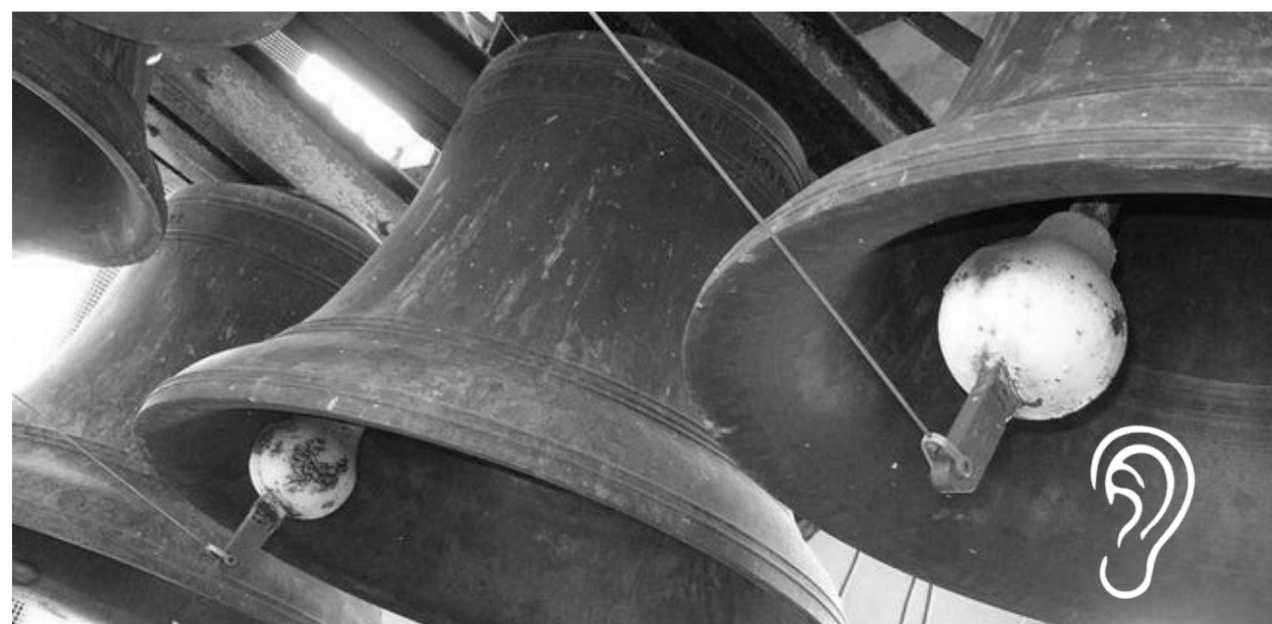
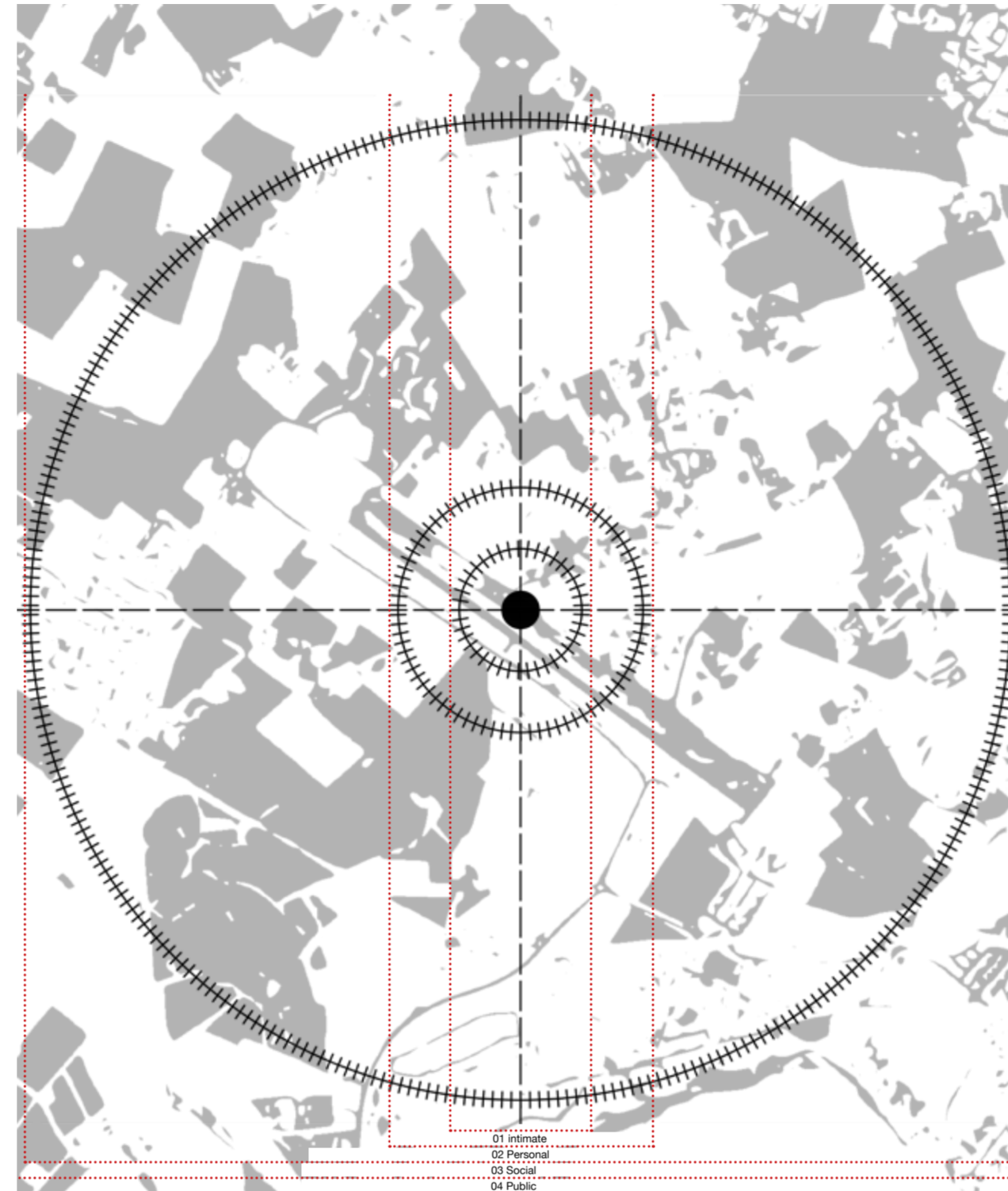
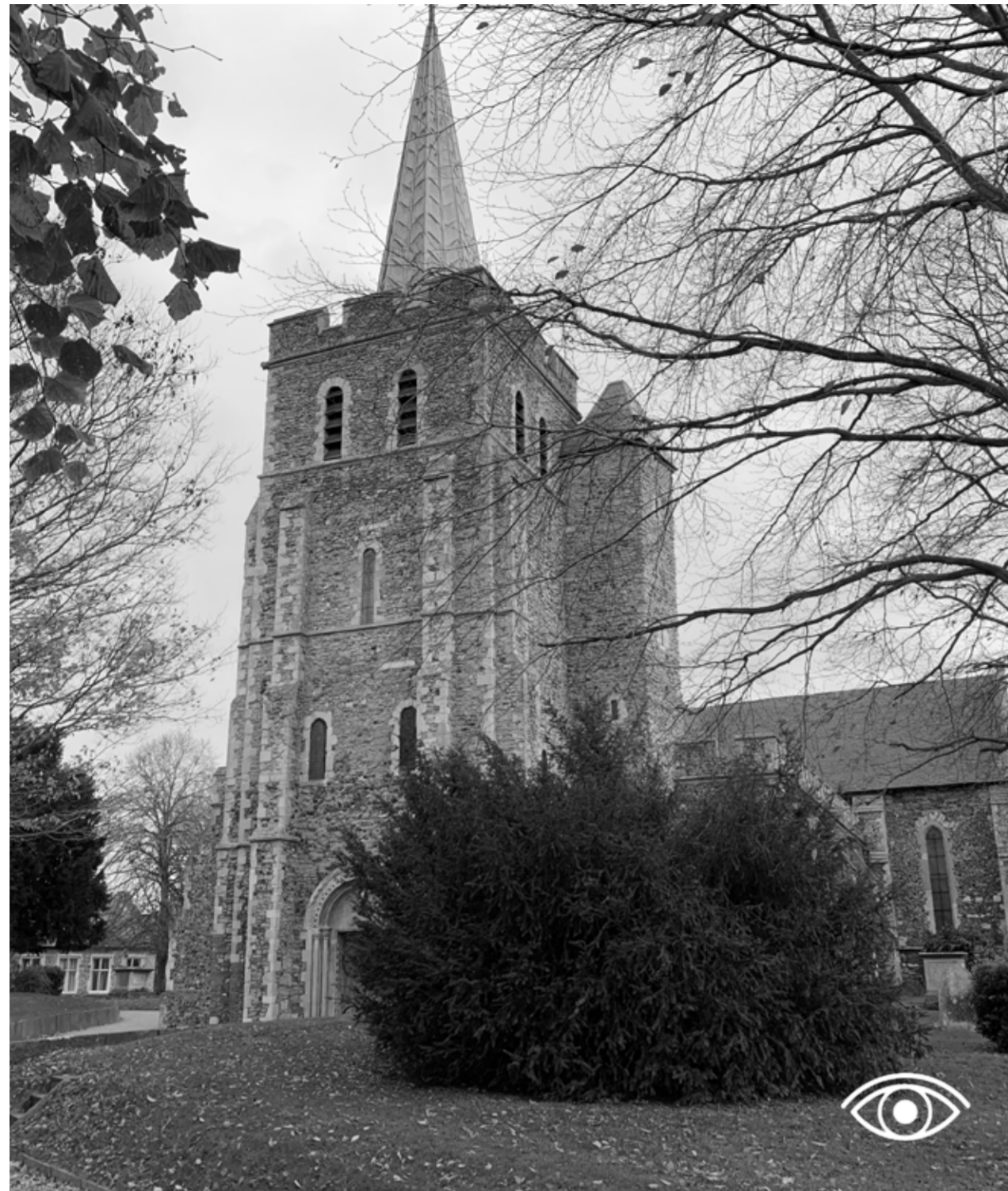


The Sonic Weaving Loom

Providing an Autonomous Urbanism for Acoustic Communities



SOUNDMARK

'A term derived from 'landmark' used in SOUNDSCAPE studies to refer to a community sound which is unique, or possesses qualities which make it specially regarded or noticed by the people in that community.'

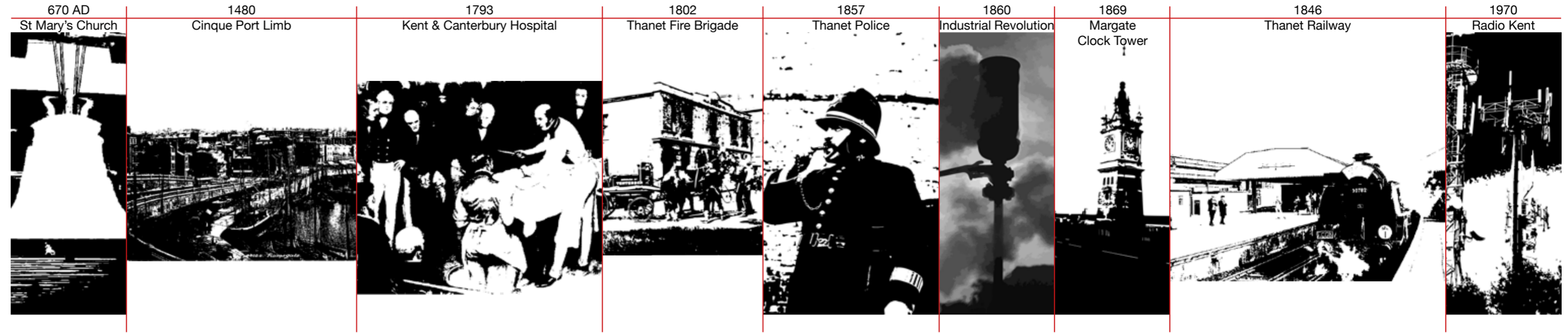
ACOUSTIC ARENA

'A sonic geography that is determined by the acoustic horizon of a Soundmark, which is in the bounds of a social fabric. Thus, it is a volume centred on a sonic event and dependant on the reverberation and frequency of the soundmark.'

ACOUSTIC COMMUNITY

'A social, religious, occupational, or other group sharing common characteristics or interests where sound forms a significance within the acoustic arena.'

