Rockcliffe Redevelopment, Ottawa: Plan Iterations

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Canada Lands Company Ltd. is an arms-length, self-financing Canadian Crown corporation charged with disposing of surplus government property to bring optimal value to Canadian taxpayers. One such property is the 320-acre former Rockcliffe Airforce Base, five kilometers east of Parliament Hill in Ottawa, Canada’s capital city.

Located alongside the Ottawa River, and surrounded by existing neighborhoods and institutions, the former base (whose operational facilities were vacated in 1985) is the largest remaining redevelopment site inside the Ottawa Greenbelt. Several years ago Canada Lands committed itself to making Rockcliffe a flagship community for a series of similar infill projects in major Canadian cities. The goal was to set a new benchmark for sustainable and financially successful development, combining creativity, innovation and design excellence, and emphasizing such important concerns as orientation away from the automobile, responsible stormwater control, reduced energy consumption, improved waste management, and regeneration of natural features.

Work on the Rockcliffe community design plan demanded the formation of a complex multidisciplinary consultant team (first assembled in April 2006). At the same time, it required an ability to be highly efficient and focused. To deal quickly with an enormous number of interrelated variables, we developed an open-ended framework capable of continuously learning and responding to new information. In practical terms, this meant working through a series of structured “iterations” that could gain progressively in completeness based on an increased need to know, and that could be tested from multiple standpoints.

This sequence of plan diagrams illustrates this process, which provides a model for the type of integrated, flexible thinking required to shape contemporary cities and neighborhoods. The drawings reflect the contribution of different team members to an intensive, evolving exploration of the site and expressed design values over a period of several months—a layering of objectives, needs and perceptions.

In our process, all the balls were in the air from the start, but there was also a relatively complete concept at each stage, representing an ever-increasing level of sophistication. Periodically, all contributing parties would come together to explore interrelationships and opportunities for lateral thinking. But the goal of each iteration was to address a sequence of issues at a higher level of precision, allowing specific technical analysis to push initial concepts toward greater refinement.

Throughout the process, the Canada Lands client group was a key participant. The City of Ottawa, through its Technical Advisory Committee (a public advisory committee with broad neighborhood and stakeholder representation), and the National Capital Commission (NCC) also provided critical input.

Natural Presence

The team’s first step was to arrive at “break-through” linking ideas which could simultaneously address multiple objectives. The first of these was simply to take full advantage of conditions on the site and of larger planning concepts for the region, such as the National Capital Commission Greenbelt, established in 1950 by Jacques Gréber, the capital’s master planner.

An important feature of the Ottawa Greenbelt is its one hundred kilometers of trails for hiking, jogging and cross-country skiing, which combine with the city’s extensive network of bike paths to reinforce Ottawa’s goal to be as an active, healthy place to live. The Rockcliffe site abutted this greenbelt trail network along the Ottawa River. The site also already possessed a mature landscape, including a densely wooded escarpment overlooking the river, areas of rolling, open land with scattered trees, and two protected forests—the National Research Council’s Woods North and the Montfort Hospital Woods.

From the outset, the team decided to emphasize continuity with this existing green infrastructure. Such a strategy would promote vital connections within the city and region, as well as generate a memorable context for development. In laying out residential streets and arteries, then, a primary goal was to link the community to the bike paths and hiking trails that wind through the surrounding green space, connect to the bike network along the Rockcliffe Parkway, and afford spectacular views of the river and Gatineau and Parliament Hills.

Rather than adhering to minimal planning norms for green space, therefore, the fundamental structuring idea of the master plan became a bold effort to preserve and expand access to the site’s natural features. This meant integrating spaces with a network of internal greenways to facilitate landscape regeneration, stormwater management, and wildlife and pedestrian connections between the Montfort Woods (a natural woodlot of maple trees to the southeast), the National Research Council (NRC) campus (an immediate neighbor to the east), and National Capital Commission (NCC) parkland along the Ottawa River and beyond.

This strategy also meant planning to build more densely in a reduced development area, a requirement we proposed addressing through a series of compact mixed-use urban villages, each with a distinct character, mix, and range of building types and uses.
Community Forms

The site’s history of settlement dates back to the early 1800s. The plan set out to preserve and celebrate this rich native and military heritage by drawing these features into integrated relationships with new development. This effort will eventually include a strategy for relocating, rehabilitating or recycling materials from 469 remaining military family dwellings.

One of the most significant aspects of sustainability planning for the Rockcliffe development will be the development of a true mix of uses—allowing people to live, work, play, shop, and enjoy a full range of community amenities in one place. Opportunities for synergistic relationships are currently being explored with the adjoining NRC campus and other nearby institutions, including Montfort Hospital, several federal agencies, and the Canada Aviation Museum. Minimum targets for employment on the site have been set, with the expectation that these may be exceeded.

