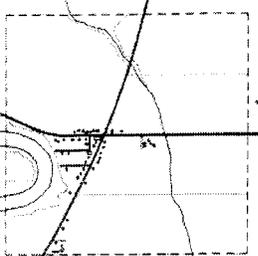
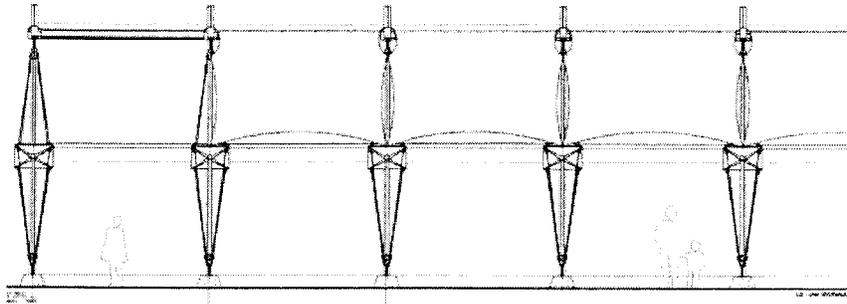
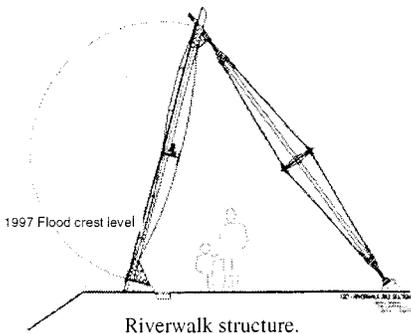
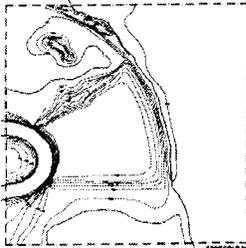


Flood Architecture

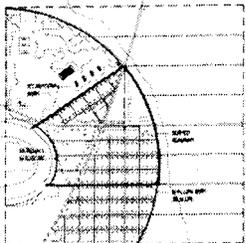
EDUARD EPP and BARRY YANCHYSHYN
University of Manitoba
1998-99 ACSA *Collaborative Practice Award*



