
Cultural Theatre
(Architecture student proposal)
Jazz Park by Responsive Environmental Design
Maraba Traders Centre for Arts
(Architecture Student Proposal)
To Church Street


6th
7th Street

Chapter 7: Technical Resolution

This chapter investigates the technical resolution of the proposed design. The final master plan and sketch plan are presented followed by sections. The sections reference the details, which explain how the design would be implemented and constructed.

7.1 Final Master Plan 1:2000

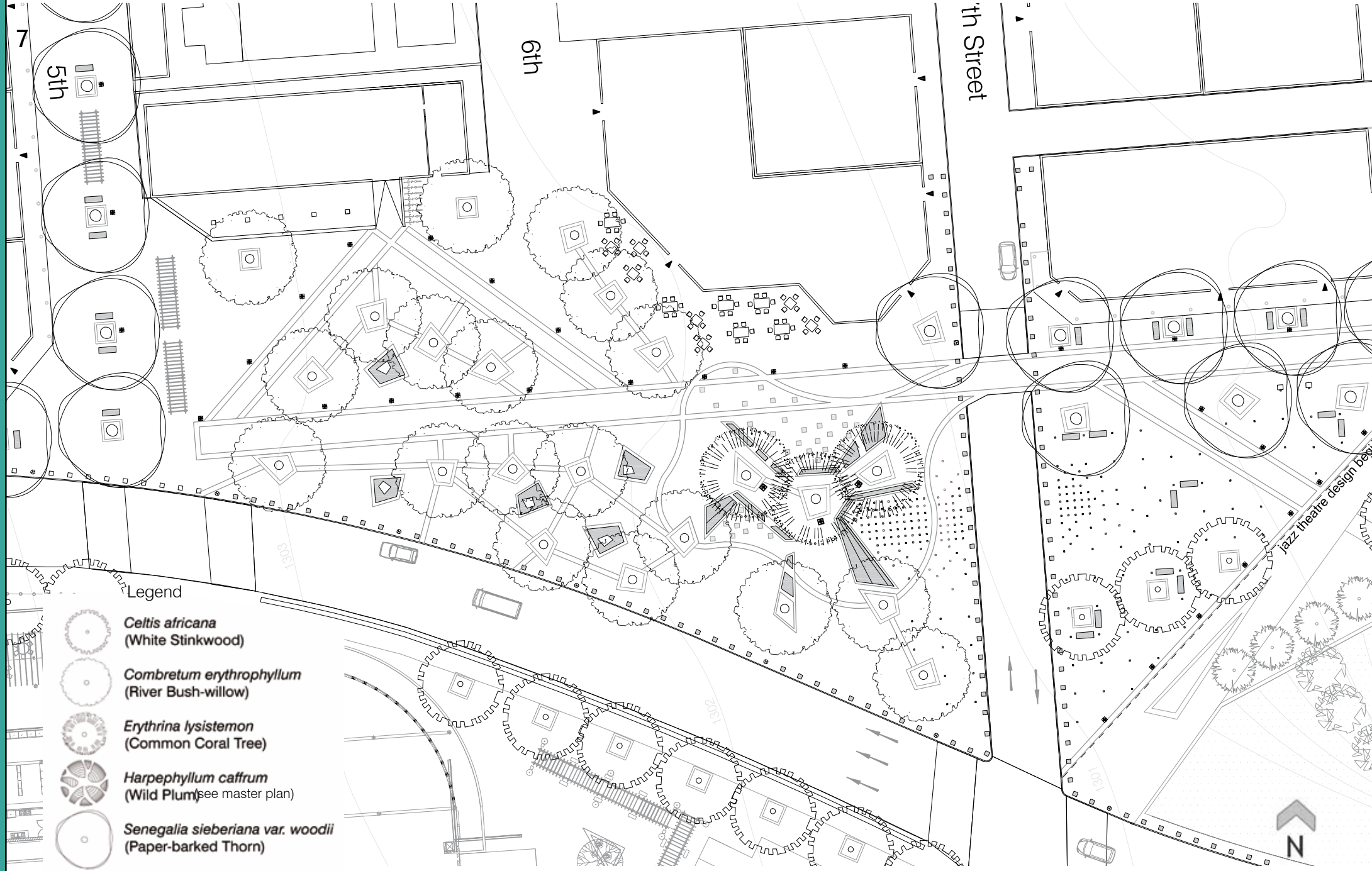
The masterplan indicates how the design is connected to surrounding functions and how it links to the greater context of Marabastad.

7.2 Sketch Plan 1:500

es the site where the landscape intervention is illustrated on a detail level and the various components of the design are indicated.

Social Space in front of Community Hall

Looking across 7th Street towards steel light columns



7.3 Planting Plan 1:500

The planting plan indicates the position and type of tree species specified for the design.

7.3.1 Plant Palette:

Trees were selected according to colour, texture and the atmosphere that they would create. All trees species are indigenous not only for the ecological benefits but also because indigenous trees require less water and maintenance.

Celtis africana
(White Stinkwood)

COLOUR:
Dark green foliage with pale grey bark

TEXTURE:
Bark is smooth, leaves simple and alternate.

ATMOSPHERE:
Good shade tree creating cool and comfortable experience. Deciduous and therefore induces change to the site when seasons change. Focal element when it has no leaves.

Combretum erythrophyllum
(River Bush-willow)

COLOUR:
Green leaves yellowish on undersurface that turn brilliantly yellow and red autumn colours. Fruit light brown when dry.

TEXTURE:
Bark dark grey, flaking in sections to reveal biscuit coloured patches.

ATMOSPHERE:
The yellow and red autumn foliage creates a unique quality. Deciduous tree and will therefore emphasize seasonal changes.

Erythrina lysistemon
(Common Coral Tree)

COLOUR:
Green heart shaped leaves with pale grey-brown bark. Bright red flowers when no other trees are in flower.

TEXTURE:
Scattered hook thorns on bark. Flower has long narrow petals.

ATMOSPHERE:
Focal tree with bright red flowers to reference blood. Crushed leaves are applied to festering sores and open wounds are treated with powdered burnt bark.

Harpephyllum caffrum
(Wild Plum)

COLOUR:
Dark grey bark, dark green leaves. Leaves colour to a beautiful red in autumn but stay on tree for up to two years. Red edible fruit.

TEXTURE:
Smooth bark. Leaves are glossy and unevenly compound creating a rich texture of foliage.

ATMOSPHERE:
Excellent shade tree. Evergreeen, therefore provides shade and colour all year round.

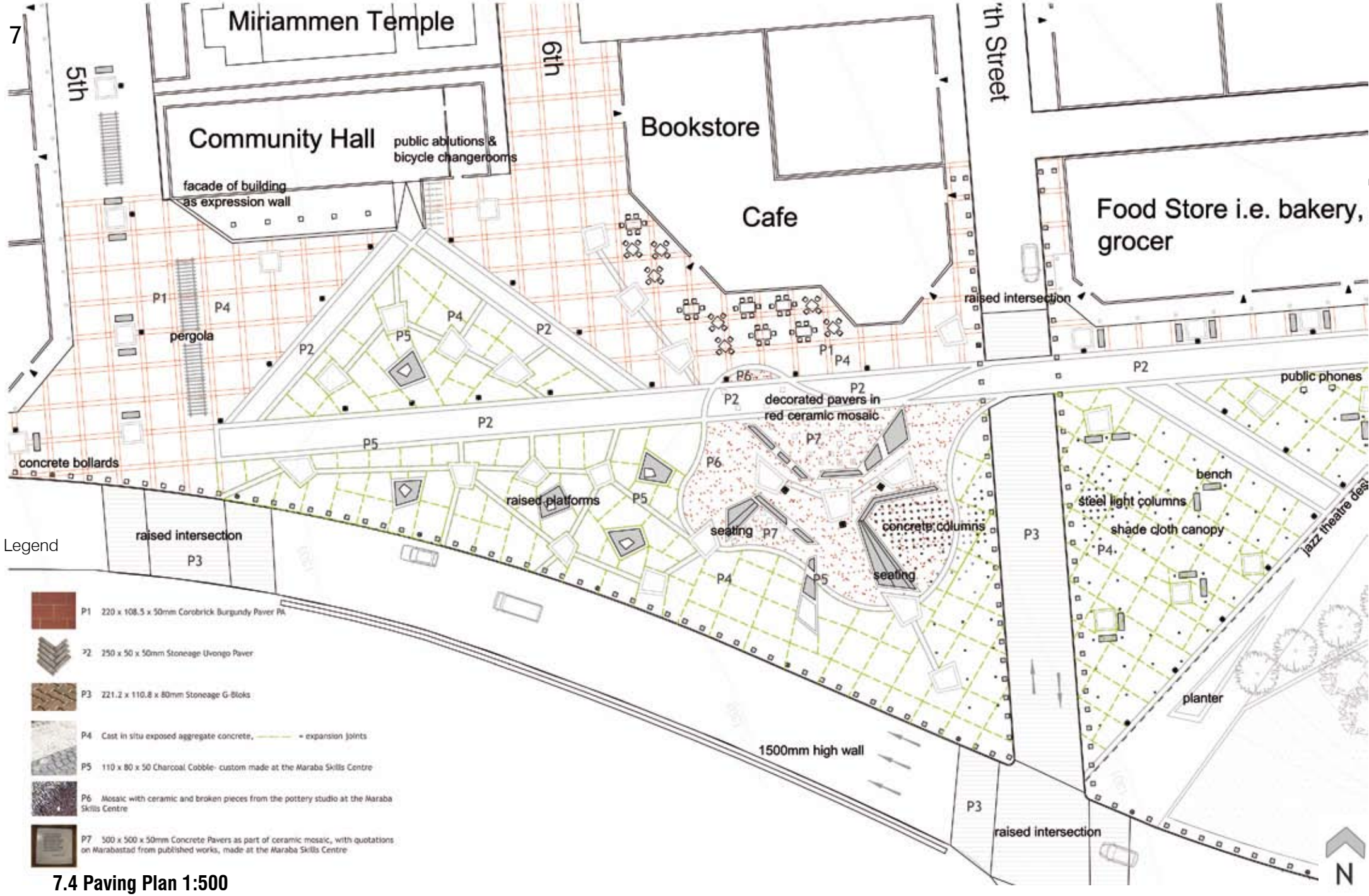
Senegalia sieberiana var woodii
(Paper-barked Thorn)

