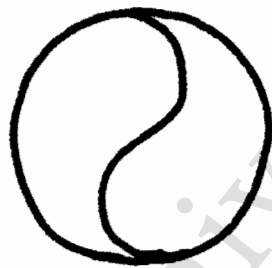


A SCHOOL OF GENERAL KNOWLEDGE
SPECIAL STUDY
THE JUNCTION OF BUILDING TO SITE



Thesis for B. Arch
Roger du Toit
University of Cape Town
June 1963

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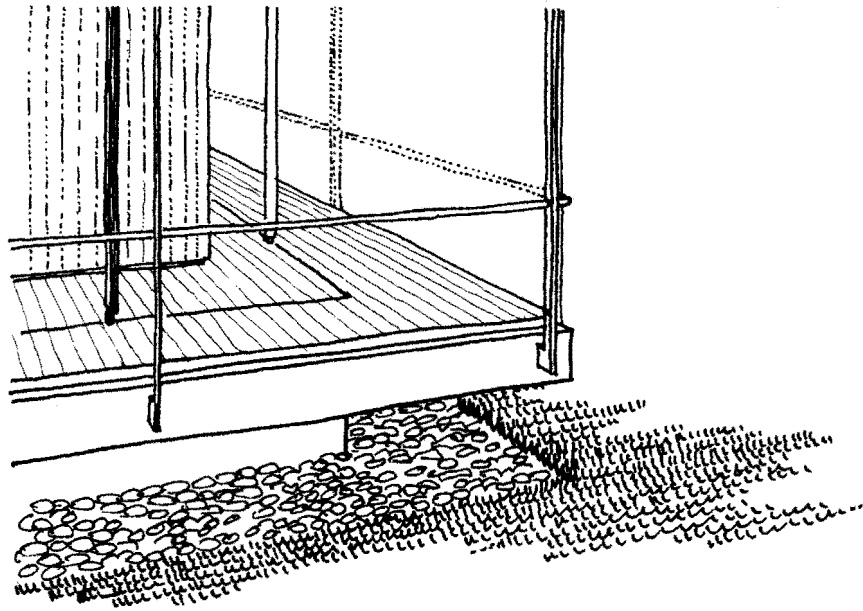
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In the design of detail, there are two aspects that require special attention. The first is the meeting of building elements with each other, the second is the meeting of building and site elements. This special study is concerned with the second. Its starting point is that the architecture harmonises rather than contrasts with its surroundings.

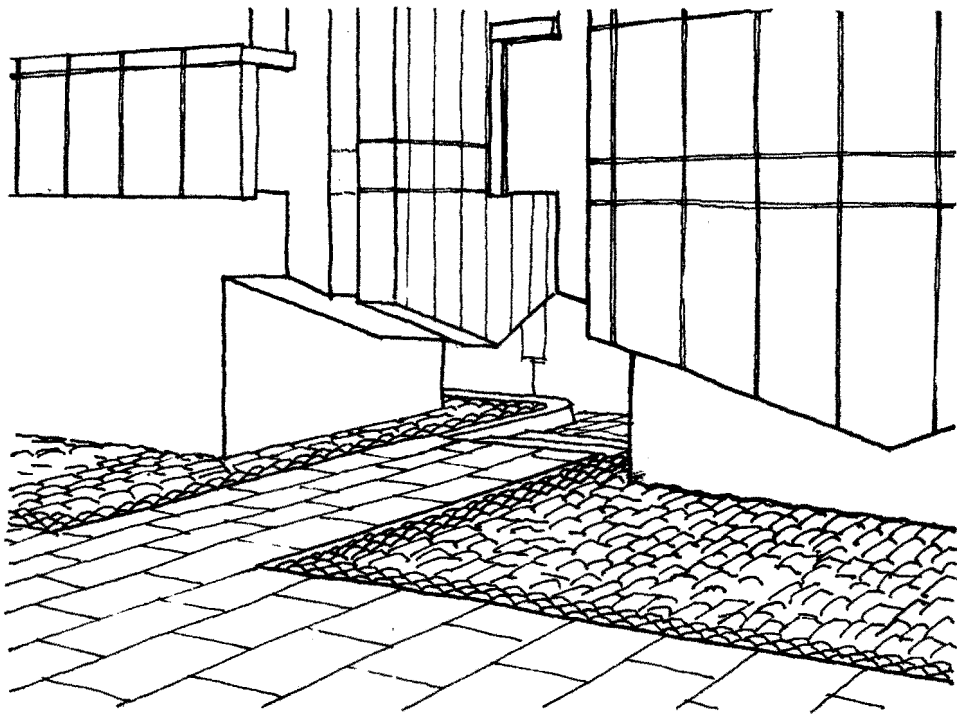
PRECEDENT

Where the ground plane is sophisticated, obviously laid out to man's sense of order, transition elements between building and site are in context

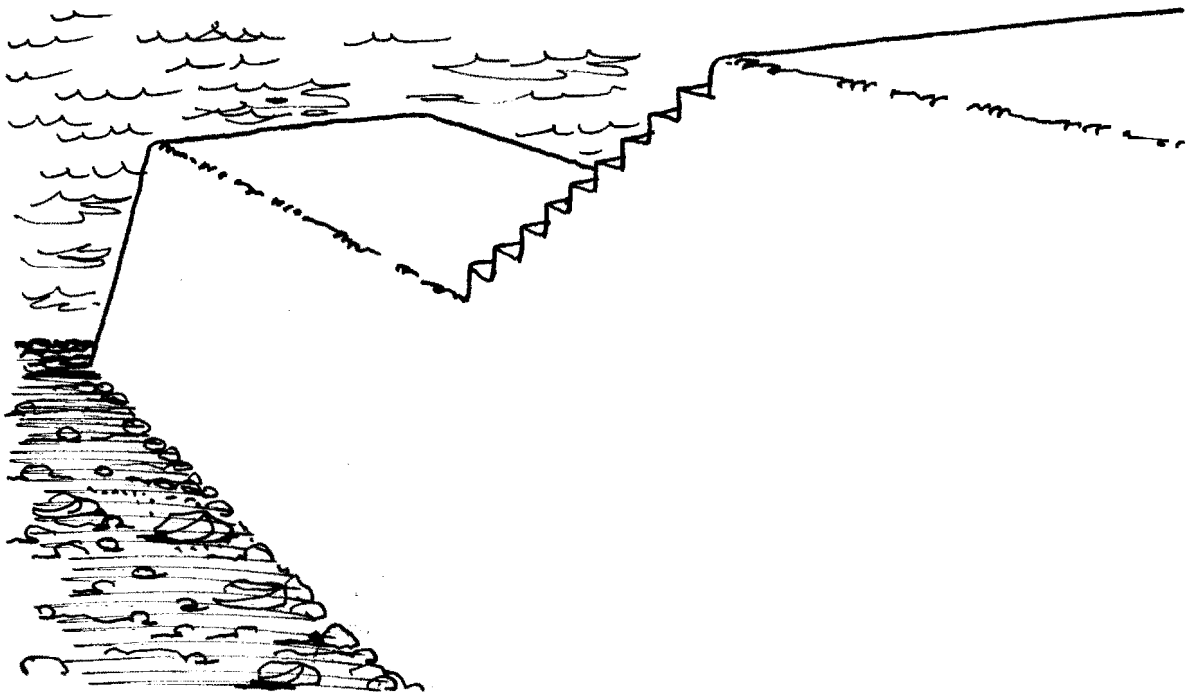
West German pavilion,
Brussels exhibition.