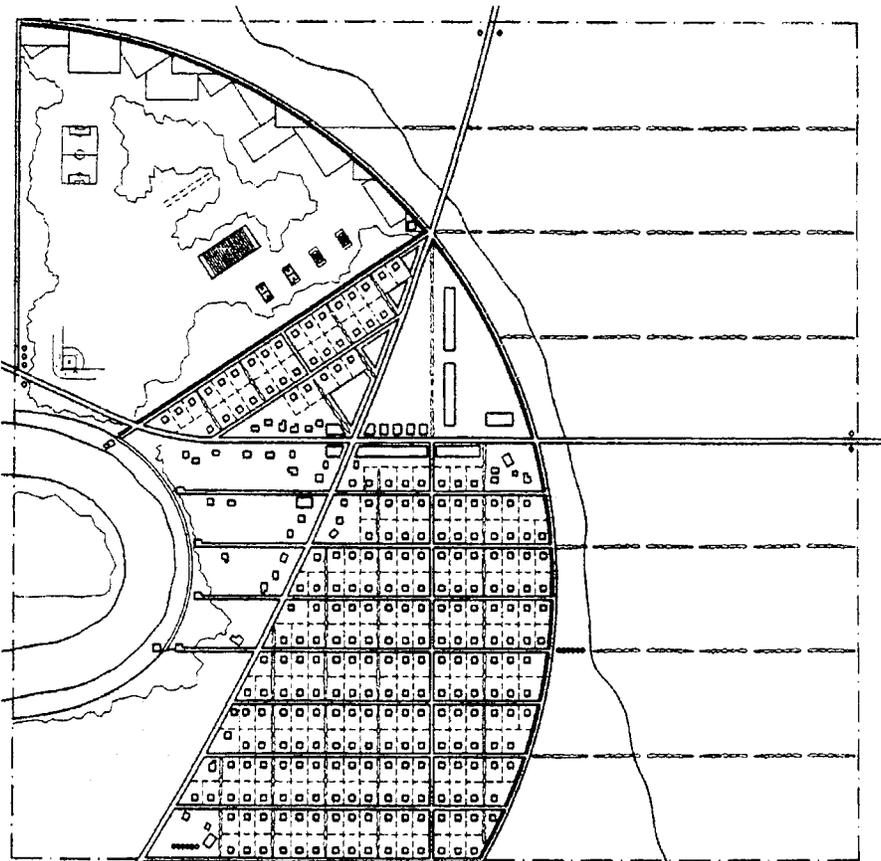
Existing conditions



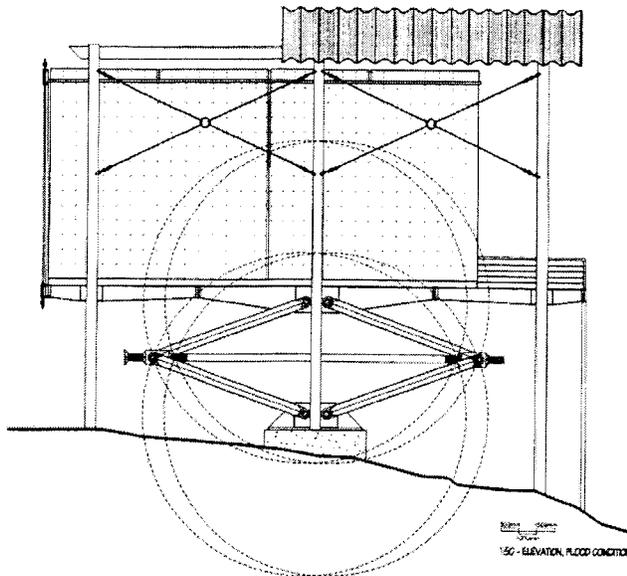
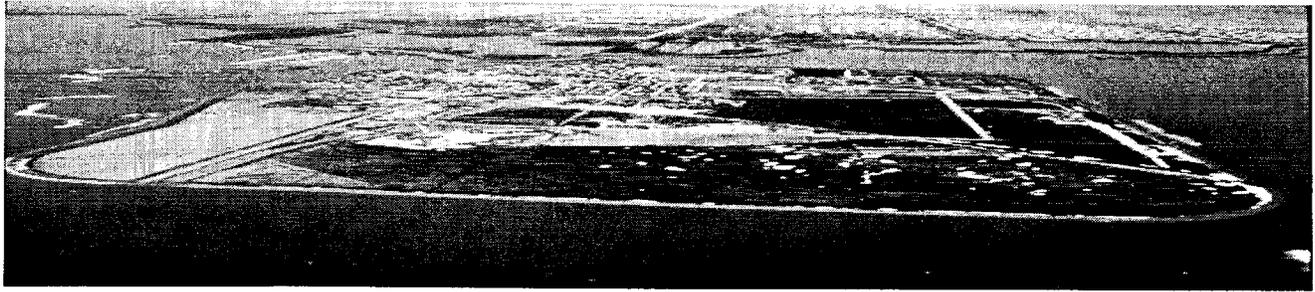
Proposed topography



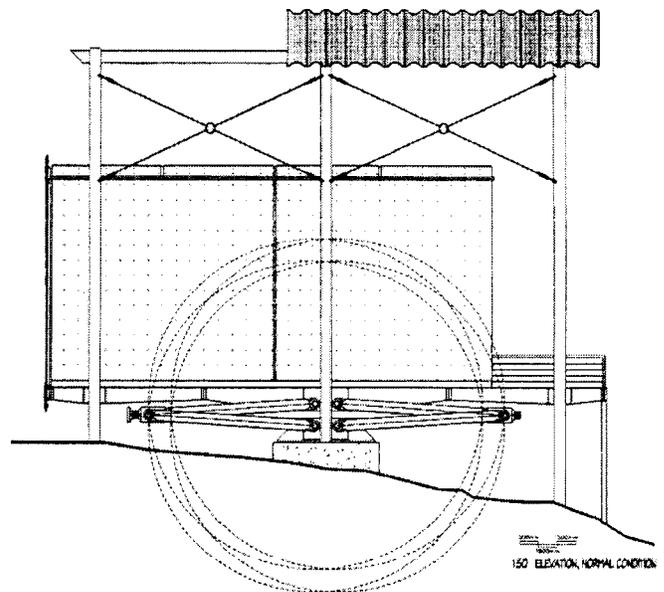
Diking system



Master Redevelopment Plan.