COLOUR:
Dark green foliage with light brown to yellowish bark.

TEXTURE:
Bark is corky and peels off in large sections.

ATMOSPHERE:
Deciduous tree and will therefore emphasize changing of seasons. Good shade tree as well as focal tree and creates a typically African experince. Large and spacious.

Venter (2005:30,98,104,154,190)



7.4 Paving Plan 1:500

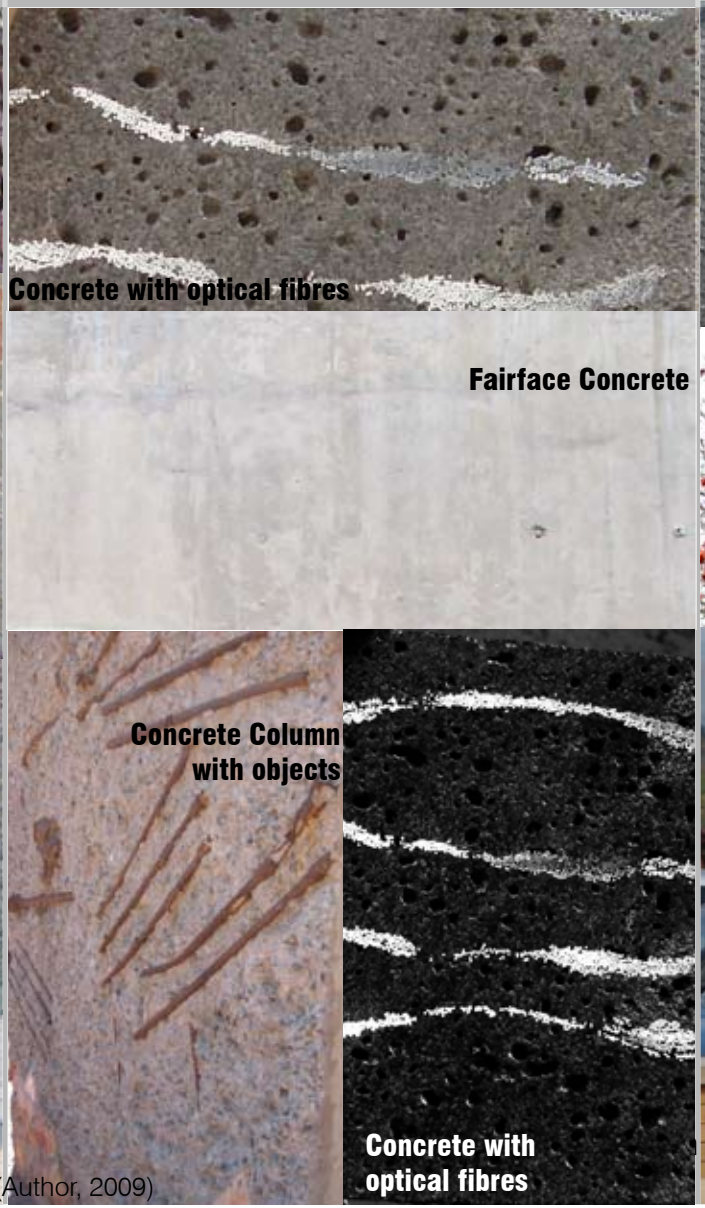
Paving materials were chosen to create a pedestrian friendly environment. Mosaic and cobbles result in a richly textured surface. Red brick and concrete [illegible] Marabastad and therefore these materials were carried through in this design.

7.4.1 Material Palette

This indicates the textures and colours of the materials used in this landscape design.

Paving

Walls



Other

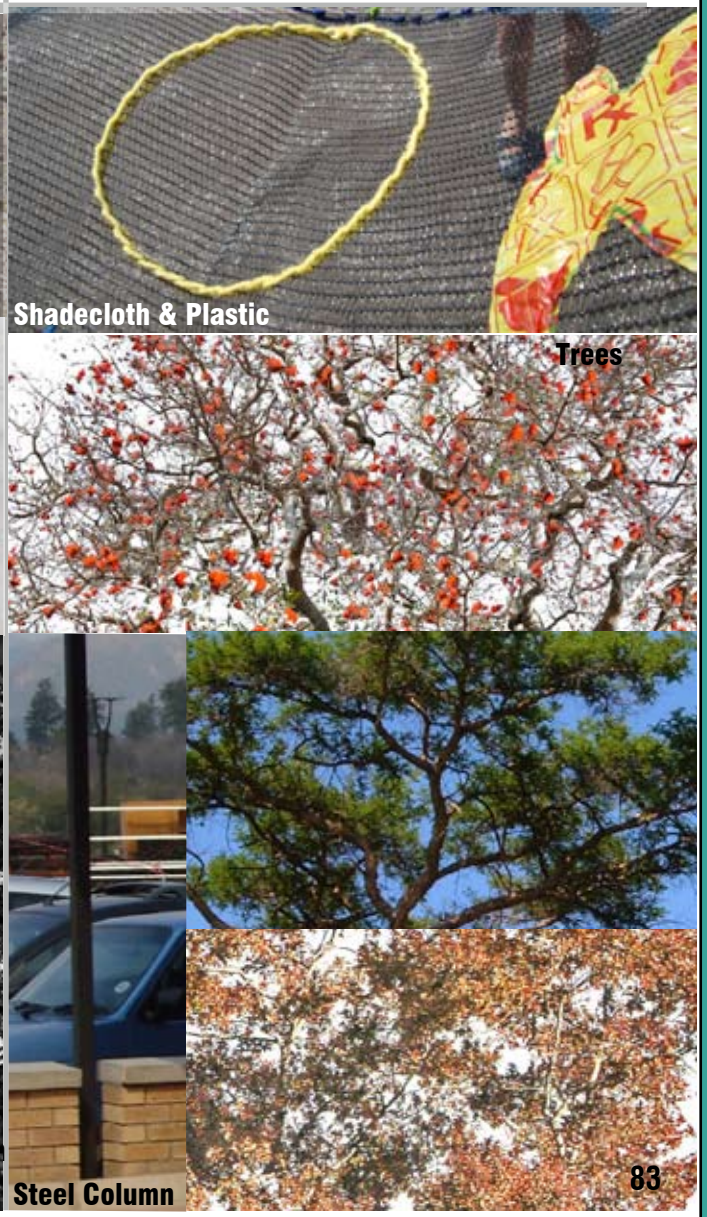


Figure 117 Collage of material textures present in design (Author, 2009)

