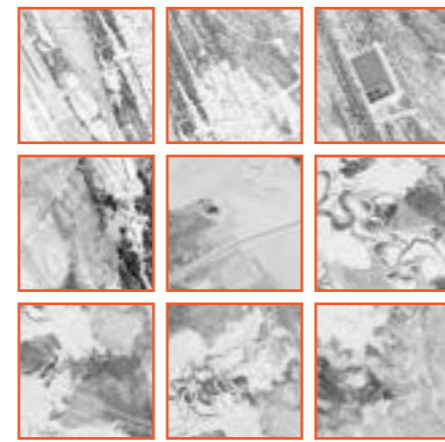
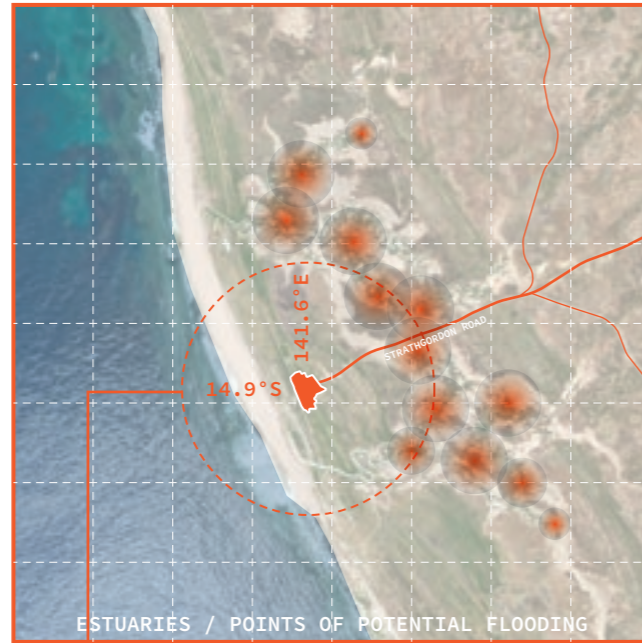
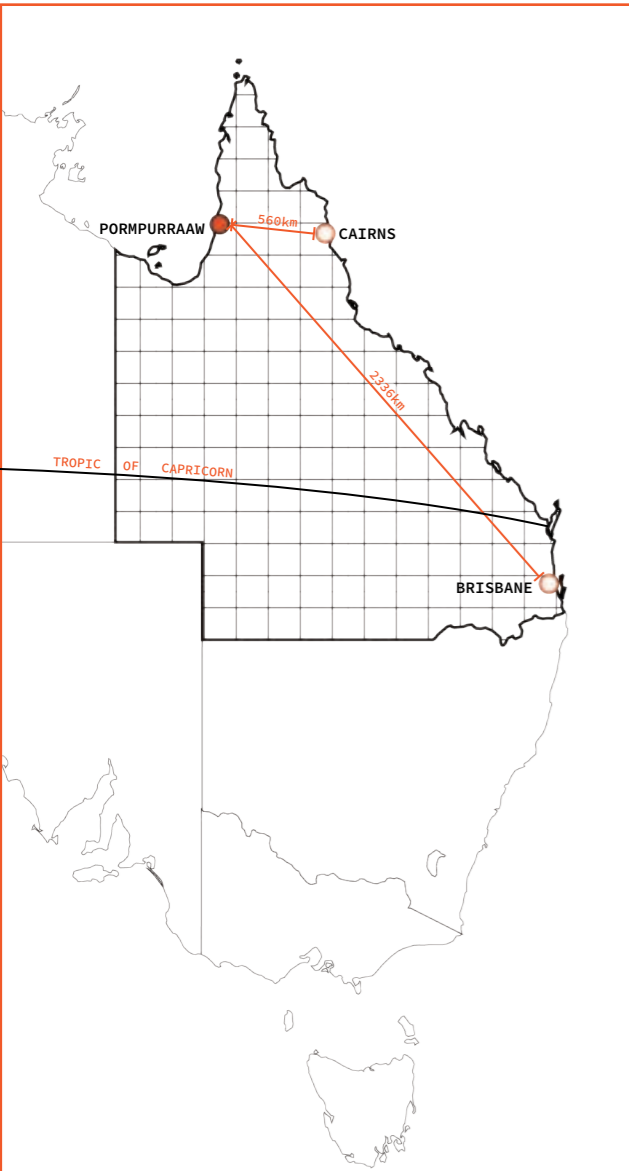


