

Corridor E - H

Southeast False Creek

- E1 Create urban gardens
- E2 Create safe and comfortable streets
- E3 Use streets to frame views
- E4 Centre activity on a “Main Street”

Burnaby Mountain Community

- F1 Move stormwater along the street
- F2 Fit streets to the slope
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Riverwalk on the Coquitlam

- G1 Use a bridge, not a culvert
- G2 Design narrow streets
- G3 Make streets to include many forms of transportation
- G4 Use cheaper materials

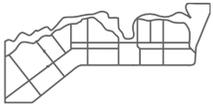
East Clayton

- H1 Create an urban forest
- H2 Design a network of interconnecting streets
- H3 Provide parking wisely
- H4 Create a key location

Corridors are the conduits for moving materials, energy and resources within and between neighbourhoods, districts, and regions. Corridors of all types and at all scales — be they streets, lanes, boulevards, pathways or streams — need to reflect their unique and specific functions. Regional transit corridors should be designed to coordinate and concentrate growth where it is most appropriate. Local corridors should be designed to be walkable and connect residents to commercial services, transit stops and natural areas, and so on. Laid over the urban fabric, an interconnected street network can and should yield to natural stream corridors without unduly compromising street interconnectivity.



E Corridor Southeast False Creek



Green Infrastructure

E1 Create urban gardens

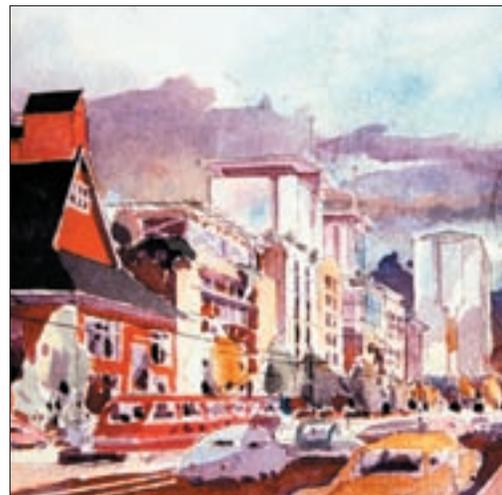
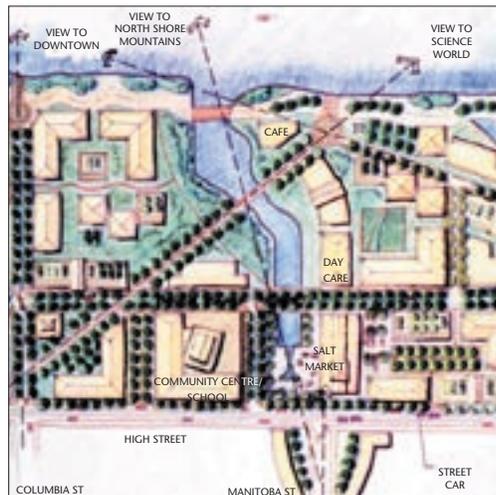
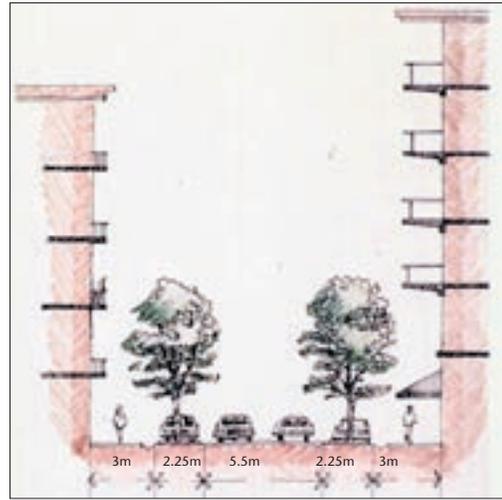
Even a high-density residential area can provide habitat for songbirds, amphibians, plants, and insects. The image below demonstrates how this is done. The street system in this image is actually a linear habitat corridor that links to habitat areas along and just off the shore. Extensive planting of fruit and nut trees and fruit-bearing plants in and along these public ways provides the community with a “garden landscape” that is not only beautiful, but also edible!