Viewing the Memorial Space from North

Approaching Memorial Space from the South- By Day

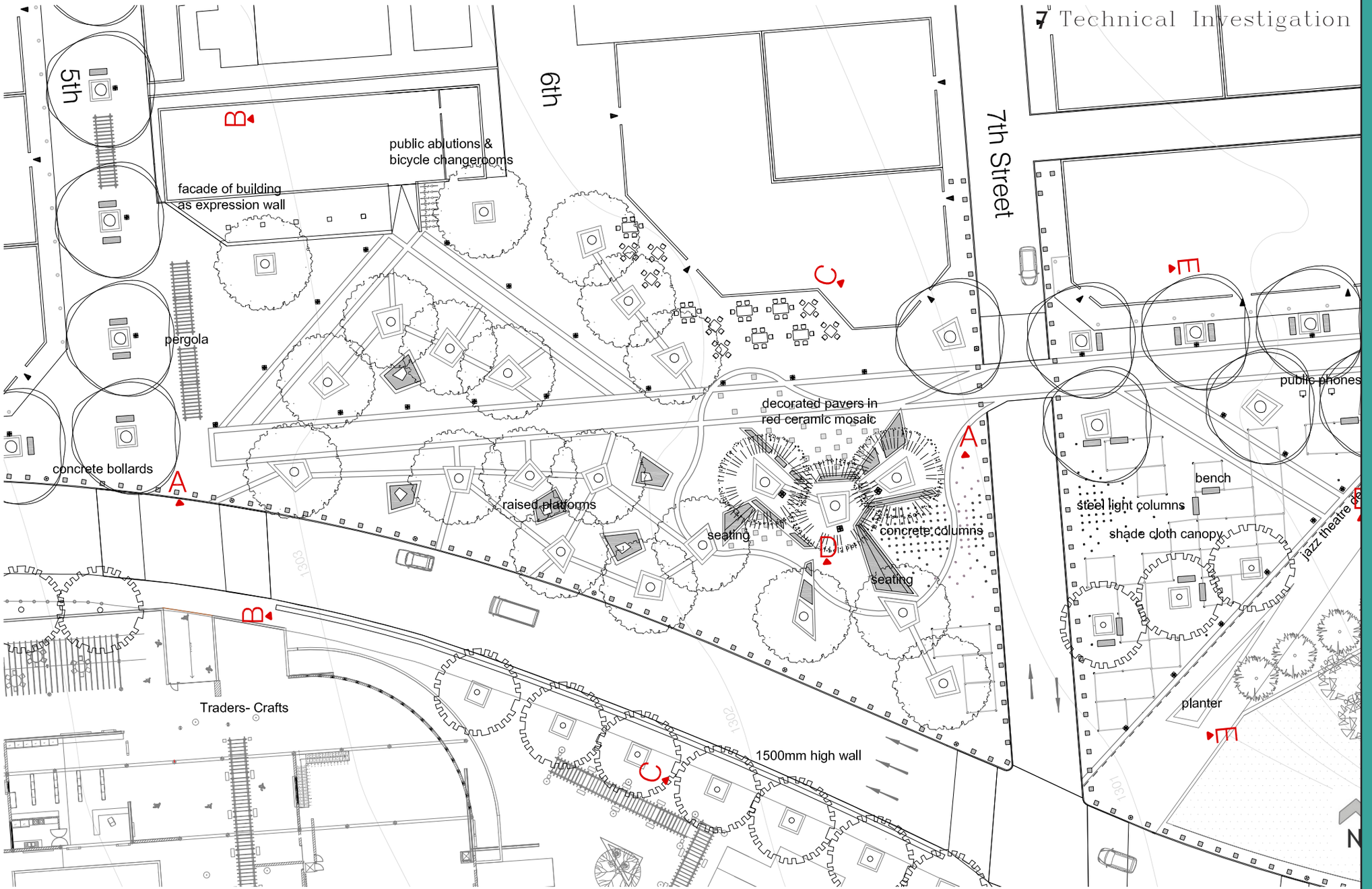
Approaching Memorial Space from the South- By Night

7.5 Stormwater Plan 1:500

Stormwater is directed through a network of cobble swales which allows the water to infiltrate into the ground and is directed towards trees for irrigation. Excess water is channelled to catch pits which lead to the existing stormwater pipe system on site.

7.6 Lighting Plan 1:500

Safety is an important concern and therefore a hierarchy of lighting- vehicular, pedestrian and focal- ensures that the site is well lit. The plan also indicates
luced by the steel light columns.



7.7 Plan indicating section positions 1:500

7.8 Section A-A 1:100

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7.9 Section B-B 1:100

Section B-B is parralell to 5th Street pedestrian spine and the avenue of *Senegalia siberiana* var *woodii* (Paperbarked-Thorn) trees can be seen. Part of the .de is used as an expression wall. Seating and counters under the pergolas allow for outdoor social functions in the plaza in front of


Pergola
Expression Wall
Community Hall
1303.3
1303.45
1303.9
1303.15
1309.3
Blocks as Counters
and Seats
People walking down 5th
Street pedestrian spine

7.10 Section C-C 1:100

Section C-C clearly shows the Memorial Space with the concrete walls with optical fibres radiating from the three trees. The cafe area to the edge of the Memorial Space can be seen.


Light Walls
Light Post
1303.7
1303.15
1302.85
1302.8
1302.5
1302.7
1301.65
Bloed Street Boulevard
Cafe
Memorial space with
three *Erythrina lysistemon*
(Coral) trees
Fairface concrete
seating wall
Light emitting concrete walls
radiating from three trees

7.11 Section D-D 1:100

Section D-D reveals the concrete columns and steel columns increasing in height from the Memorial Space.


Shade cloth attached
to steel light columns

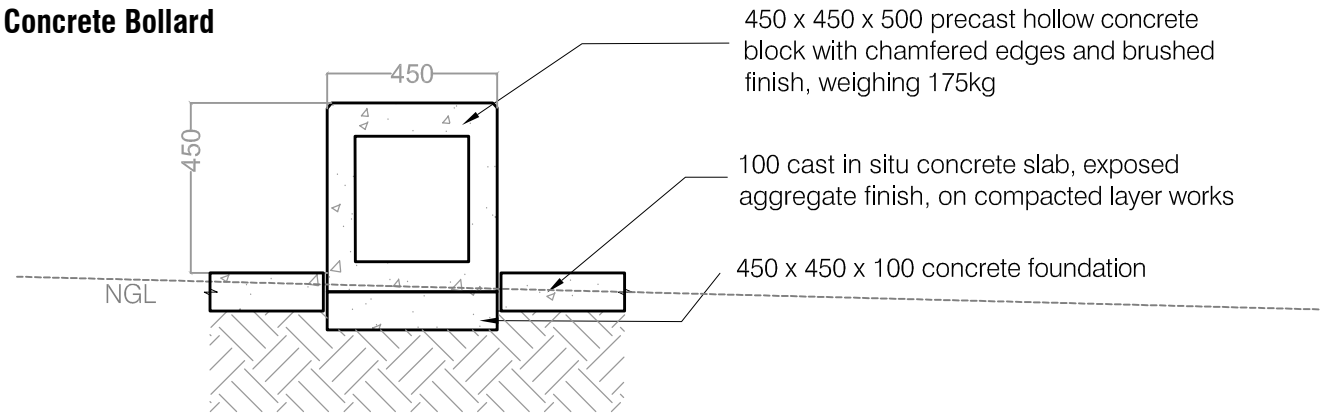
7.12 Section E-E 1:100

Section E-E shows the space that contains the steel light columns with shade cloth attached to it. A typical section through Bloed Street Boulevard can be seen.

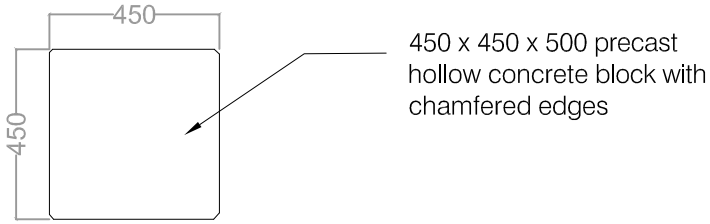

Traders
1300.5
Shadows cast onto the ground from the shade cloth canpoy consist of games and interesting shapes for children to interact with
Planter as part of Jazz Park design, therefore existing