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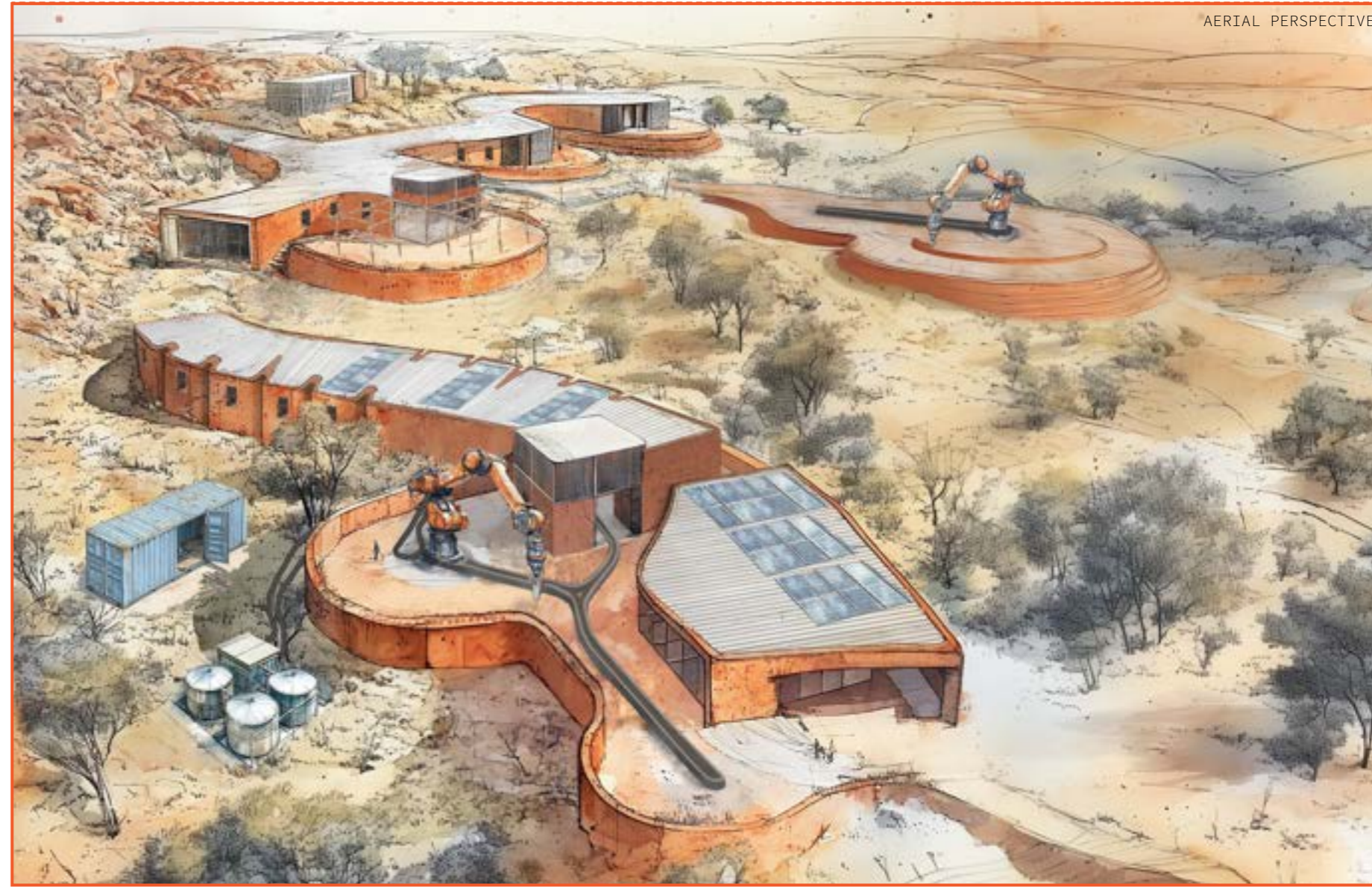
COASTAL AREAS WITH WETLANDS, ESTUARIES AND SAVANNAH WOODLANDS



2 / LANDSCAPE + CLIMATE

- COUNTRY • AUSTRALIA
- STATE • QUEENSLAND
- REGION • CAPE YORK PENINSULAR
- NEAREST MAJOR CITY • CAIRNS (650KM)
- REGION • CAPE YORK PENINSULAR
- POPULATION • 611 (AS PER 2021 CENSUS)
- INDIGENOUS COMMUNITY • KUKU THAAYORRE
UW OYKANGAND

1 / SITE + GENERAL



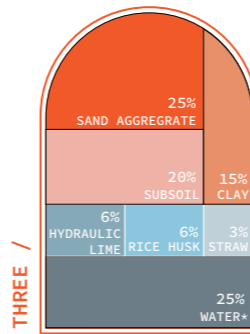
AERIAL PERSPECTIVE



ONE / KIT IS DISPATCHED TO TOWN IN NEED

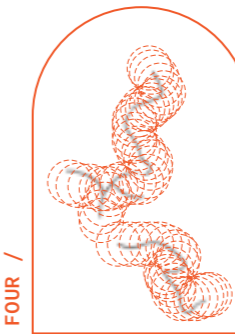


TWO / RADAR-EQUIPPED DRONE SENT TO LOCATE SITE WITH SUITABLE TERRAIN + STABLE GROUND MOISTURE



THREE / PRINTING MATERIAL MIXED ACCORDING TO ON-SITE CONDITIONS, WITH AMOUNT OF HYDRAULIC LIME + SAND AGGREGATE + STRAW FIBRES + WATER