Movement

E2 Create safe and comfortable streets

Designing streets for safety and comfort will encourage more people to use them. The cutaway view of this local street shows how this may be accomplished. A narrow roadway (approximately 6m wide) accommodates two travel lanes. Moving traffic is buffered from pedestrians by parking, located within grassy verges on either side of the street. Street trees provide areas of shade and create a strong edge between the roadway and the sidewalk. The “zero” setback of the buildings gives the street an even stronger edge while balconies provide a means for further animating the street.



Drawing credit: Bob Worden, Ramsay Worden Architects, Ltd.

Social Infrastructure

E3 Use streets to frame views

Grid street patterns usually protect long views. Modified grid street patterns can protect long views and/or emphasize key structures or locations within the district. In the plan detail shown, the street orientation and design ensures that views to local landmarks such as the North Shore mountains, city hall, the downtown core, and Science World are maintained. The street wall – a three-to-four-storey continuous building wall set closely to the road – contributes to the impact of these views by “framing” the street.

Cost

E4 Centre activity on a “Main Street”

A primary through-corridor can become the commercial heart of the community. Team Two took the position that a centre could be linear and connect to the rest of the city along an active street corridor. Retail, services, and workshop spaces animate the Main Street while serving neighbourhood residents and those that pass through by foot, car, bicycle or streetcar.

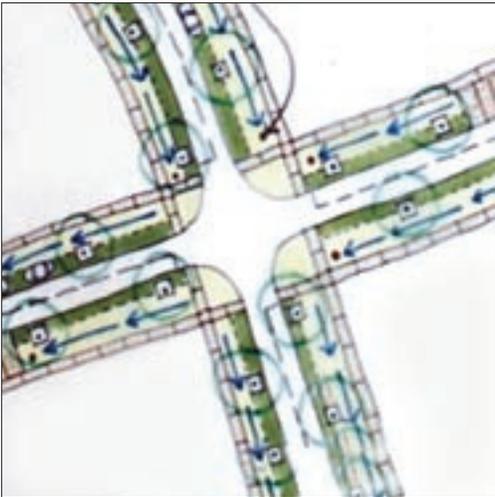
Burnaby Mountain Community



Green Infrastructure

F1 Move stormwater along the street

In conventional, hierarchical road systems, water and people move via conduits that get progressively larger. In contrast, narrow, interconnected streets handle stormwater on the surface, meaning that runoff can be dispersed between more than one route, rather than being funneled into a single, large pipe. Interconnecting street systems also ensure that neighbourhood destinations are always accessible via the shortest possible route, increasing the viability of walking and biking.



Movement

F2 Fit streets to the slope

Streets that follow the terrain create less disruption to the landscape, cost less to build and maintain, and efficiently move both water and people. In this example from the Team Two plan, streets are laid out in a "flowing grid" to follow the south facing slope of the site. Street slopes are between 5% and 7% or less allowing for ease of movement, whether one travels by foot, bike, wheelchair or any other mode of transportation.



Social Infrastructure

F3 Create a sense of enclosure

Buildings should reinforce the edges of the street and provide a defined and accommodating place for users. In the drawing above from the Team Three plan, seven storey maximum height buildings are set back minimum distances from the property line to provide an "urban" street enclosure, without being so tall as to blanket the street in dark shadow. Streets that frequently interconnect create shorter blocks, add more corner locations (good for commercial services), and give an urban rhythm to the street.



Cost

F4 Make streets cheaper

Unnecessary costs can often result from "overbuilding" infrastructure. Narrower, cheaper streets provide more room for infiltration trenches, street trees and sidewalks. Soft infrastructure, such as pervious sidewalks, reinforced grass shoulders, individual tree grates and overflow inlets replace expensive and ecologically destructive hard infrastructure such as curbs and gutters.