7.13 Details

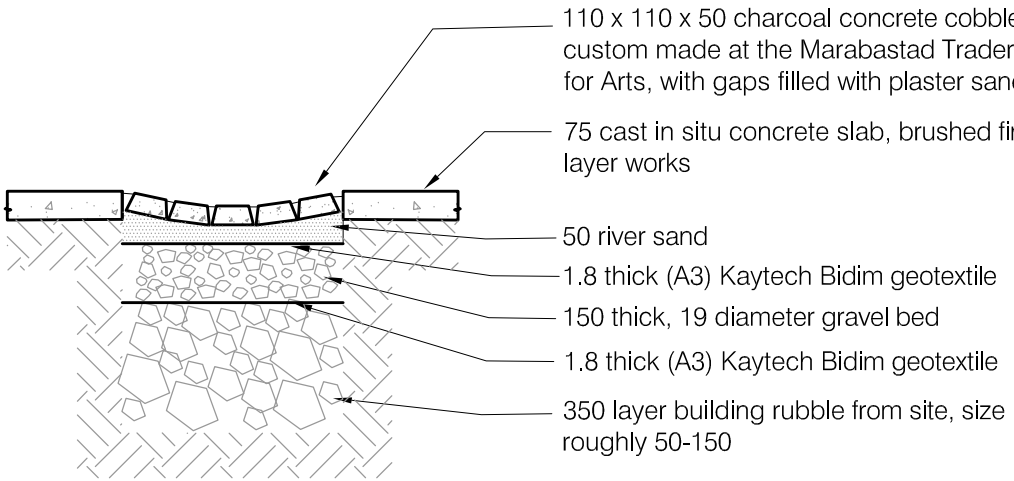
Detail of Concrete Bollard



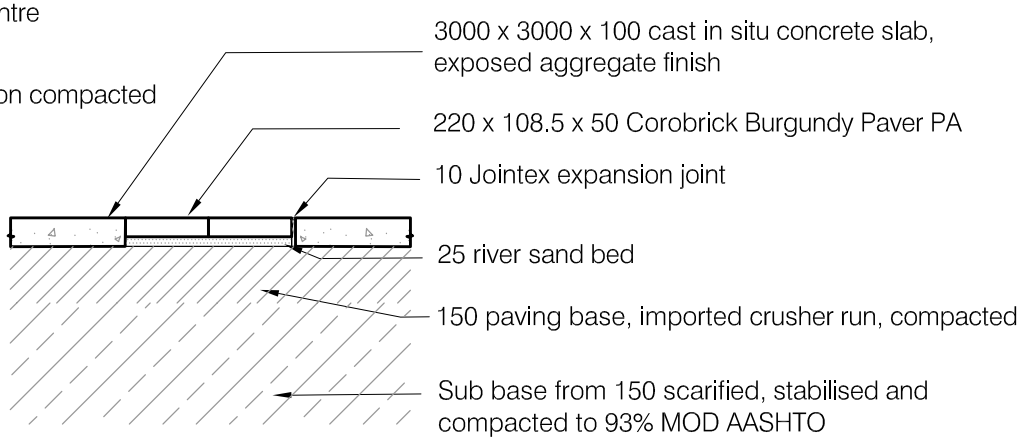
Concrete Bollard Section 1:20



Concrete Bollard Plan 1:20

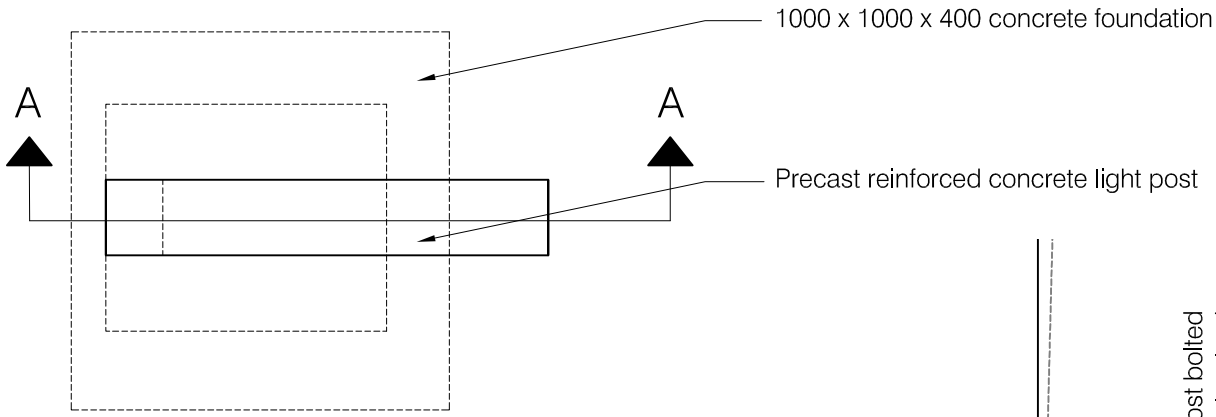


Detail of Drainage Swale 1:20

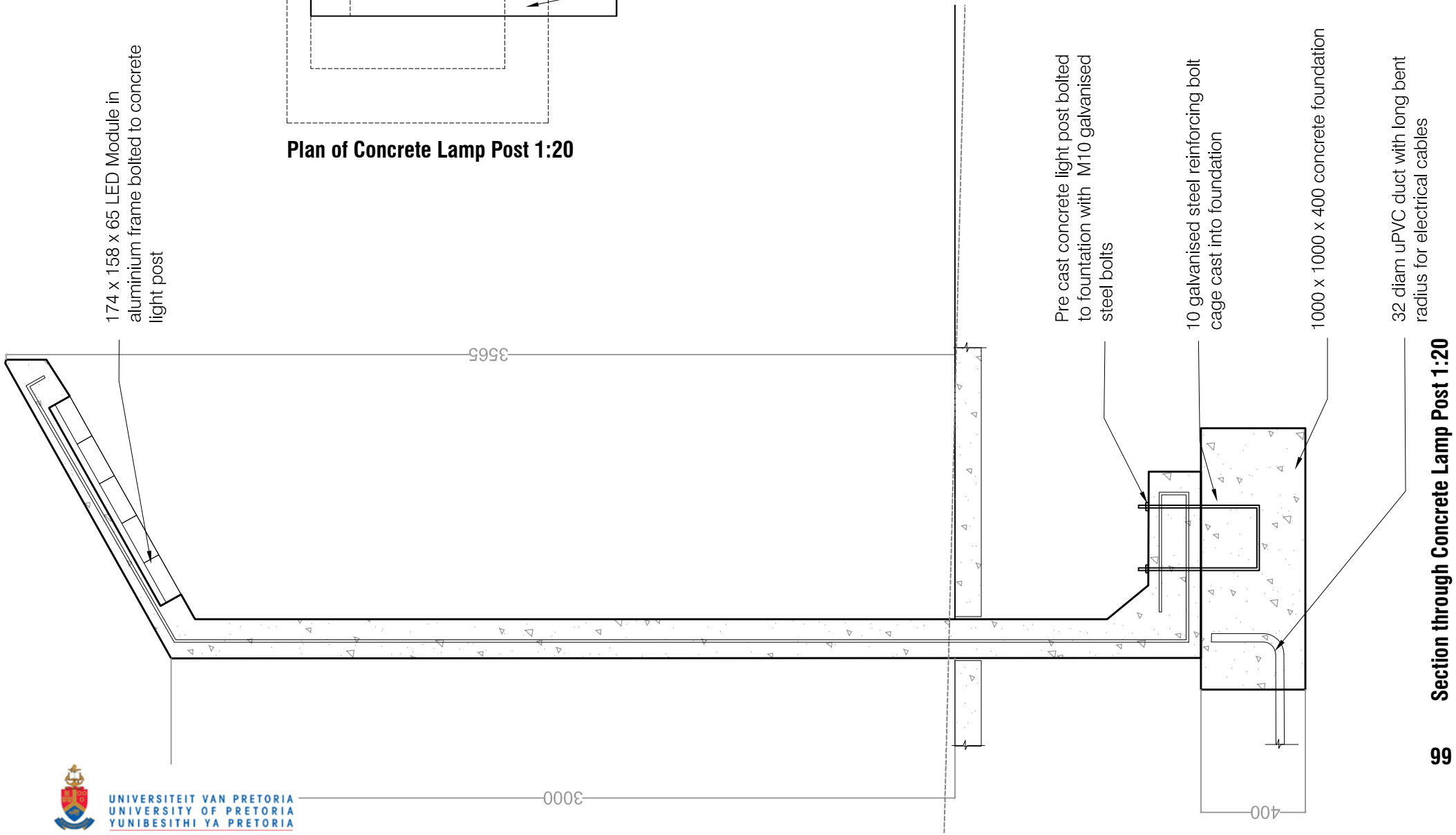


Detail of Paving in front of Community Hall 1:20

Detail of Concrete Lamp Post

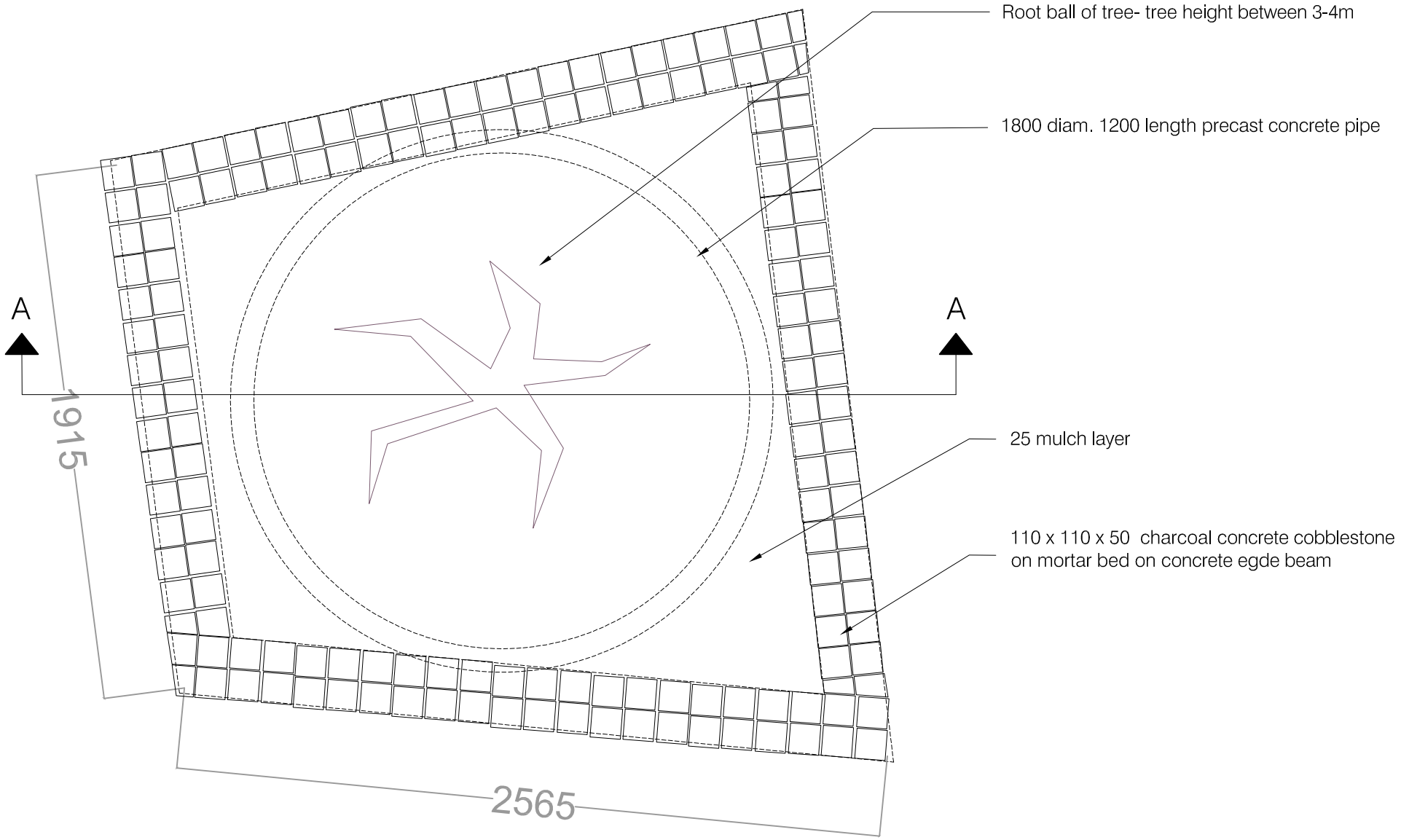


Plan of Concrete Lamp Post 1:20

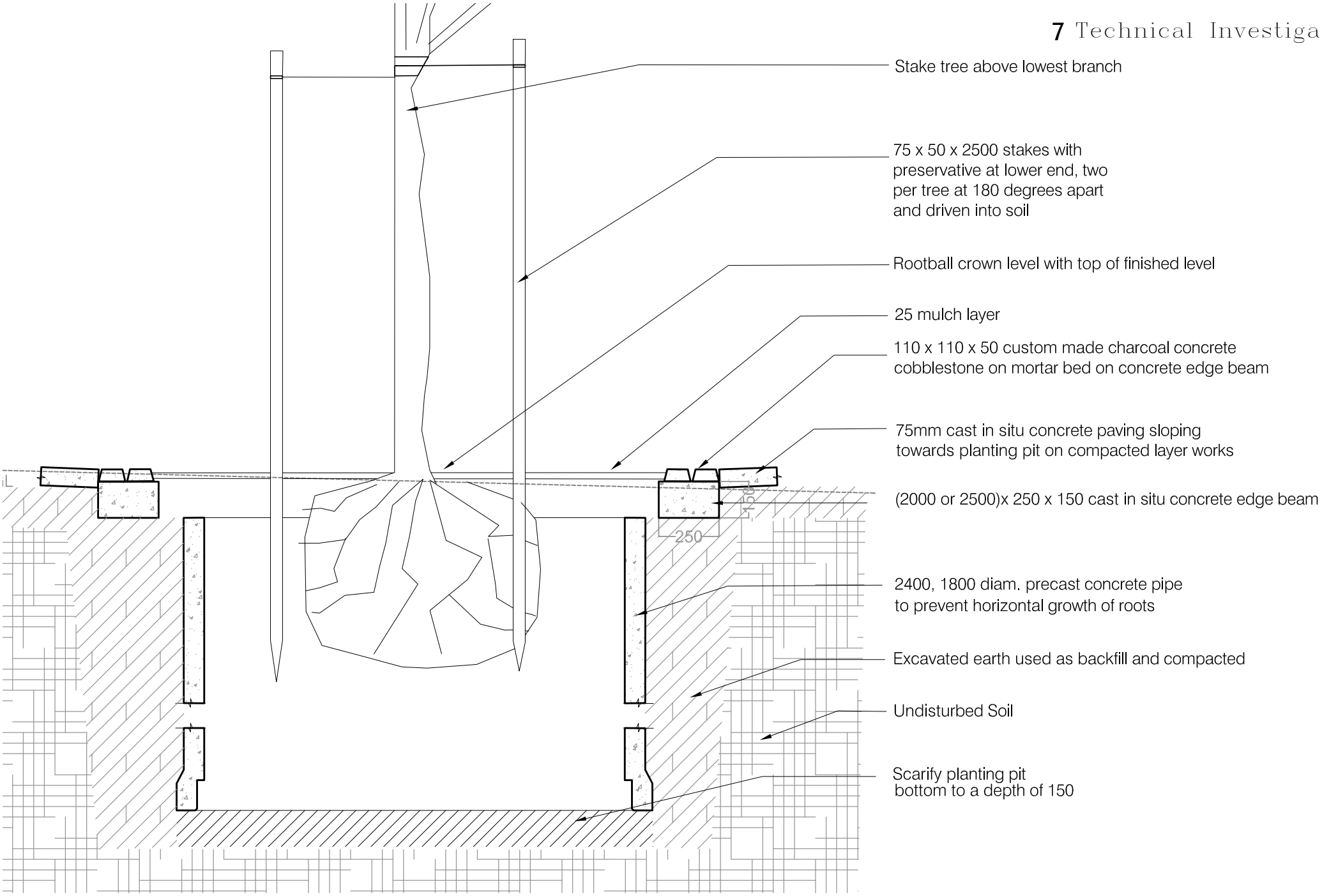


Section through Concrete Lamp Post 1:20

Detail of Typical Tree Planter

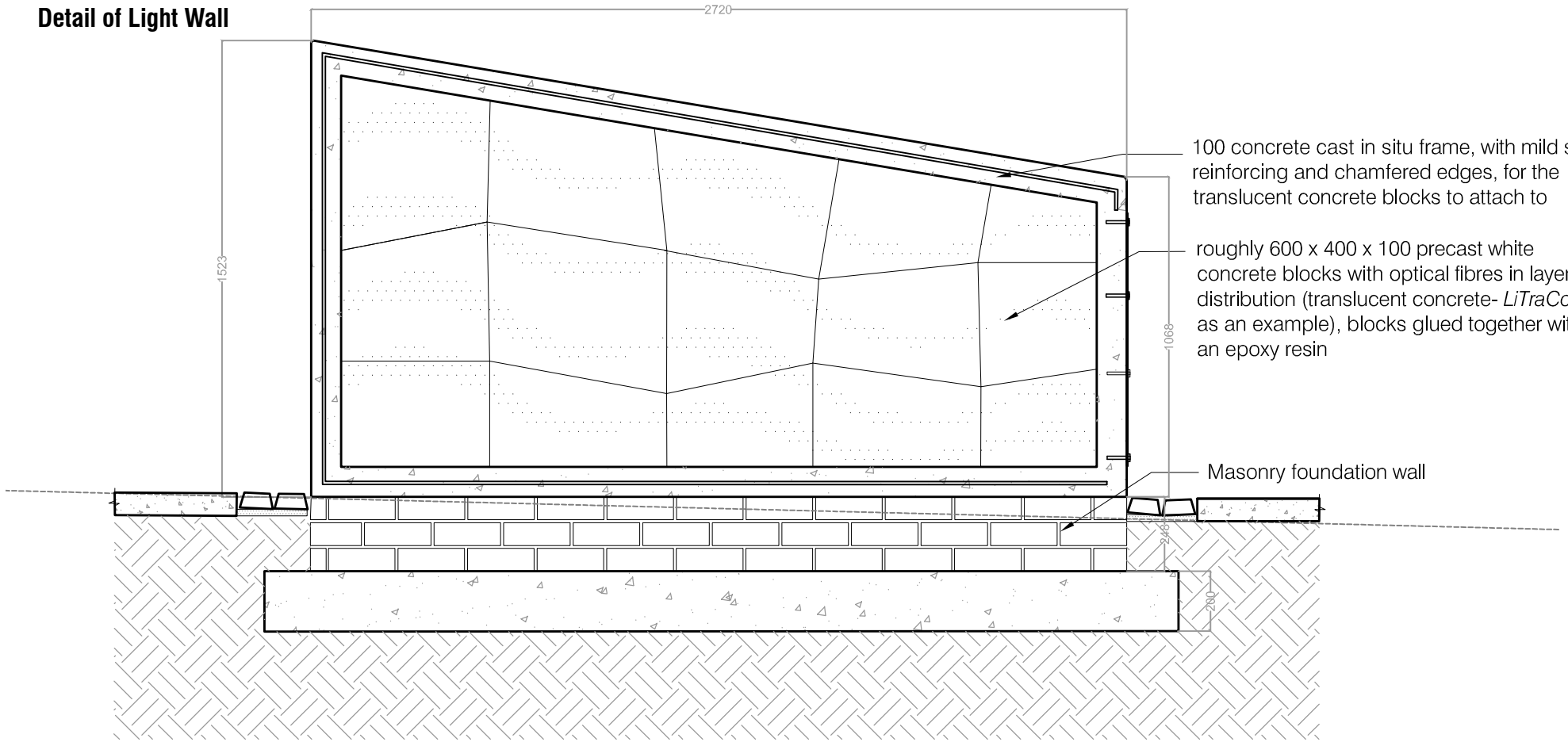


Plan of planter 1:20