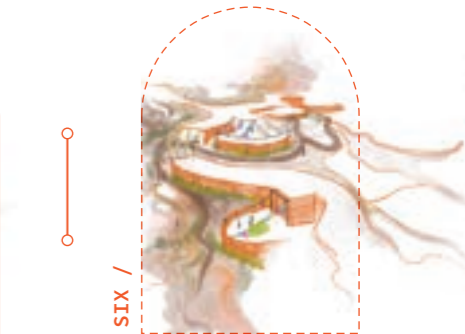
*WATER CONTENT TO VARY BASED OFF SOIL MOISTURE PERCENTAGE AS PER SURVEY



FOUR / CONSTRUCTION COMMENCES WITH PRE-DETERMINED PATHS FOR 3D PRINTERS TO PRINT ACCORDINGLY TO SITE SPECIFIC DESIGN



FIVE / DISPLACED COMMUNITY OF 100 MOVE INTO NEW HOMES



SIX / SITE CONTINUES TO GROW WITH COMMUNITY OVER TIME, EMBRACING PERSONALISATION AND NEW EXPERIENCES

3 / CHRONICLE OF THE KIT DISPATCH

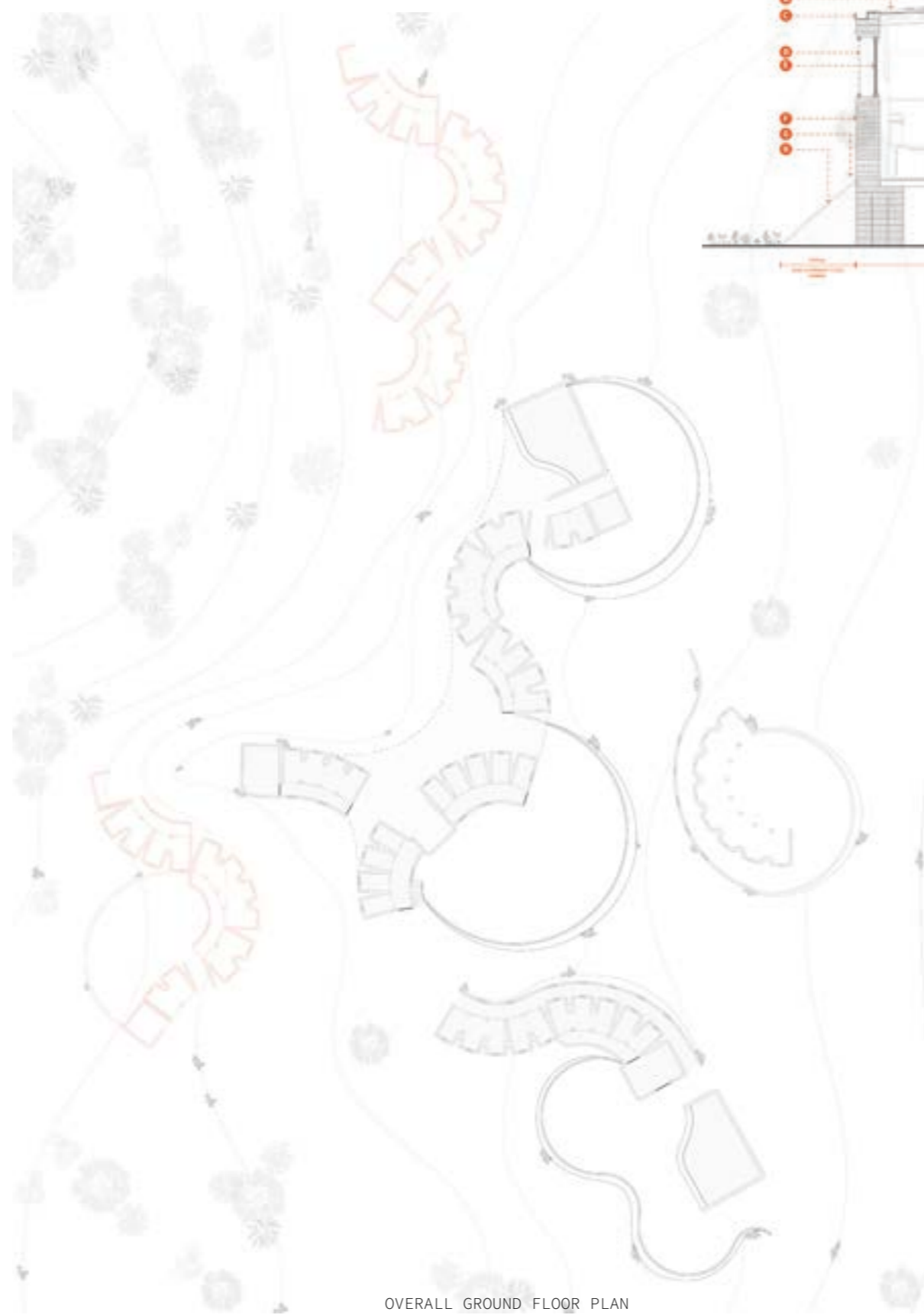
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GROUND PERSPECTIVE

