1.0 Introduction

Options for the design of River Walls, which the City of Perth endorse, include:

- A mixture of rock revetment
- Pocket Beaches
- Limestone Wall

When deciding which option is most appropriate consideration must be given to the sustainability, community interaction with the river, long term viability, aesthetics and the nature of the surrounding environment.

The design and construction of the River Wall Structure must align with the following principles:

a) All structures must have an attractive appearance that is appropriate to their general surroundings and adjacent structures
b) Structural Design is based on proven methods, materials and technology
c) Fixing for retaining structures are concealed and integrated as a design factor.
d) Unless a feature of the architectural design, all structures are to be of uniform colour and surface finish, including after repair work.
e) River Walls must follow simple straight or smooth alignments with large radii, and interface with adjoining pathways, structures and environmental features.

2.0 Design Specification and Guidelines

All River Wall structures are to be designed in accordance with all relevant standards, including but not limited to the following:

- AS 4997-2005 Guidelines for the Design of Maritime Structures
- AS 4678-2002 Earth-retaining Structures
- AS 5100 Set-2007 Bridge Design
- BS 6349-1-4:2013 Maritime Works

Where design and construction aspects of River Walls are not considered in the above references, it is necessary to consider and conform to other international codes of practice and design guidelines.

2.1 Design Life

River Walls are to be designed to achieve the maximum life outlined in the the table below, without any major maintenance or replacement of elements while remaining safe and functional.

<table>
<thead>
<tr>
<th>Asset</th>
<th>Design Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>River Wall, Embankments and Scour protection</td>
<td>100 years</td>
</tr>
<tr>
<td>Drainage and other structures which are accessible for maintenance</td>
<td>50 years</td>
</tr>
</tbody>
</table>