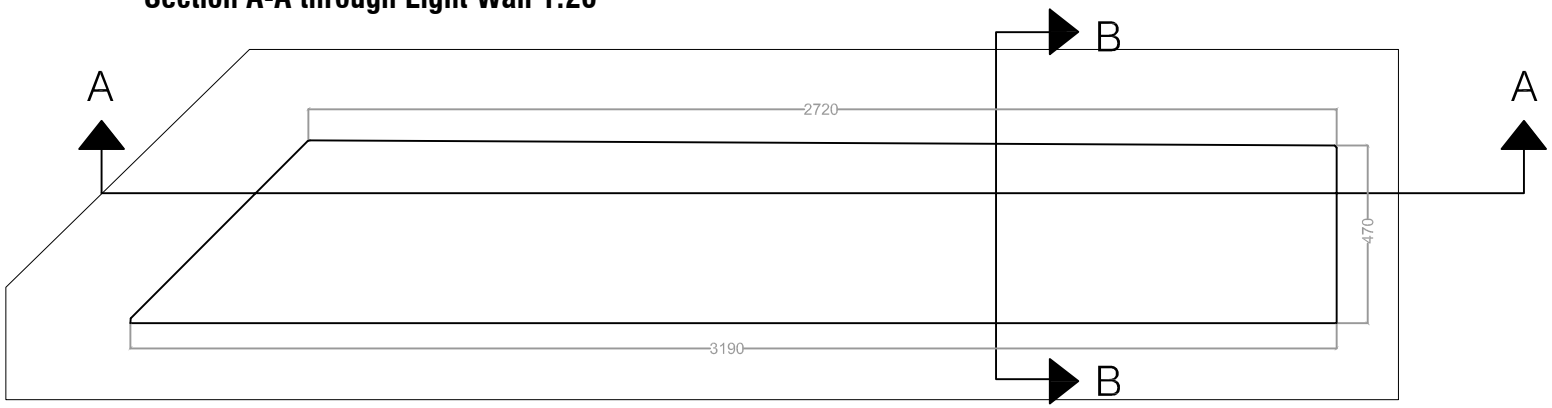


Section A-A through Planter 1:20

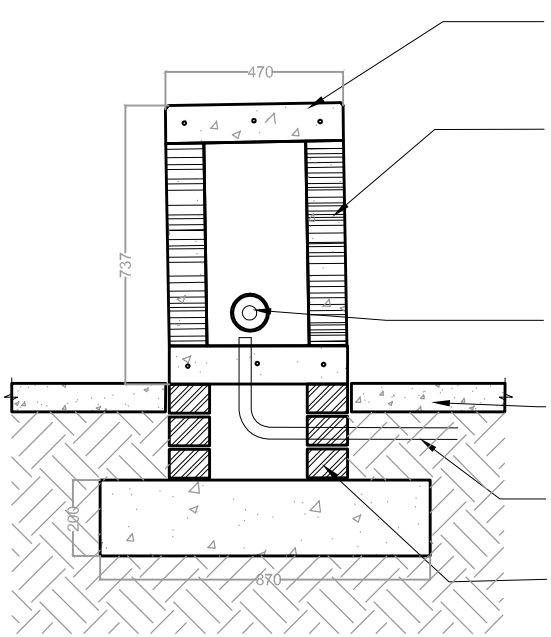
Detail of Light Wall



Section A-A through Light Wall 1:20



Plan of Light Wall 1:20



100 concrete cast in situ frame for the translucent concrete blocks to be fixed to

600 x 100 x 400 precast white concrete blocks with optical fibres in layered distribution (translucent concrete- *LiTraCon* as an example), blocks glued together with an epoxy resin

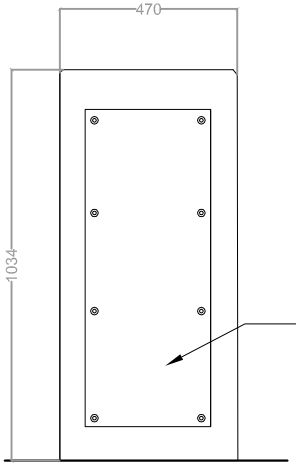
LED tube light inside cavity, free standing on concrete frame

75 cast in situ concrete slab on compacted layer works

32 diam uPVC duct with long bent radius for electrical cables