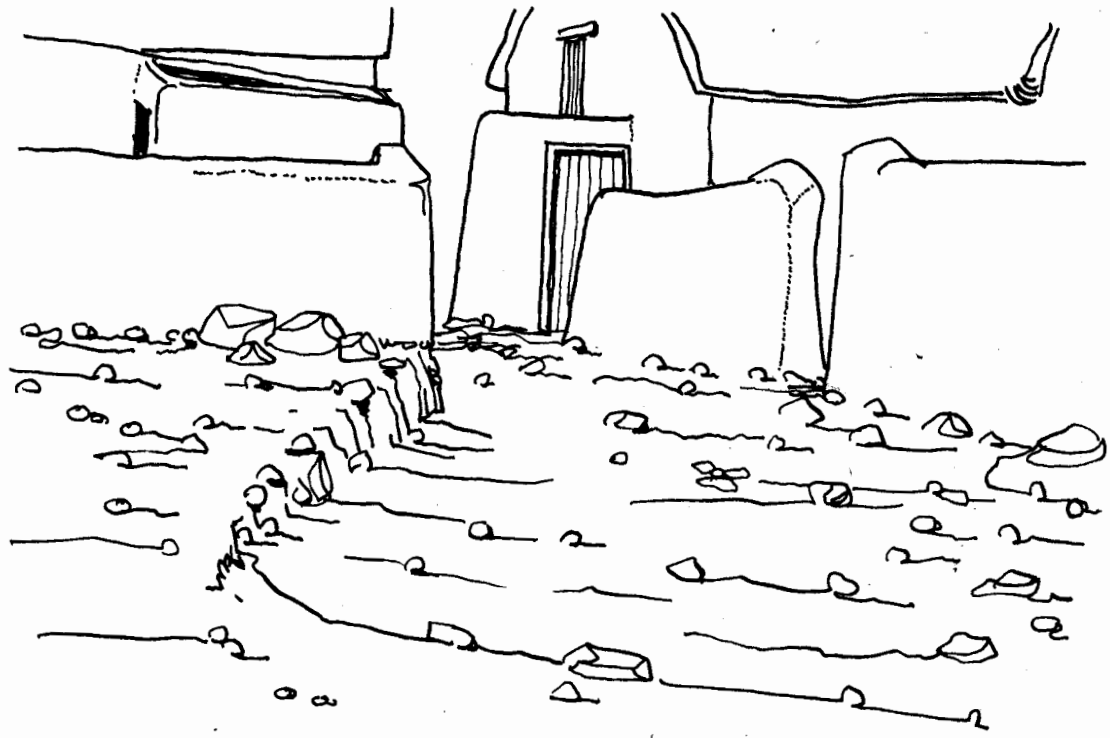


Keeling House
East End, London
Denys Lasdun

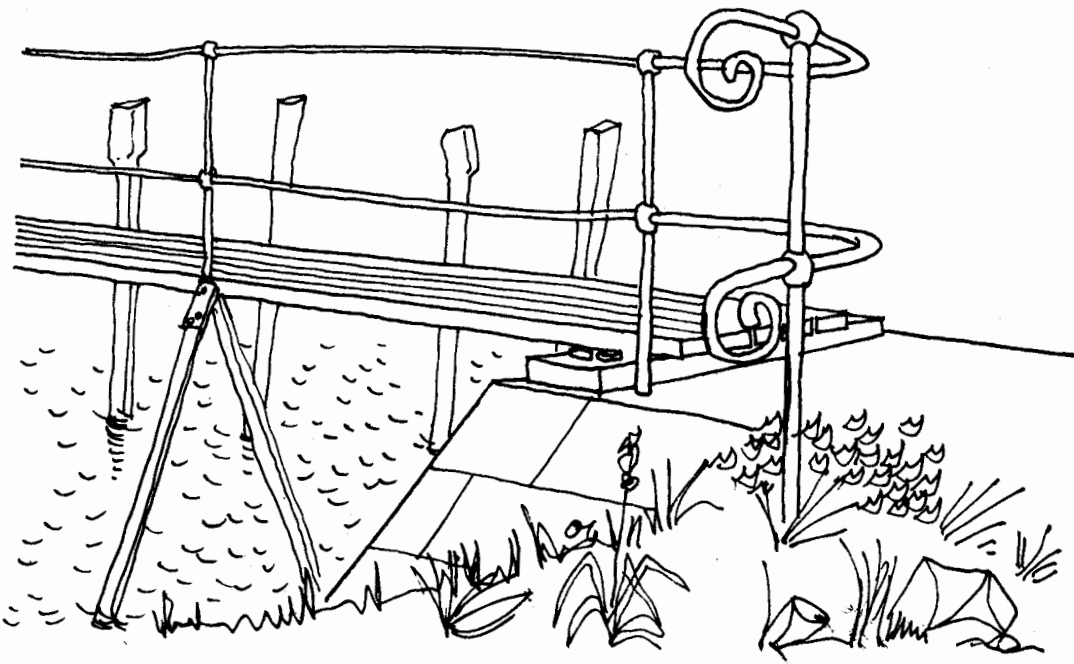


There are times, particularly when the site has great power of character, when the best solution is to run an equally powerful architectural element straight into it, with no transitional stages

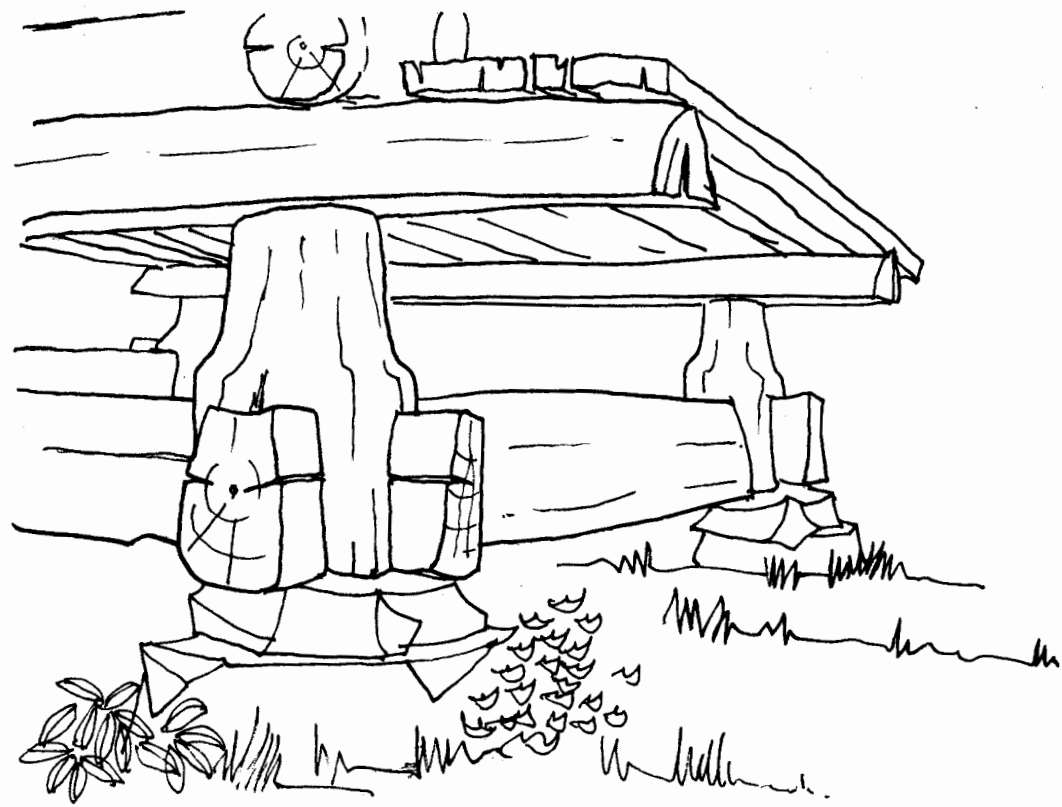




Elim, Cape



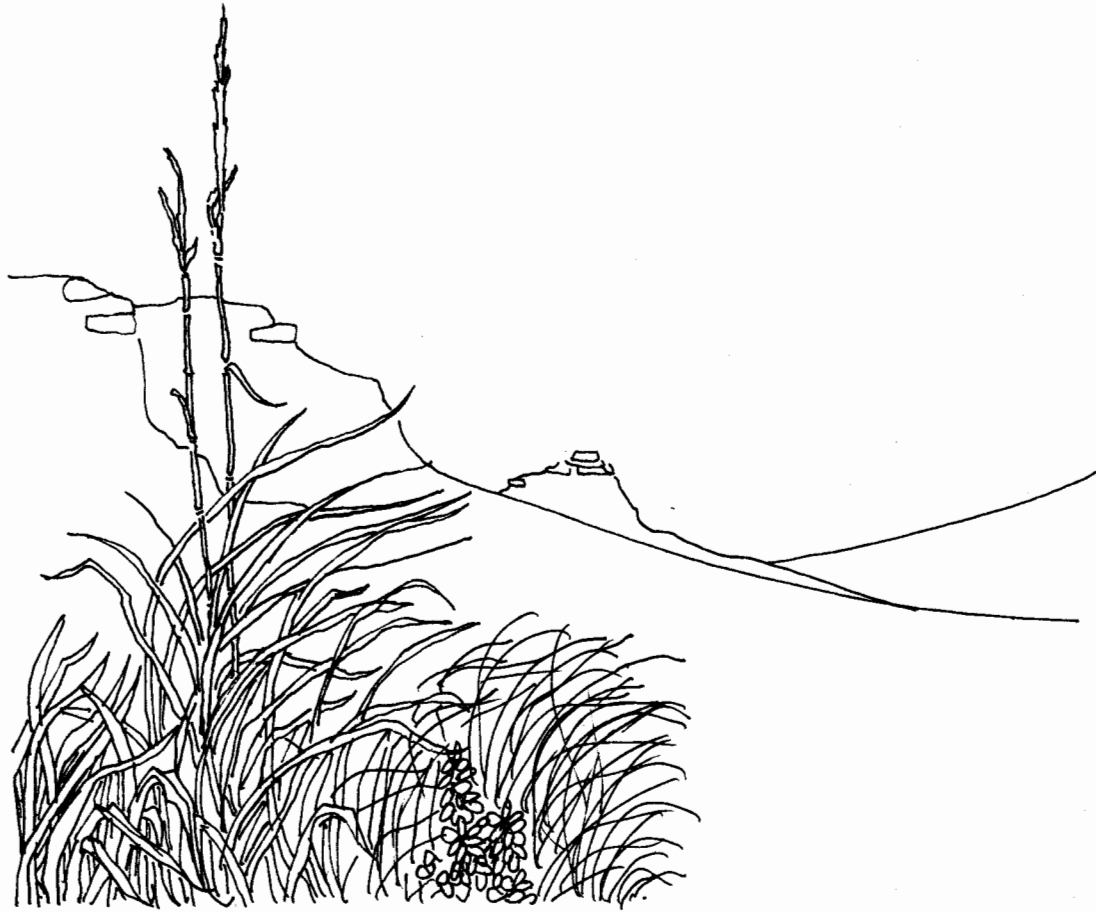
Bridge, England



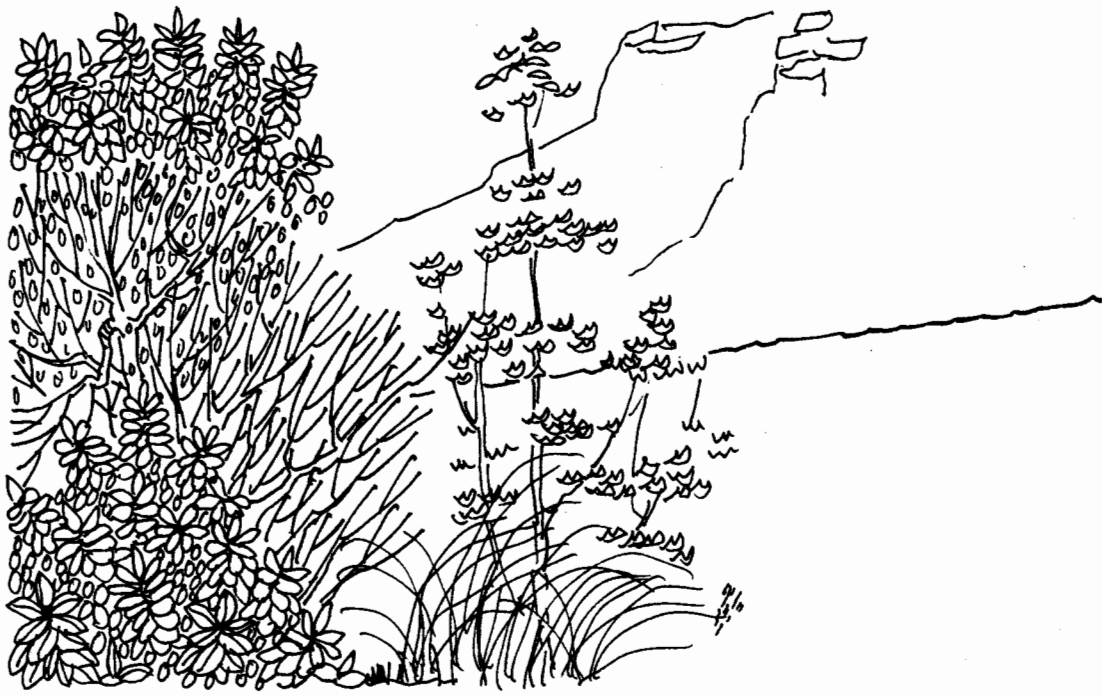
Log loft,
Norway.

SITE ELEMENTS

Heather occupies the greatest area of the immediate site.