G Corridor Riverwalk on the Coquitlam



Green Infrastructure

G1 Use a bridge, not a culvert

Culverts cause more impact to watercourses and are more difficult for wildlife to travel through than bridges. The Riverwalk proposal uses bridges instead to cross the creeks that flow through the site. Access to the site is also by bridge over the Coquitlam River, as illustrated below. The crossing location and bridge design were chosen to virtually eliminate direct environmental impacts to the Coquitlam River.



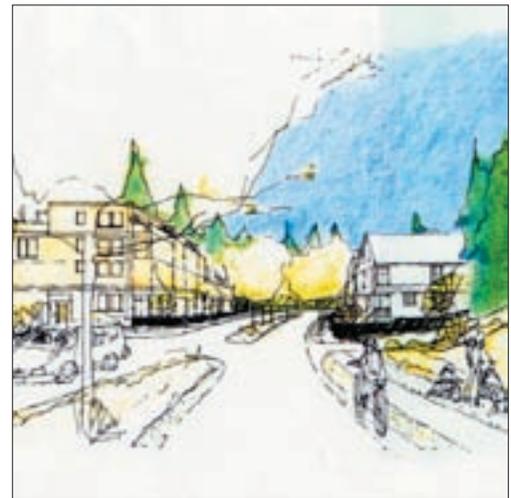
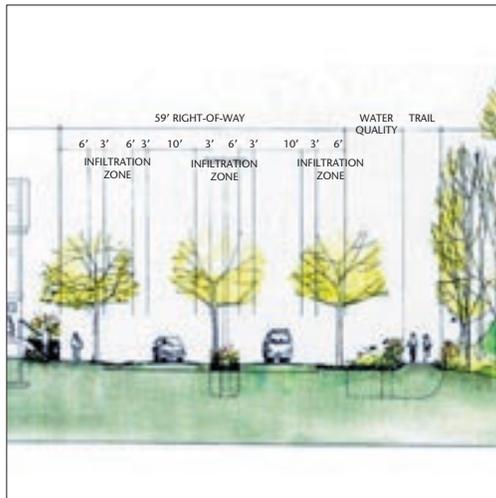
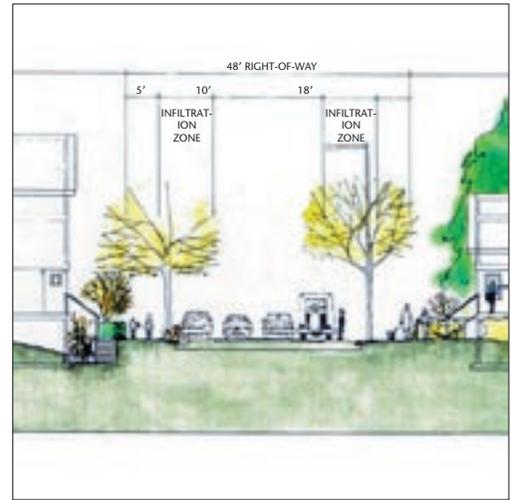
Drawing credit: Stacy Moriarty, Moriarty and Company, Ltd.



Movement

G2 Design narrow streets

Narrow streets encourage animated street activity. Small front yard setbacks, a narrowed travel lane and gravel verges that double as parking pull-outs give the street a comfortable scale for pedestrians and cyclists. Houses with front doors and windows close to the sidewalk provide eyes on the street. Street trees located between sidewalks and roadways protect pedestrians and completes the envelope of space that defines the walking corridor.



Social Infrastructure

G3 Make streets to include many forms of transportation

Streets carry more than just cars – other forms of transportation should feel welcome. The cut away view above shows a roadway that includes a pedestrian sidewalk, one vehicle travel lane in each direction and a trail for biking and walking. The planting area between the street and the trail protects pedestrians while cleaning storm water runoff from the street.