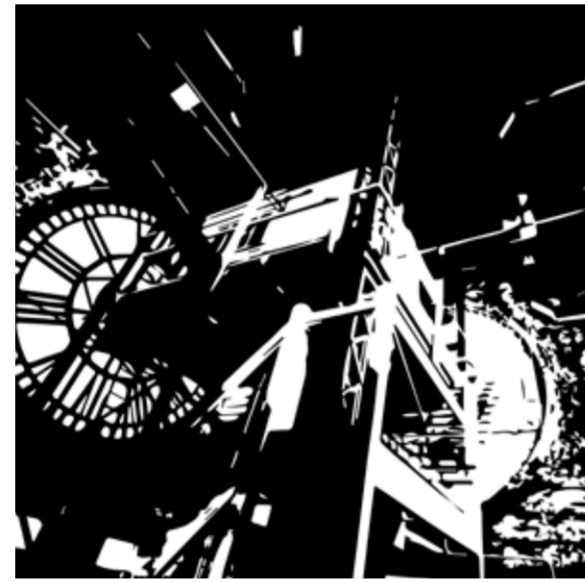
THANET SOUND MARK TIME LINE



EVENT



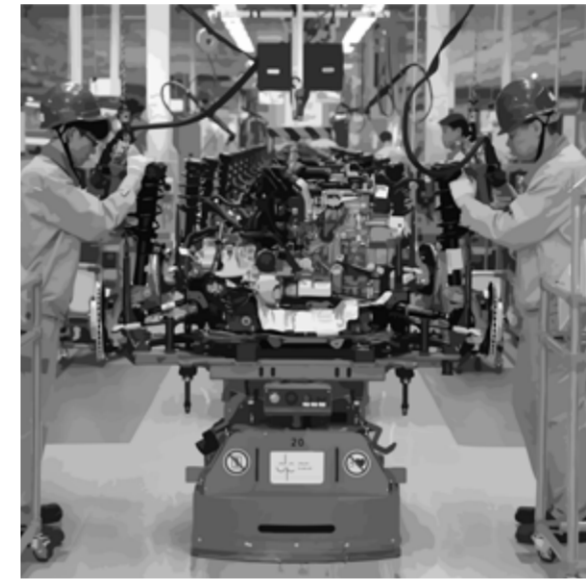
Bell ringing



Clock mechanisms



Foghorn warning



Machine initiated

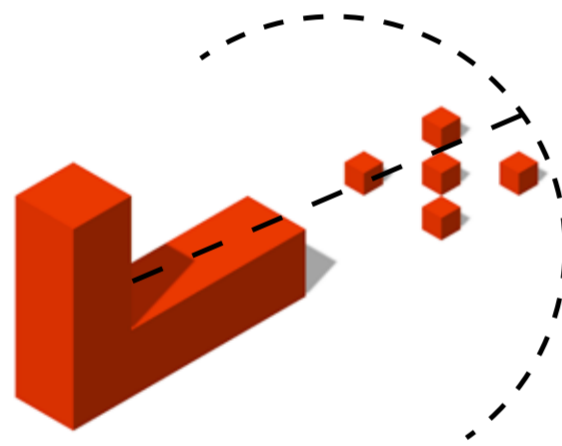


Engine started

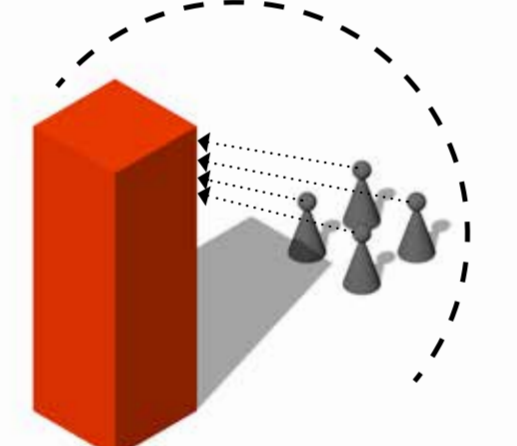


DJ presents

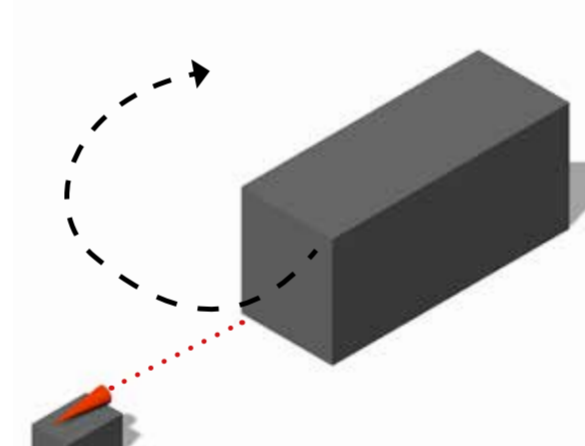
TRANSMISSION



Town signalled



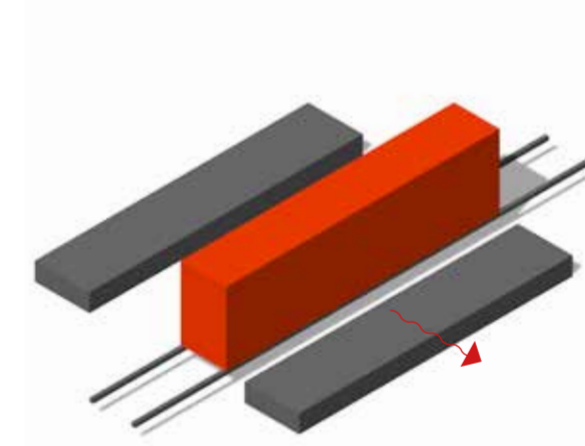
Time signalled



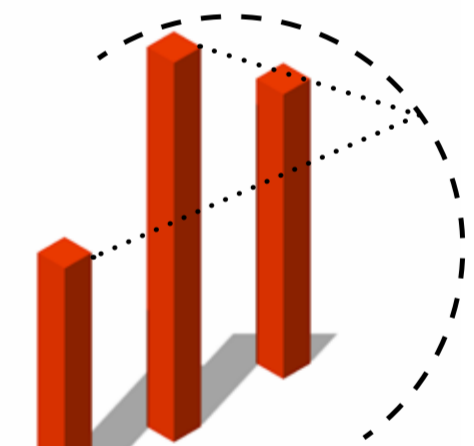
Danger signalled



Machine animates



Ambient sound created



Transmission produced

ARENA



Bell tower



Town synchronizes



Danger avoided



Mechanical arena

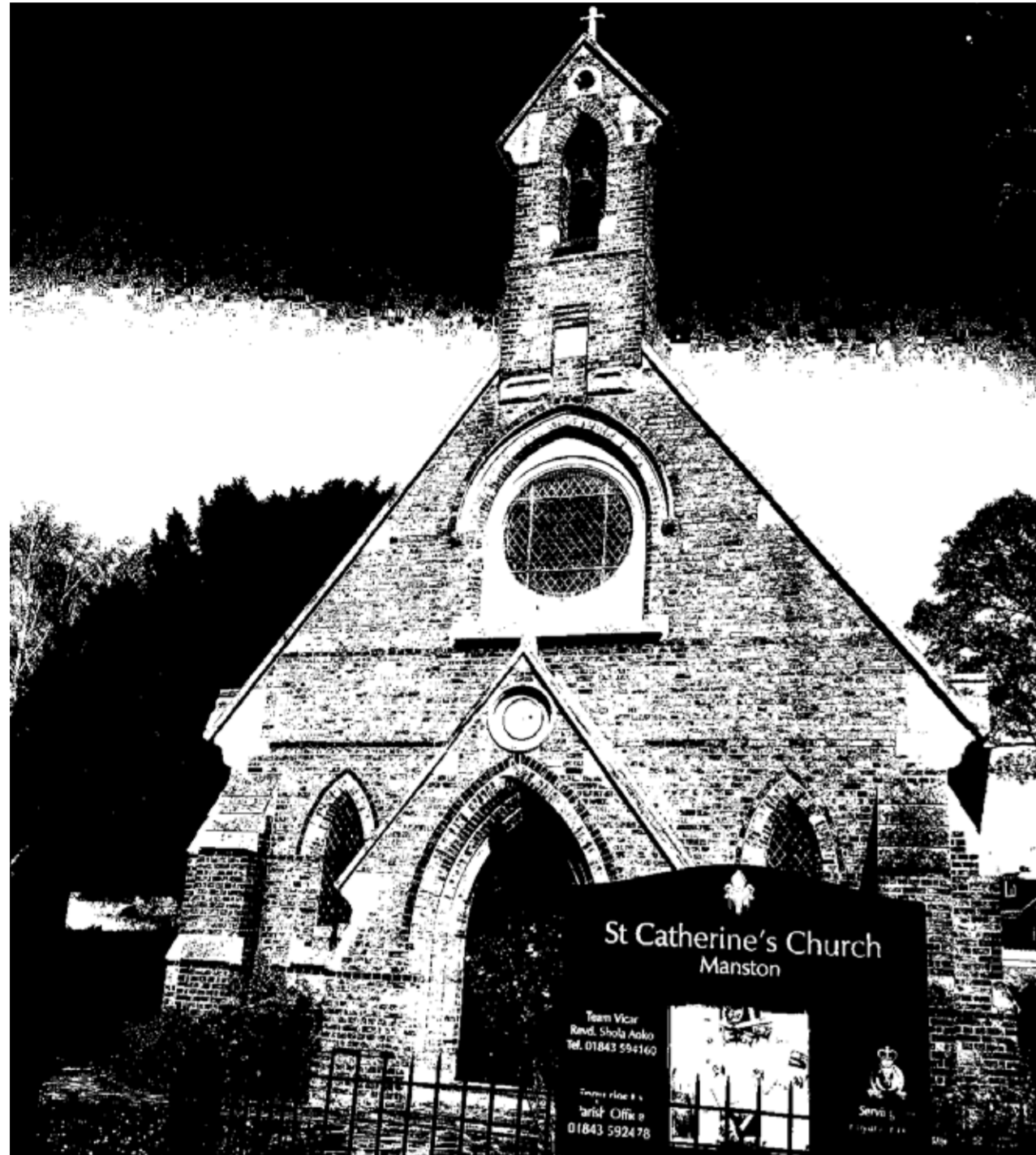


Response evoked

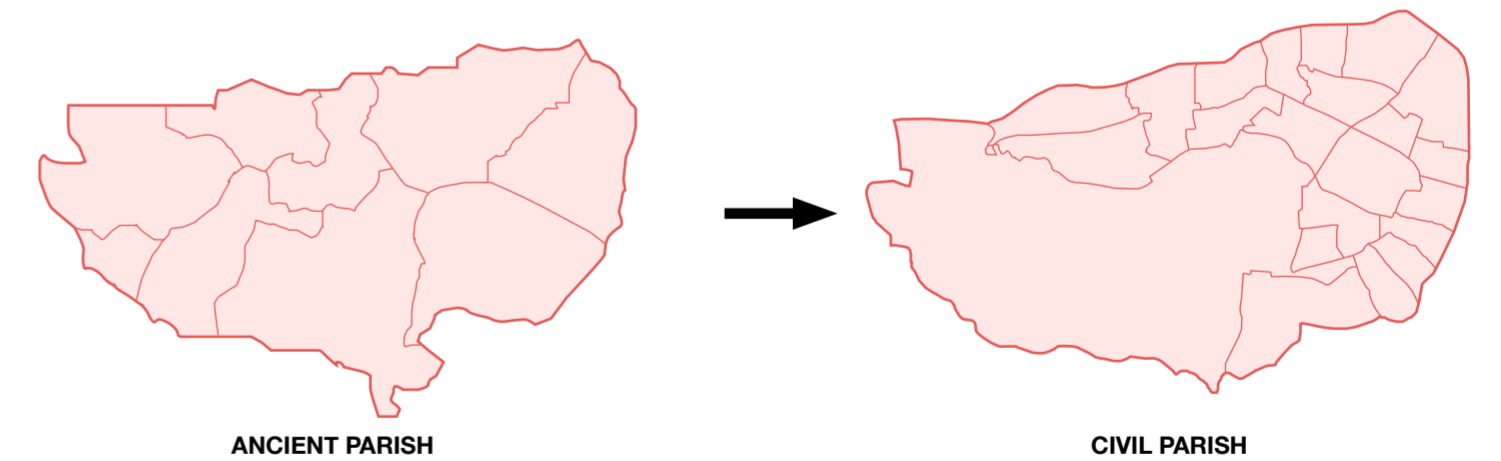
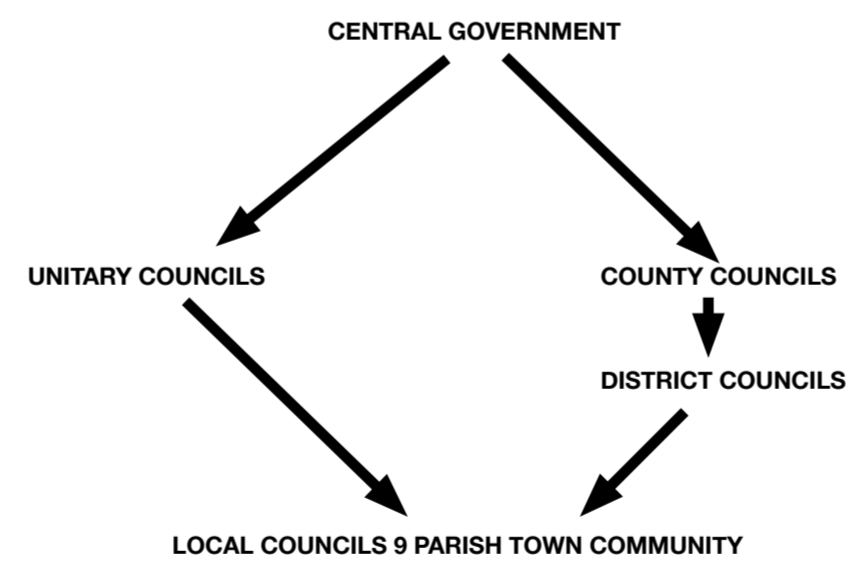
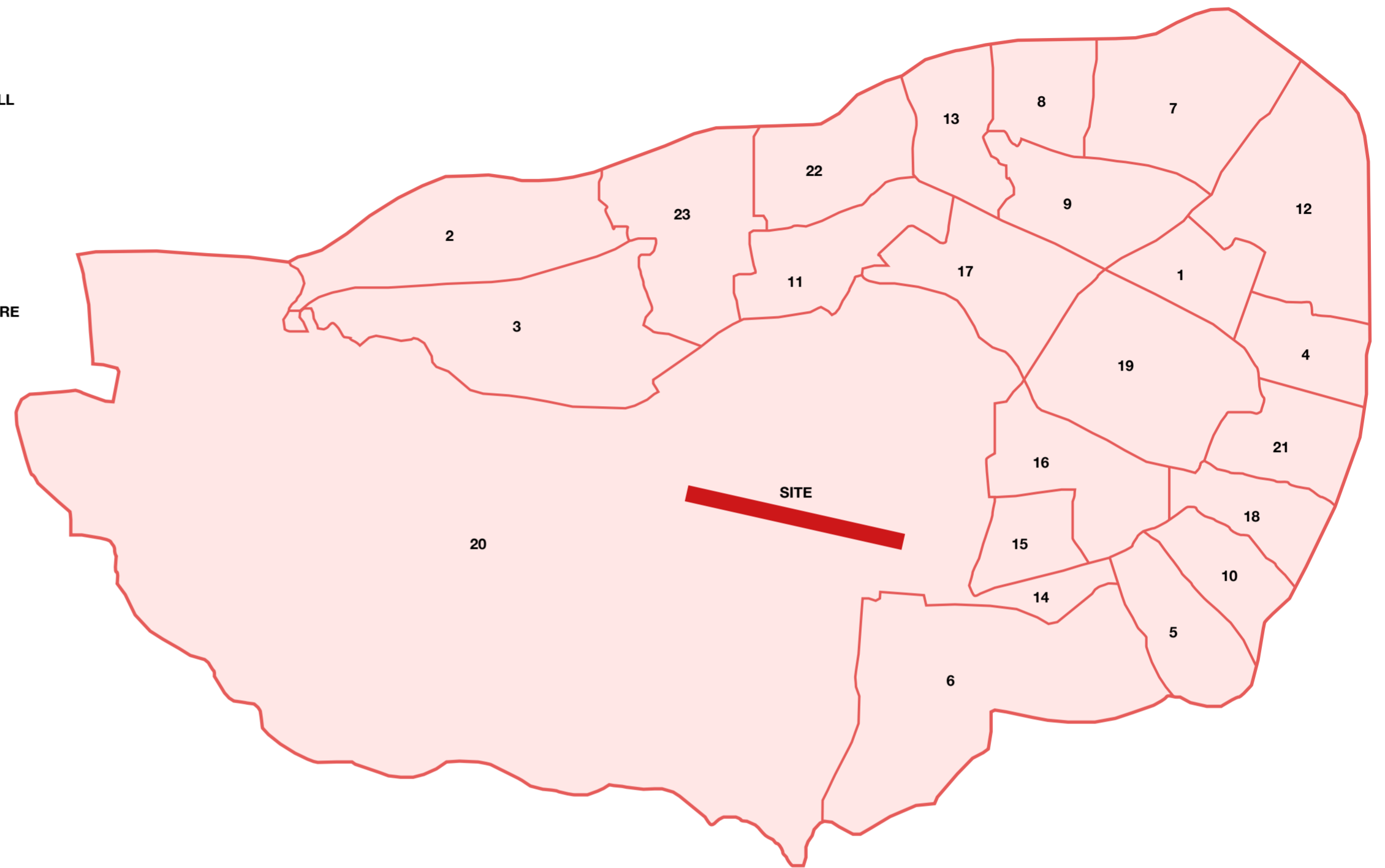


Waves received

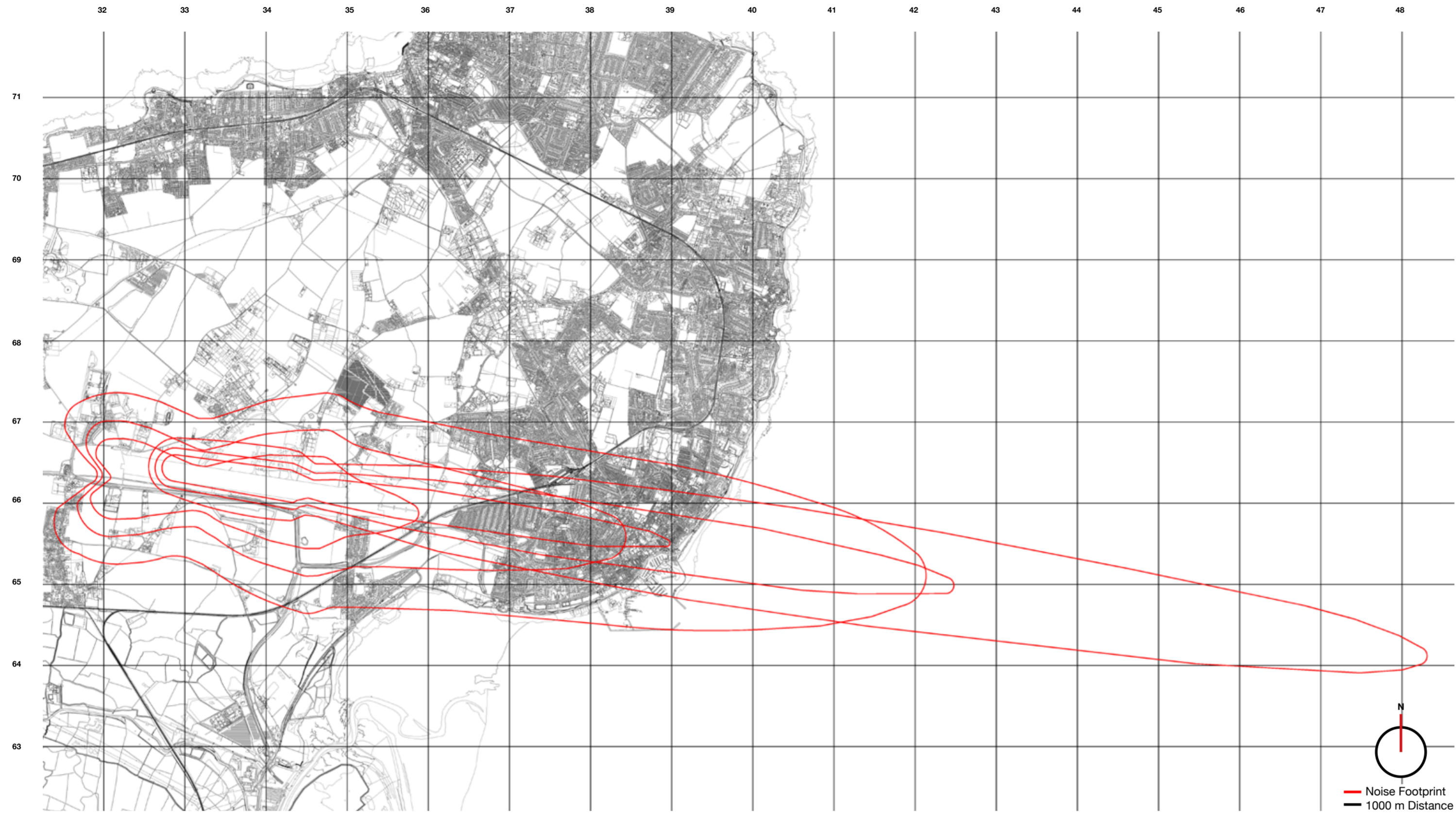
SOUNDMARK TAXONOMY // LANDMARKS OF SOUND



1. BEACON ROAD
2. BIRCHINGTON NORTH
3. BIRCHINGTON SOUTH
4. BRADSTOWE
5. CENTRAL HARBOUR
6. CLIFFSENEND & PEGWELL
7. CLIFTONVILLE EAST
8. CLIFTONVILLE WEST
9. DANE VALLEY
10. EASTCLIFF
11. GARLINGE
12. KINGSGATES
13. MARGATE CENTRAL
14. NETHERCOURT
15. NEWINGTON
16. NORTHWOOD
17. SALMESTONE
18. SIRE MOSES MONTIFIORE
19. ST PETERS
20. THANET VILLAGES
21. VIKING
22. WESTBROOK
23. WESTGATE-ON-SEA



ANCIENT PARISHES // SONIC GOVERNANCE IN THE ARENA



MANSTON AIRPORT CLOSURE



At the outset of the First World War, the Isle of Thanet was equipped with a small and precarious landing strip for aircraft at St Mildred's Bay, Westgate-on-Sea, on top of the chalk cliffs, at the foot of which was a promenade which had been used for seaplane operations. The landing grounds atop the cliff soon became the scene of several accidents, with one plane failing to stop before the end of the cliffs and tumbling into the sea, which, fortunately for the pilot, had been on its inward tide.



In the winter of 1915–1916, early aircraft began to use the open farmlands between Minster and Manston as a site for emergency landings. The Admiralty Aerodrome at Manston was opened in response. Its location near the Kent coast gave Manston some advantages over other aerodromes, and regular additions in men and machinery were soon made, particularly from Detling, in early days. By 1917 the Royal Flying Corps was well established and taking an active part in the defence of Britain.



On 19 March 2014, it was announced that a 45-day consultation period into the closure of the former airport had begun. Daily losses were said to be £10,000. The airport's chief executive announced that the airport could close on 9 April 2014, and on 25 March 2014 KLM Royal Dutch Airlines announced the end of its flights to Amsterdam by 10 April, and Manston's last scheduled flight departed for Amsterdam on 9 April 2014.



ABANDONED ARENA // MANSTON AIRPORTS DEPARTURE



Signal Sound



Church  



Clock Towers  

Civil Servant  

Factories  

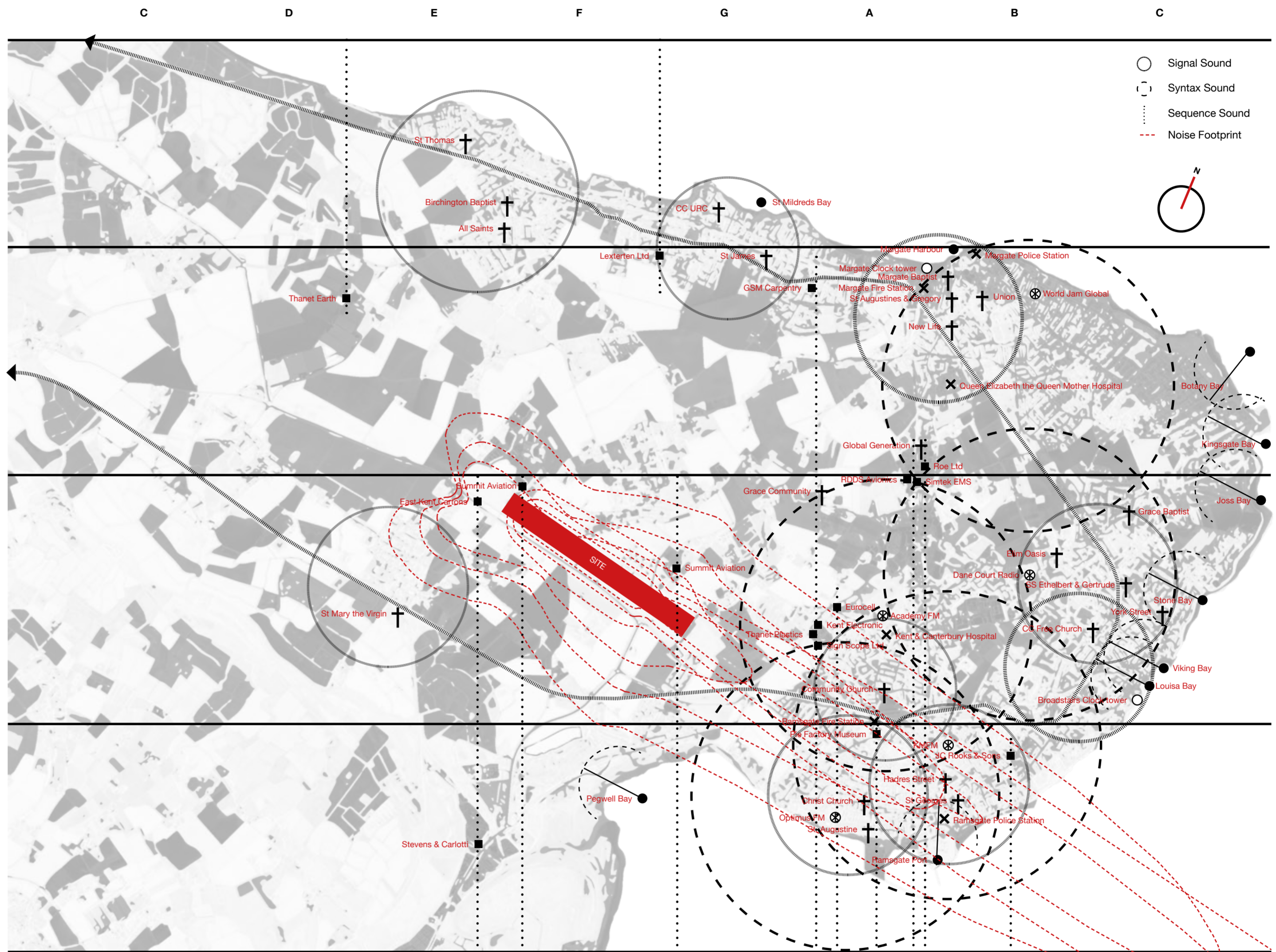
Railway  

Port / Bays  

Radio Stations  

Sequence Sound

Syntax Sound



ACOUSTIC ARENAS // SOUNDMARKS

Diatonic Scale



VISUAL

06 Cupula

05 Viewing platform

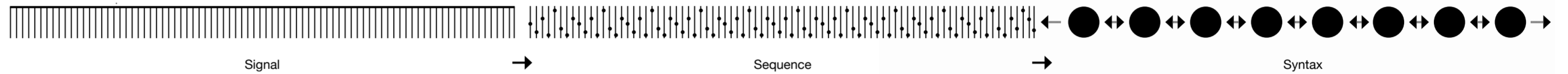
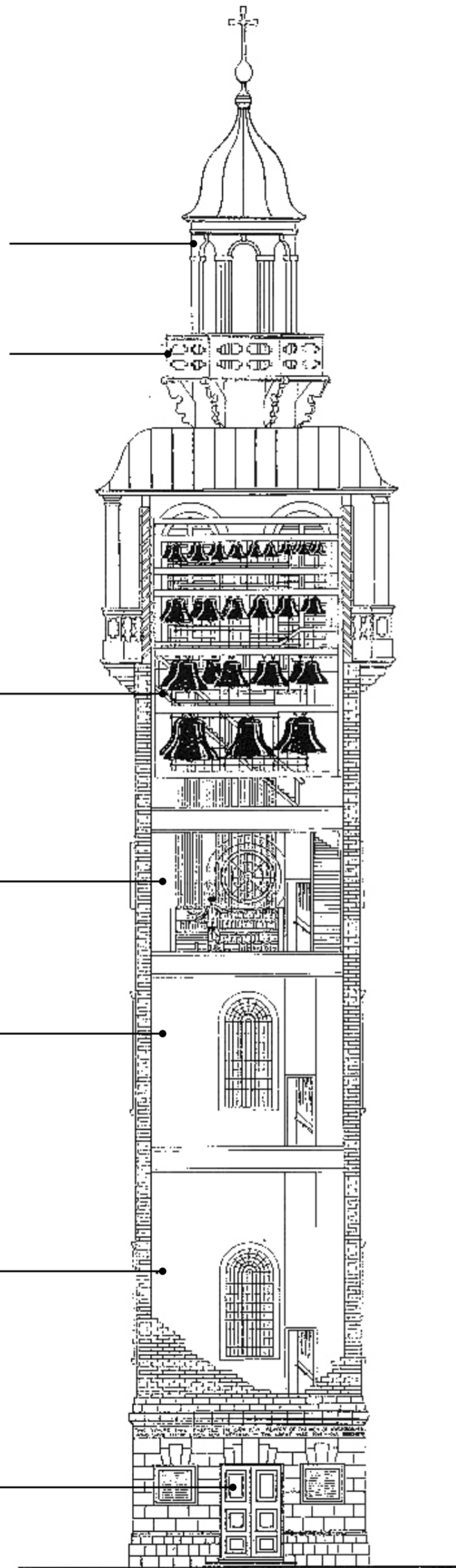
04 Belfry