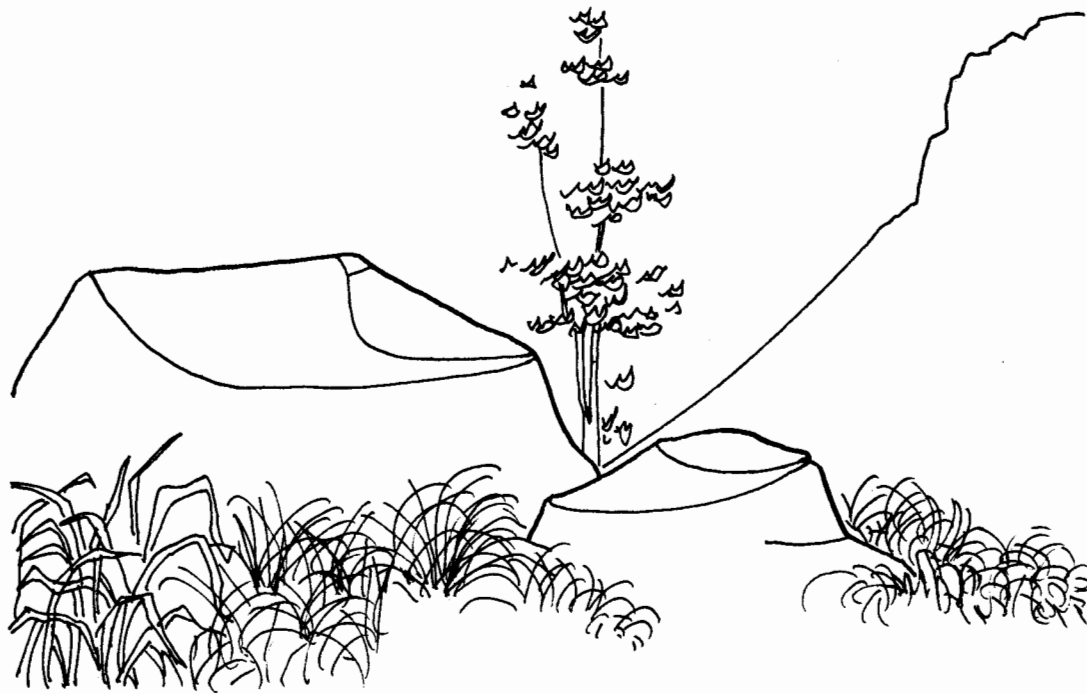
Shrub takes its place as the site drops into the valley on the south and east.



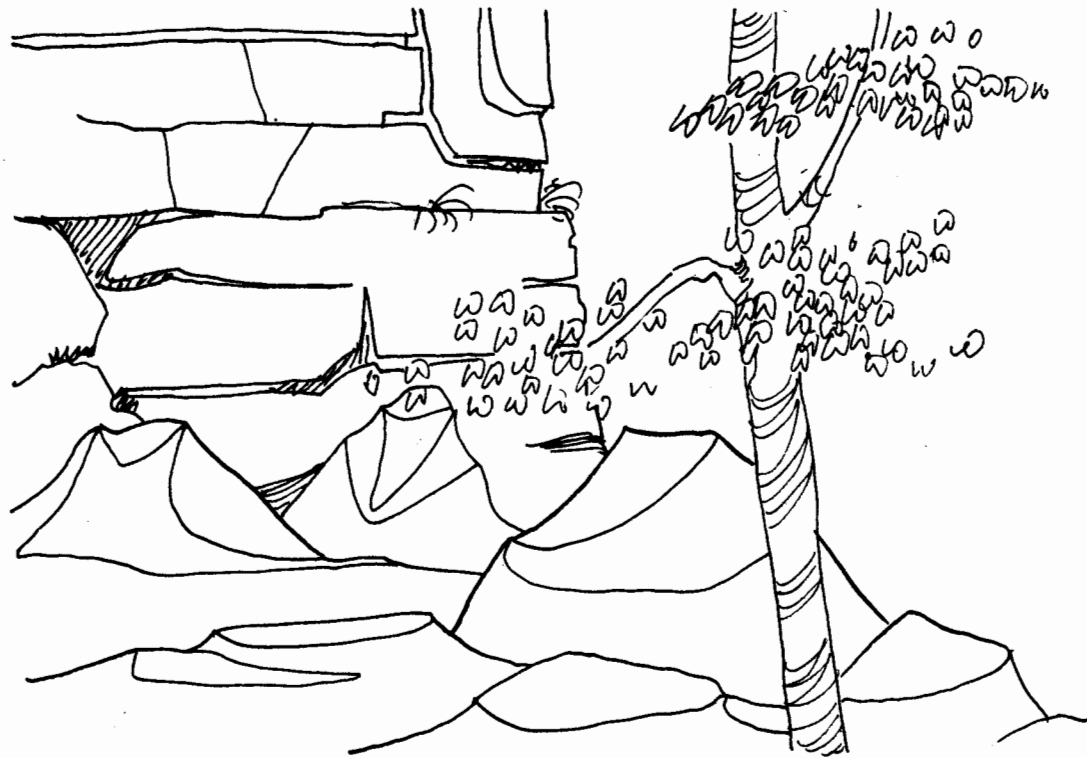
Indigenous bush grows profusely in the sheltered slopes, covering very large areas in related to other parts of Table Mountain



Large boulders sprinkle
the south east brow



A sharp 20 ft. cliff
rises from the
indigenous bush
of the ravine to the
heather of the site



Probably the finest stream
in the peninsula
runs through the ravine
flanking the west of the site



BUILDING ELEMENTS

1. HORIZONTAL

Earth concrete for
the approach road

Setts and pebbles as
transitional elements

Brick for paving.