Cost

G4 Use cheaper materials

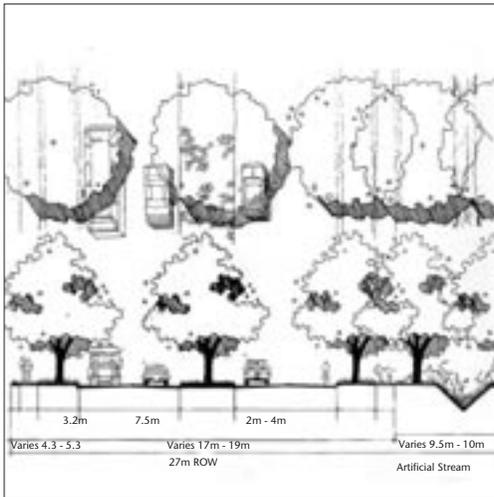
Reducing street width and switching to more natural materials calms traffic and makes streets less expensive to build. Crushed stone parking strips replace expensive and environmentally unfriendly curb and gutter systems.



Green Infrastructure

H1 Create an urban forest

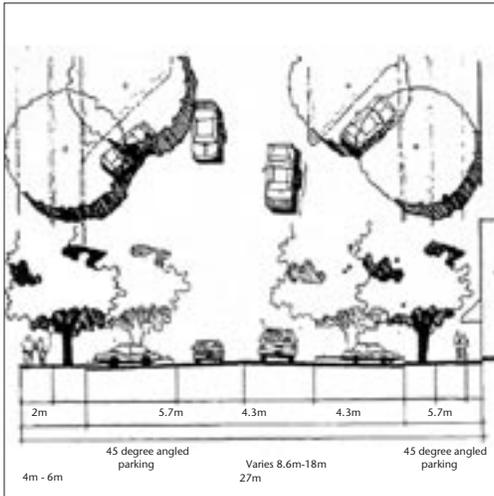
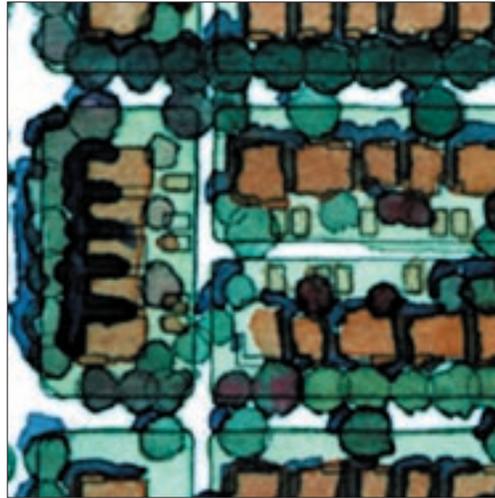
Streets and other corridors are ideal locations for reestablishing forest and hydrological systems lost to development. On this “riparian parkway,” a mix of trees provides a canopy large enough to cover 60 percent of the roadway. This linear forest becomes a habitat corridor for birds and gives shade to the sidewalk and the adjacent artificial stream.



Movement

H2 Design a network of interconnecting streets

East Clayton uses an interconnected system of streets, in a modified grid pattern, not only to disperse the flow of traffic, but also to ensure that many different needs are satisfied in the most efficient and healthy way possible. This includes the movement of water, fish, wildlife and people.



Social Infrastructure

H3 Provide parking wisely

Nothing is less interesting and more exposed than a sidewalk lined with parking lots. Dedicated parking lots in East Clayton are located behind, not in front of, commercial buildings. Parking on the street, on the other hand, is abundant. Angled parking, as shown above, creates a shield between pedestrians and passing cars. Lots of trees planted on parking islands and along the street edge ensure that the majority of the parking surface is shaded and that the perceived width of the street is dramatically reduced.



Cost

H4 Create a key location

When you concentrate stores, offices, and community services along a central corridor, it provides a focus for activity and provides enough customers to keep shops lively. “Main Streets,” like the one shown above, have offices and residences above the stores, ensuring life on the street even after the stores are closed. The building is set snugly against the sidewalk so that pedestrians can see into shop windows, while overhangs and canopies provide protection from the rain.