03 Playing cabin

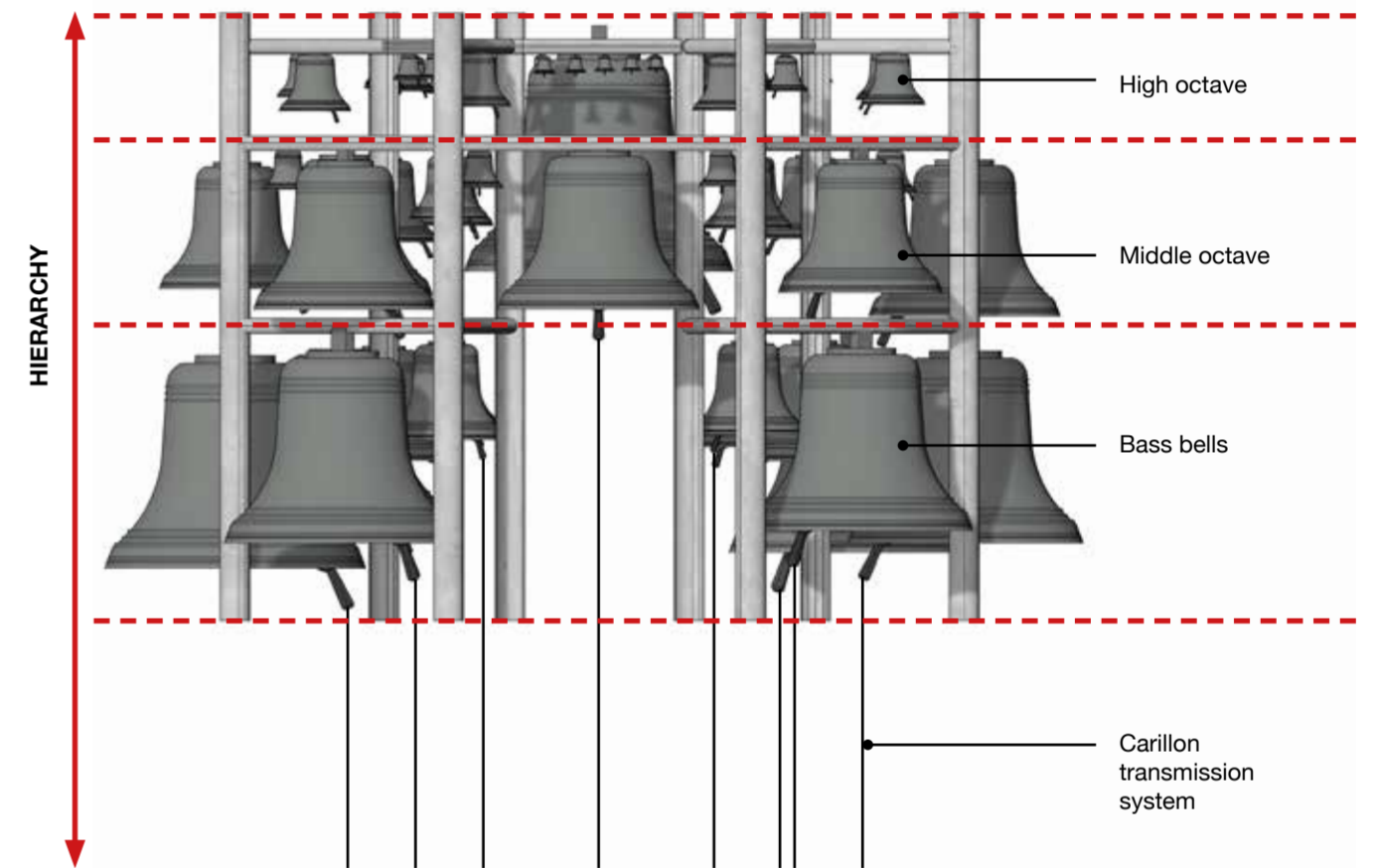
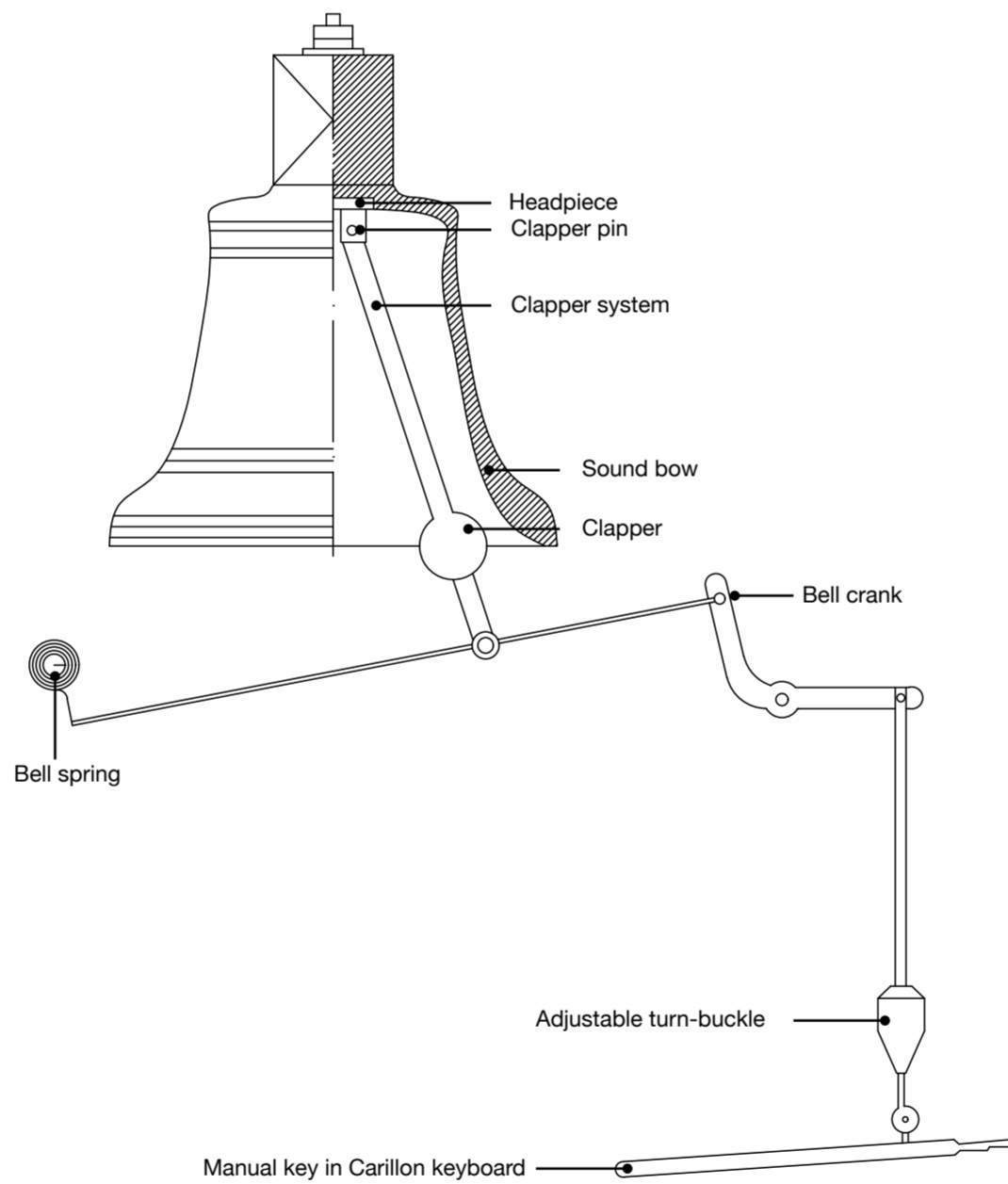
02 Access

01 Access

00 Entrance



AUDIBLE



CARILLON

A carillon (UK: /kəˈrɪljən/; [1] French: [karijɔ̃]) is a musical instrument typically housed in the bell tower (belfry) of a church or municipal building. The instrument consists of at least 23 cast bronze, cup-shaped bells, which are played serially to produce a melody, or together to play a chord. A traditional manual carillon is played by striking a keyboard—the stick-like keys of which are called batons—with the fists, and by pressing the keys of a pedal keyboard with the feet. The keys mechanically activate levers and wires connected to metal clappers that strike the bells.

The word “carillon” is said to originate from the French quadrillon, meaning four bells. In German, a carillon is called a Glockenspiel. The percussion instrument called a glockenspiel by English speakers is often called a carillon in French.

In medieval times, swinging bells were first used as a way of notifying people of imminent church services, and for such as fires, storms, wars and other secular events.

However, the use of bells to play melodic musical compositions originated in the 16th century in the Low Countries. The first carillon was in Flanders, where a fool performed music on the bells of Oudenaarde Town Hall in 1510 by using a baton keyboard.

Major figures in the evolution of the modern carillon were Pieter and François Hemony working in the 17th century. They are credited as being the greatest carillon bell founders in the history of the Low Countries. They developed the carillon, in collaboration with Jacob van Eyck, into a full-fledged musical instrument by casting the first tuned carillon in 1644, which was installed in Zutphen’s Wijnhuistoren tower.

CARILLON CHARACTERISTICS // TYPOLOGY FORENSIC ANALYSIS

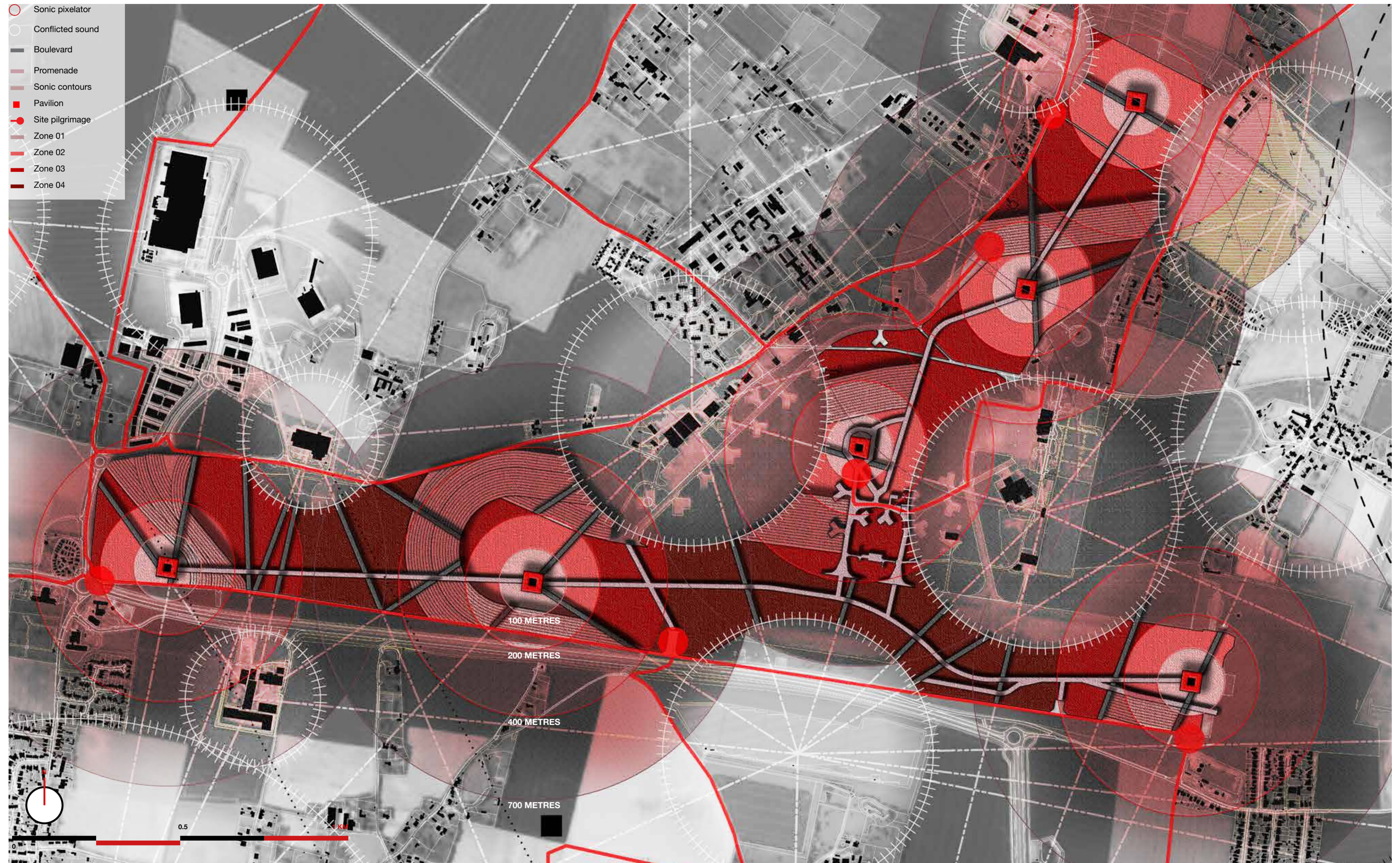


PIXELATED VOICES

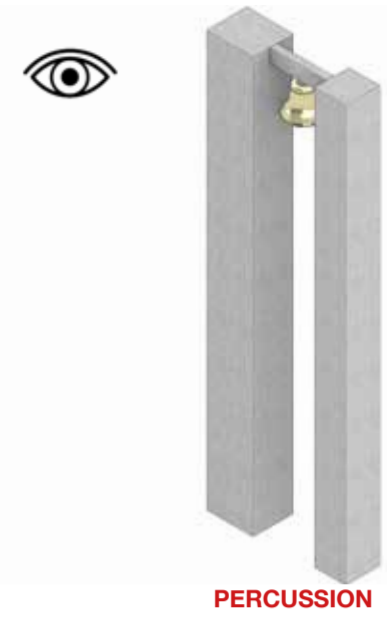
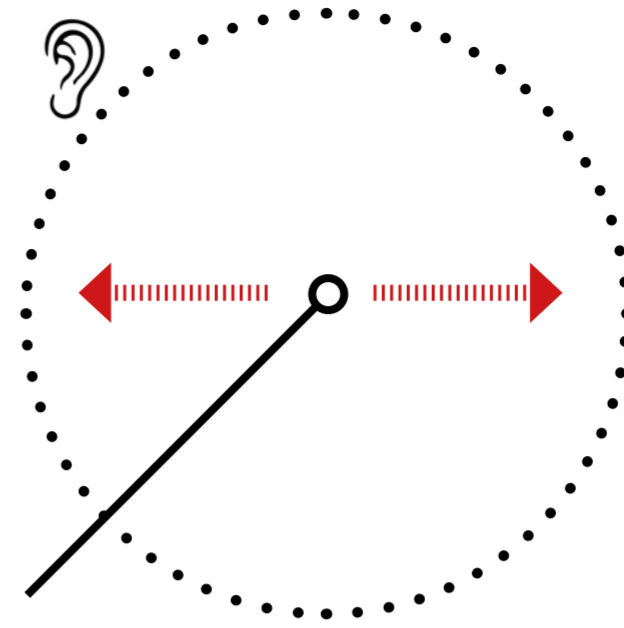
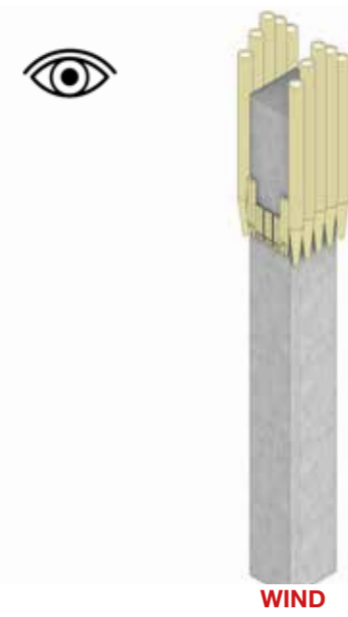
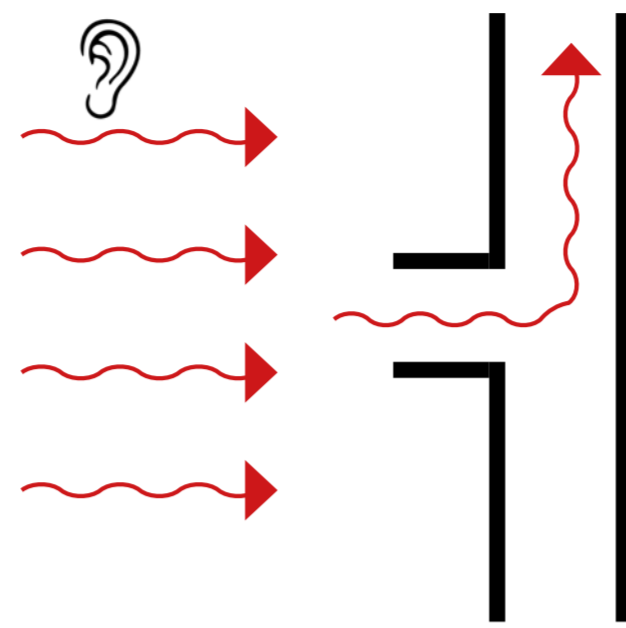
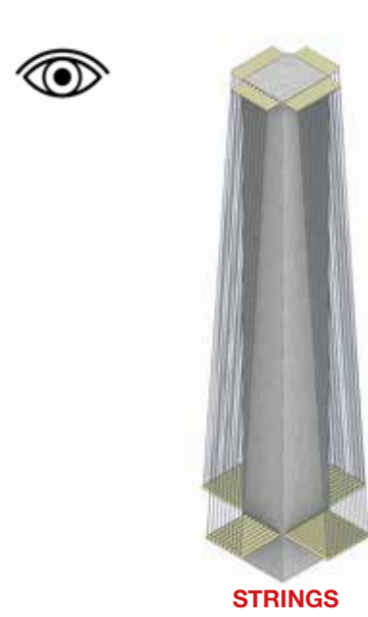
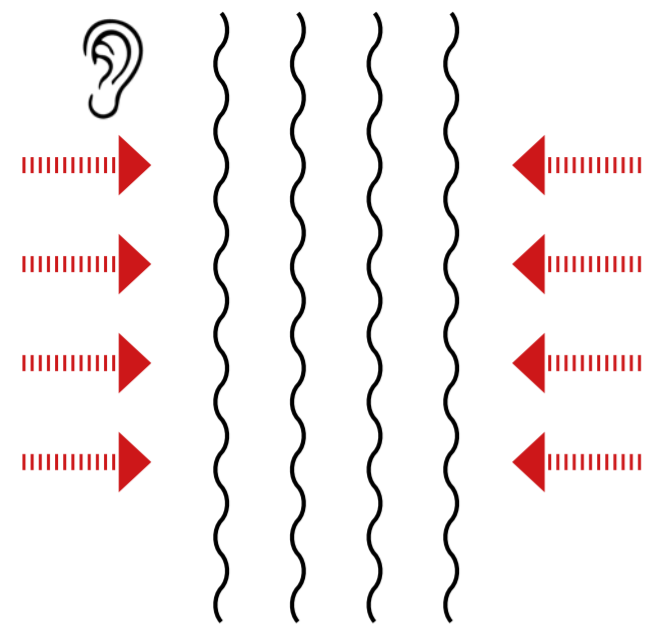
Extinction Rebellion (XR) has continued its campaign against the reopening of Manston airport with a socially-distanced protest near the airstrip. Thanet activists spread their message in silence from the A299 roadside with banners reading 'No jobs on a dying Thanet' and 'We can't eat money'. They claim that the reopening of the Kent airport is an "environmentally-damaging scheme" which puts "investors before the community." And they believe the toots given by drivers who saw them at both the Minster and Cliffsend roundabouts of the Thanet Way and on Hengist Way, shows locals agree. A spokesman said: "If the toots of support each protest site received from passing motorists reflects wider opinion on the proposed Manston freight hub, then Thanet's two MPs – Sir Roger Gale and Craig Mackinlay – may have misjudged the local mood."