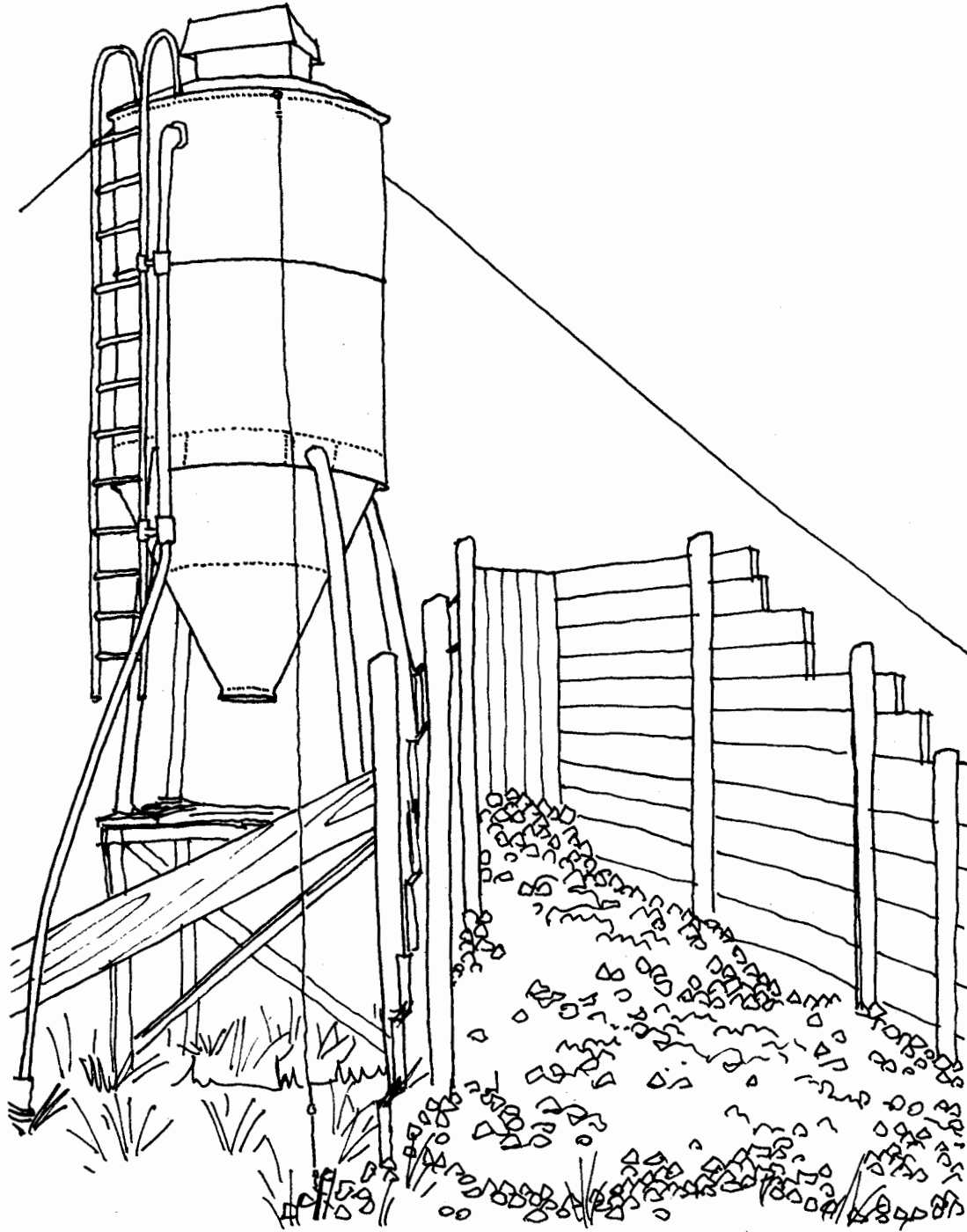
2. VERTICAL

Light toned off-shutter concrete
forms the main structure

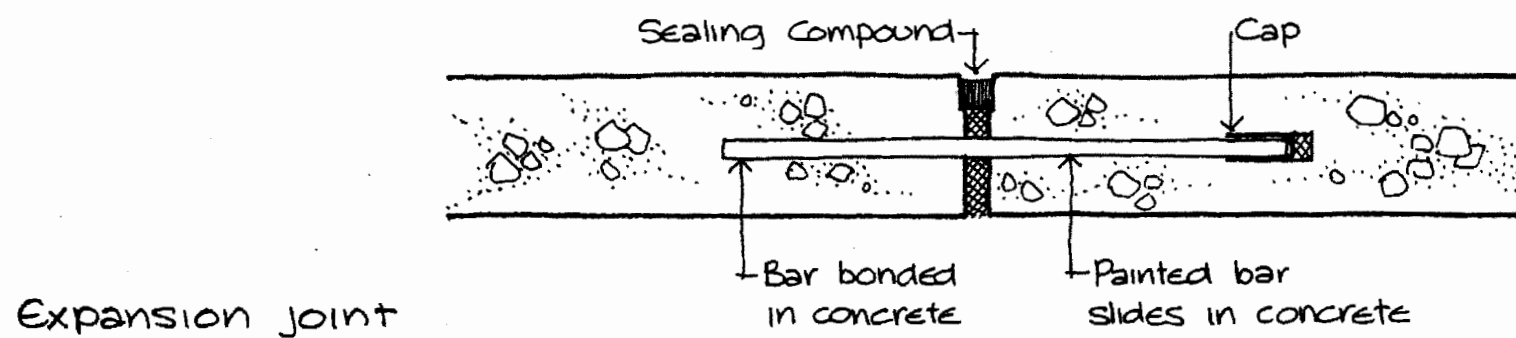
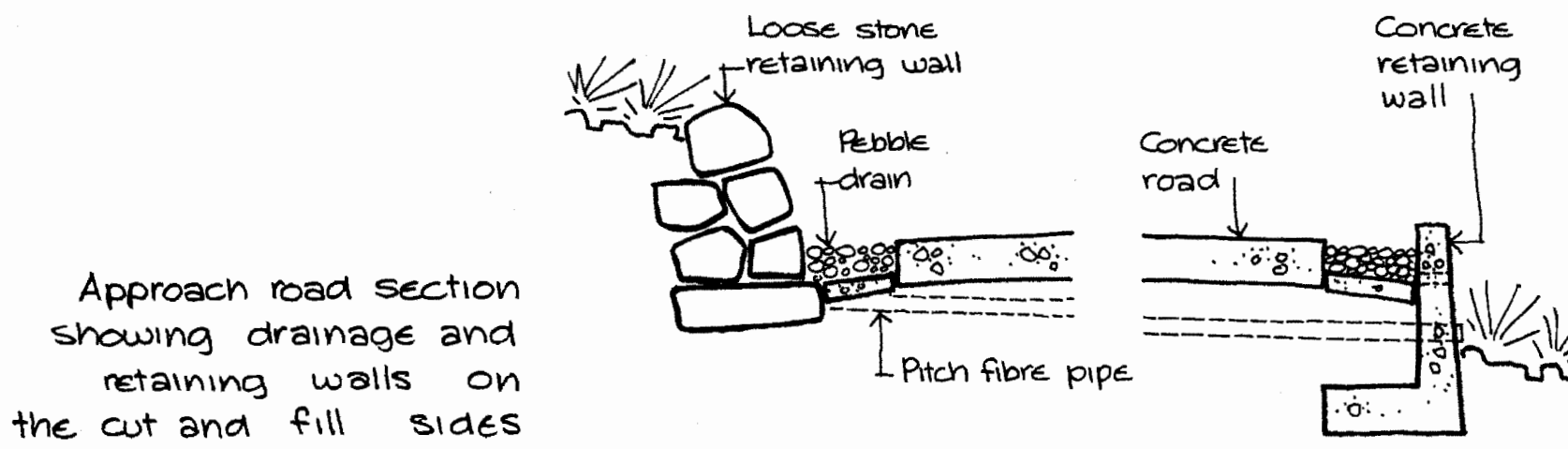
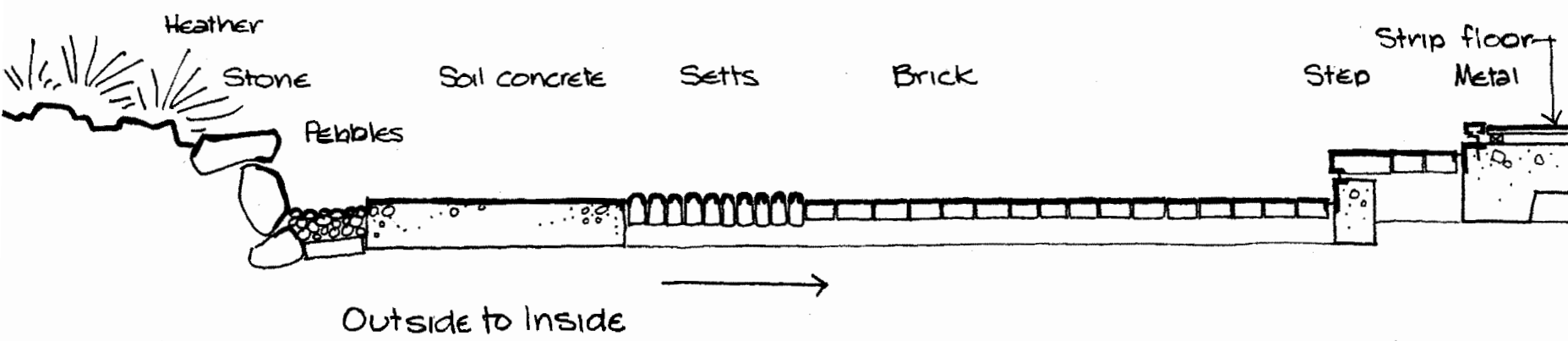
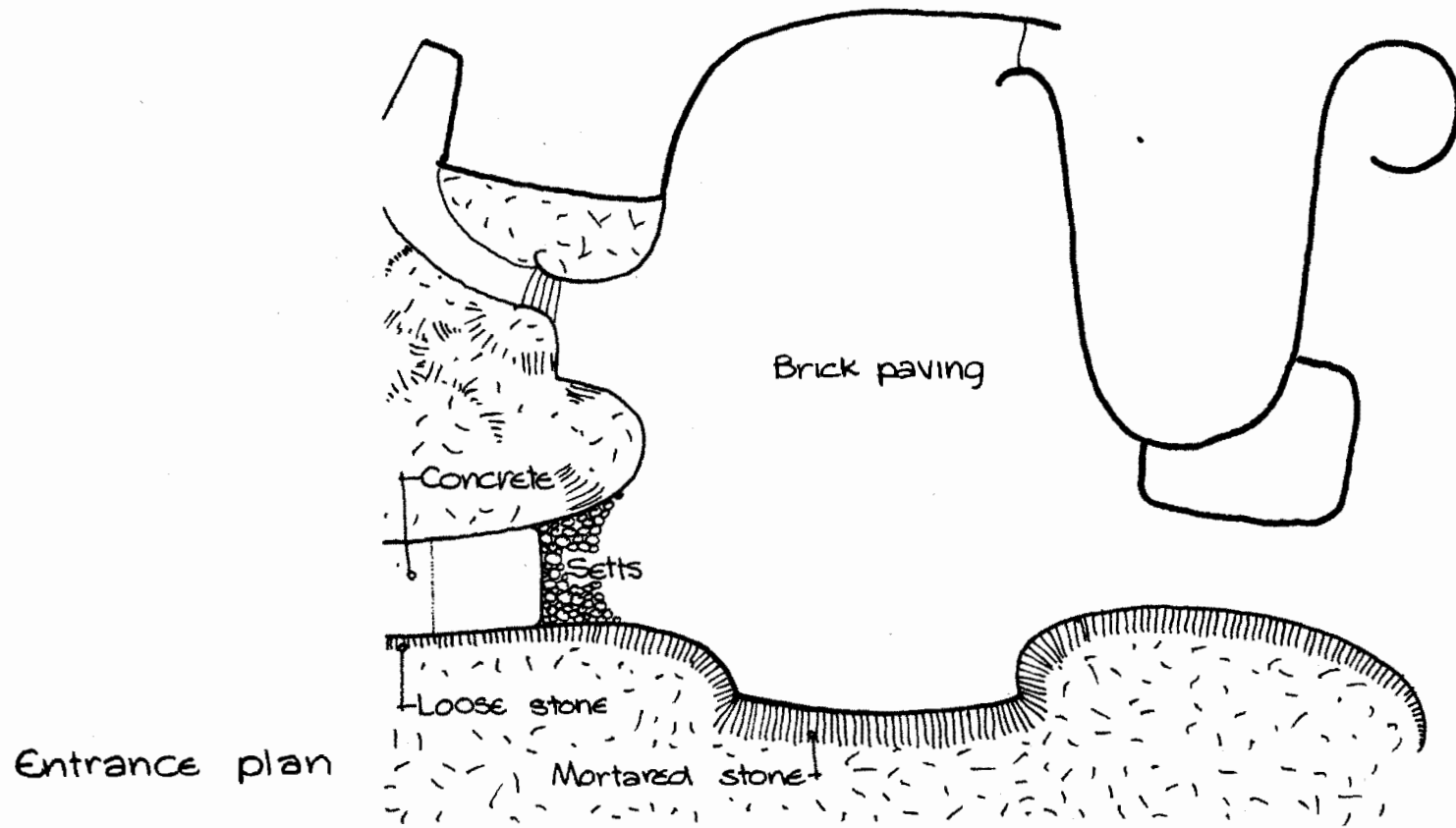
Glass fills the voids

Rough red cedar for panels

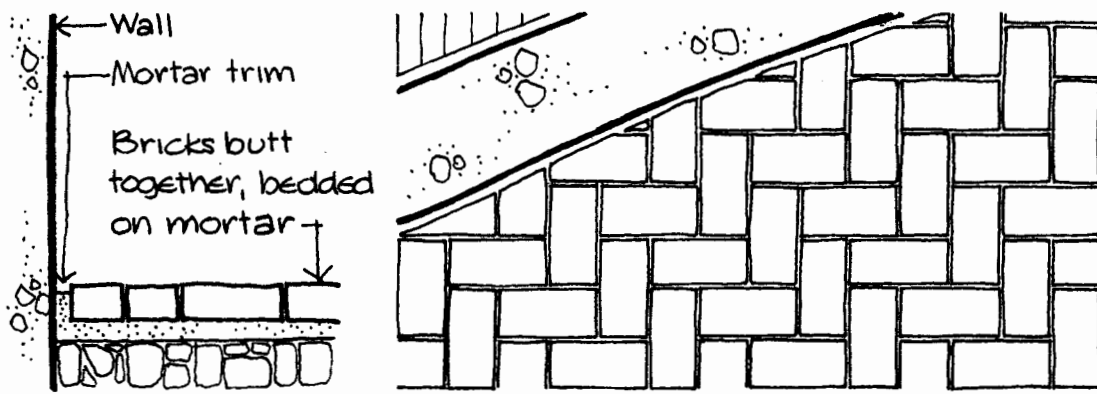
Metal for framing and fixing



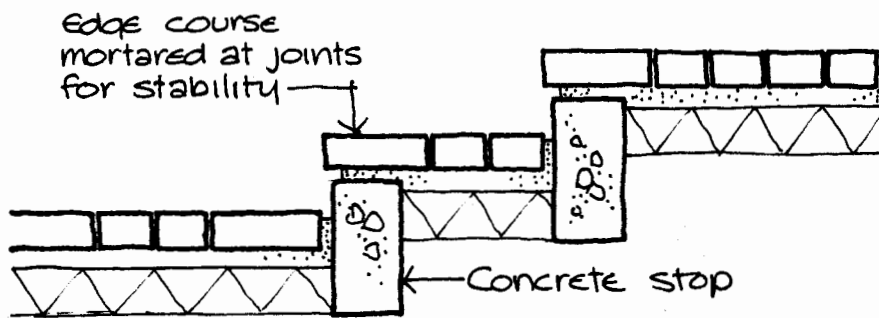
PROGRESSION



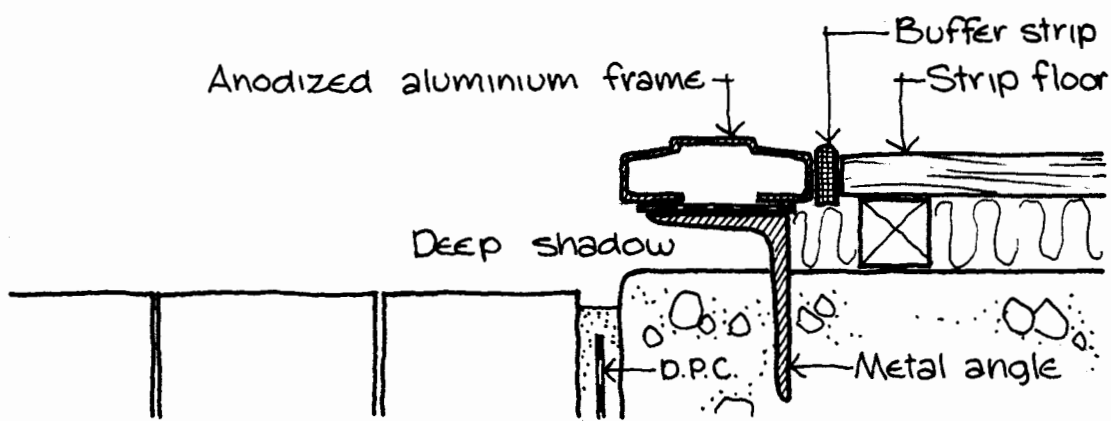
Herringbone pattern, free-flowing without rigid boundaries, paves the irregular plan shapes of the motor courts