Masonry foundation wall

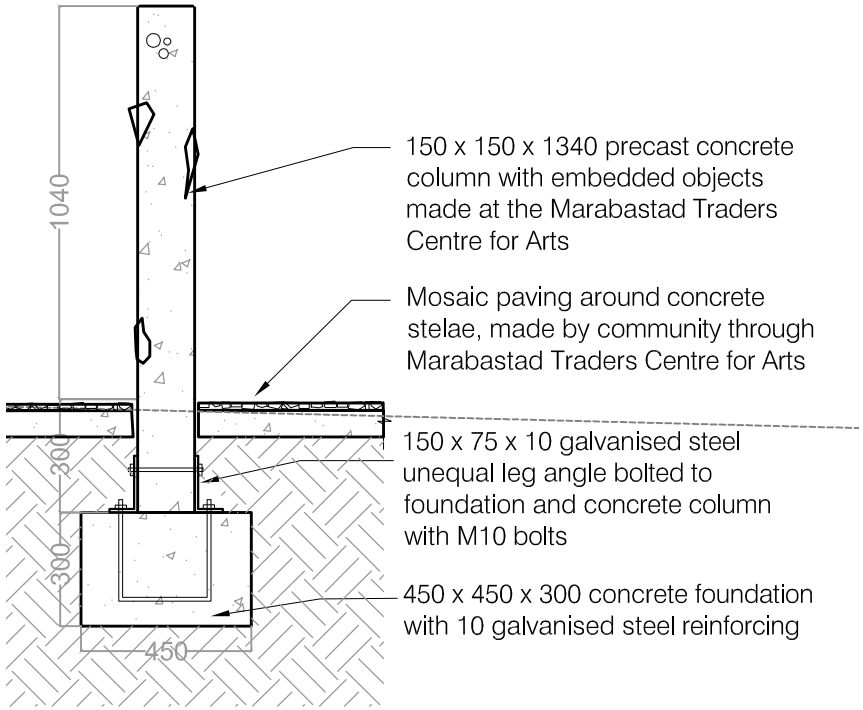
Cross Section B-B through Light Wall 1:20



300 x 800 x 3 galvanised steel access door bolted to concrete frame with allen key bolt, fixed tight to prevent vandalism

Light wall elevation 1:20

Detail of Concrete Stelae



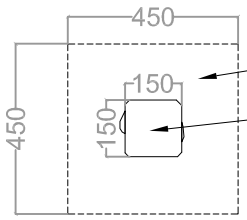
150 x 150 x 1340 precast concrete column with embedded objects made at the Marabastad Traders Centre for Arts

Mosaic paving around concrete stelae, made by community through Marabastad Traders Centre for Arts

150 x 75 x 10 galvanised steel unequal leg angle bolted to foundation and concrete column with M10 bolts