The A299 is currently blocked after lorry drivers held protests outside Manston airport. The road, which runs parallel to the airport was pictured with a number of lorry drivers protesting in the middle of it as traffic was halted. It is understood the lorry drivers broke down the perimeter of the airport before stopping traffic in both directions. It comes as there is growing concern of the welfare of the drivers at the former airport site.

Activists have stormed an airport site and taken over the control tower to protest against the proposed expansion of an arms company. Peace campaigners are occupying the top floor of the Second World War tower at Manston airport to rally against a planning application submitted by Instro Precision. The group invaded the building - which is rented by the firm - at 11am today, and draped banners highlighting their opposition to the plans.



POLITICS OF SOUND // WEAVING AN AUTONOMOUS ARENA



SIGNAL



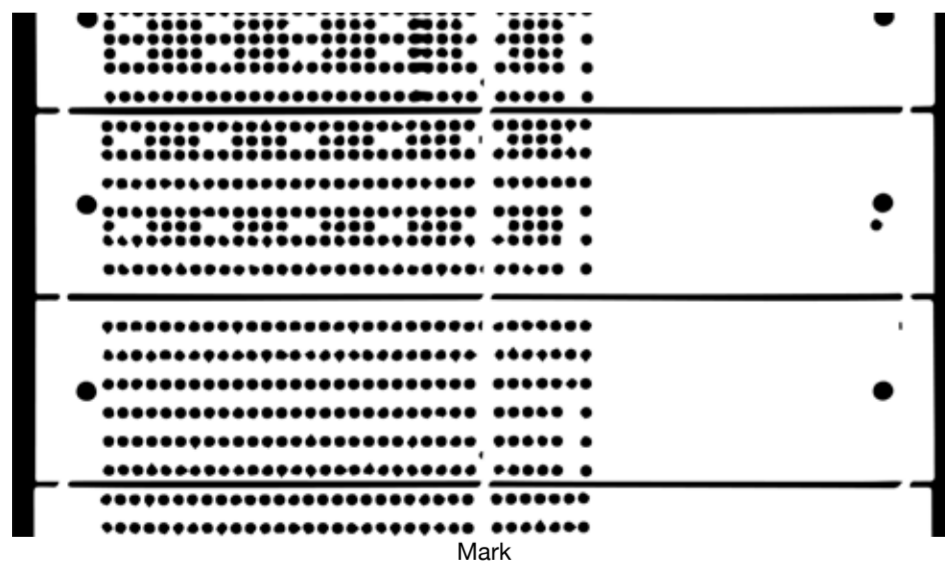
- Noise Footprint
- Anchor point
- Triangulation
- Signal Sound
- Syntax Sound
- Sequence Sound
- Corridor 01
- Corridor 02
- Corridor 03
- Church
- Clock Towers
- Civil Servant
- Factories
- Railway
- Port / Bays
- Radio Stations



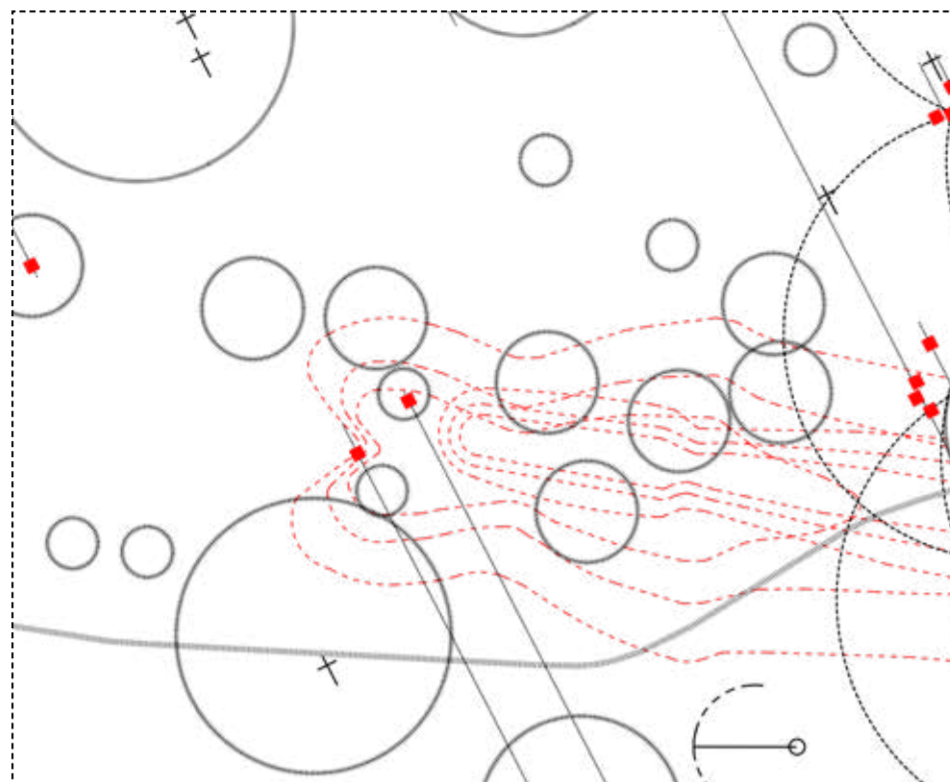
SEQUENCE



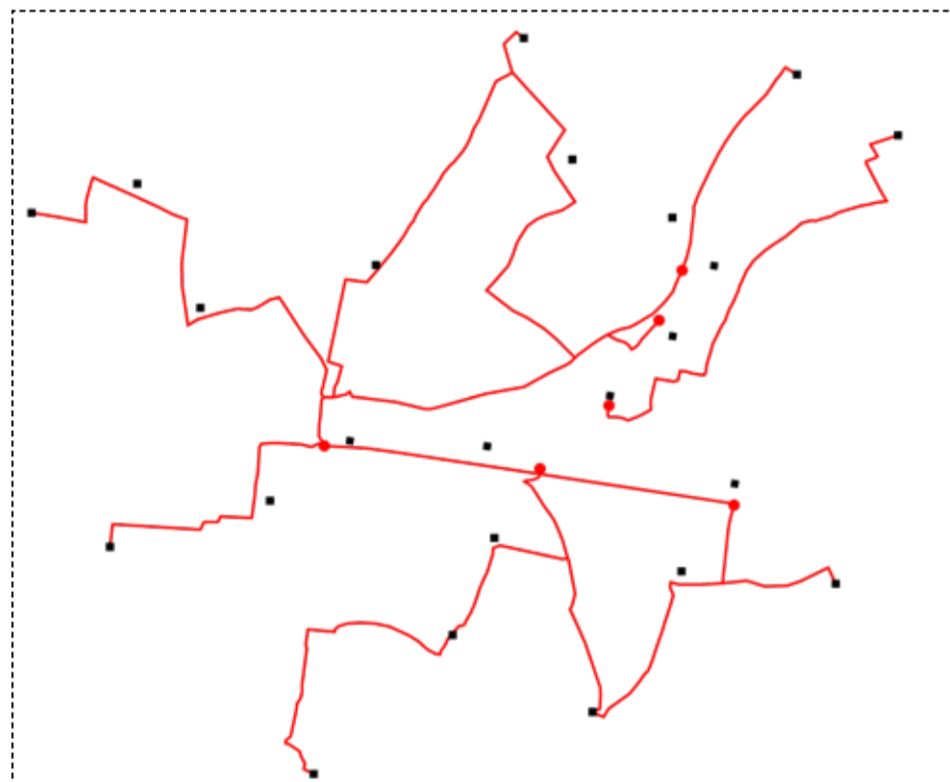
SYNTAX



01 SOCIAL FABRIC



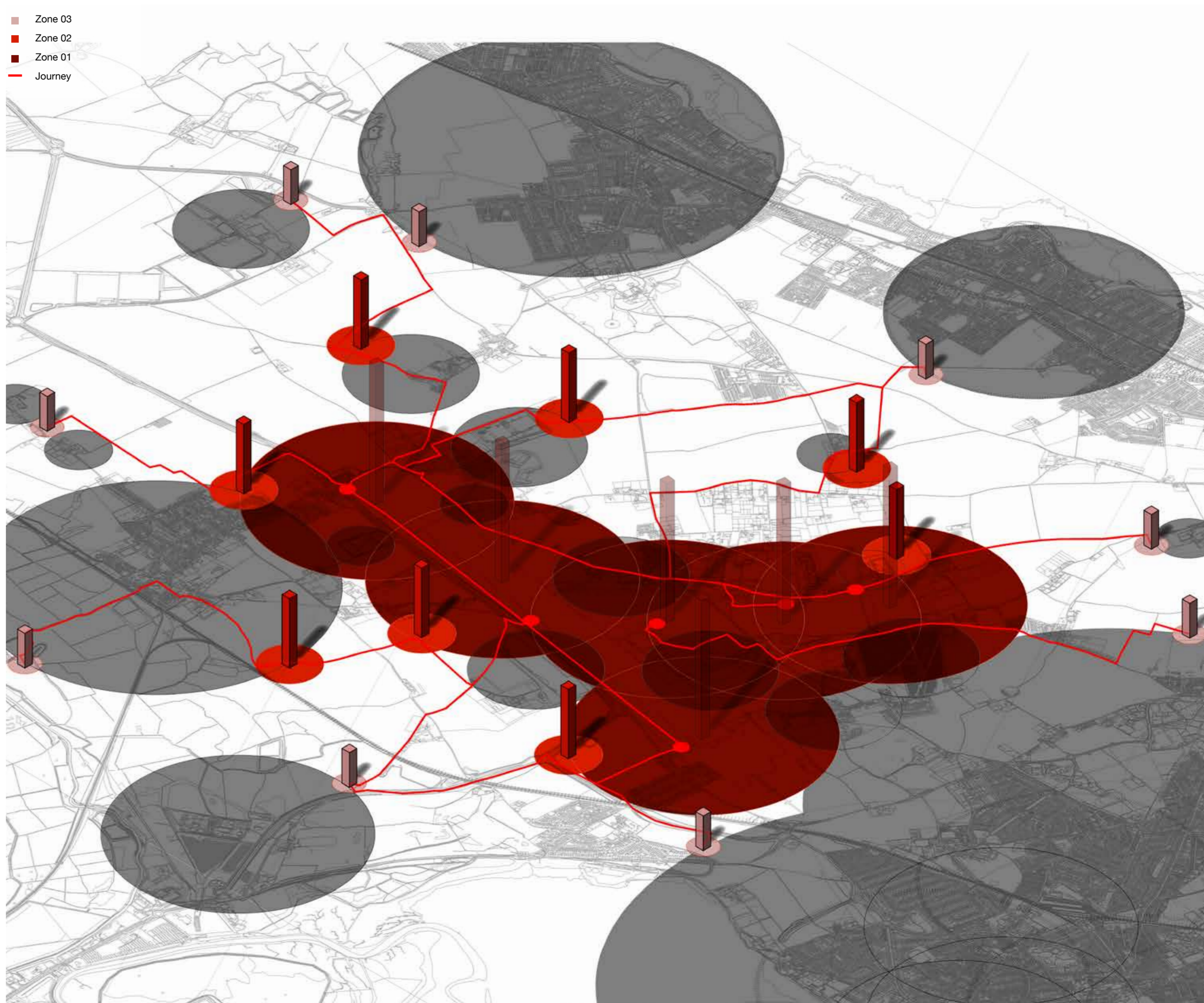
02 JOURNEY



03 WEAVE



- Zone 03
- Zone 02
- Zone 01
- Journey



MANSTON THEATRUM // PROGRAMMATIC RADIUS



Strings Symphony intervention



Percussion Polyphony intervention



Wind Weaving intervention

THE ACOUSTIC ADJUDICATORS // THANET'S SONIC INTERVENTIONS

24 HOURS



1. Solar farm Manston

9AM - 5PM



2. Polar Helicopters, Manston

7:30AM - 5PM



3. DDS demolition, Margate

9AM - 5PM



4. Summit Aviation, Manston

9AM - 5PM



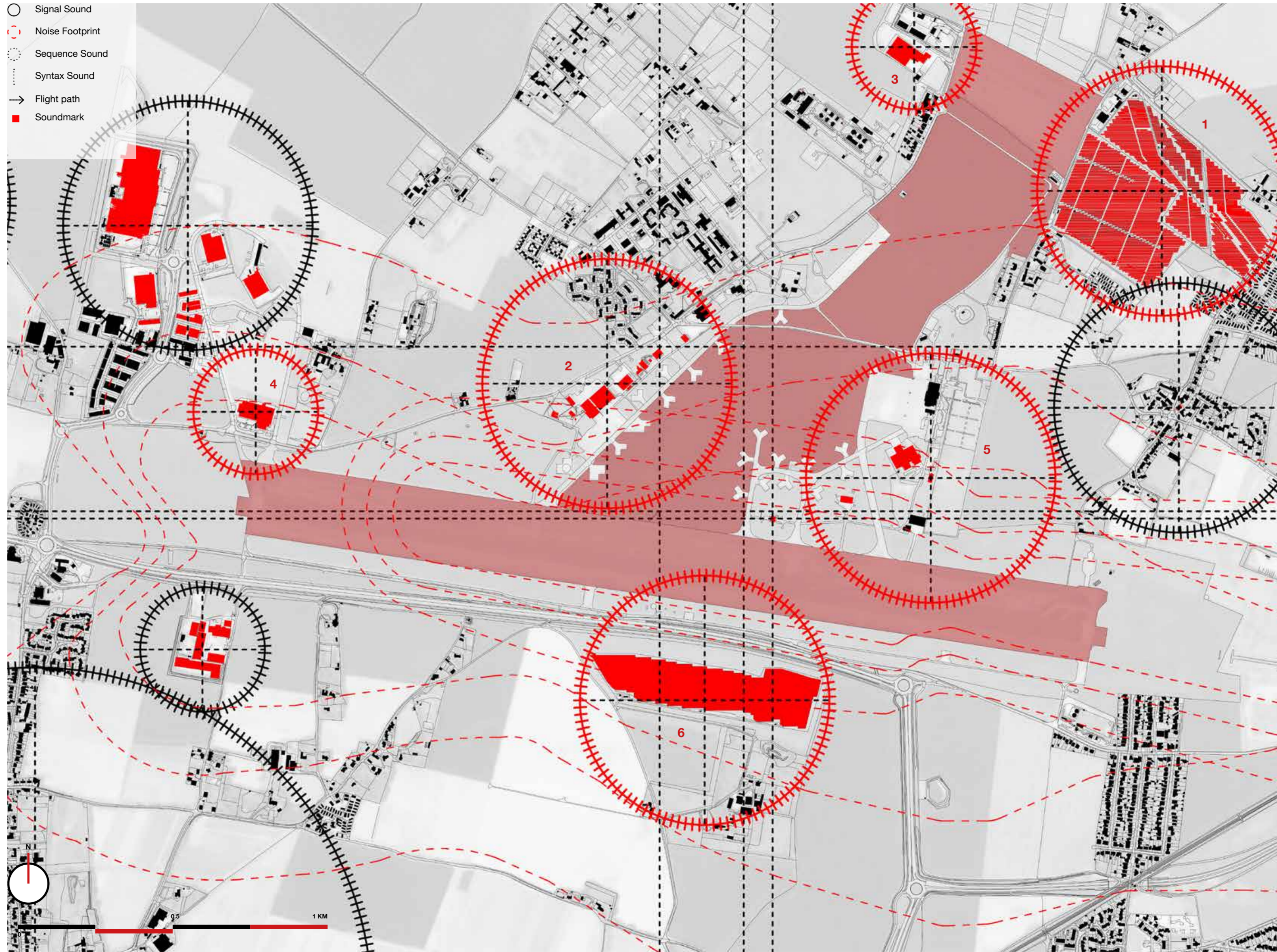
5. Helix Aviation, Manston

24 HOURS



6. Thornhill solar fam, Manston

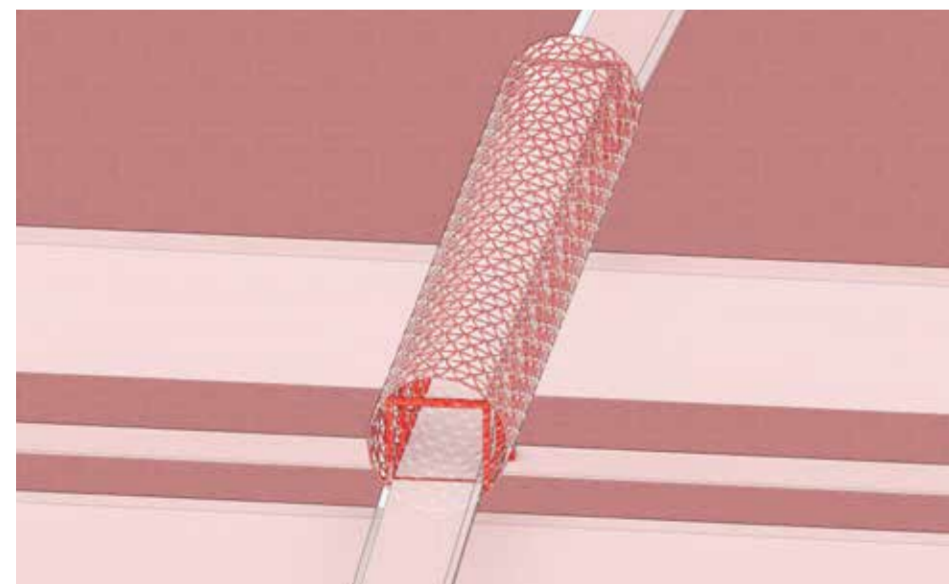
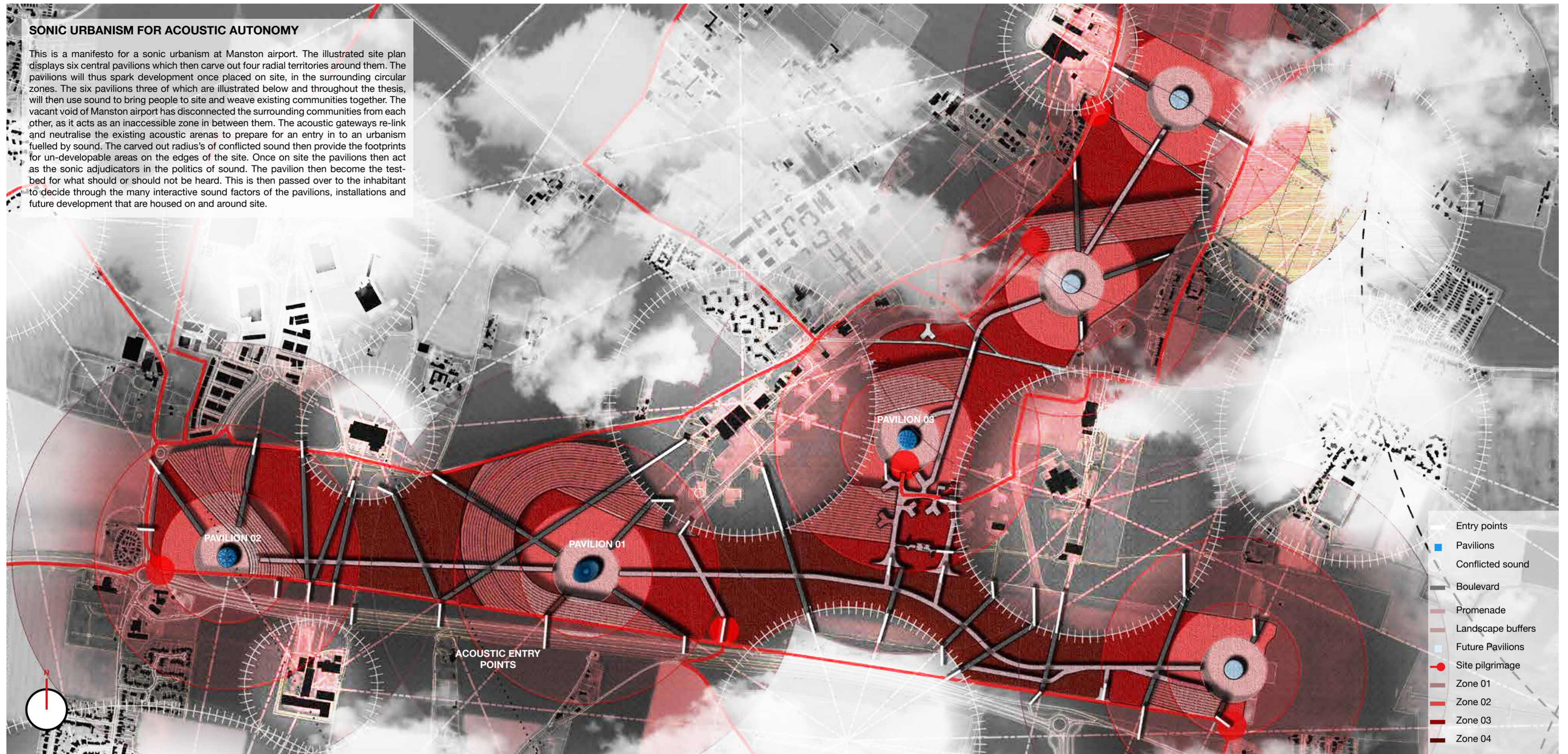
- Signal Sound
- Noise Footprint
- Sequence Sound
- Syntax Sound
- Flight path
- Soundmark