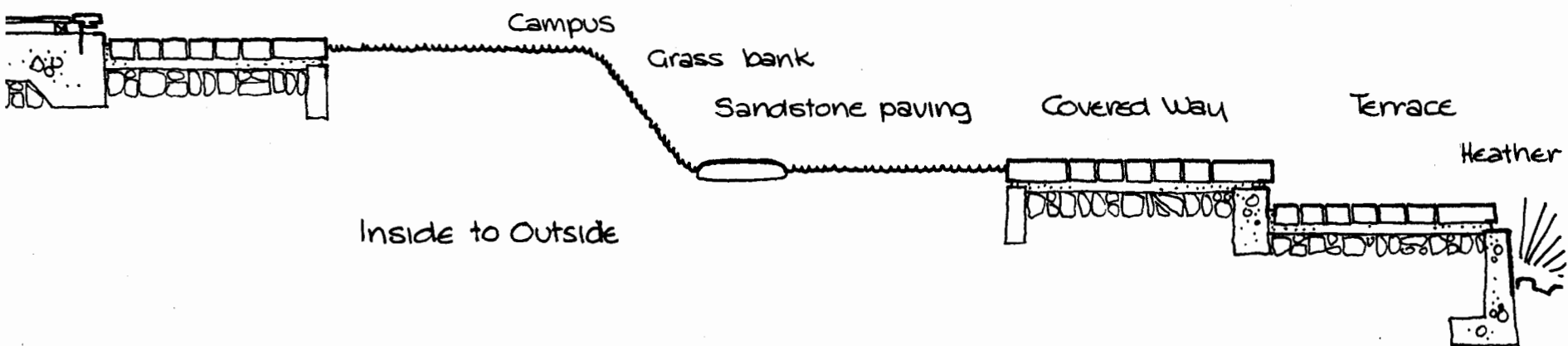
Brickwork steps



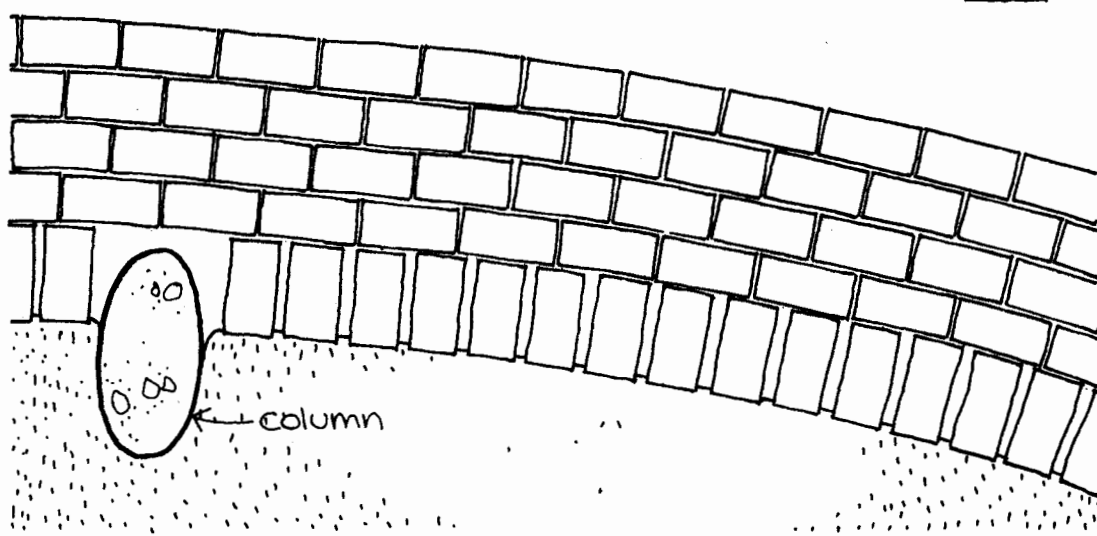
A definite change of level and material at the threshold prevents stumbling



Inside to Outside

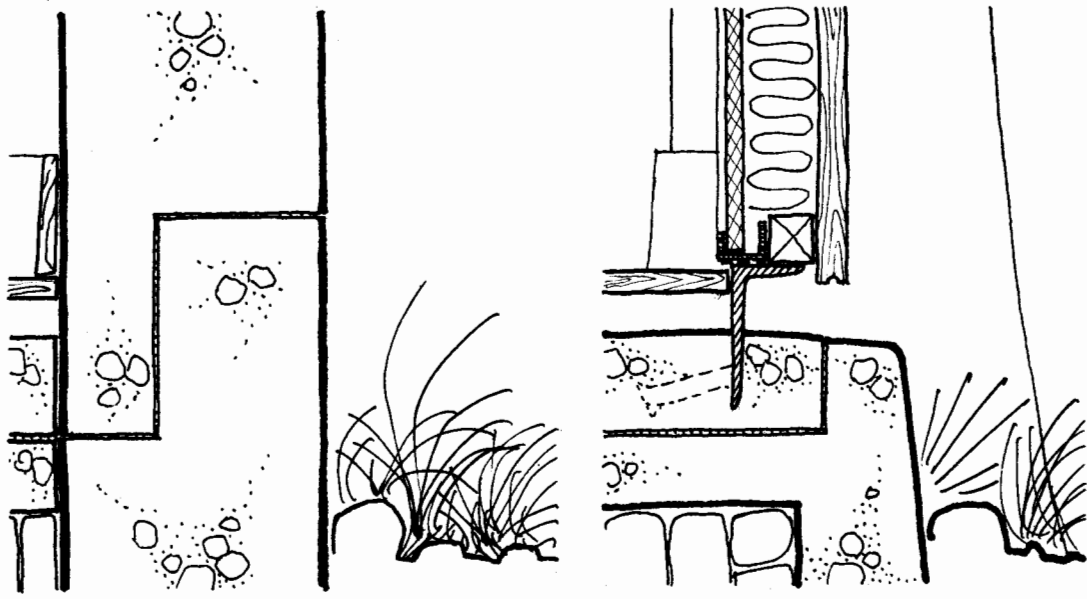


Stretcher bond, directional with a definite boundary, paves the strong continuous plan form of the covered way



DETAILS

Concrete walls
run directly
into the heather
Panels are protected
from the ground line
by a projection
of the floor slab

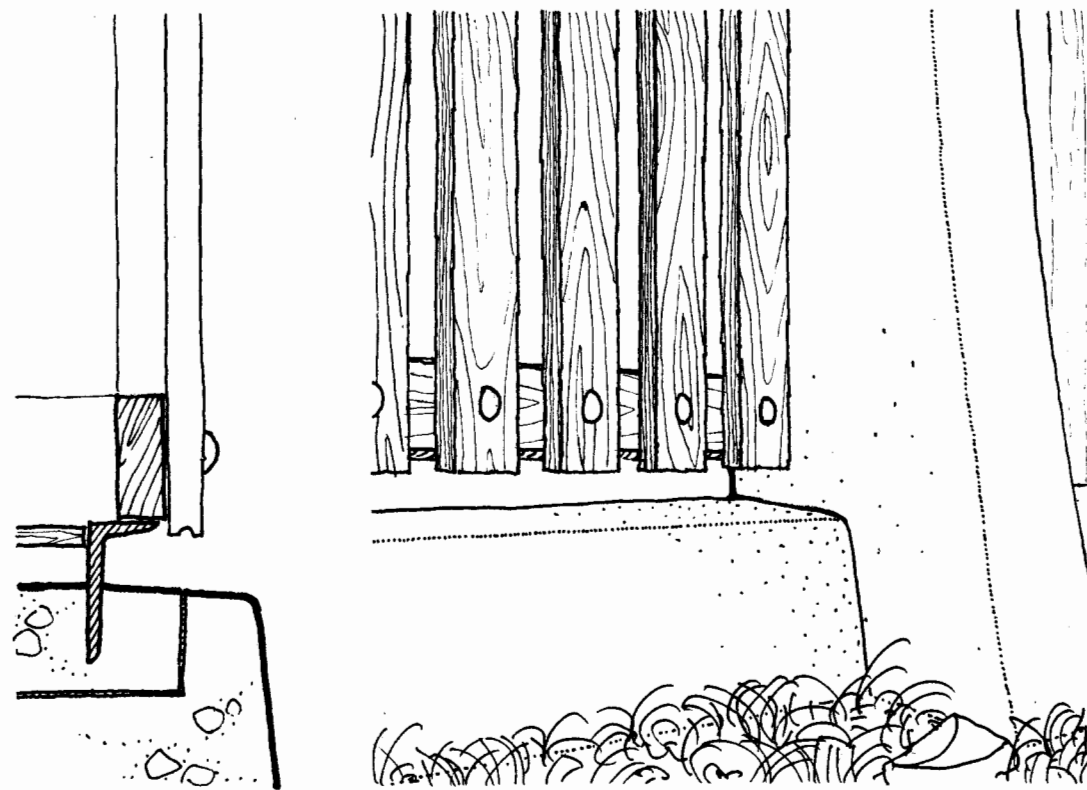


The difference in
wall and panel detailing,
though both direct,
enhances the individuality
of each material —
concrete is poured,
panels are fixed.
... refer Elm