450 x 450 x 300 concrete foundation with 10 galvanised steel reinforcing

Section through Concrete Stelae 1:20

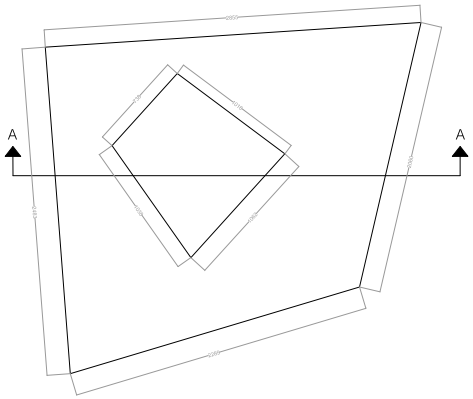


450 x 450 x 300 concrete foundation

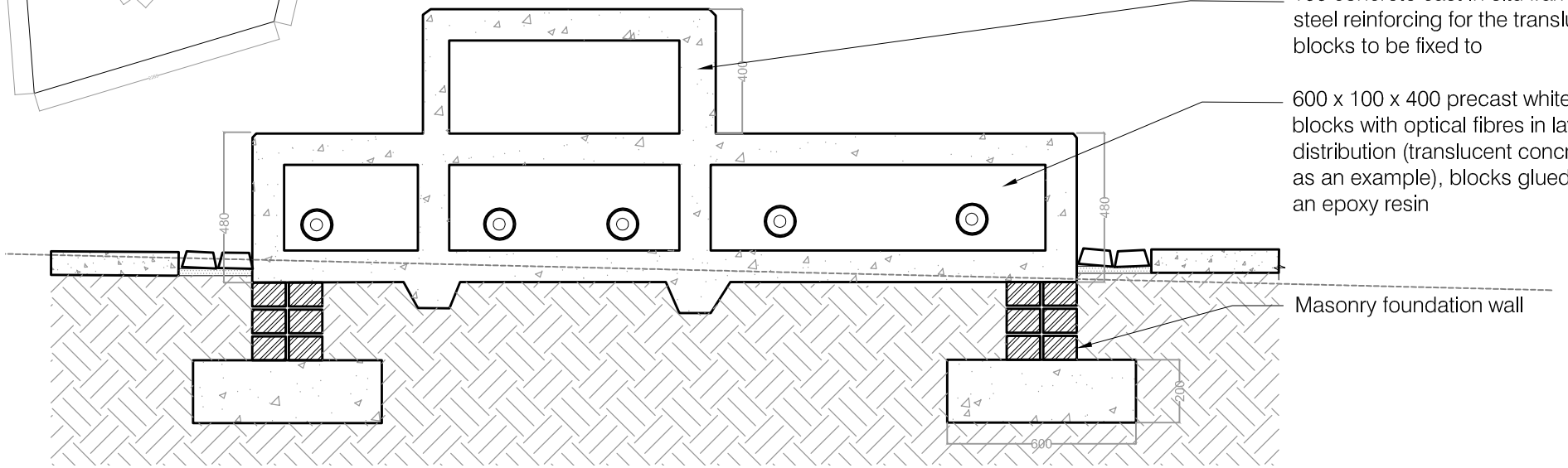
150 x 150 x (430, 560, 690, 950 and 1340) concrete stelae with embedded objects

Plan of Concrete Stelae 1:20

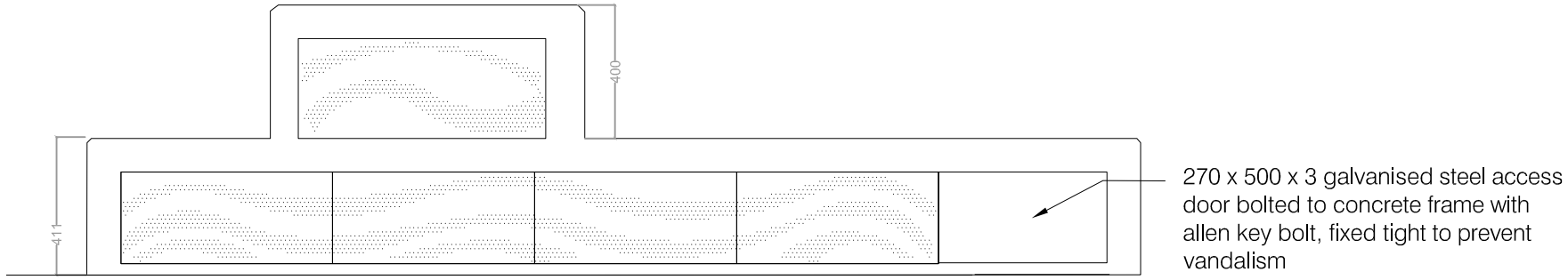
Detail of Performance Platform



Plan of Performance Platform (NTS)

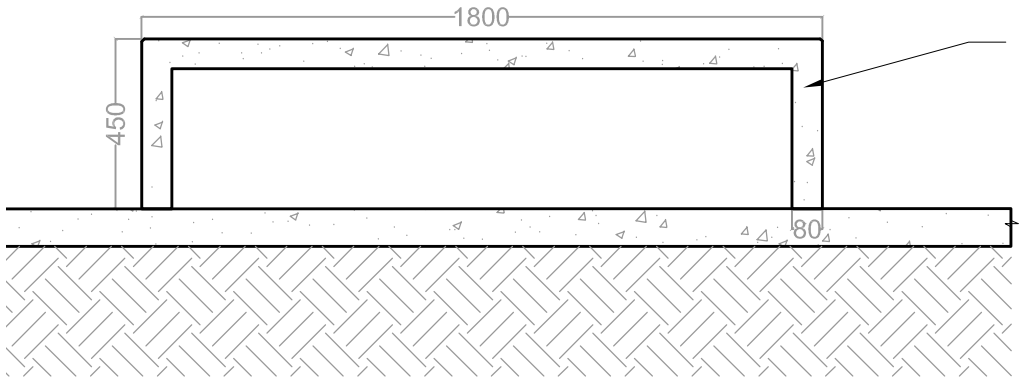


Section A-A through Performance Platform 1:20



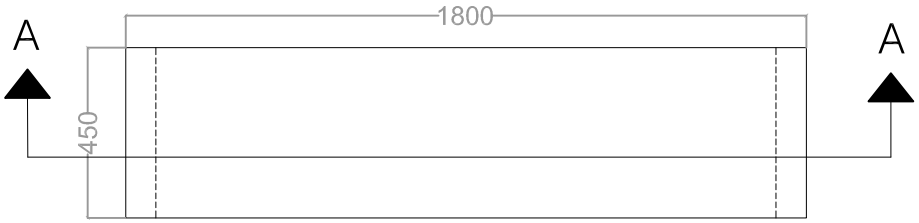
Elevation of Performance Platform 1:20

Detail of Concrete Bench

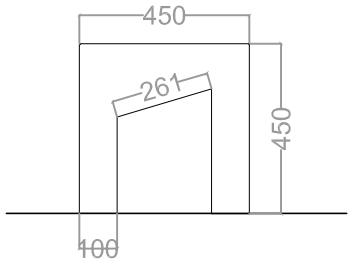


1800 x 450 x 450 precast concrete bench placed on completed paving

Section A-A through Concrete Bench 1:20

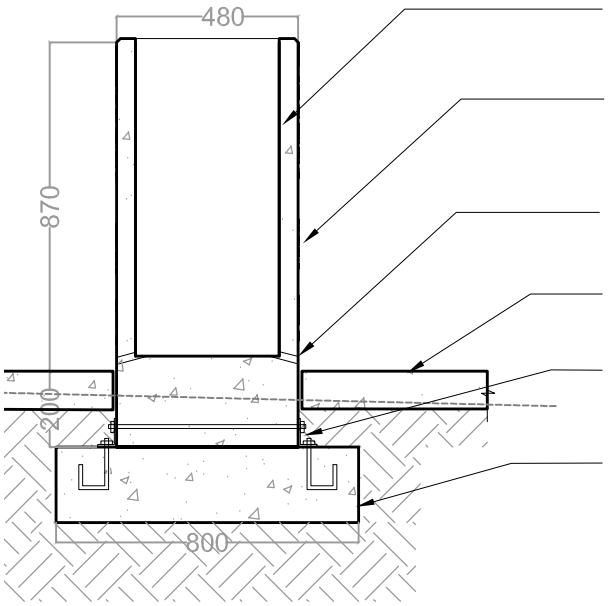


Plan of Concrete Bench 1:20



Concrete Bench Elevation 1:20

Detail of Concrete Refuse Bin



480 x 480 x 1070 precast concrete refuse bin with chamfered edges

ceramic mosaic tiles epoxy glued to precast concrete refuse bin at the Marabastad Traders Centre for Arts

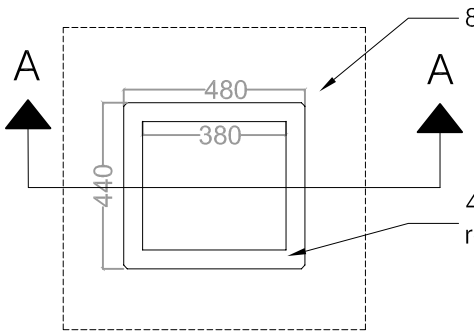
20 drainage holes

100 cast in situ concrete slab on compacted layer works

75 x 50 x 6 galvanised steel unequal leg angle bolted with M10 bolts

800 x 800 x 200 concrete foundation cast with 10 galvanised steel J-bolt reinforcing