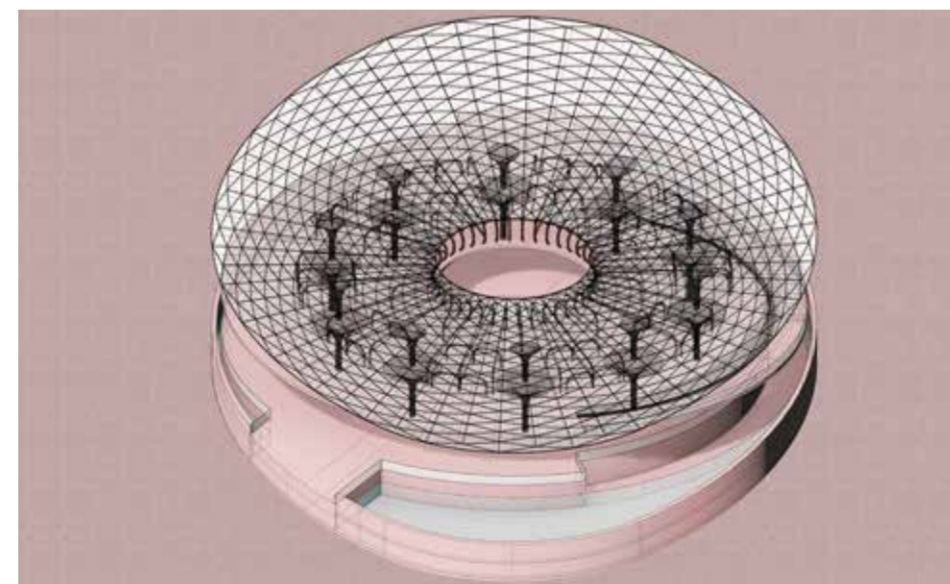
IMMINENT ARENA // MANSTON AIRPORTS ARRIVAL

SONIC URBANISM FOR ACOUSTIC AUTONOMY

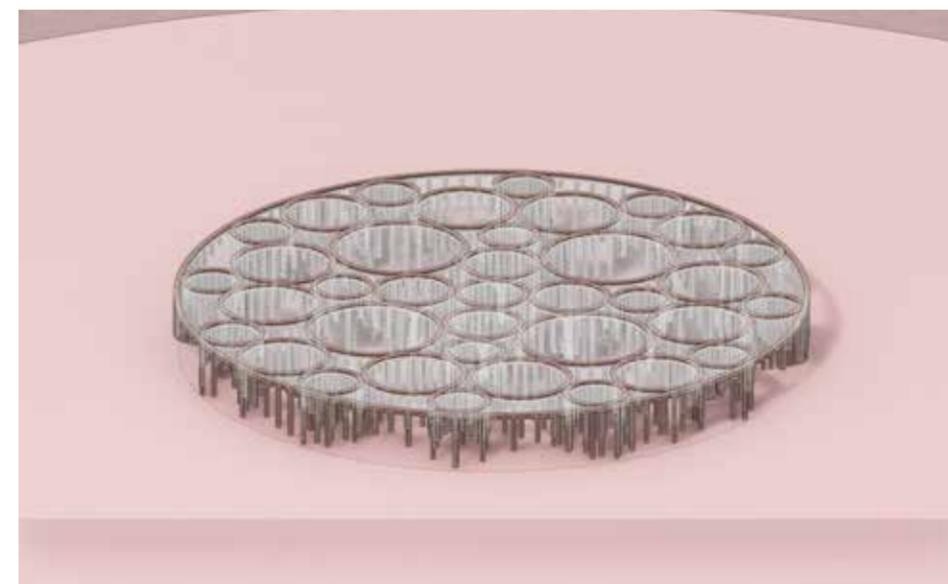
This is a manifesto for a sonic urbanism at Manston airport. The illustrated site plan displays six central pavilions which then carve out four radial territories around them. The pavilions will thus spark development once placed on site, in the surrounding circular zones. The six pavilions three of which are illustrated below and throughout the thesis, will then use sound to bring people to site and weave existing communities together. The vacant void of Manston airport has disconnected the surrounding communities from each other, as it acts as an inaccessible zone in between them. The acoustic gateways re-link and neutralise the existing acoustic arenas to prepare for an entry in to an urbanism fuelled by sound. The carved out radius's of conflicted sound then provide the footprints for un-developable areas on the edges of the site. Once on site the pavilions then act as the sonic adjudicators in the politics of sound. The pavilion then become the test-bed for what should or should not be heard. This is then passed over to the inhabitant to decide through the many interactive sound factors of the pavilions, installations and future development that are housed on and around site.



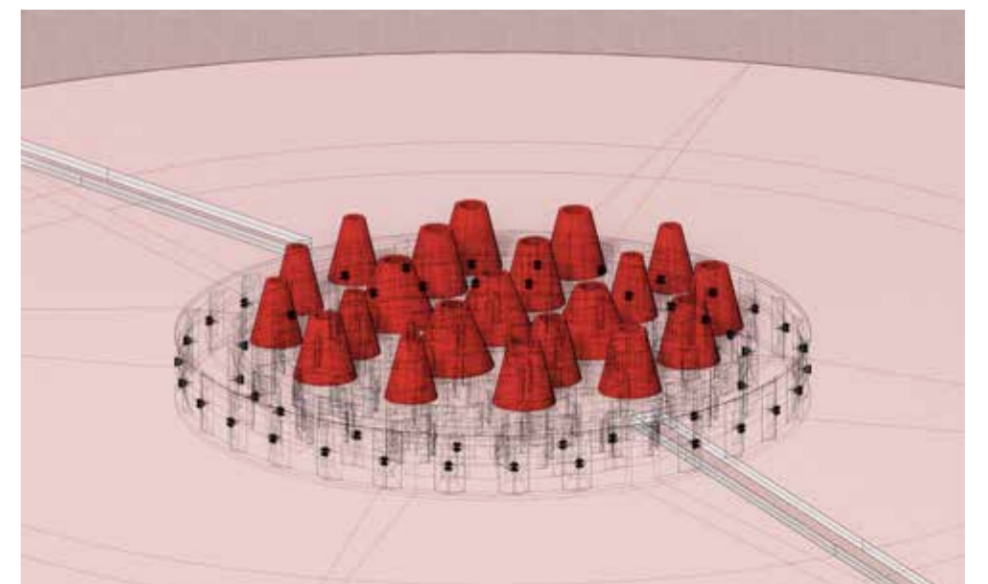
ENTRY POINTS 00 - THE ACOUSTIC GATEWAY



PAVILION 01 - THE SONIC RESERVOIR



PAVILION 02 - THE AUTONOMOUS AUTHOR

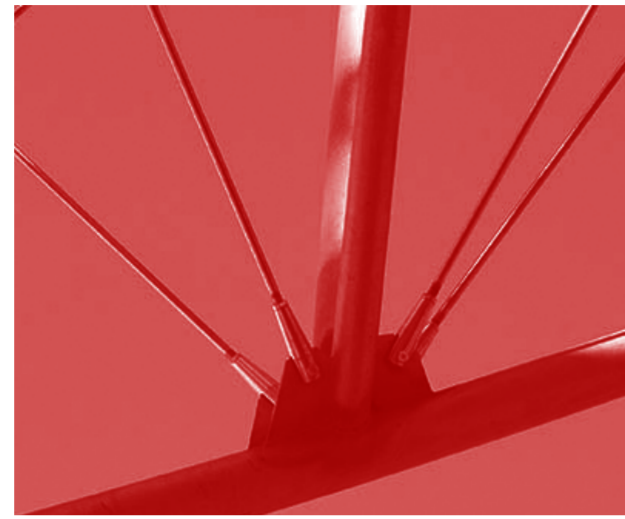


PAVILION 03 - THANET'S VOICE

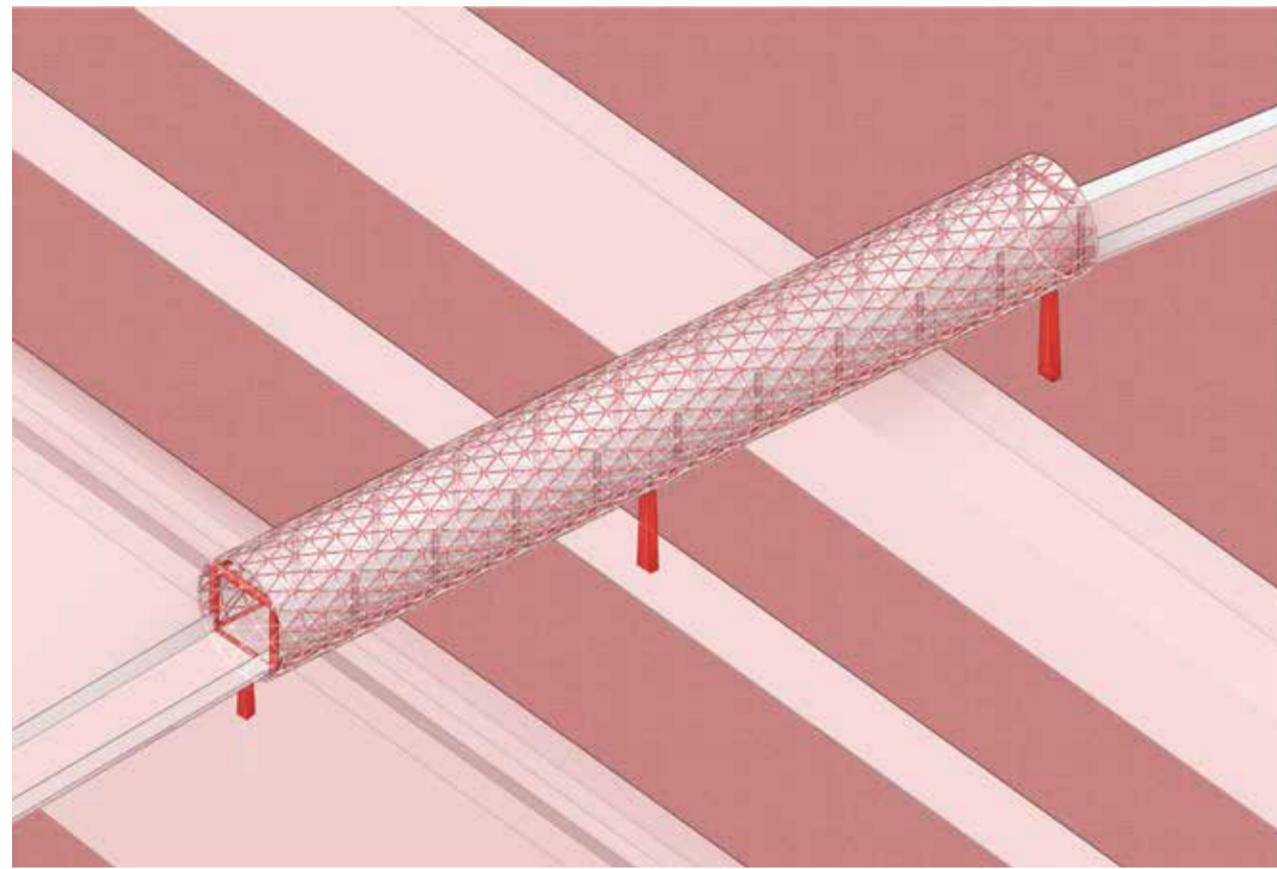
SONIC URBANISM // PAVILION PLACEMENT STRATEGY



Rumble strips activate frame



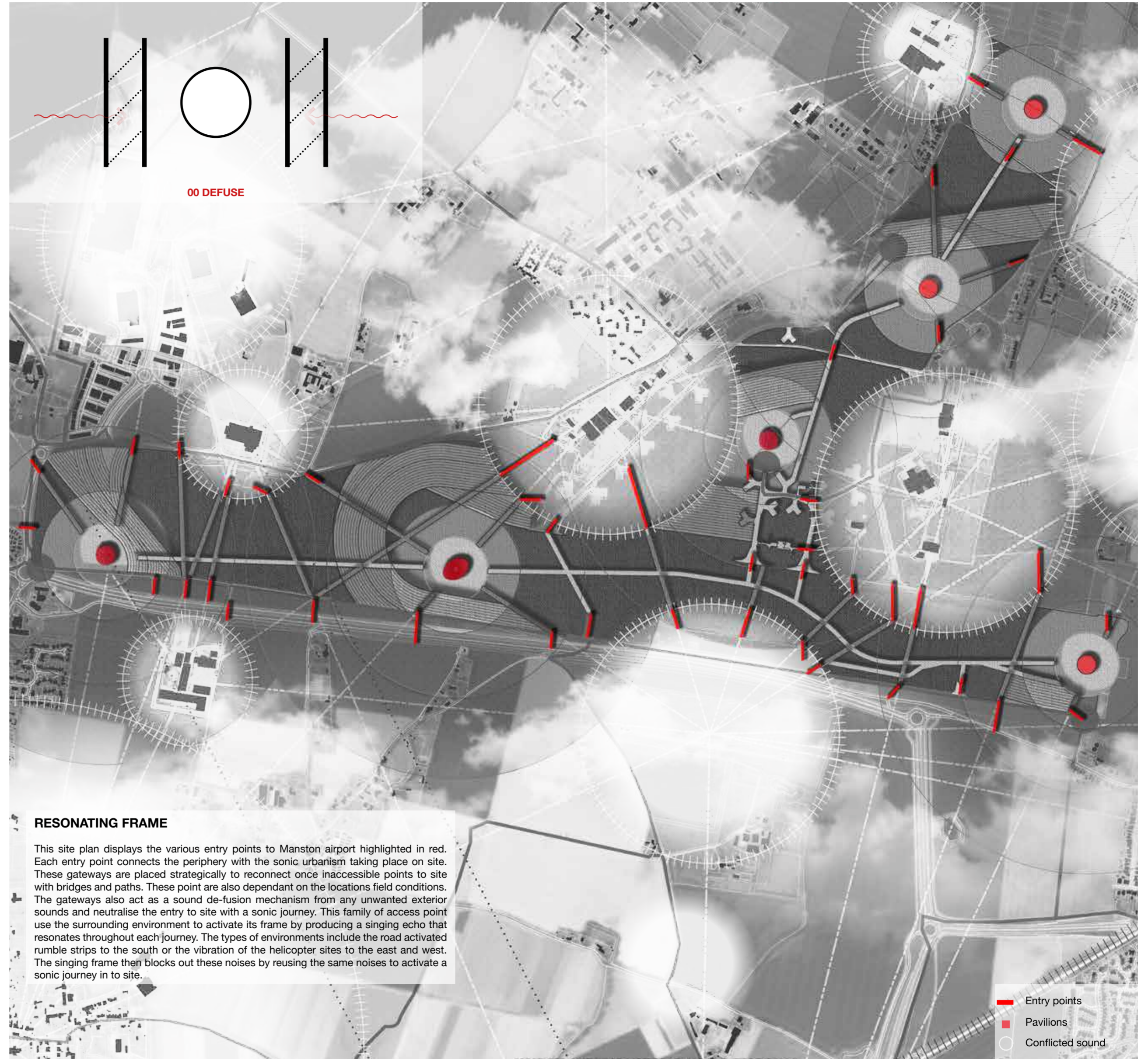
Reverberating cables placed in the frame



Southern acoustic gateway in situ



View of car activated resonating frame



00 DEFUSE

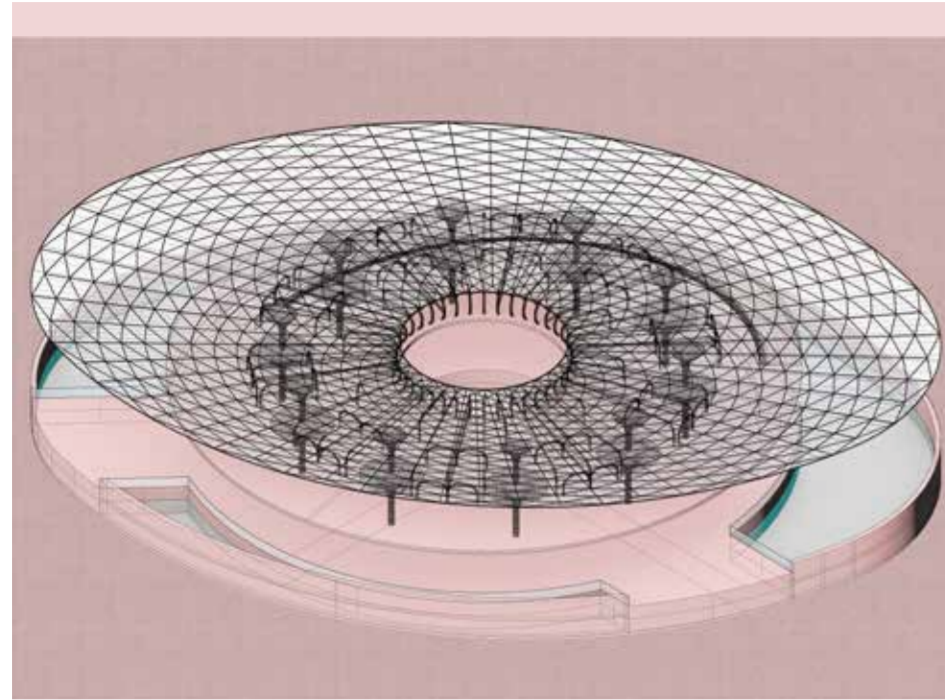
RESONATING FRAME

This site plan displays the various entry points to Manston airport highlighted in red. Each entry point connects the periphery with the sonic urbanism taking place on site. These gateways are placed strategically to reconnect once inaccessible points to site with bridges and paths. These point are also dependant on the locations field conditions. The gateways also act as a sound de-fusion mechanism from any unwanted exterior sounds and neutralise the entry to site with a sonic journey. This family of access point use the surrounding environment to activate its frame by producing a singing echo that resonates throughout each journey. The types of environments include the road activated rumble strips to the south or the vibration of the helicopter sites to the east and west. The singing frame then blocks out these noises by reusing the same noises to activate a sonic journey in to site.