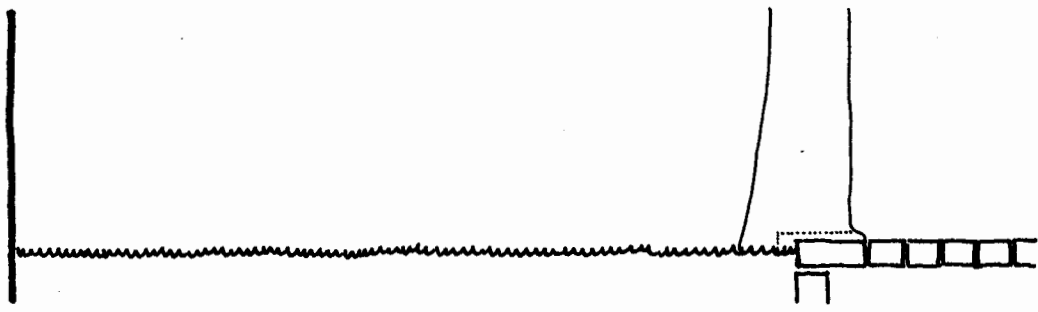


Wall and panel to outside

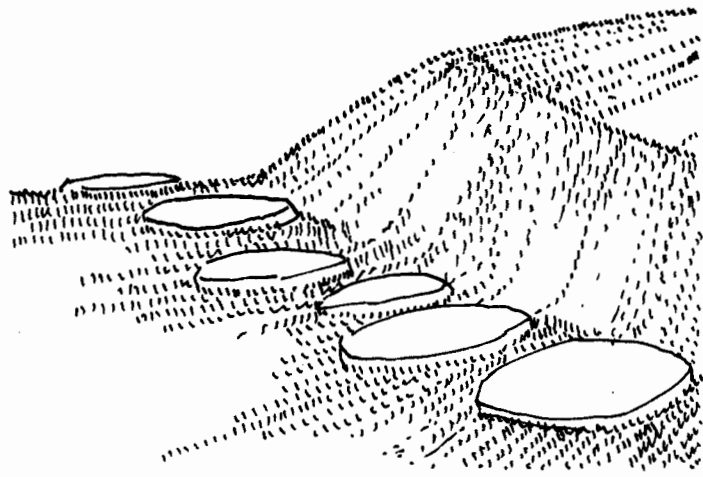
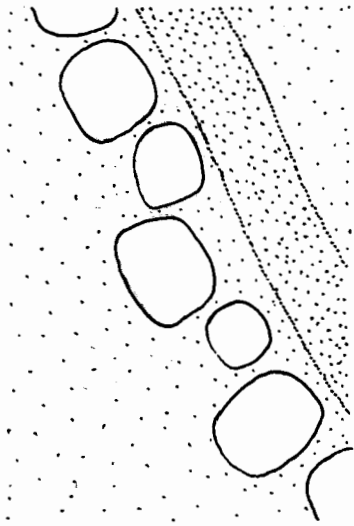
The weather is
filtered, not barred,
at stair landings.
The view is screened—
a glimpse, not a panorama



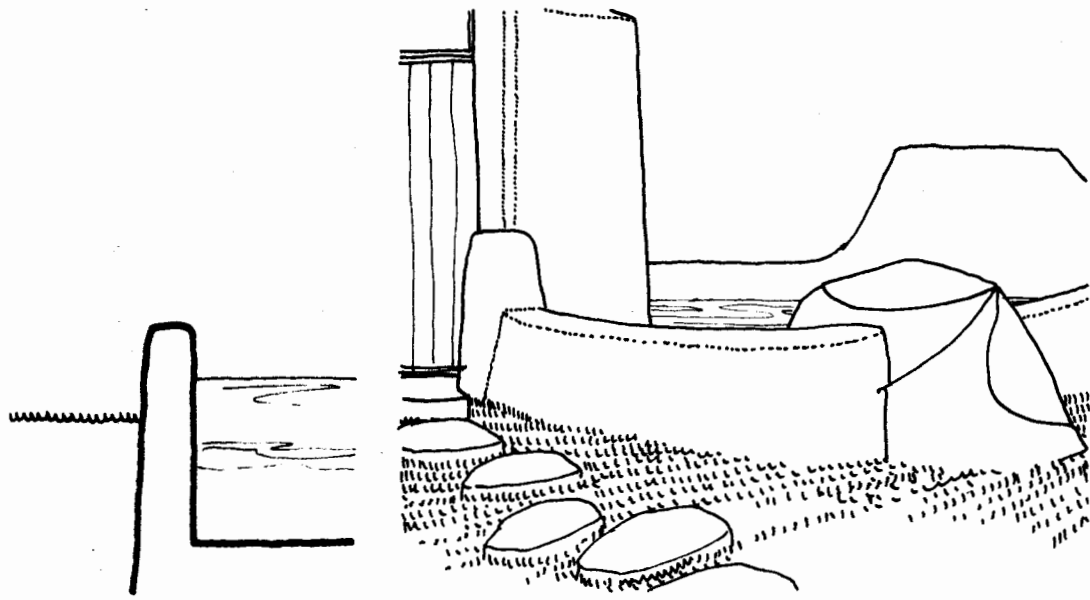
The grass surface within
the campus flows
between the concrete walls
and brick paving.



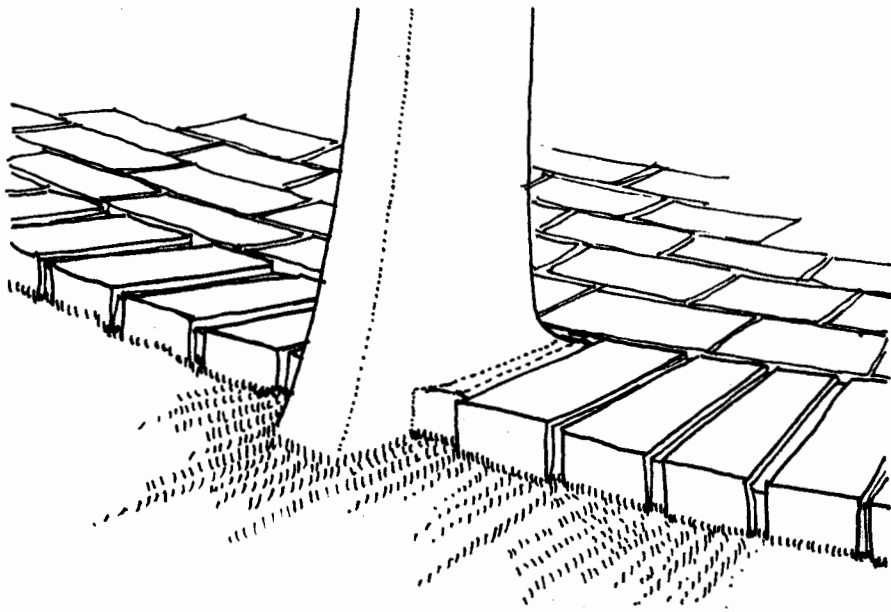
The path is a series
of stepping stones



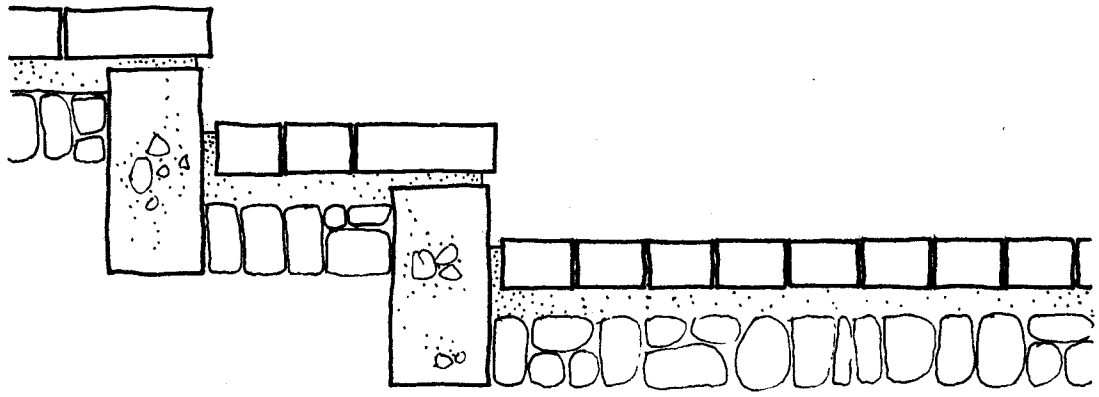
The pool becomes
an island



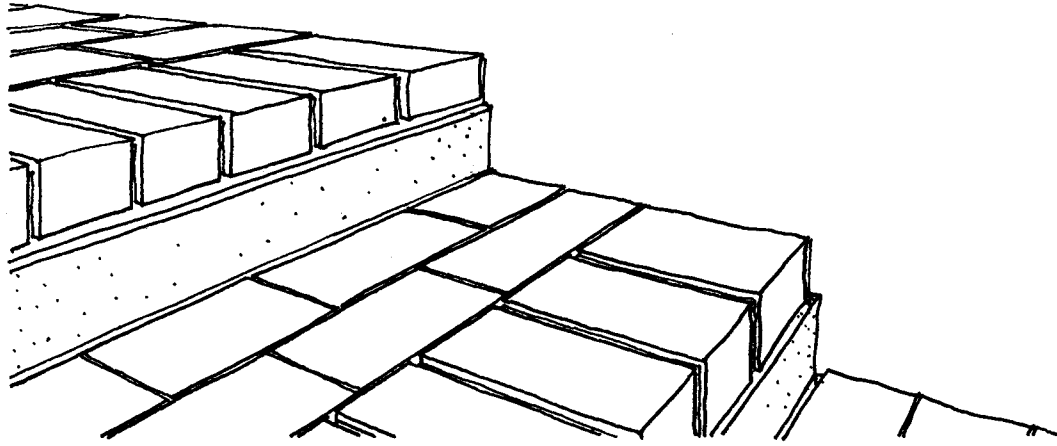
Covered way
column junction



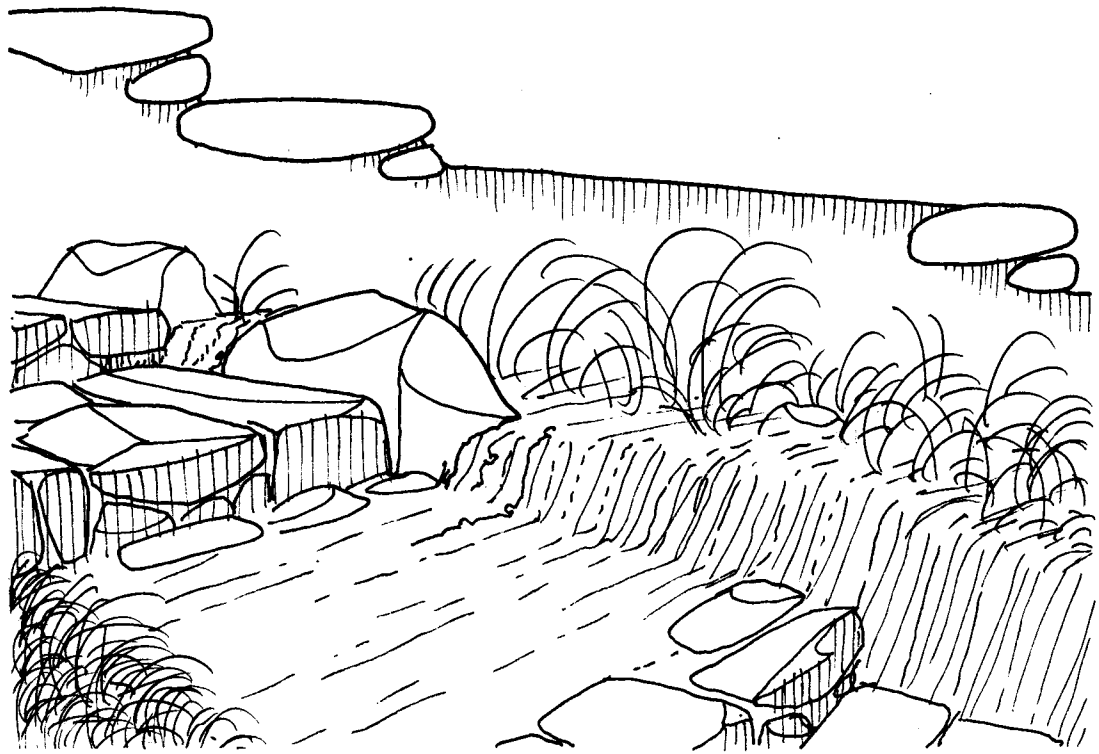
Steps inside
are made up of
rigid brick units



