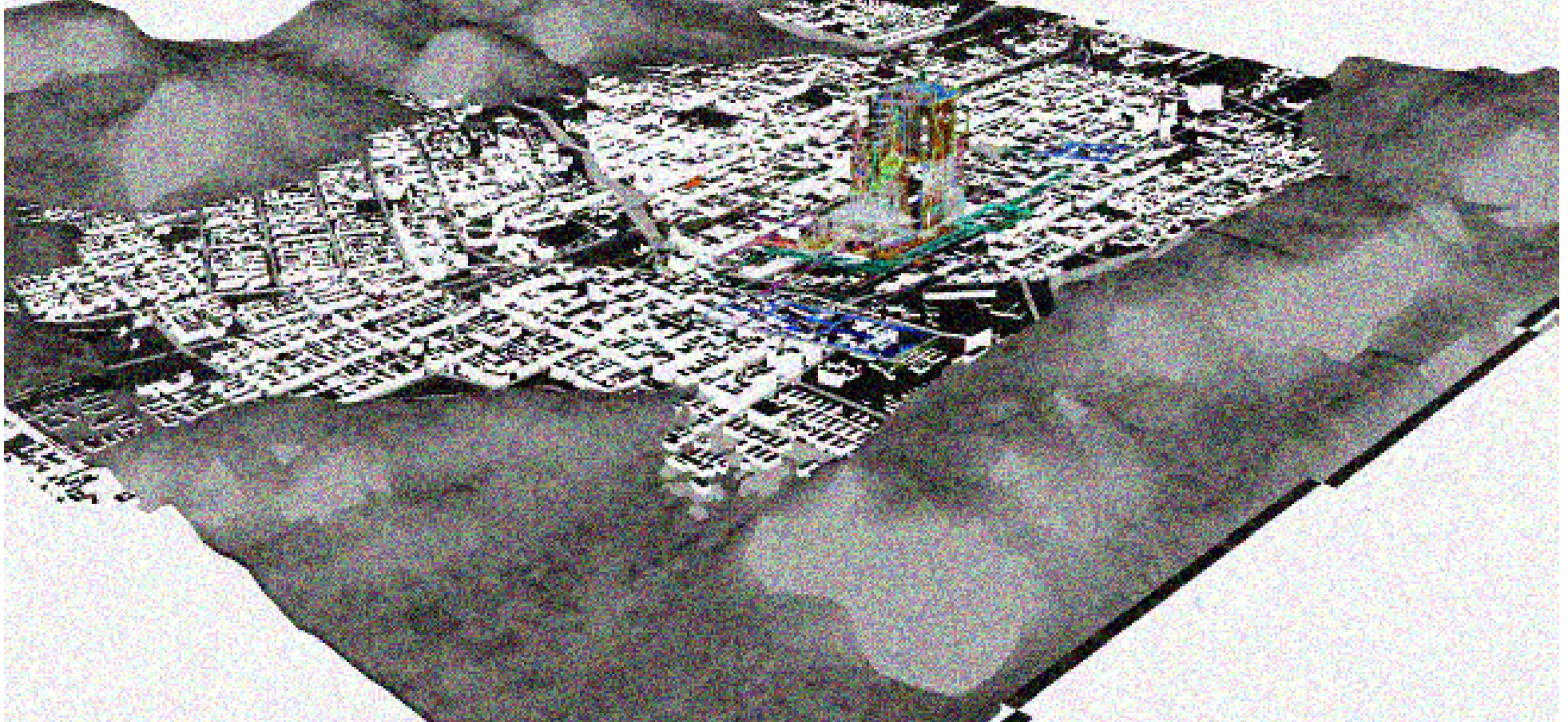


INNER CITY REGENERATION BRIEFING DOCUMENT



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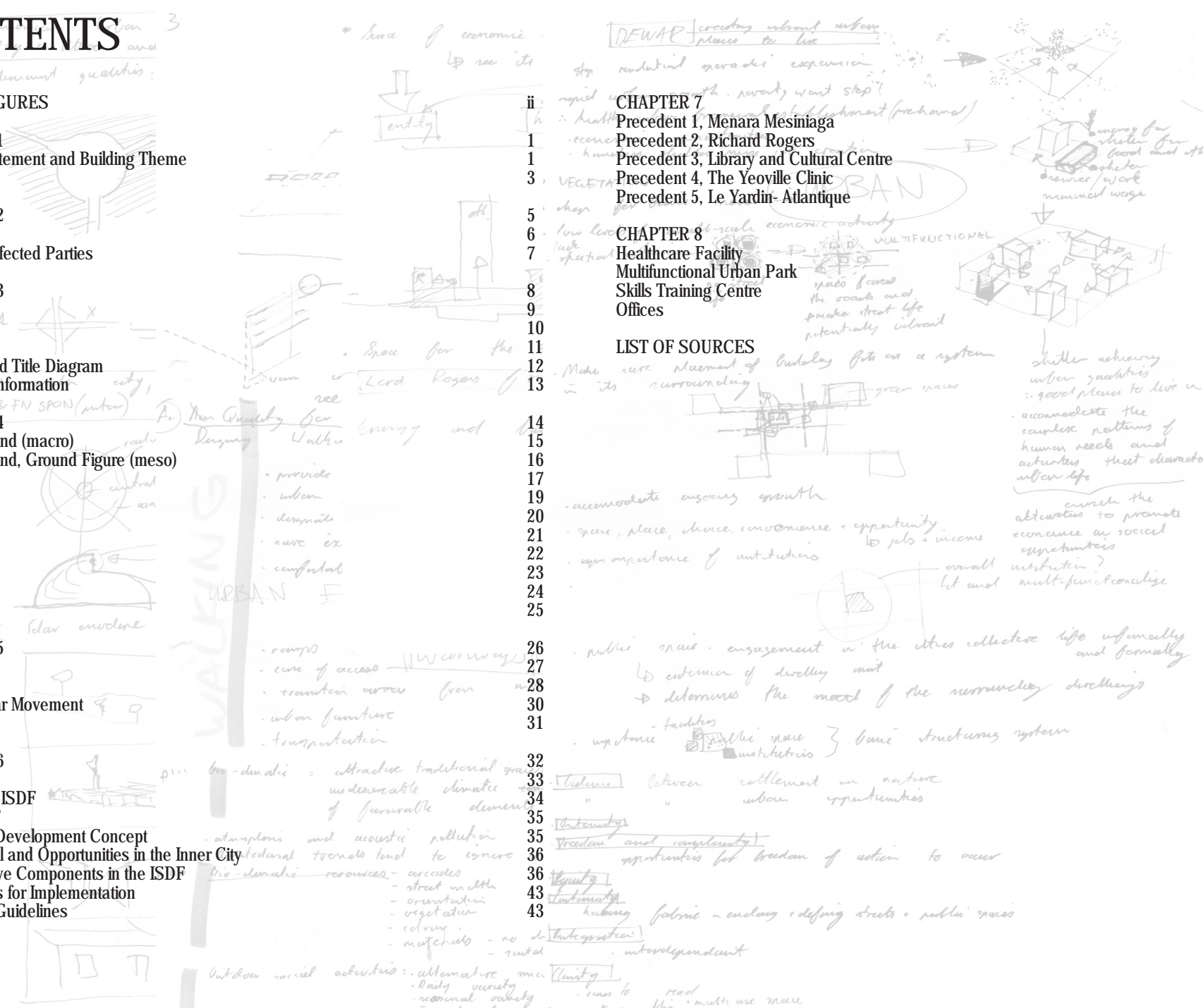
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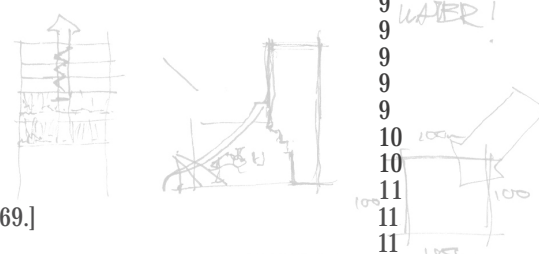
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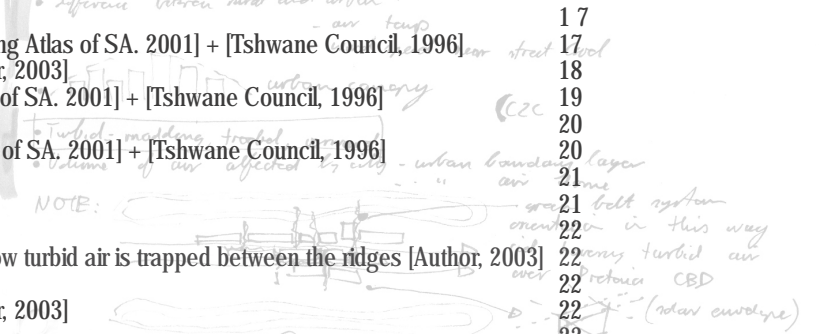
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Climate considerations in building and urban Design, by Norman S. Perlmutter, Van Nostrand Reinhold (1969) 1998
 Chapter 7 p 201: General characteristics of the urban climate



