Expo site. As Expo's architects conceived the layout of the islands during the early 1960s, a pedestrian bridge was planned over the LeMoynes channel to provide easy access to the exhibition's pavilions as well as to the site's Metro station. Tentatively named Concordia, the footbridge was officially renamed Cosmos, when it was poised as the link between the pavilions of the United States and Soviet Union, the major competitors in the 60s space race.

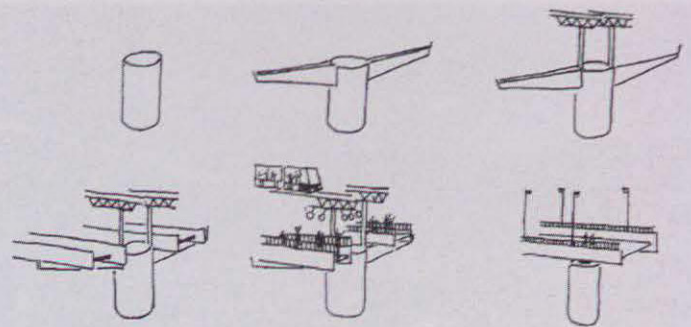
By late 1965, preparations for the bridge, designed by the Swan Wooster Engineering Company of Montreal, were underway. By the summer of 1966, the four supporting pylons were sunk into place, their metal coffers filled with concrete. The elevated tracks of the minirail spanned above them, crossing the river. Resistance against the ice and rapids of the LeMoynes channel was ensured by cables stretching from the concrete base of each coffer to the transversal beam atop each pylon.<sup>1</sup> The original wooden pedestrian bridges, each measuring 675 feet long and 20 feet wide, were cantilevered off the pylons.

The walkways rested on wooden girders, each 150 feet long on average. The main spans consisted of beams glued together then planed. These beams were fabricated at a British Columbia plant and shipped across Canada on three flat cars. A movable coupling transferred the weight of the beams to the lead and tail cars enabling the convoy to manoeuvre the curves of the railway tracks.<sup>2</sup> Under the watchful eye of the exhibition's architects, the span was eventually built at a cost of \$669,900 and opened well prior to the exhibition's April 27th inauguration.<sup>3</sup>

Designed to complement a strictly pedestrian site, the Cosmos Walk, praised by architecture critic Laurent Lamy as a "*rencontre heureuse et inattendue de la technique inventive de l'ingénieur, de la pondération de l'architecte et de la fantaisie du designer*" became an appreciated Expo detail (fig. 2).<sup>4</sup> Over 1000 acres in size, Expo '67 served as a prototype for what a city could be:

The people who planned Expo were functioning consciously as missionaries for good city design. Expo was programmed as city space, and was a huge success. People were pleased just to be there. Ever thing was chosen to enhance this effect: design was rigidly controlled as a system, rather than (in almost all cities) a haphazard collection of unrelated shapes.<sup>5</sup>

Unlike the other three bridges which crossed the river, the Cosmos Walk was level with the exhibition grounds and did not require the construction of large imposing access ramps. This, and the fact that the minirail whisked



Cosmos Bridge structural sketches.

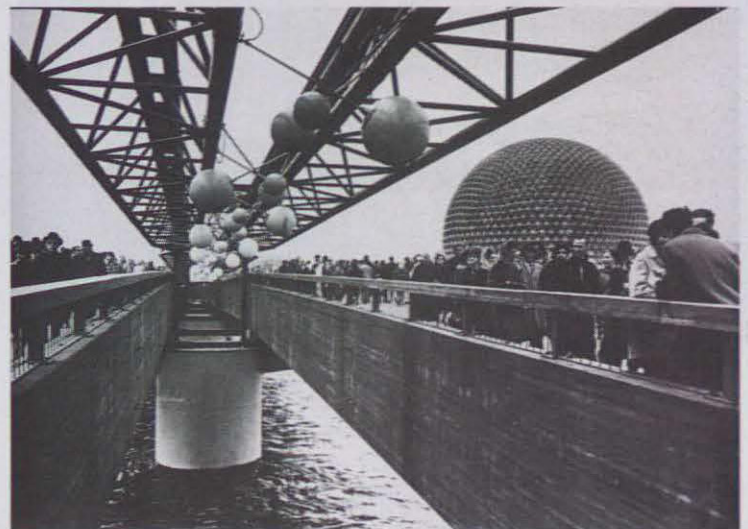


Figure 2. Jean-Claude Hurni, Cosmos Walk (1967), from Laurent Lamy and Jean-Claude Hurni *Architecture contemporaine au Québec 1960-1970* (Montreal: L'Hexagone, 1983).



Figure 3. Construction of the Cosmos Walk (1966).



Figure 4. Pont du Cosmos (April 1975).

