

transitional habitation

future occupation in bulimba, qld

the situation

The Intergovernmental Panel on Climate Change (2007) predicts that by 2100 global sea levels will have risen by as much as 59cm. This shift will affect the way we inhabit our riparian edges, low-lying lands and public spaces.

A strategy of adaptation and resilience is required - one that allows temporal inundation of lands, facilitates transition of land use and accommodates consolidation of social infrastructures.

A strategy for transitional habitation.

life on a floodplain

Expansion of the suburban fabric has pushed habitation from the high, defensible ridgelines on to the alluvial floodplains of the Bulimba Peninsula. As sea levels and associated tides rise, low-lying areas become more at risk from flooding by both storm surge and overland flow.

below 2.1m - public domain

Land below 2.1m (the new highest astronomical tide) is given over to public realm and provides recreational opportunities for residents in the immediate vicinity.

2.1m - 3m - transitional habitation

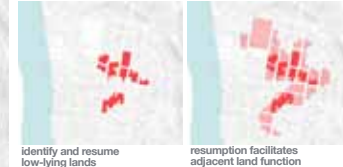
Habitation of land between 2.1m and 3m (the new Q100 level) evolves in response to the increased threat of flooding. Adjacent lands form an inhabited threshold between high ground and the transitional territories of the public realm.

3m - the defensible edge

Occupation of land above 3m continues, however strategies for densification and continued, alternative habitation of these areas are set in place to ensure overall resilience. Existing and forgotten drainage lines form the basis for circulation inside the transitional territories.

a framework for new habitation

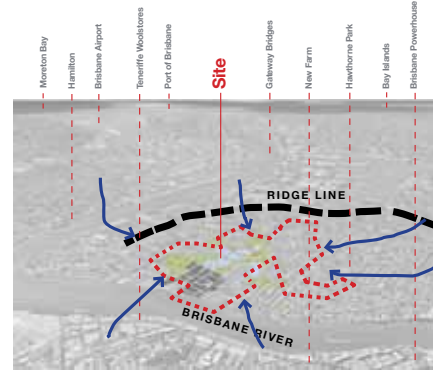
New developments have been designed with rising sea levels in mind, with base floor levels set clear of inundation areas.



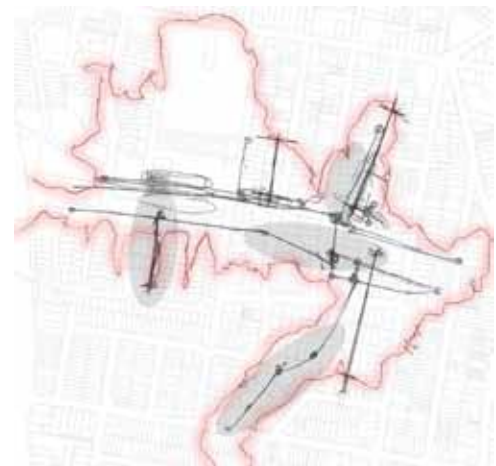
the proposition

The existing suburban fabric is given over to a temporal condition via resumption of low-lying lands for public domain.

Reoccupation & transitional habitation of these spaces facilitates not only typical public function, but allows adaptive, resilient occupation during flood disturbance events.



Source Image: Google Earth (2010) living in a drainage basin



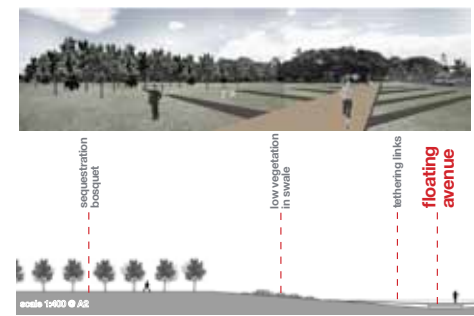
a series of incidences



scale 1:10 000 © A2 site plan

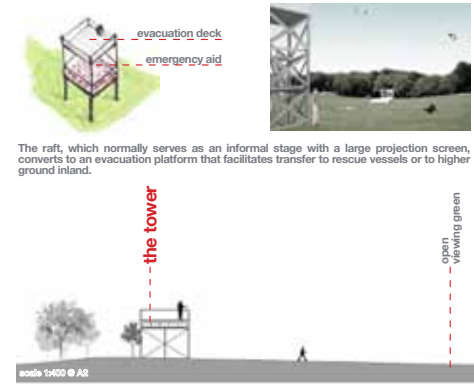
the floating avenue

Tethered walkways sit in the bottom of drainage swales. In times of flooding, the walkways float on the rising water, allowing access to the spine, adjacent roadways & the tower/raft.



