PART 2: POWER OF CONNECTION

“Today, our values are different. We are more aware of the cause-and-effect relationship between our actions and the fragile environment in which we live”
CHAPTER 1: SITE SELECTION - ERA BRICK WORKS QUARRY
INTRODUCTION

Isolation and human exclusion from the natural environment as a response to the problem of polluted urban river systems is a plausible response in terms of the ecological environment.

However, through the disassociation of man from nature, it has led to the creation of a void and wasted landscape within the urban environment. “… the culturally innovative aspects of landscape architecture are often overlooked or even suppressed as emphasis is placed on more technical procedures aimed at the restoration of an essentially cultureless natural world.” (Corner 2009:3).

The problem is so expertly addressed by James Corner, where it is the relationship between man and nature, or landscape and the connection that man has to his environment which gives cultural value to that land.

The social value which was historically placed on water systems as a resource has been significantly altered over time. This alteration took place through the development and use of water resources beyond the banks of the rivers on which human settlement originated, as resources would not be able to provide for the increase in demand.

The loss of that dependency on the river system led to loss of importance within the urban environment, degradation and pollution caused further damage to the relationship between man and the river as the river had now lost its aesthetic and economic value.

Part two of the dissertation focuses on the connection between man and the urban riverfront through the incorporation of river purification systems as a design informant for public space.

Humans, as the dominant species in an ecosystem, cannot be excluded from the protection and rehabilitation of urban river systems. If the ecological and hydrological approach to urban river systems does not align with the economic and social ideals of the modern day city, then it is fundamental that alternative ways of understanding and communicating the importance and value of the river system are explored.

Connectivity on all scales needs to be inclusive of the human species, rather than controlling rivers and framing them as an isolated aesthetic view as previous riverfront project tended to do, the intention has shifted to the integration of the complexity of an urban river ecosystem into the public image and experience of the city.
PROBLEM IDENTIFICATION
First and foremost, the largest problems facing urban river systems are pollution and destruction of the surrounding natural environment through urbanisation. However, with the removal of the human element as an approach to river rehabilitation there is a loss of connection between man and his environment. The loss of economic and social value through this isolation has resulted in the degradation and loss of significance of smaller scale urban river systems that are no longer seen as a resource. With the increase in void and wasted landscapes along urban river banks and borders, failing to address these landscapes and reintroducing them into the public realm, will result in all connectivity being severed between man and the natural environment.

HYPOTHESIS
Only through integrating the public realm of the urban environment with areas of void or wasted landscape, and using the rehabilitation systems and processes of the Moreleta Spruit as a design generator and informant for the site, will connectivity on various levels concerning man and the natural and urban environments be re-established. Through the incorporation of social, ecological and economic aspects informed by the natural environment, the wasted landscape is transformed through the integration of the natural environment, into a public space centred on the interaction, education and awareness of the complexity and significance of urban river systems.

DESIGN QUESTION
Can the rehabilitation of a polluted resource and the associated surrounding environment become a connecting feature with an impact on the surrounding environment? Through enhancing the spatial quality of the rehabilitation process and the incorporation of these processes into economic and social aspects of the intervention, will the public realm be drawn into the previously wasted landscape, connecting man and the environment through common participation and experience?

TECHNICAL QUESTION
How can the river system be diverted and incorporated into the economic and social elements of a place? What are the technical hydrological purification aspects and varying construction methods for the diversion of a water system? How can materials and technical aspects of the intervention be designed in varying degrees of urban and natural integration?

CLIENT IDENTIFICATION
How will the improvement of ecological functions within the river system be resolved while simultaneously increasing access and integration between the urban and ecological environment as well as minimizing the anthropogenic influence of the urban environment on the water resource?