NOTE: ... urban boundary layer ... urban envelope ...
 OVERALL SPATIAL PATTERN OF THE URBAN HEAT ISLAND p 208
 factors influencing the urban temp (especially wind speed)
 • distance between urban and rural
 • lower rate of cooling during night = higher urban temp
 • storage in mass
 • he concentrated heat generation by activities / anthropogenic heat release
 • lower evaporation from soil and vegetation
 • seasonal heat sources
 • heating in winter
 • air conditioning in summer

□ = green and grass!
 floor system during winter
 space and pedestrian movement
 NORMAN PRESSMAN
 Professor, Urban planning and design
 avoids unnecessary underpasses
 avoid open spaces for no motorized vehicles
 or provide windbreaks
 conditions
 - rainwater run-off
 - models, half-cut details for ease of walking
 under X outdoor
 wind spaces providing shelter from winter conditions factors, taking advantage elements
 here
 ignore spatial definition
 etc
 - no dust
 - suitable to water (humidity)
 first microclimates. degree of enclosure
 variety of vegetation
 & variety
 multi use space
 multi use space

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Handwritten notes and diagrams:

Wind: wind needs at different hours of day, wind frequencies for each hour, frequently distribution of wind directions, average air temp corresponding to each wind direction, air temp reduction.

Green and Spaces: □ = green and spaces!

Urban Design: 120.67 GIVONI, and pedestrian movement, NORMAN PRESTMAN Professor, Urban plans and design, increasing wind speeds, or space for no motorized vehicles, provide windbreaks, rainwater run-off, modify half-cut details for ease of walking.

Urban Canopy: difference between rural and urban - air temp, wind speed, street level, urban canopy, Turbid: madding, trouble, upward, Volume of air affected by city - urban boundary layer, air some, gran belt system, orientation in this way, not heavy turbid air over Pretoria CBD, (rural envelope).

Heat Island: HEAT ISLAND p 200, dust able to water (humidity), coclimate, degree of enclosure, vegetation, multi-use space, use - private to public.

Overall Spatial Pattern: OVERALL SPATIAL PATTERN OF THE URBAN HEAT ISLAND p 200, follow influencing the urban temp, not radiance between urban and rural, daytime net rad. at ground level may be smaller than rural, lower rate of cooling during night = higher urban temp, storage in mass, be concentrated heat generation by activities / anthropogenic heat release, lower evaporation from soil and vegetation, seasonal heat sources, heating in winter, air condensing in summer.

Other Notes: analysis of, SHADI, T, MATEE, WIND str, urban envelope, note: (x) outdoor, natural definition.