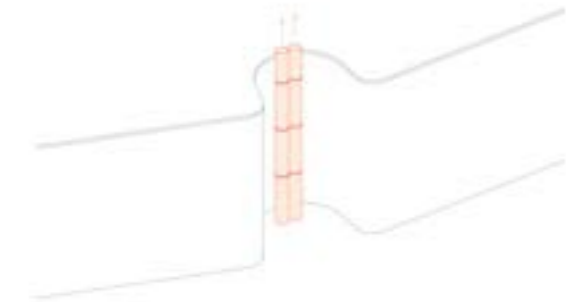


OVERALL GROUND FLOOR PLAN

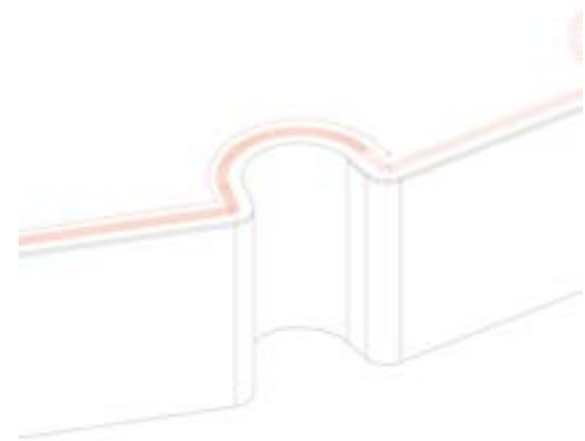


TYPICAL ROOM SECTION

- A PHOTOVOLTAIC ENERGY FOR SELF-SUFFICIENCY
- B CABLE RETICULATION THROUGH ROOF AND CEILING
- C SACRIFICIAL PVC BOX-GUTTER SYSTEM
- D PROTECTIVE MESH SCREEN BARRIER
- E OPERABLE GLAZED TOUGHENED WINDOWS
- F CLAY-HYDRAULIC LIME BASED FILAMENT EXTRUDED WALL
- G FLASHINGS TO DATUM ABOVE LEVEL
- H RAN-MADE LEVEL AS FLOOD PROTECTION BARRIER
- I TIE DOWN METAL SUPPORTS
- J GRATED ELEVATED WALKWAY AS BUFFER/SOCIAL ZONE
- K MINIMISE VEGETATION OVERGROWTH



SERVICES + DOWNPIPES RECESSED IN WALL COVES



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STATEMENT

STATEMENT

The **Ground-Up Initiative** is born from a deep understanding of the emotional impact that losing cherished places has on individuals and communities. Pormpuraaw, a remote community of 600 in Far North Queensland, was completely destroyed by a cyclone in 1952. The grief experienced is not just for the physical loss but for the erasure of the life and potential that these places held.

Acknowledging that temporary solutions cannot fully restore what has been lost, our prospective inquiry outlines our vision for the future of digital fabrication that aims to support both the physical and emotional rebuilding process. The Ground-Up Initiative offers a novel solution for rapidly deploying housing in displaced communities through large-scale 3D printing. Prepositioned kits are dispatched containing printers, binding material and natural fibres to combine with local soil for on-site production, quickly creating an elevated and adaptable residential landscape - layer by layer - where prefabricated windows, roofing and service modules are then installed. At the end of its service life, the modules and services can be removed to leave behind a footprint of earthen walls that will progressively melt back into the site.

Resilience is addressed through the programmatic planning and technical design of the project, striving to provide safe, reliable and comfortable spaces that can be transformed to the likes of a home. Pormpuraaw, like many communities above the Tropic of Capricorn, remains seriously vulnerable to floods, cyclones and bushfires. By enabling communities to rebuild with locally sourced materials and adaptable designs, it rationalises the construction process to minimise transport time and material cost.

Our initiative strives to gently uplift affected communities, recognising their profound loss and supporting their journey of healing. By providing tools to reconstruct their environment from familiar materials, we hope to help individuals and communities regain their sense of place, continuity, and connection. In doing so, we aim to ensure that their return to daily life is not only practical but also restorative and empowering.

MICHAEL
ANNIE
SAM

CONNOLLY
KANG
SHIN

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