- Entry points
- Pavilions
- Conflicted sound

ENTRY POINTS // ACOUSTIC GATEWAYS

SOUNDMARK ARENA



Rainwater harvesting

ACOUSTIC ACTIVATOR



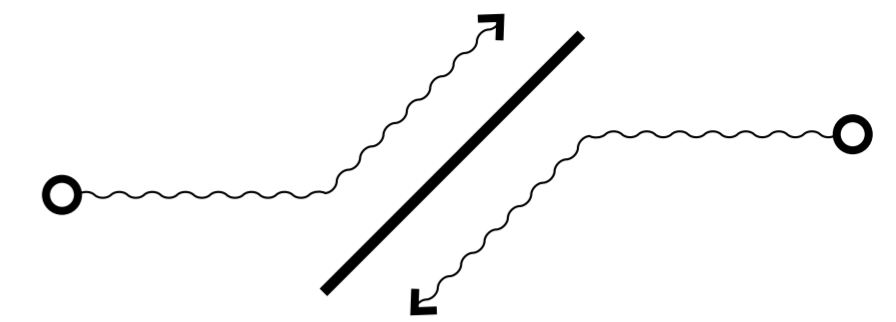
Hydraulophononic system

AUTONOMOUS ADJUDICATOR



Rain collected & played through interactive piping

SONIC TACTIC

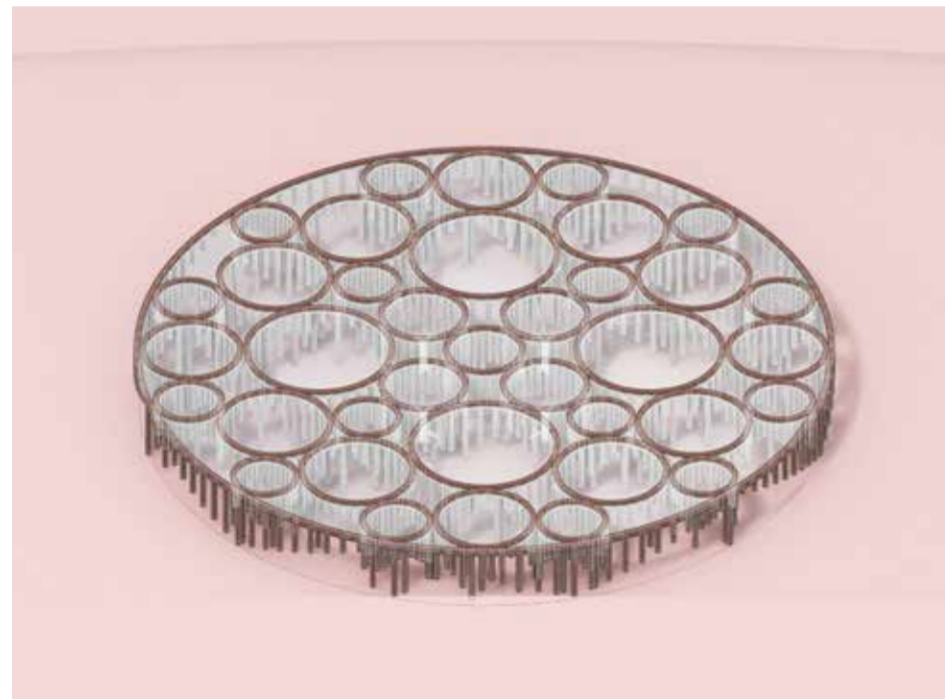


01 REROUTE

1. To send or direct (something) on or along a different route. (Oxford Dictionary, 2021)

When sound, traveling in air, comes to the end of the air, it will start to penetrate whatever it strikes. The wave consists of both pressure and movement of the particles of the material through which it goes. ... This results in the wave leaving the wall, just the same way that light gets reflected from a mirror. Any mirror obeys the three laws of reflection, flat, curved, convex or concave.

PAVILION 01 - THE SONIC RESERVOIR



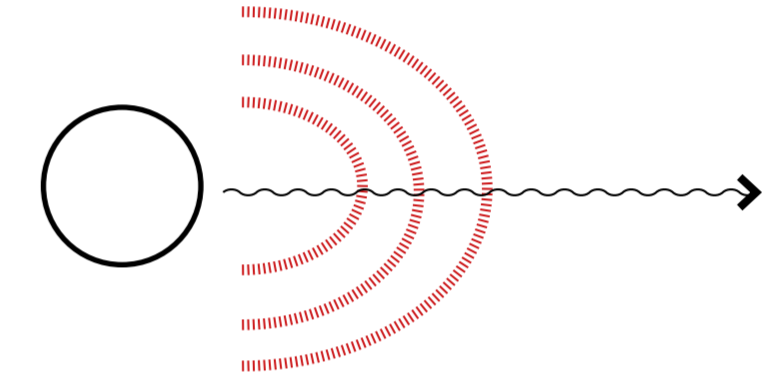
Framework forest



Baton powered mechanism



Inhabitant plays the pavilions frame

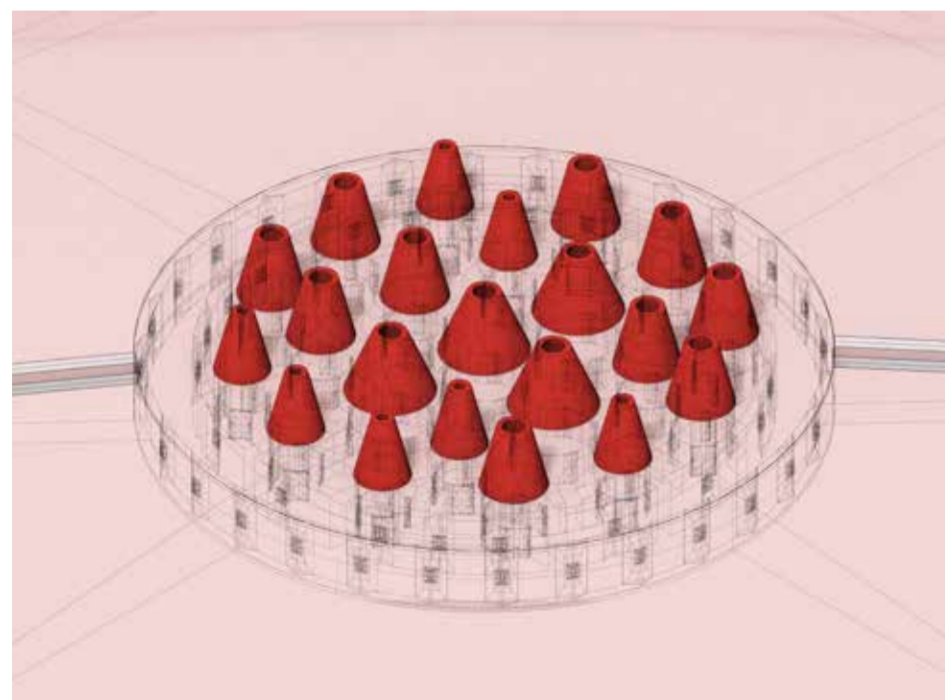


02 REVERBERATE

1. (Of a loud noise) to be repeated several times as an echo.
2. Of a place) appear to vibrate because of a loud noise.
3. Return or re-echo (a sound) (Oxford Dictionary, 2021)

Reverberation, in psychoacoustics and acoustics, is a persistence of sound after the sound is produced. A reverberation, or reverb, is created when a sound or signal is reflected causing numerous reflections to build up and then decay as the sound is absorbed by the surfaces of objects in the space - which could include furniture, people, and air. This is most noticeable when the sound source stops but the reflections continue, their amplitude decreasing, until zero is reached.

PAVILION 02 - THE AUTONOMOUS AUTHOR



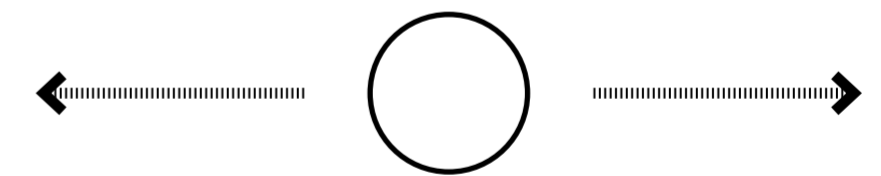
Subterranean Peregrination



Electroacoustic speakers



Recorded sounds of Thanet played to the community

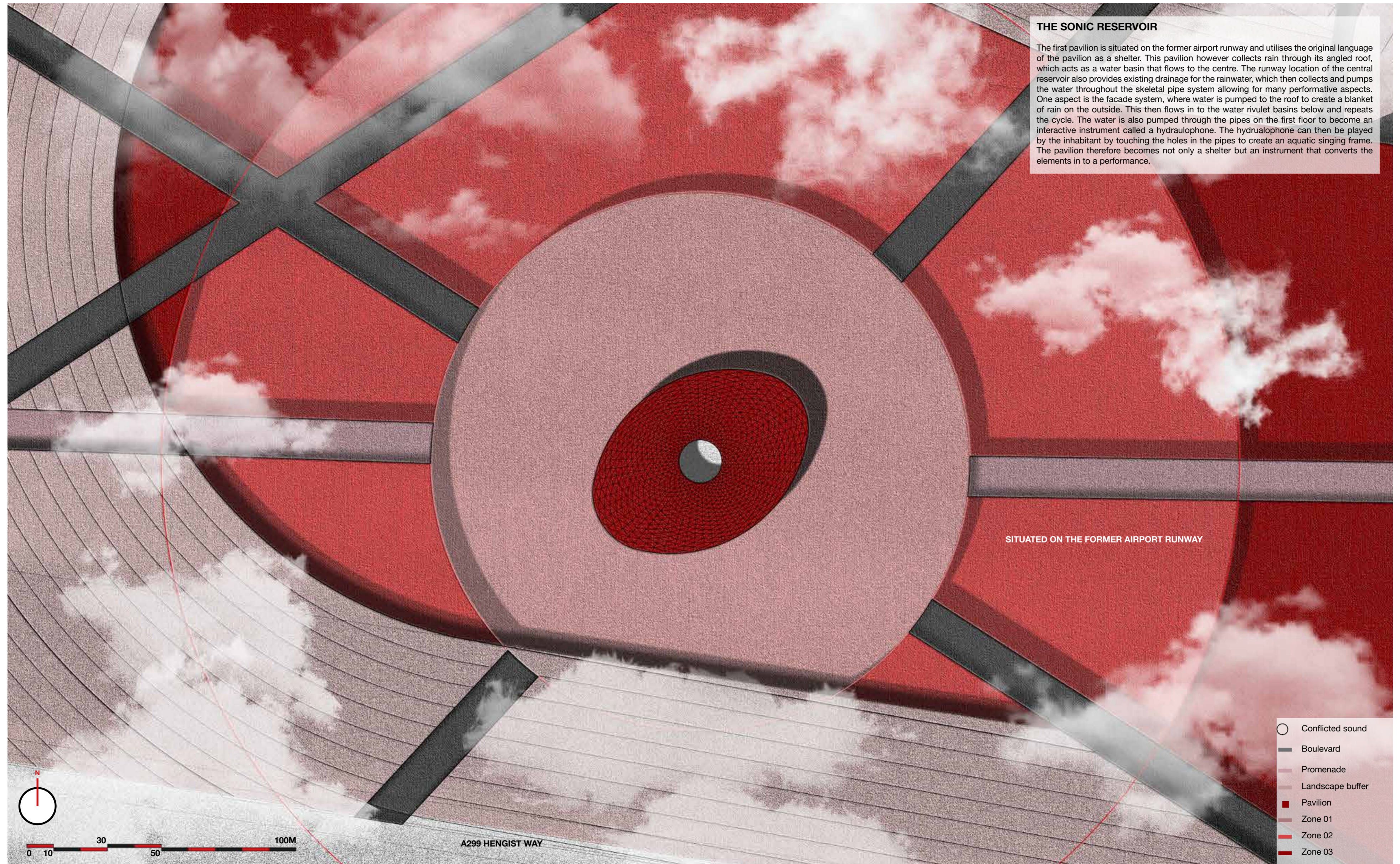


03 AMPLIFY

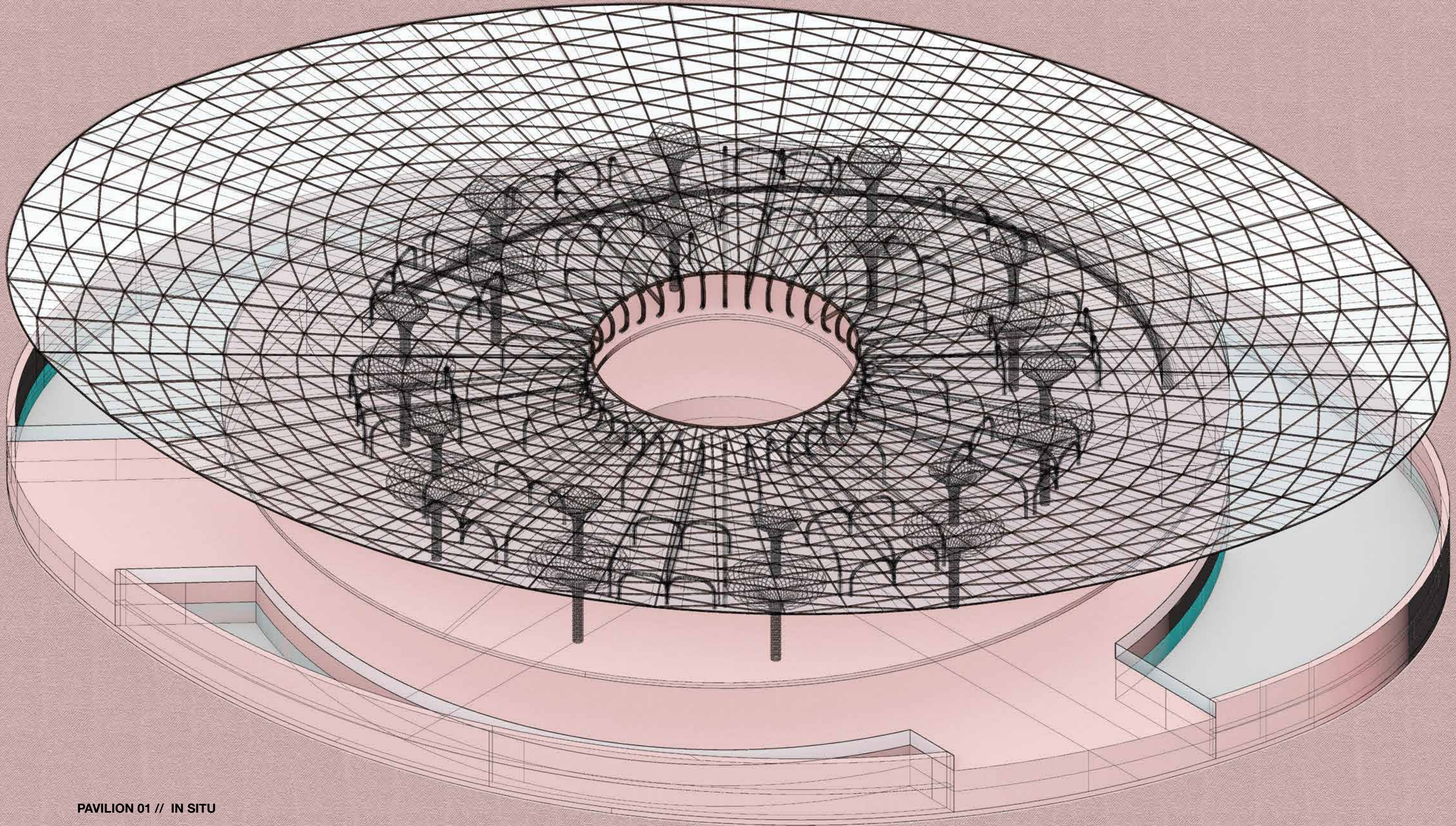
1. Enlarge upon or add detail to a sonic output.
2. Increase the volume of (sound), especially using an amplifier (Oxford Dictionary, 2021)

Sounds can be made louder or amplified in a number of ways. By providing more energy in making the sound its loudness can be increased. This would be achieved by beating a drum with greater vigour, blowing harder on the recorder or using more bodily energy in shouting louder.

ACOUSTIC ACTIVATORS // AURAL NETWORK TYPOLOGY

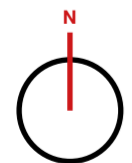
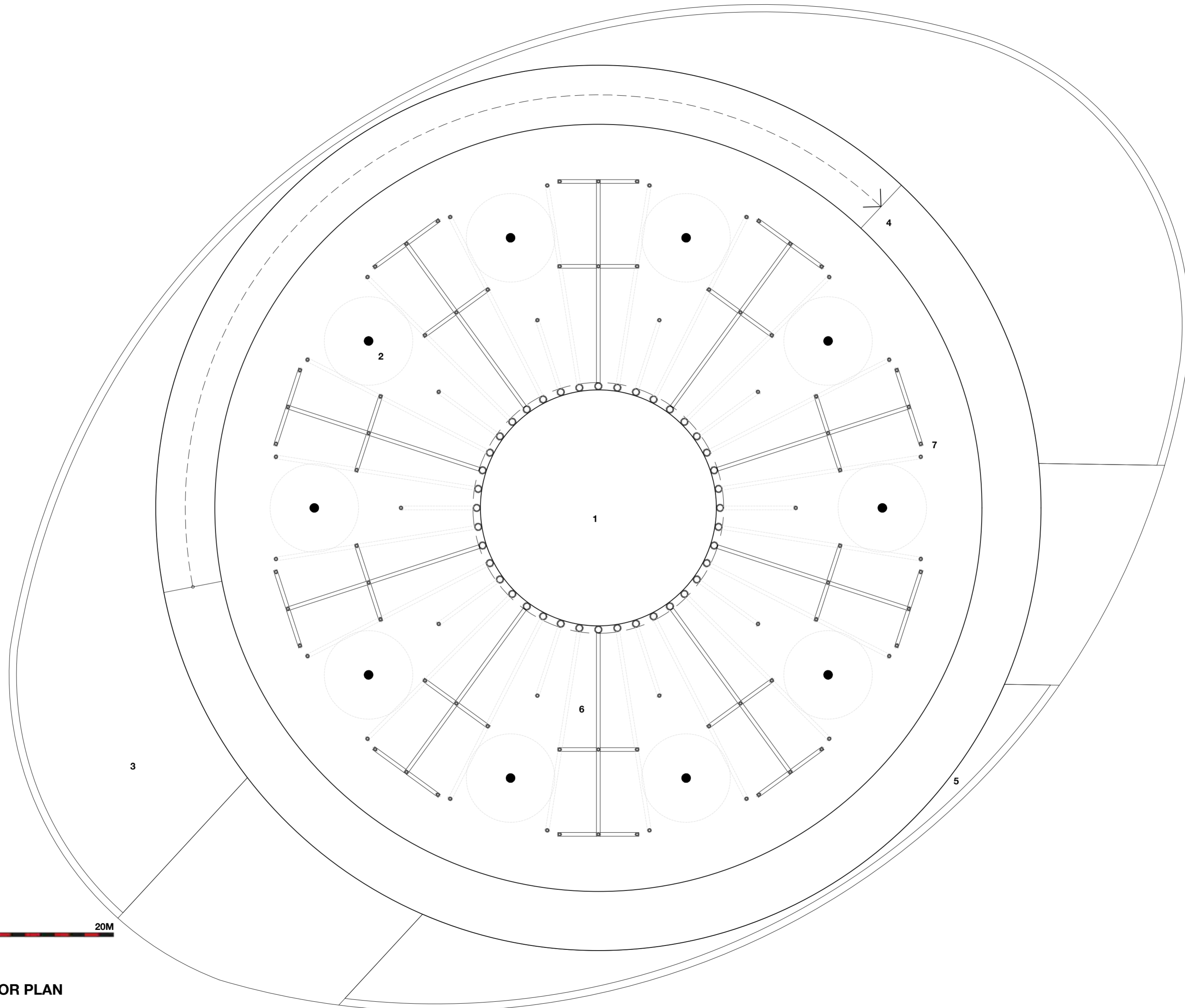