Flood conditions.



Normal conditions.

STUDIO OVERVIEW

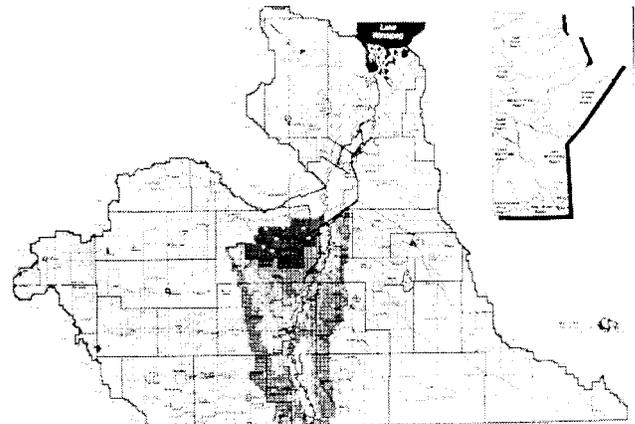
The studio set out to: propose physical solutions to ameliorate the problem of regional flooding in both urban and rural contexts of the Red and Assiniboine River floodplains, and to produce a handbook of "purposeful" and "poetic" solutions. Another important intention was to engage the design discipline with the issues that we face in the community.

The questions of how to provide innovative solutions to potential flooding of existing and proposed settlement was addressed at a number of scales and in various contexts. At the regional level, new ways of mitigating the river headwaters have to be found to secure entire towns, villages, and hamlets and to secure municipal infrastructures; at the private property level, citizens have to find new means to secure their land, homes, buildings and businesses — while retaining long held notions of place and identity.

The project required a multi-disciplinary approach in order to synergize the form-generating capabilities. Collaboration was fostered between the departments of architecture and landscape architecture together with engineers and civic officials drawn from the city and province as well as members from various communities.

AUBIGNY (REJEANNE DUPUIS)

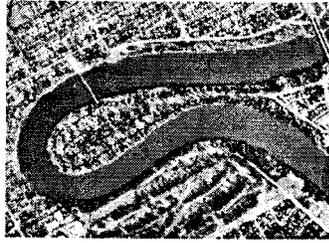
The rural town of Aubigny fell victim to the greatest flood of the century — it was not protected by a permanent diking system. Located adjacent to the Red River, the opportunity existed to explore



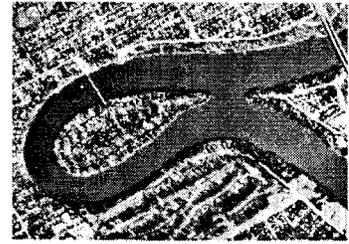
a range of flood protection "systems" in relation to prairie settlement practices. The floodproofing strategy includes an alternative "topographic" dyke; a riverwalk structure that serves as a waterproof barrier and as a linear town market canopy; alternative housing designs for homes below the high water line as well as means to preserve existing homes and buildings. In turn, these systems can be applied to other communities in the Red River Valley.