The plan also provides for a strong retail presence on a pedestrian-oriented High Street and around a market square that will occupy the base’s former parade ground. This retail space is expected to serve not only the site’s residents and employees but also surrounding communities. Housing on the site will accommodate a great range of forms, tenure, income levels, and lifestyles. The overall goal is to mirror the range of uses and forms within the diverse Greens Creek Sector in which Rockcliffe is located.
A transportation strategy was also developed to connect Rockcliffe’s new population to the surrounding city. This deemphasizes the automobile in favor of a range of alternatives. First and foremost, it will encourage people to walk within and among the new villages. An extensive network of bike lanes and off-street multiuse trails will further weave through its greenways, connecting to communities to the south and west and improving access to the river and the regional trail system leading to downtown Ottawa. A new transit spine has also been identified that will run through the community and link to the regional bus transitway. Its stops will be key neighborhood focal points. Other transportation strategies in the plan include traffic demand management, controls over parking supply, and emphasis on shared parking areas.

A Public Infrastructure

For any undertaking of this scale, a master plan can only serve as a “framework,” a living instrument capable of absorbing change and interpretation. Over time, some elements will remain fixed, while others will evolve. Through this process, the Rockcliffe plan will need to remain accountable to original commitments, while also being flexible enough to accommodate unexpected market-driven opportunities. Such flexibility has been the great lesson of large-scale planning in recent decades.

To reconcile this dilemma, the plan proposes a design for the public realm that is both more explicit and more detailed than that for a conventional development. In essence, Rockcliffe’s public realm will embody its “big idea”—to establish its greenway network as its essential connecting web.

In addition, the public realm specified in the plan does not just comprise a utilitarian network of streets and park reserves. It includes actual preliminary park designs; locations for trails, gardens, constructed wetlands, and regeneration areas; a range of hardscapes and softscapes; a rich hierarchy of street types; specific ways of integrating transit; and a range of public facilities and programs.

These features are ultimately the guarantors of what will make Rockcliffe distinctive, and they are intimately tied to the successful implementation of sustainability strategies. They are what Canada Lands Company, as the master developer, will commission and build, establishing Rockcliffe’s fundamental DNA and character.

In summary, then, the Rockcliffe plan focuses on weaving together found assets (both built and green), new networks for movement, a synergistic mix of uses, and appropriately scaled built form. But the ultimate test of the iterative process that produced it will be its ability to encourage the formation of attractive, active “places”—the High Street, the market square, sidewalks, trails, parks, and neighborhood gathering spaces. When inhabited, it is these that will create the basis for real community.

**Notes**

1. The greenbelt, established in 1956 by Jacques Gréber, is a 14,950-hectare (36,950-acre) crescent of land within the present-day boundaries of Ottawa, in which real estate development is strictly controlled.
2. The National Capital Commission (NCC) is a Crown corporation created by Parliament in 1959 as steward of federal lands and buildings in the National Capital Region.
3. The National Research Council (NRC) is Canada’s premier science and technology research organization.
4. The Aviation Museum contains Canada’s premier aeronautical collection and is housed in a facility due north of the project area.

**Project team**

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and

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**Previous page:** Aerial view of Ottawa showing a portion of the greenbelt surrounding the city and the Rockcliffe site.

1. Interwoven diagonal greenways suggest a functional green network that then builds community around it. Landscape is viewed as the driver of urban form.
2. Dense, urban entities defined by small, compact blocks are formed between the green fingers, creating portals on the river.
3. Biological regeneration, green infill, and natural drainage patterns locate the green frame.
4. Mapping of habitat and wildlife corridors reinforces the positioning of the green network.

5. An access and transit strategy is developed to ensure connectivity and walkability both within the community and the neighborhoods beyond.

6. The tight, walkable urban grid defers to the greenways, defining a porous, transitional edge between park and city.
The “a-ha moments” are identified and serve to locate an urban park and look-off pier, committing the best place on the site to the public realm.
8. The notion of a hilltown emerges at the north of the site as the rectilinear grid begins to defer to the folds and flats of the topography.

9. A variety of streets emerge. An east-west High Street comes into focus as a retail spine, centered on a new market square.

10. Fluid lines shape the greenways, creating public promenades that lasso the emerging neighborhoods.
11. Functional open spaces drive the community structure, and pedestrian-oriented “green streets” connect the neighborhoods.

12. Institutional buildings are located along the greenways, capitalizing on views, trail networks, and a program of shared green spaces.
13. Eight distinct neighborhoods are defined, encouraging a diversity of built form that reflects social diversity.

14. A vibrant mixed-use community, concentrated along the High Street and public transit corridor provides retail, work, transit, and amenity within a five-minute walk of every residence.
A guiding, flexible “sustainable frame” emerges, defining the plan as a living instrument capable of absorbing change and responding to evolving needs.