PAVILION 01 // SITE LOCATION PLAN



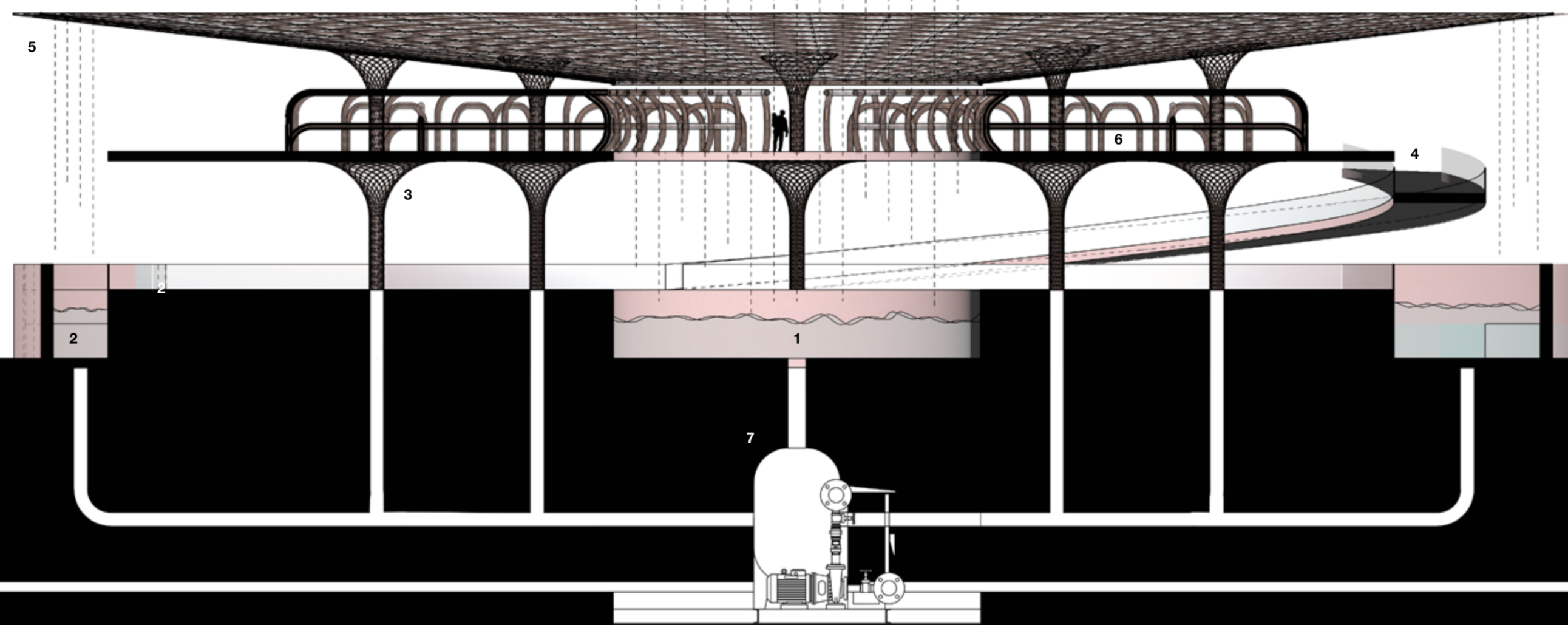
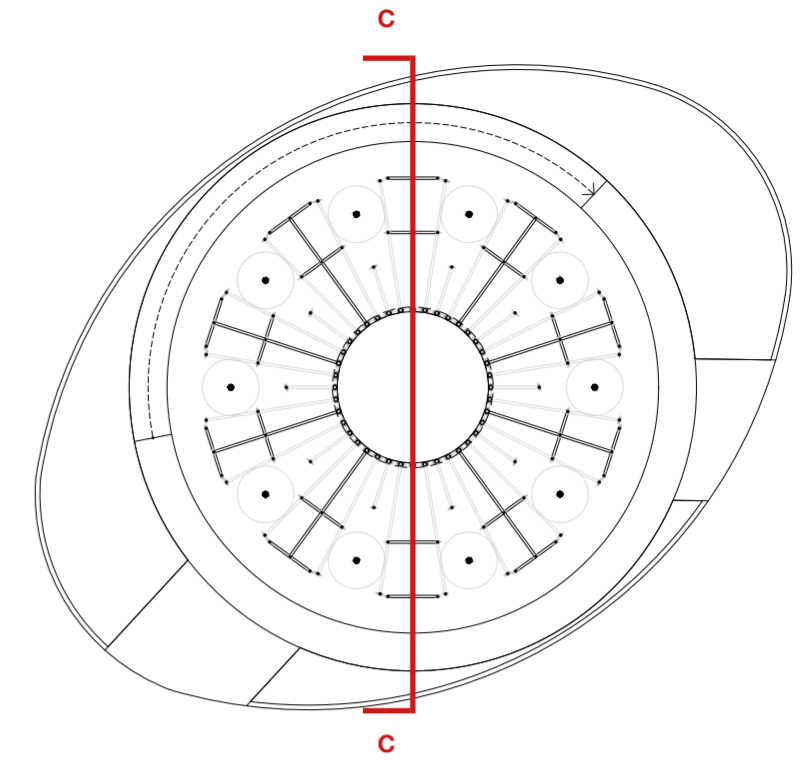
PAVILION 01 // IN SITU

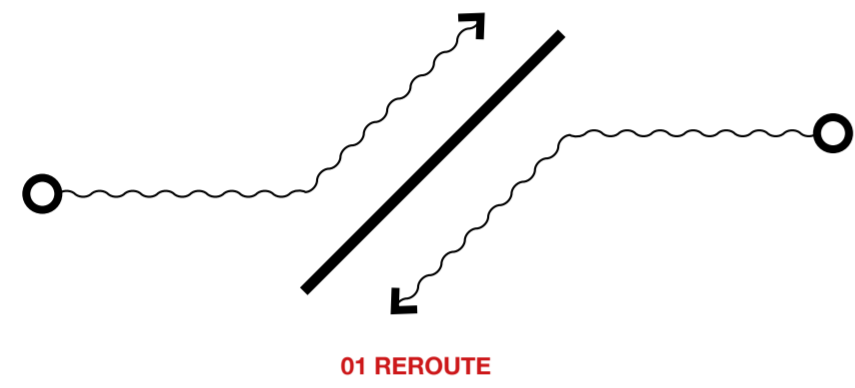
- 1. RESERVOIR COLLECTION POINT
- 2. STRUCTURAL COLUMN
- 3. WATER RIVULET BASIN
- 4. RAMP ACCESS
- 5. PERFORMATIVE RAIN FACADE
- 6. WATER PIPING
- 7. HYDRAULOPHONE SYSTEM



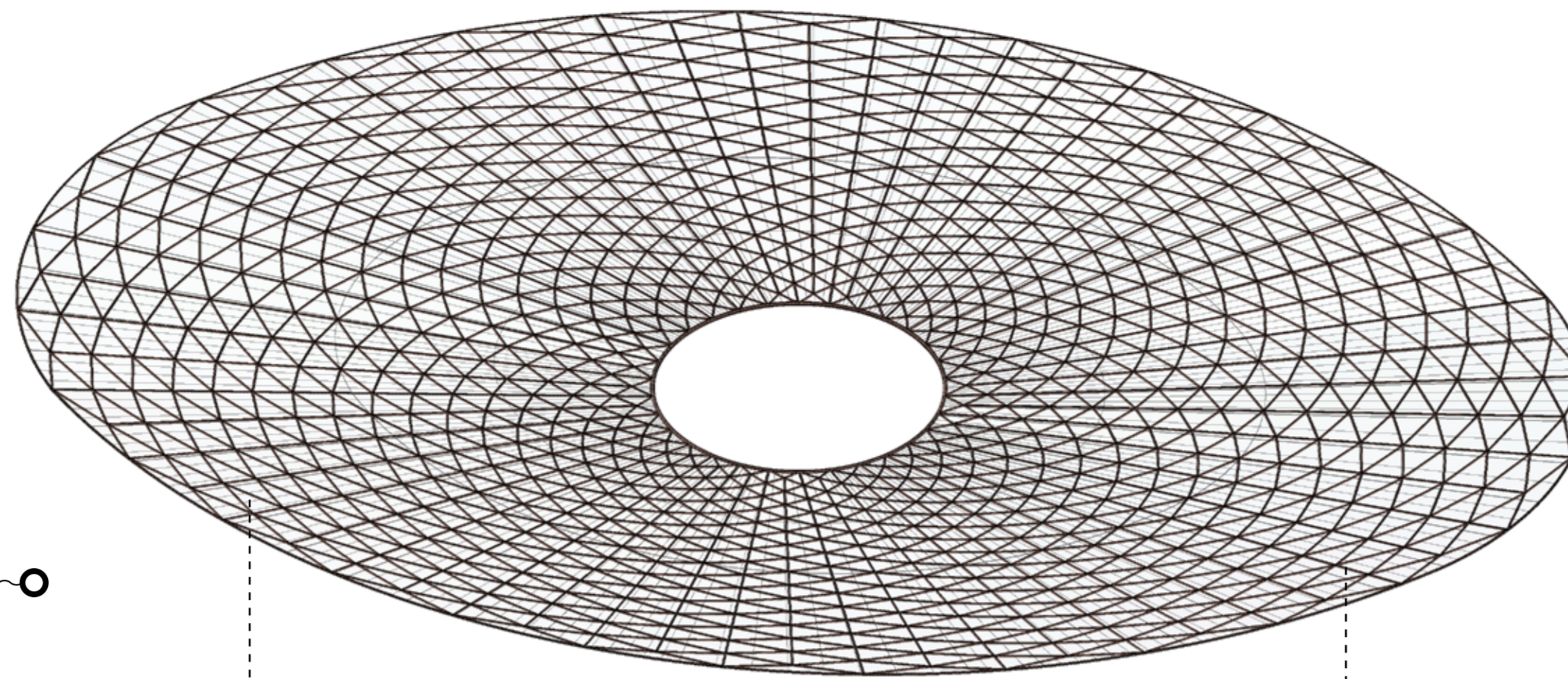
PAVILION 01 // FIRST FLOOR PLAN

- 1. RESERVOIR COLLECTION POINT
- 2. STRUCTURAL COLUMN
- 3. WATER RIVULET BASIN
- 4. RAMP ACCESS
- 5. PERFORMATIVE RAIN FACADE
- 6. HYDRAULOPHONE SYSTEM
- 7. RAINWATER HARVESTING PUMP