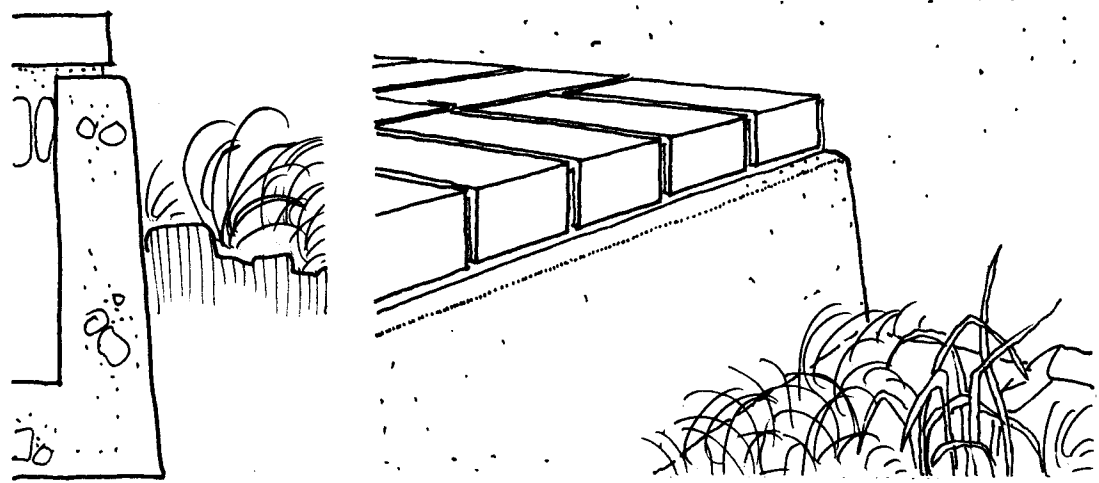
Materials are treated
to bring out
their individuality



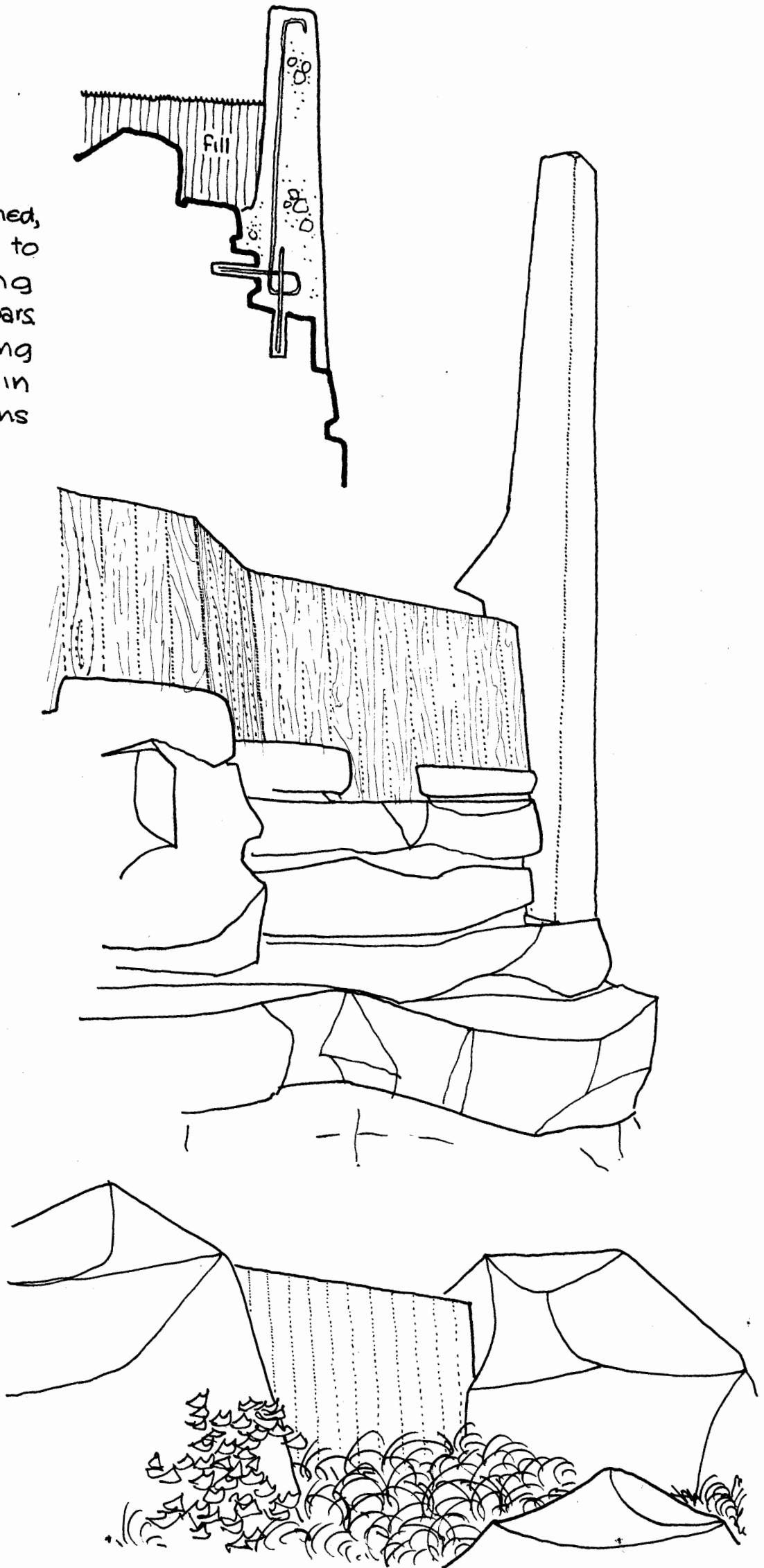
Steps outside
are made up of
loose stones
of various sizes



Living unit
steps of brick
rest on concrete
retaining walls



The rock is cleaned,
holes are drilled to
take re-inforcing
and splice bars
Vertical wood shuttering
laid on rock in
convenient positions



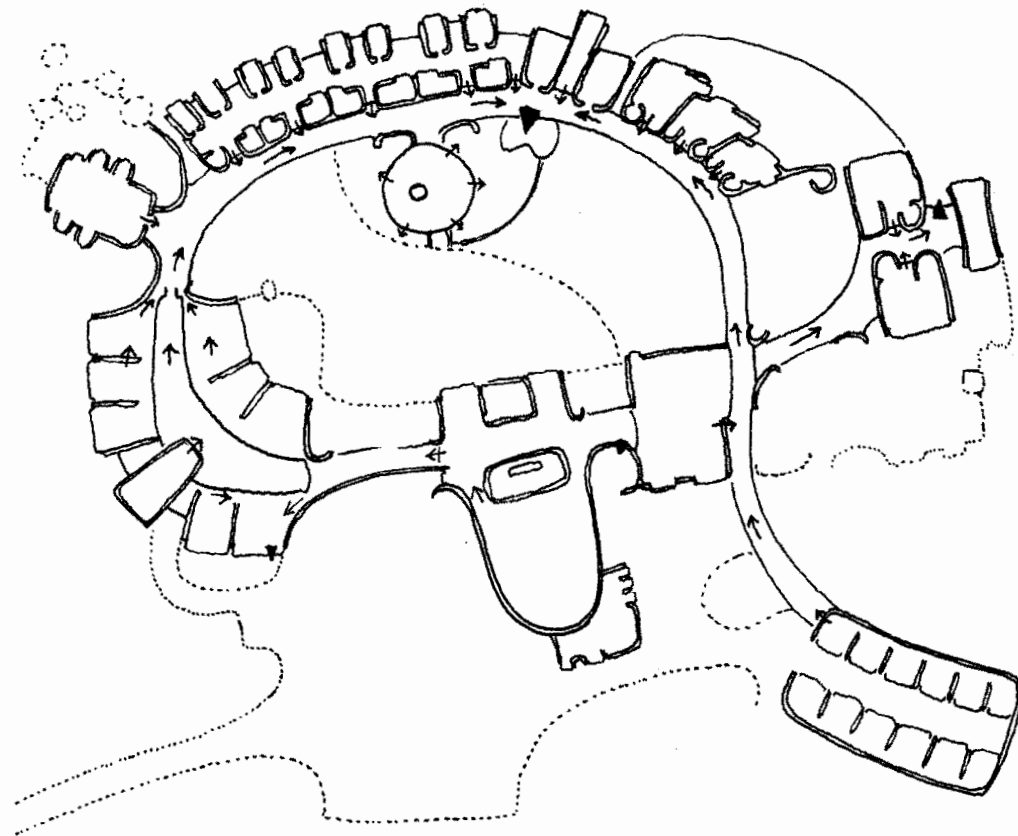
Concrete retaining wall
cast between boulders
to enclose a
library reading court

The complex will be seen as often from above as from base level — roof character becomes vital to the proper setting of building to site.

Sod fills the flowing spaces created by the plan forms. Mastic asphalt tanking provides a surface impervious to water.