Section A-A through Concrete Refuse Bin 1:20

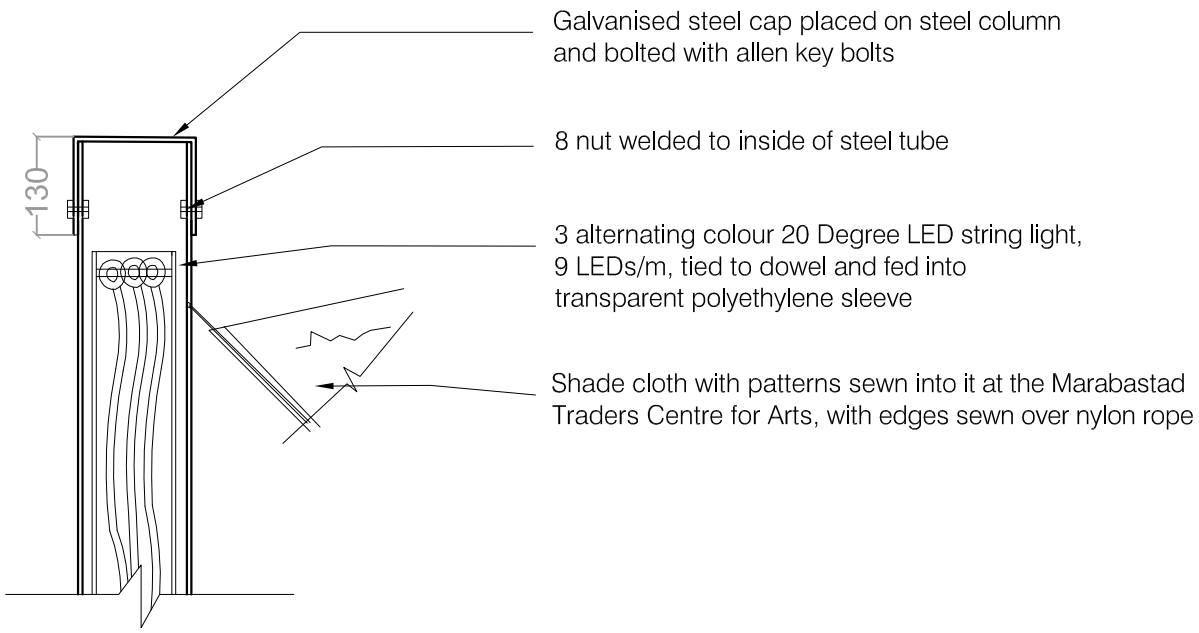


800 x 800 x 200 concrete foundation

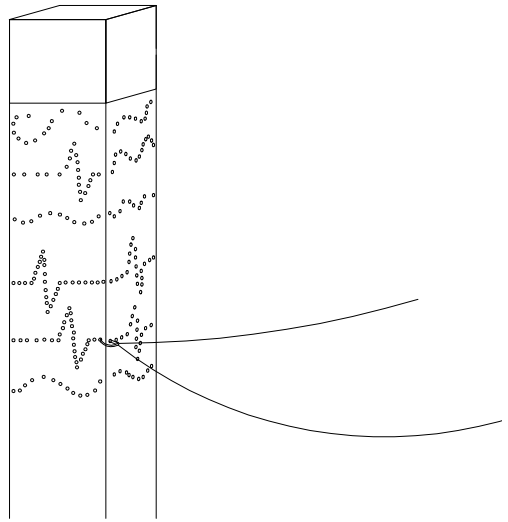
480 x 480 x 1070 precast concrete refuse bin with chamfered edges

Plan of Concrete Refuse Bin 1:20

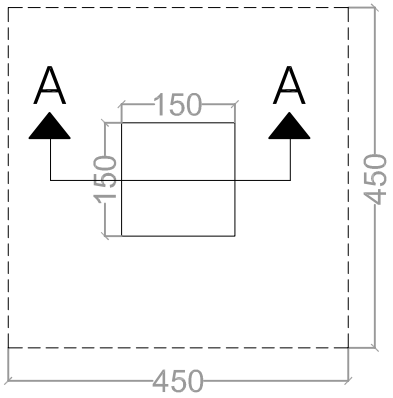
Detail of Steel Light Column



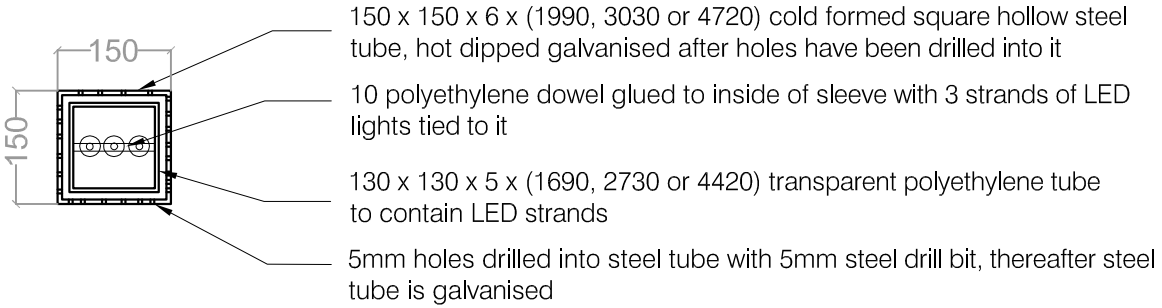
Section A-A: Fixing of Shade Cloth to Steel Light Column 1:10



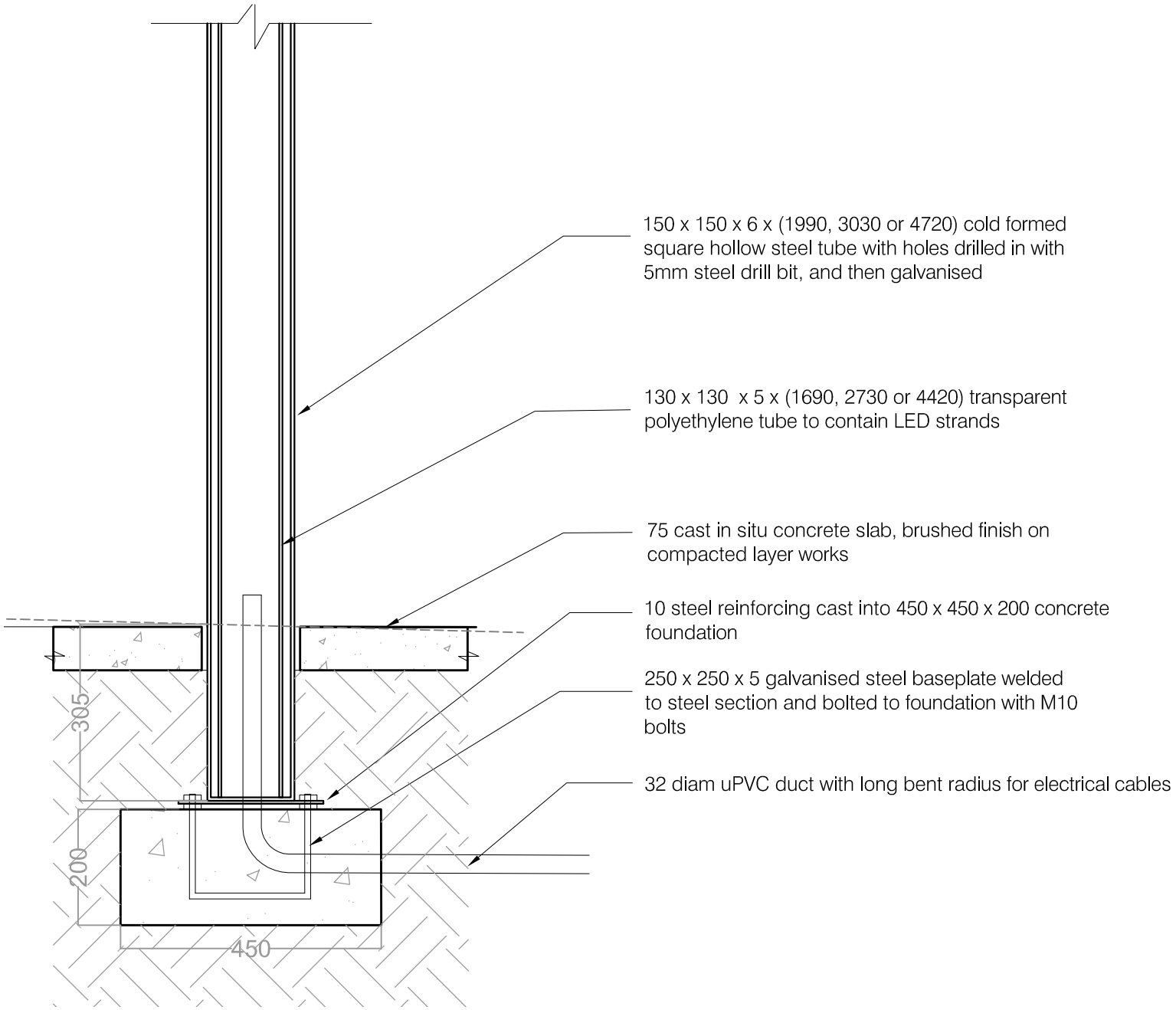
3D of Steel Light Column



Plan of Steel Light Column 1:10



Cross Section through Steel Light Column 1:10



Section A-A through Steel Light Column foundation 1:10