1997



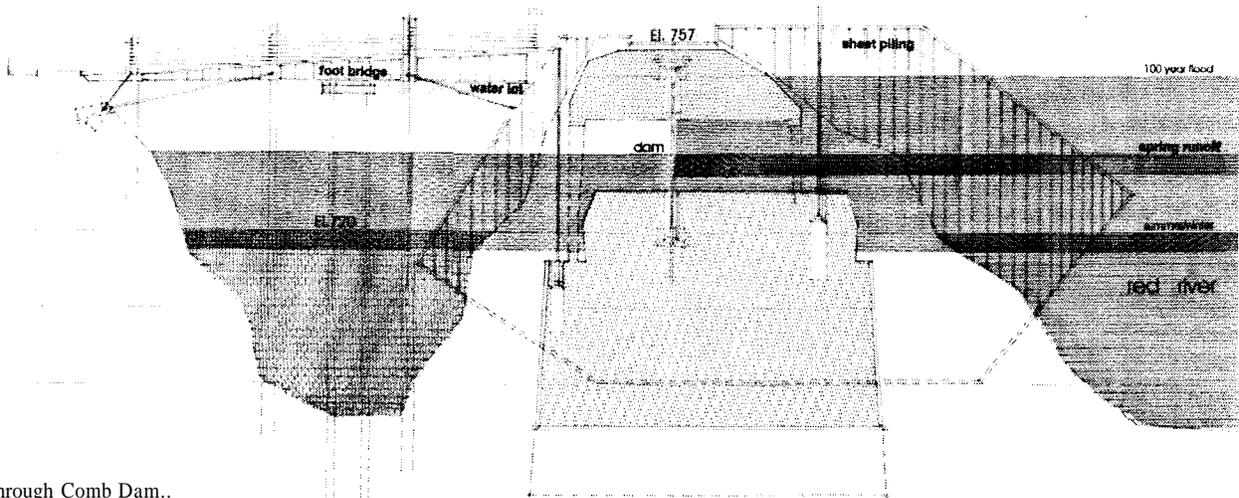
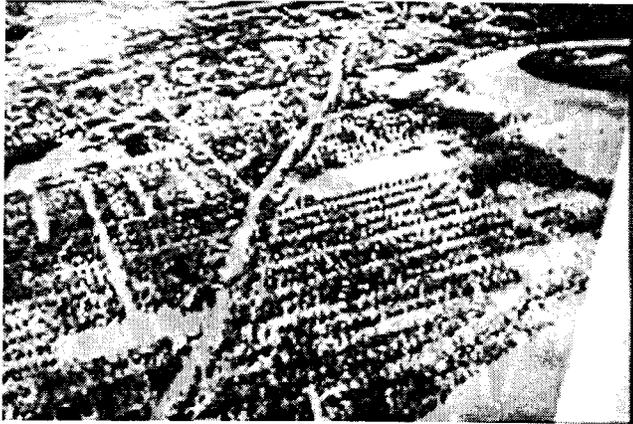
2022



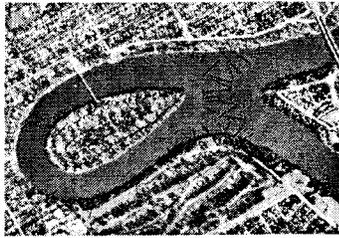
2072

KINGSTON CRESCENT, WINNIPEG (KAREN SHANSKI)

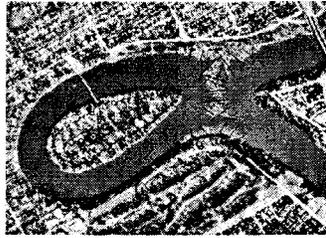
The residents of Kingston Crescent were evacuated with the help of the armed forces and watched, from a safe distance, as the flood water rose well above their homes. The project sought ways to "work with" as opposed to "protect against" the on-going flood and erosion forces acting on this ox-bow community, over the next two centuries. The design proposed a new urban/river morphology and community/housing typology, mediated by a proto-typical comb and boat lock infrastructure.



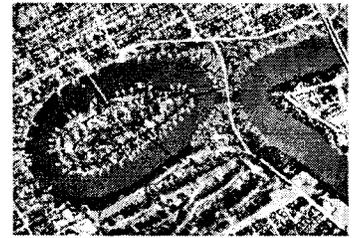
Section through Comb Dam..