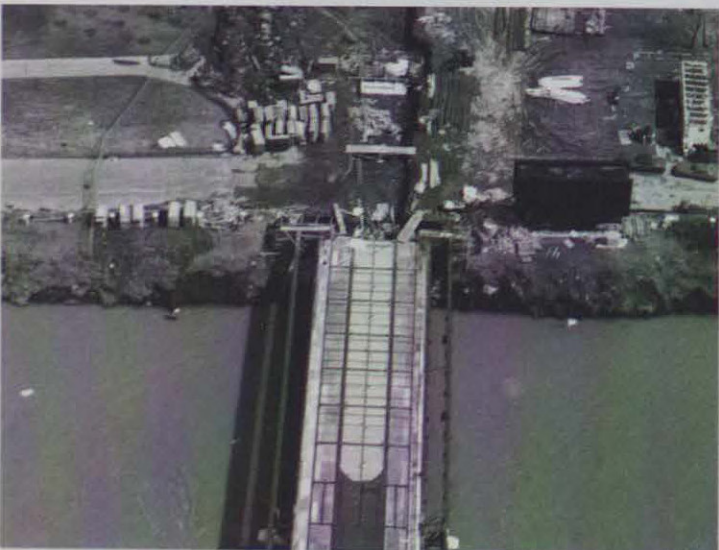


Figure 5. Pont du Cosmos (April 1976).

visitors over it in seconds and then through the Buckminster Fuller's twenty-story geodesic dome, contributed to its harmony with the rest of exhibition site (fig. 3). The structure's intimate relationship with its environment proved so tempting in fact, that on Sunday, August 6, 1967, an eighteen-year-old Quebecer dove from the walkway and swam to Île Notre-Dame, where security guards were awaiting him.<sup>6</sup>

In the aftermath of Expo '67, the walkway continued to serve the exhibition site, which then accommodated the annual summer exhibition known as *Terre des Hommes* (Man and His World). The bridge remained the "Cosmos," even though the Soviet pavilion, which had originally inspired its name, was dismantled and shipped back to Moscow in early 1968 (where it is used today as a sports centre). Following a blue-collar strike during the spring of 1972, *Terre des Hommes* opened late. As a result, Île Notre-Dame remained closed during the shortened season, to reopen sporadically only for temporary events. Closed off, the Cosmos Walk saw little use during the following three years as Île Notre-Dame was abandoned. By 1974, the demise of the span was underway. Along with the elimination of the minirail and the removal of the suspended globular lighting beneath it, the walkway's wooden structure began to show signs of decay. However, later that year, a project was undertaken to transform part of Île Notre-Dame into a rowing basin for the 1976 Olympic Games. During this period, the Cosmos Walk was renamed the Pont du Cosmos.

Wishing to improve access to the Île Notre-Dame Olympic site, the decision was made to transform the existing pedestrian span into a vehicular bridge. Despite the fact that the adjacent Pont des Îles already allowed vehicular access to the island, it might be suggested that Olympic organizers preferred welcoming visitors to the site via a newly remodeled span, in harmony with the rest of the new Olympic installations, rather than via a neglected bridge, used in part as a parking lot for dozens of decade-old Expo trains. And so, in April 1976, the once-pedestrian walkway was stripped of its wooden decks and amended by steel beams and a single concrete deck (figs. 4 & 5). By June of the same year, the now 35-foot wide bridge was opened to vehicular traffic.

The new Pont du Cosmos, although functional, would never be as elegant as it once was. The subsequent installation of new lights along the bridge illuminated the change: modern and rectangular in shape, the fixtures were a far cry from the floating globes which once lit the way (fig. 6). Ironically, the city's attempt to implement an aesthetic cover-up of the old Expo site failed when the former

American pavilion was destroyed by a spectacular fire, just weeks prior to the games.

In the years following the Olympics, the bridge became a sort of Checkpoint Charlie. An elaborate gate was erected at the bridge's entrance to control access to the temporary events taking place on Île Notre-Dame. Traffic on the bridge dwindled to *la balade* as one last attempt at reviving Terre des Hommes failed during the 1980s.

Wishing to complete a successful development of the former Expo islands, the city of Montreal announced its master plan in early 1988 which sought to highlight and emphasize the islands' blue and green vocation. Favoring pedestrian over vehicular traffic on the islands, multiple paths and walkways were laid throughout the site including a main promenade which starts at the Île Notre-Dame beach, passes through the gardens, crosses the Pont du Cosmos and concludes at the island's new ferry wharf. However, projects on the island seem fated to ongoing modification; increased traffic to the Casino de Montreal has compromised the green agenda and pedestrian plan.

From a symbolic landmark to an ignored secondary route, the Pont du Cosmos demonstrates that thirty years after Expo's architectural triumph, the glory of the international exhibition has all but disappeared. Montreal has been left with mutations of original designs, the Pont du Cosmos included. The reshaping of the Expo site has come at the expense of its unique features. Visitors to the International Exhibition, perhaps Montrealers especially, cherish and revisit the memory of the summer of '67, but memories are practically all that remain true. Admittedly, pavilions and infrastructure designed to last for six months were not expected to endure. But what does remain should be preserved, or sensitively recycled. Why not use the "Expo-Express" bridge — just downstream from the Pont du Cosmos and abandoned for 28 years — to improve access to Île Sainte-Hélène on busy firework nights? And if that doesn't work out, why not offer it as a scaled-down bungee-jumping venue at La Rondé?

1. Expo 67 Information Manual (Montreal: CCWE, 15 April 1966), S110 P3.
2. Jeanne Morazain, "The Pedestrian King," *Mega Plan* 6.1 (1997).
3. Expo 67 Information Manual (Montreal: CCWE, 15 April 1966), S110 P1.
4. Lamy, Laurent and Jean-Claude Hurni, *Architecture contemporaine au Québec 1960-1970* (Montreal: L'Hexagone, 1983), 167.
5. Robert Fulford, *Remember Expo* (Toronto: McClelland and Stewart, 1968), 49.
6. Yvonne Morrisette, *De jour en jour à l'Expo 67*, Vol. 2 (Montreal: n.p.).

Sean Rosengarten organized tours of the Expo '67 site when he was 14 years old. He is currently a student of political science, but may try his hand at architecture one of these days.



Figure 6. Pont du Cosmos (1998).