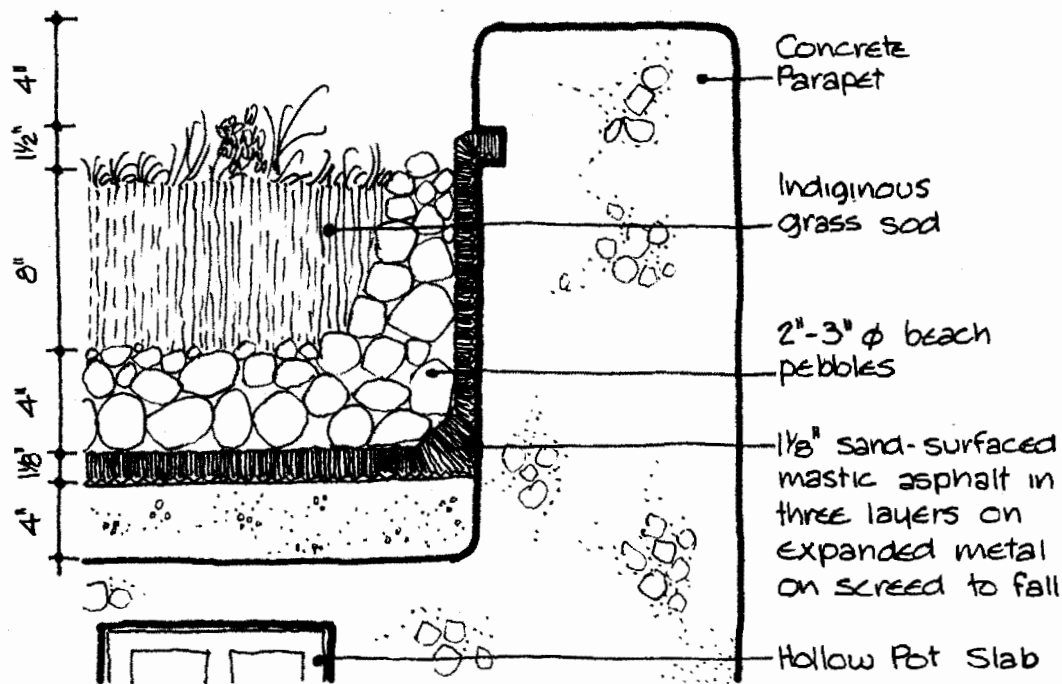
A loose beach pebble base provides seepage.

Water is collected by the covered way roof which falls to a central gargoyle feeding a pool beside the hearth



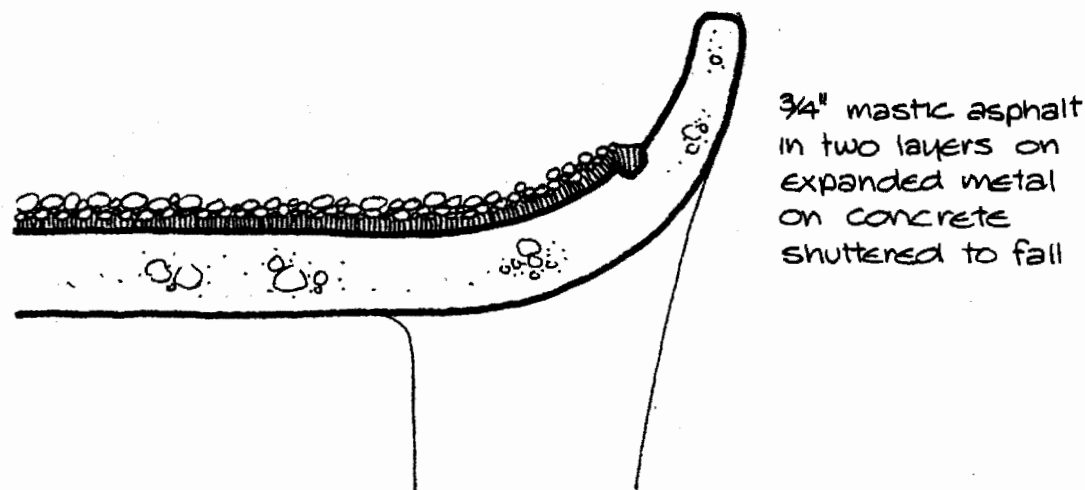
Water seeping through the sod drains slowly from the roofs to the pebbled covered way through a system of gargoyles, creating an artificial spring which continues to feed the gargoyle pools long after the shower

Roof Detail-



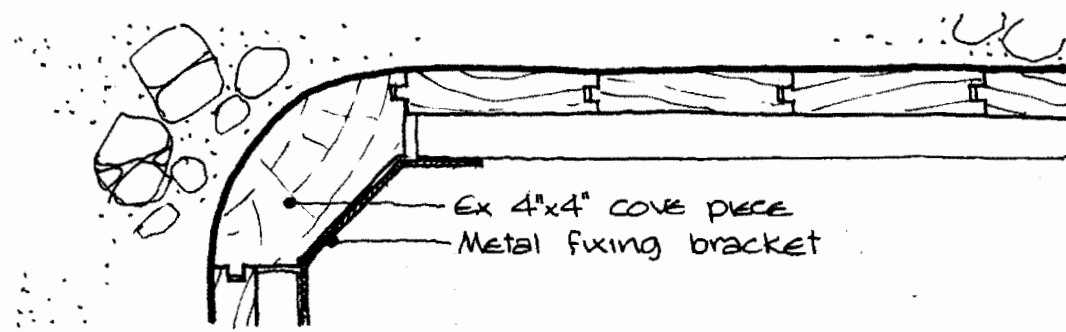
Pebbles used are from a beach deposit between Milnerton and Blaauwberg Strand of smooth oval stones. They have subtle tone and hue variations, which come out particularly when wet.

Covered way aqueduct-

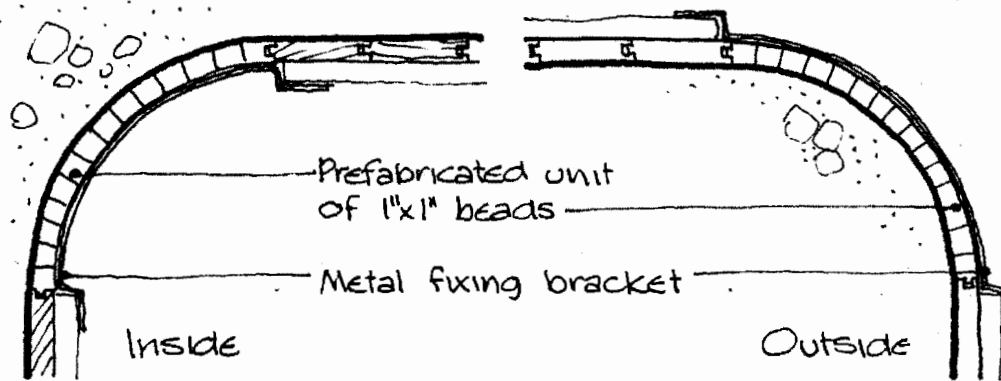


SHUTTERING

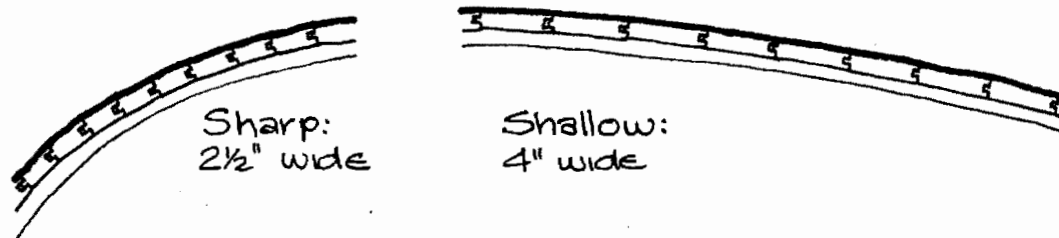
Plan curve A: 4" ϕ
 Rightangular straight junctions
 i.e. in section between wall
 and roof slab



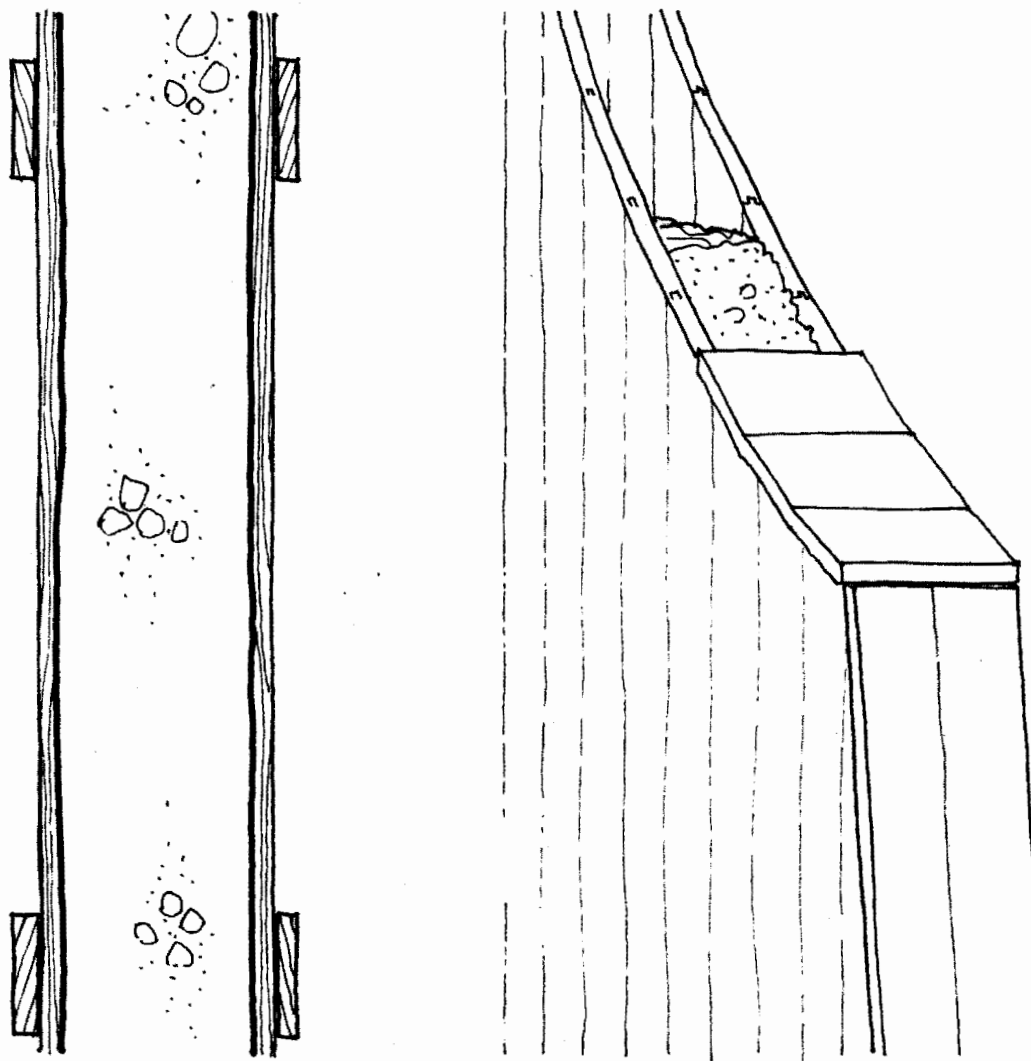
Plan curve B:
 20" ϕ arc - units
 made up and re-used



Transition curves:
 T&G boarding bent
 in position. Steamed
 timber framework
 provides even sweeps



Straights:
 4"x7/8" T&G boarding



All wall sections have
 parallel vertical faces.
 For wall height transitions
 the shuttering is
 set in position, the tops
 are cut to account
 for sweep, and it
 is clapped up as the
 concrete is poured