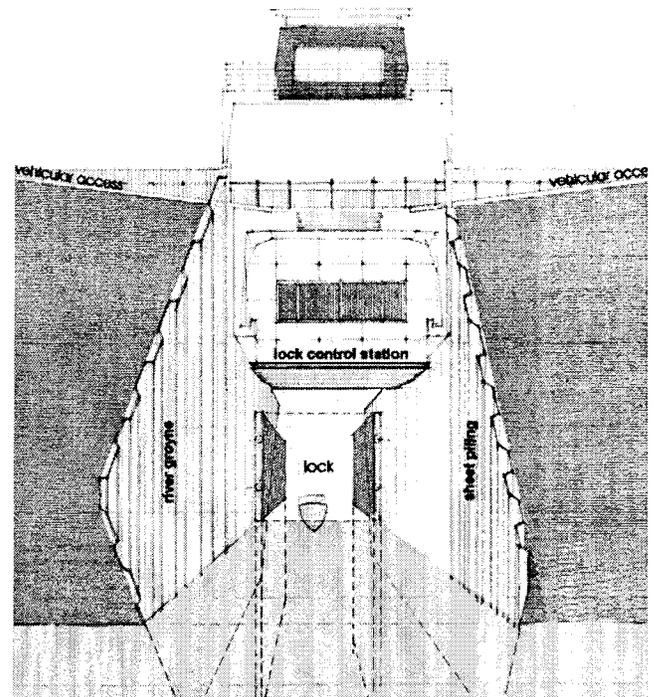
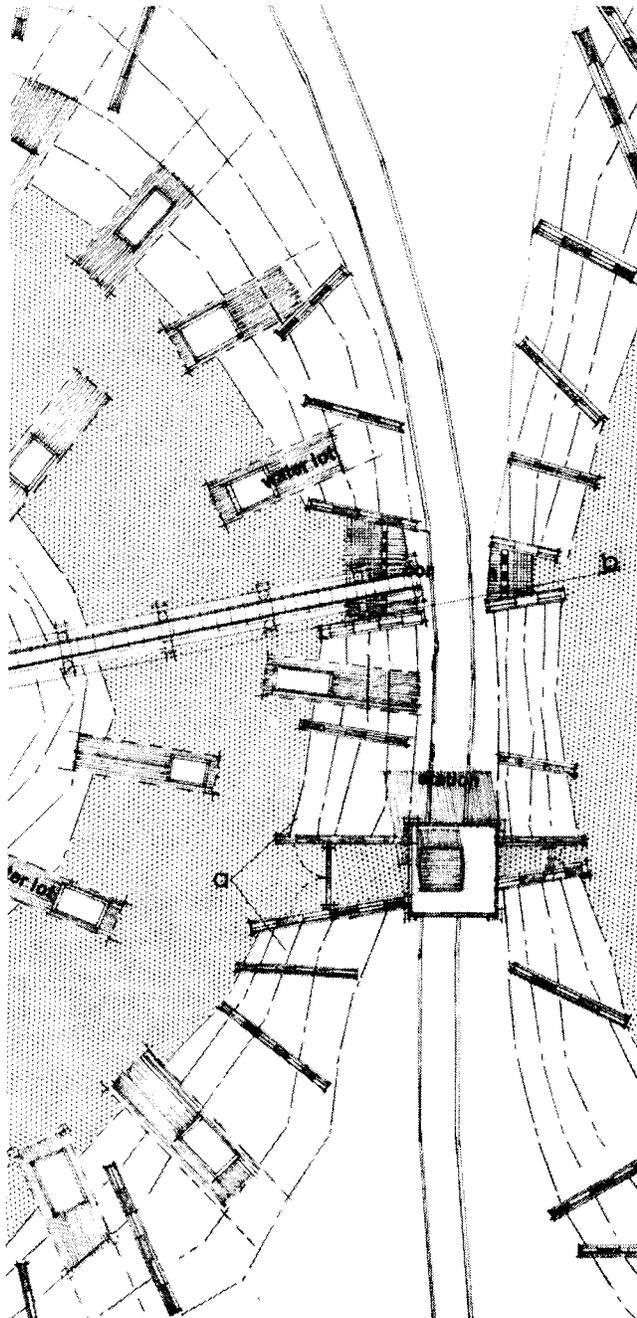
2122



2147



2197



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