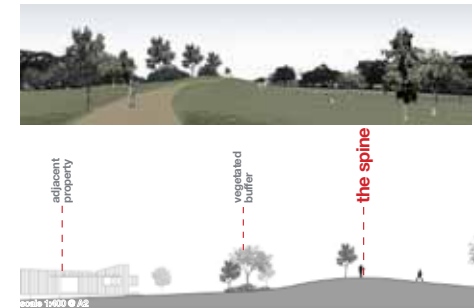
the tower and the raft

The tower is a last place of refuge in times of heavy inundation. Typically performing public function as an observation tower and projection point, the tower contains emergency supplies and communications to enable evacuation from flooded areas.



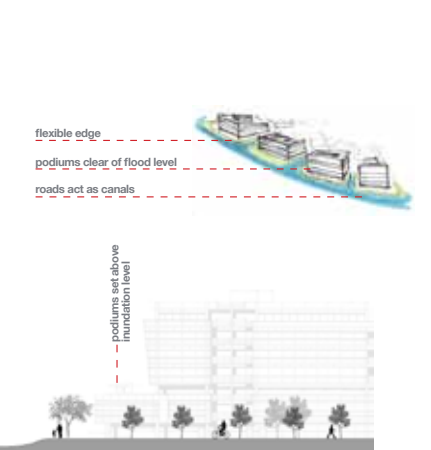
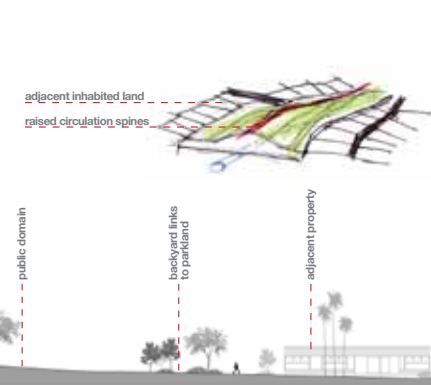
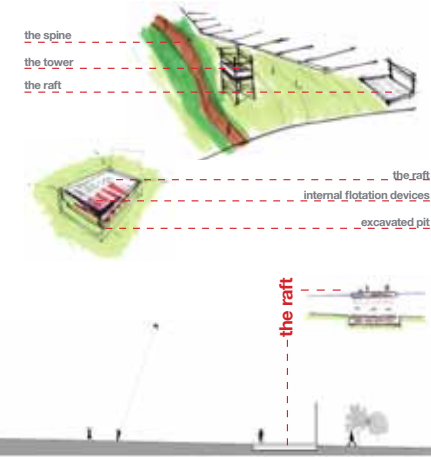
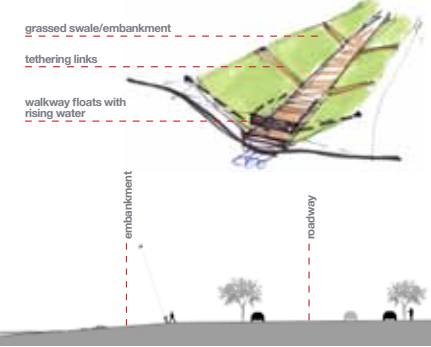
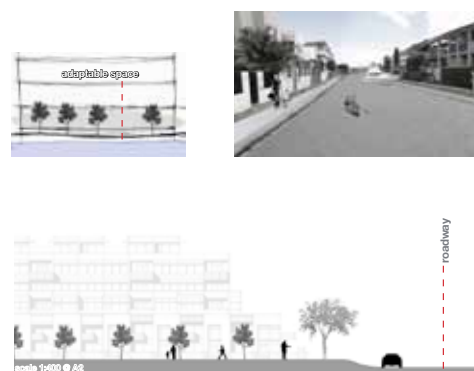
the spine

Raised spines mirror the path of underground stormwater lines, lifting primary circulation routes above threatened territories and providing initial points of refuge in times of inundation.



new habitation

New developments in low-lying areas are designed to adapt to periodic inundation. During these times streets become canals and alternative modes of transportation are employed.



TRANSITIONAL HABITATION

DAN YOUNG

LANDSCAPE ARCHITECTURE

UNLAND SCAPED 2011