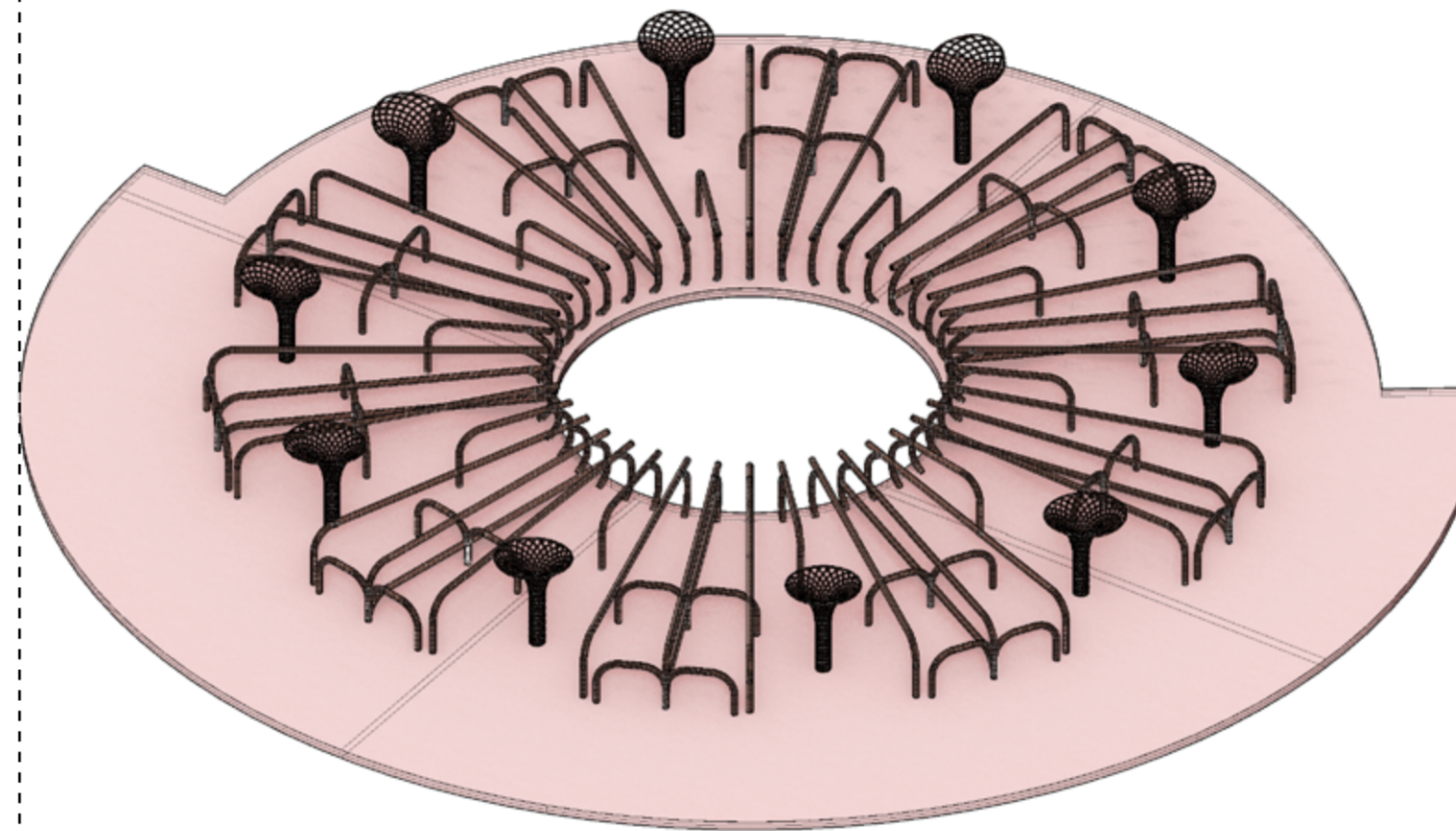




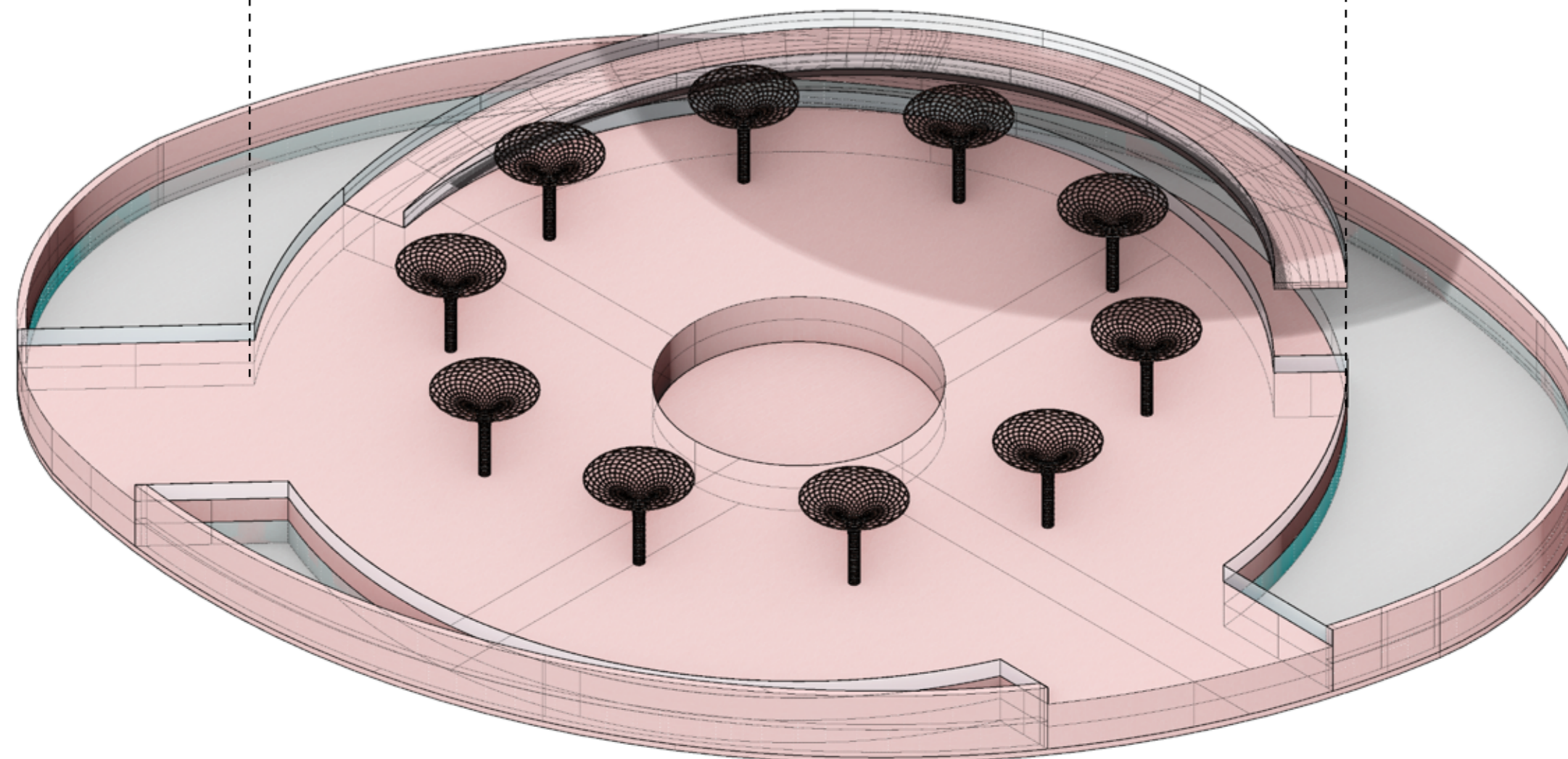
01 REROUTE



RAINWATER HARVESTING ROOF STRUCTURE



+01 RAINROOM & HYDRAULOPHONE SYSTEM

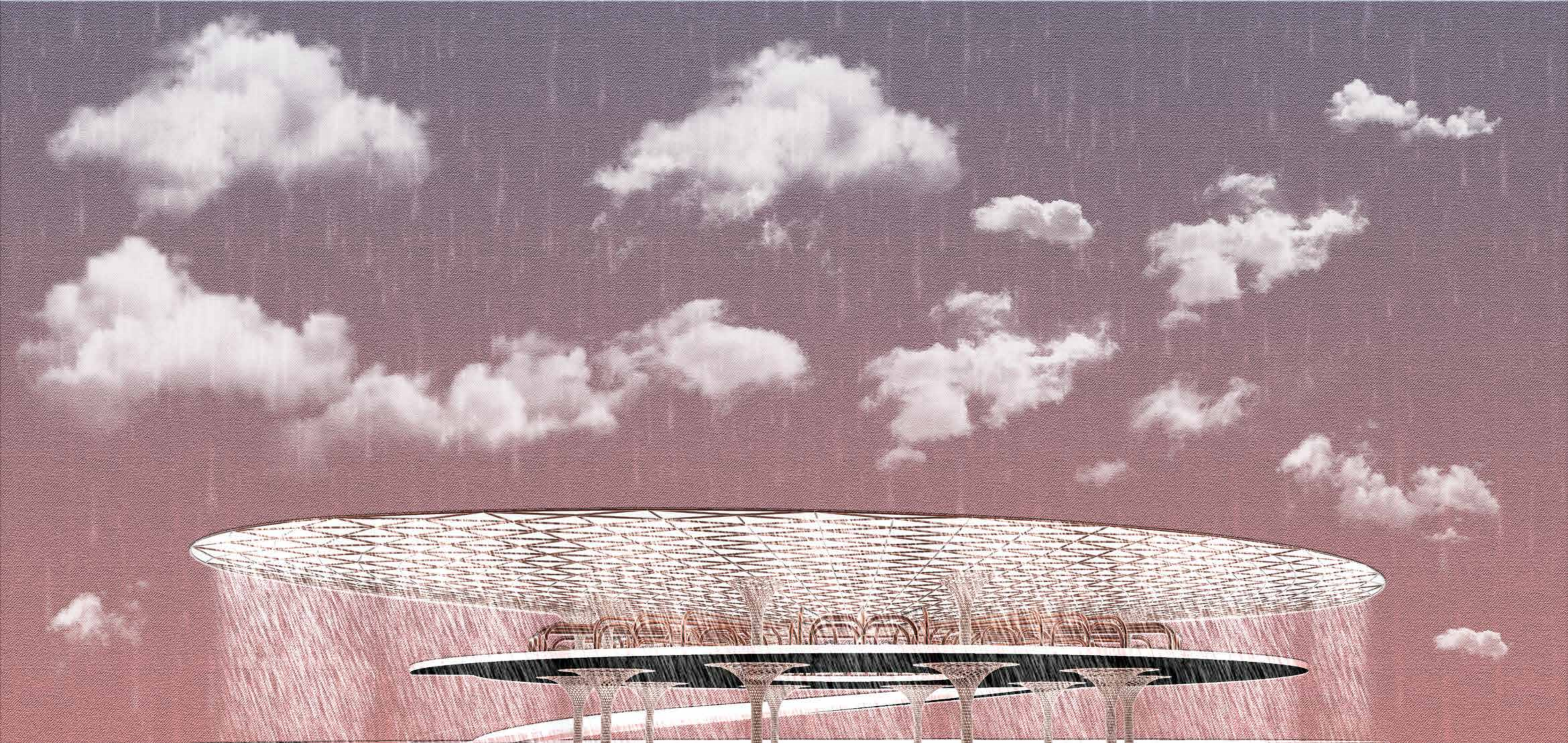


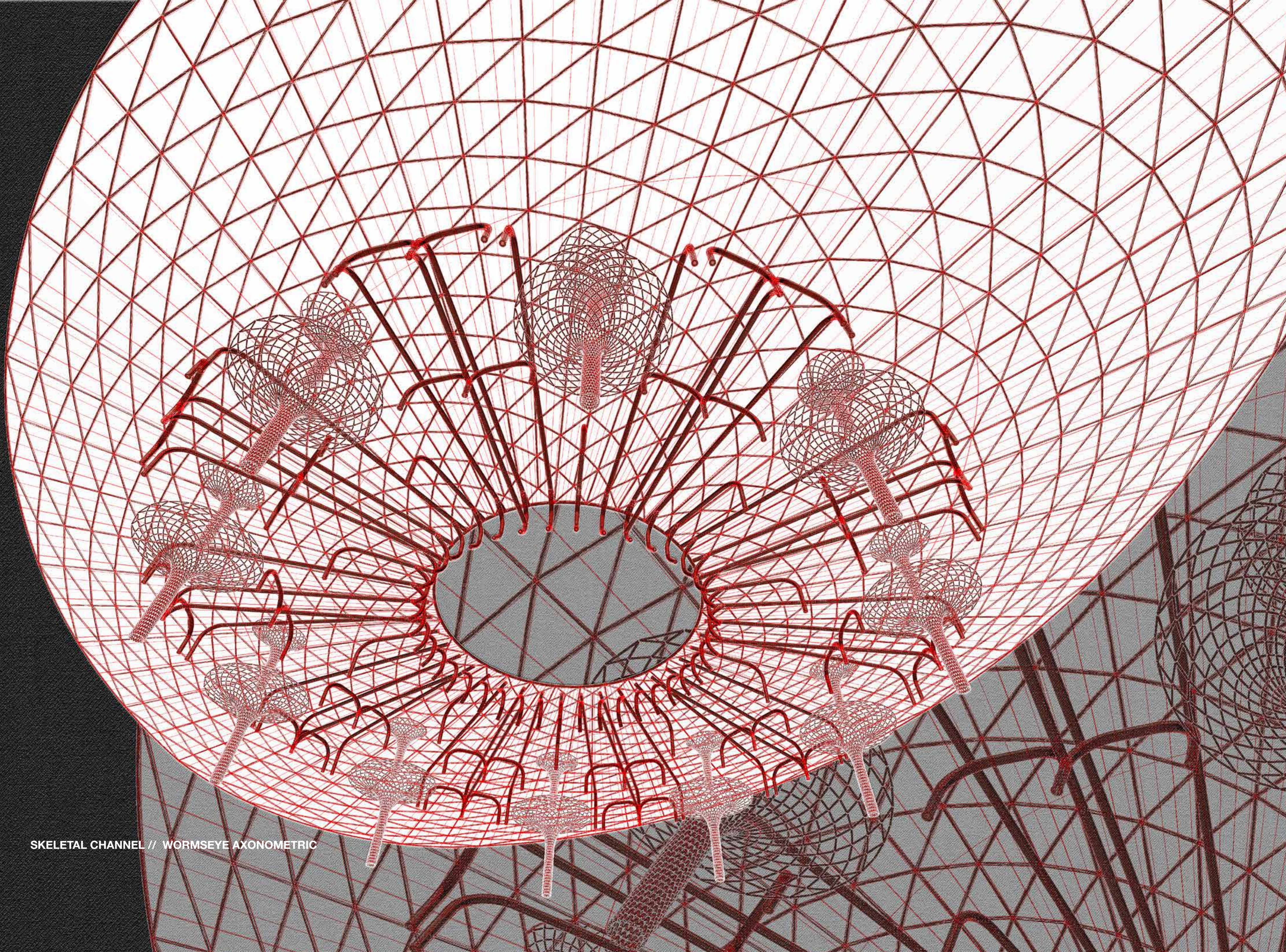
+00 UNDER CROFT RESERVOIR

PAVILION 01 // REROUTE COMPONENTS

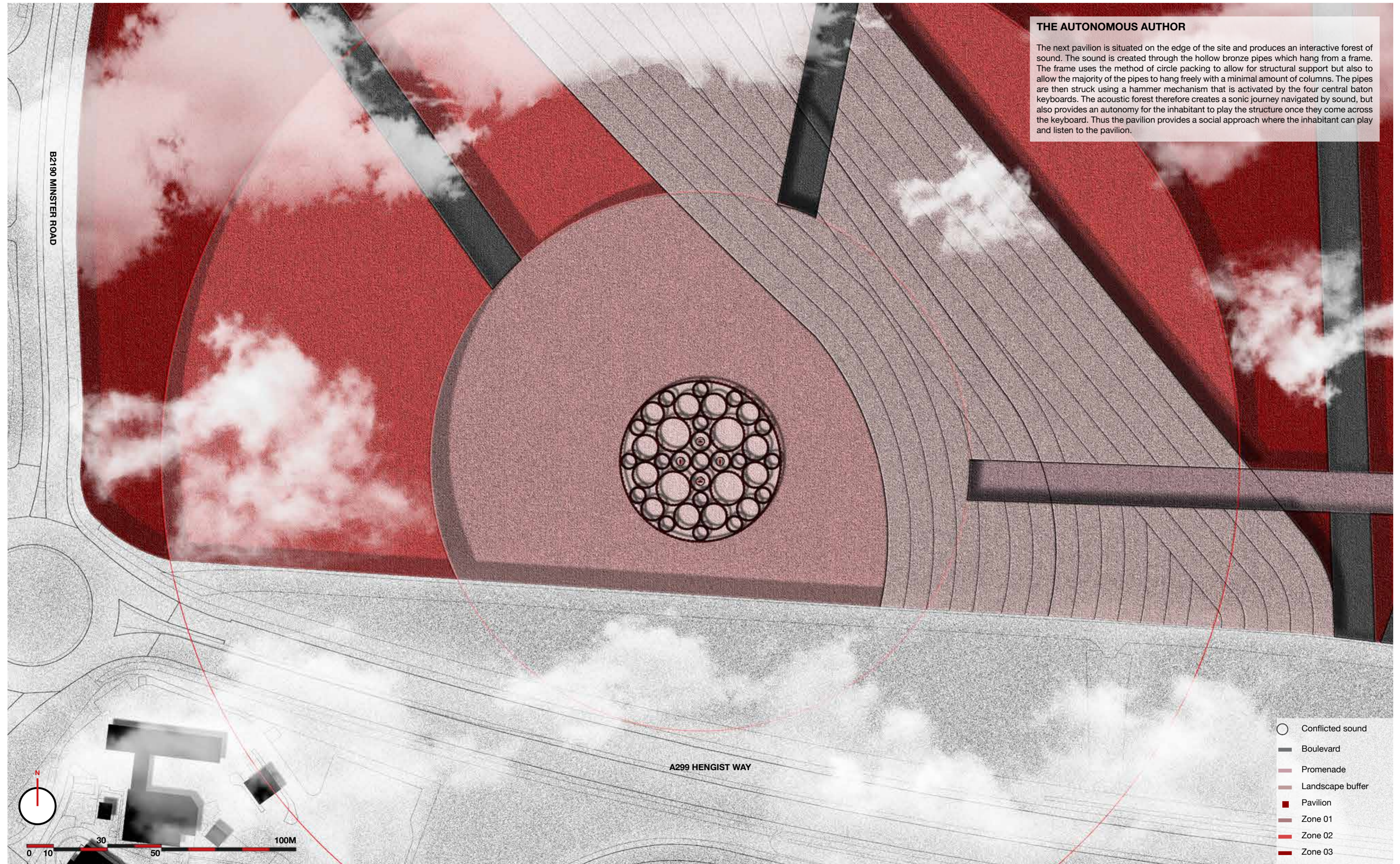


01 REROUTE // HYDRAULOPHONIC PERFORMANCE

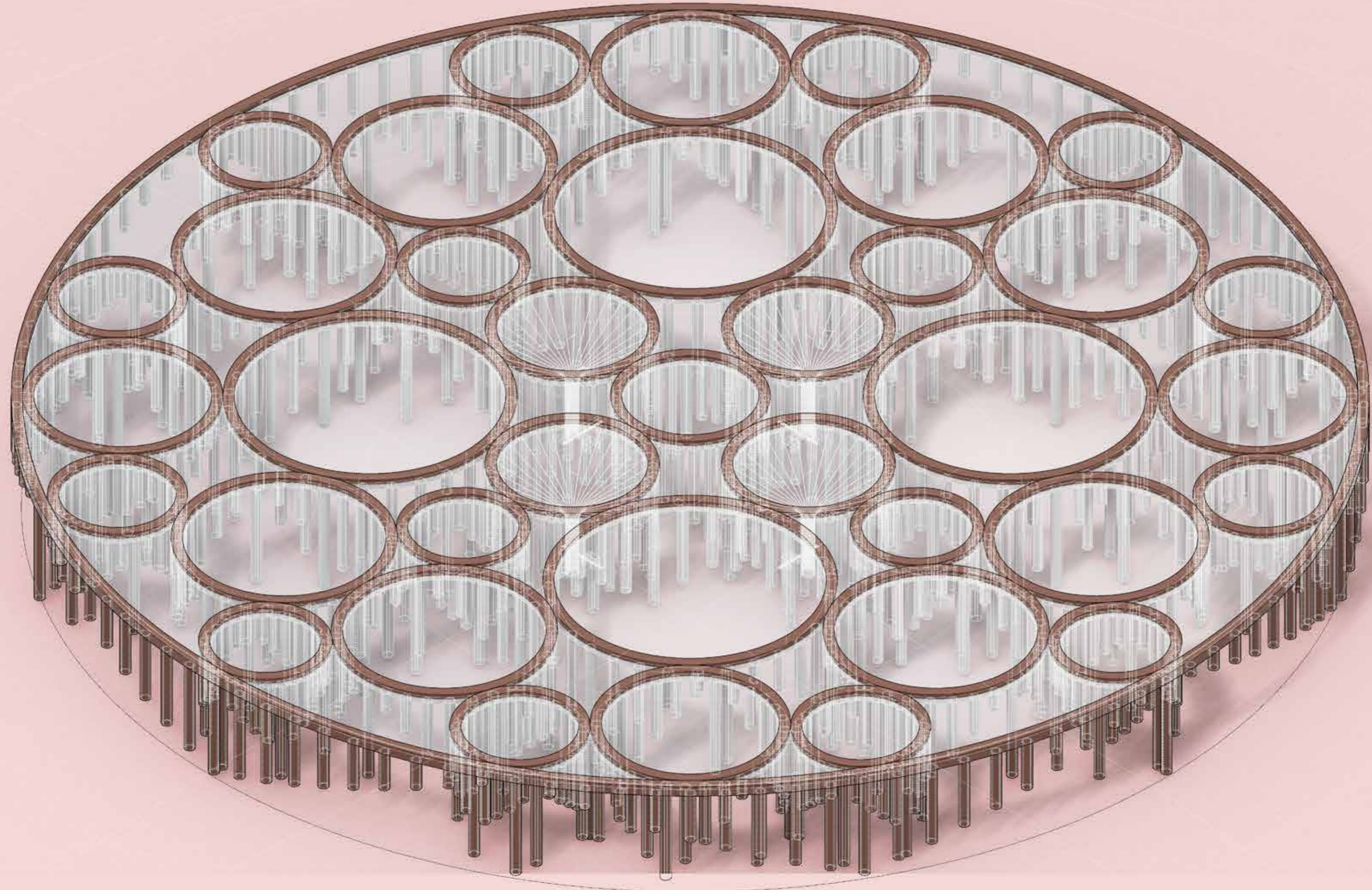




SKELETAL CHANNEL // WORMSEYE AXONOMETRIC

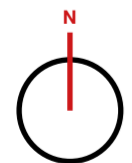
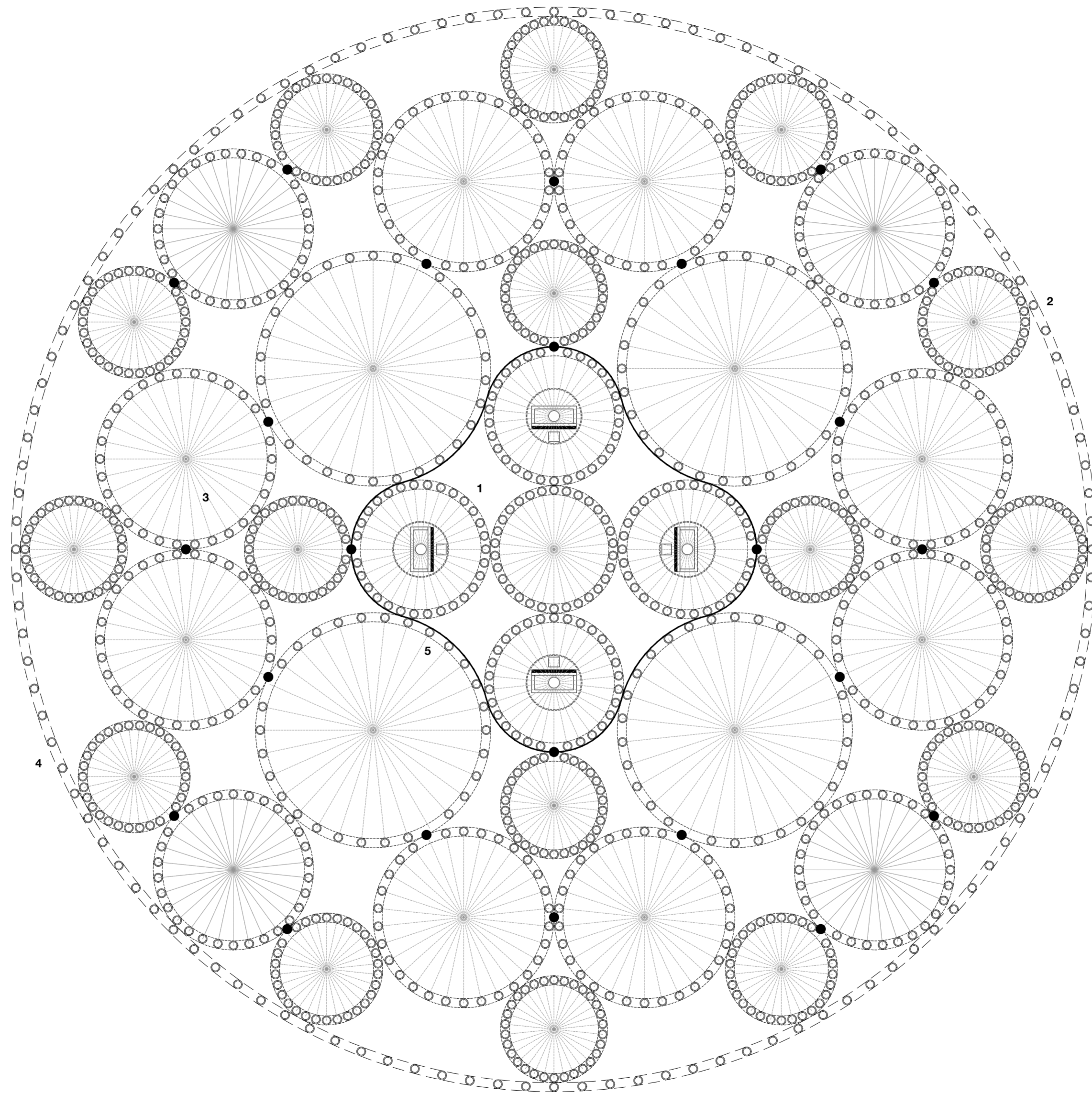


PAVILION 02 // SITE LOCATION PLAN



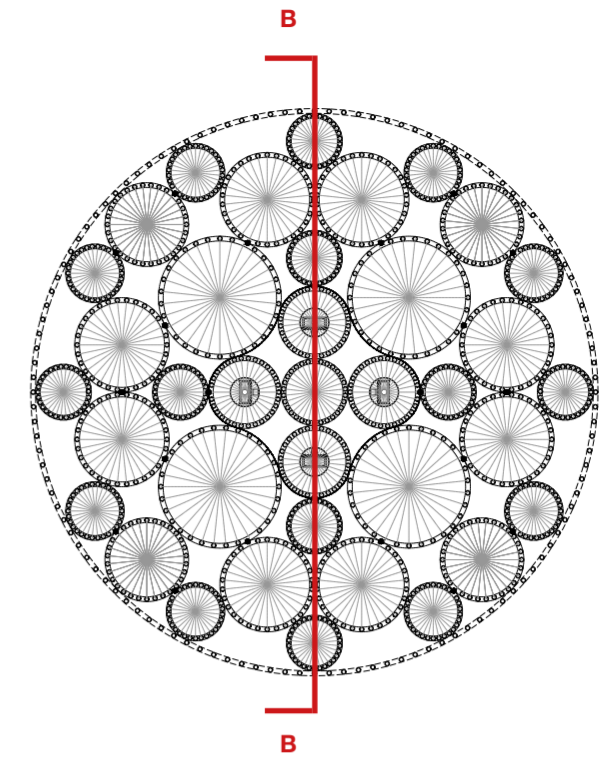
PAVILION 02 // IN SITU

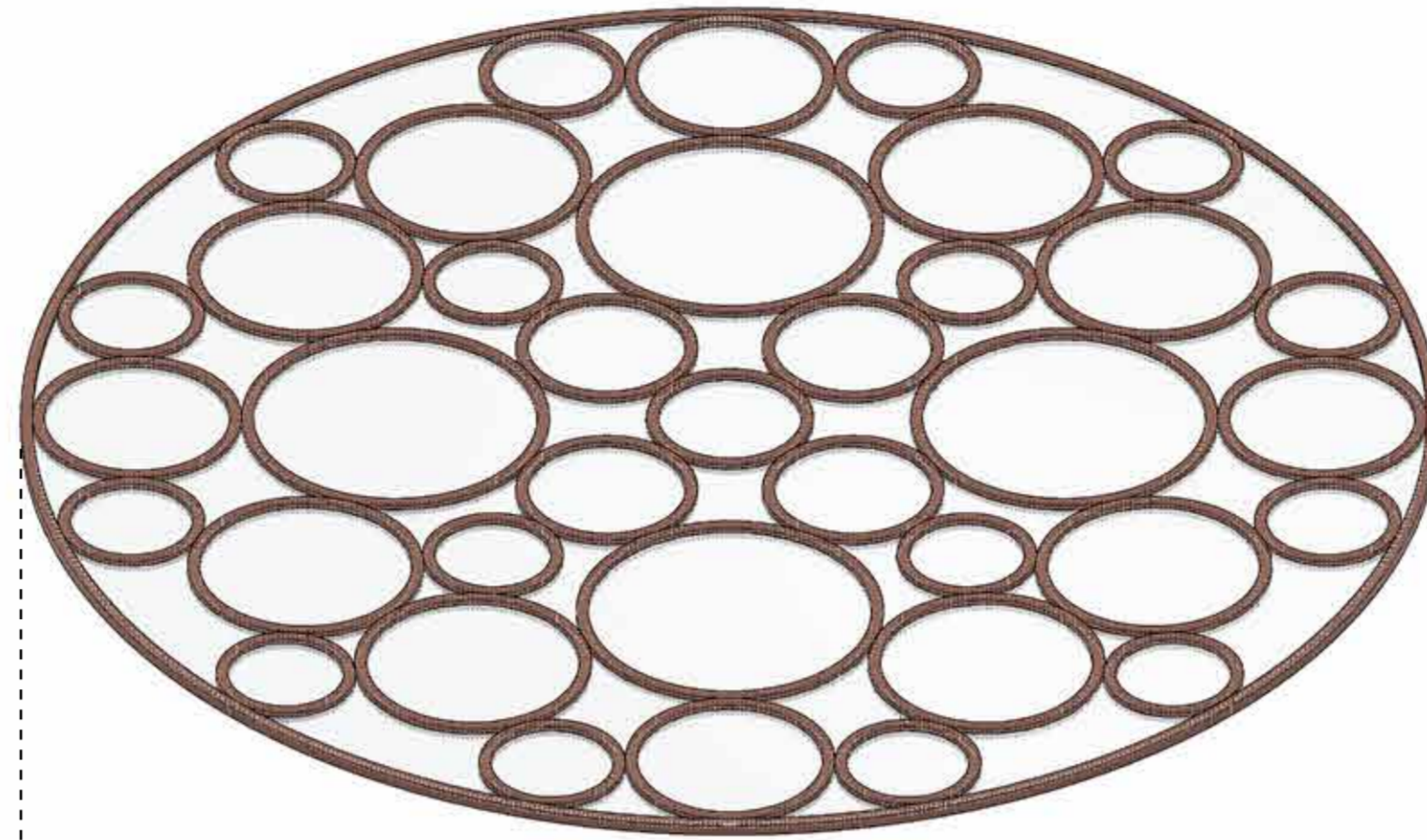
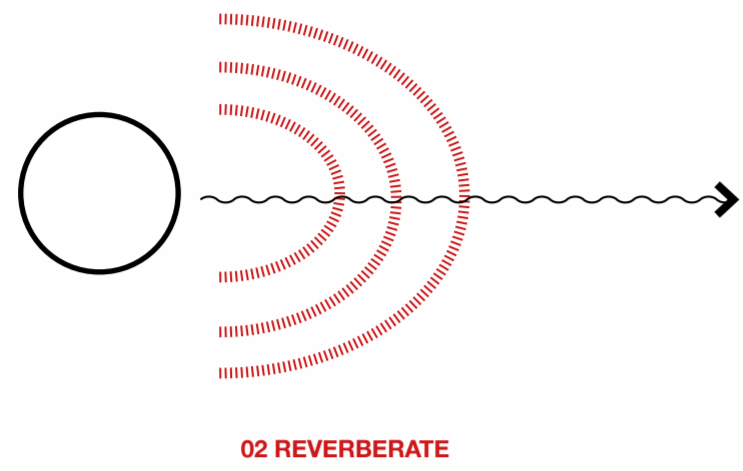
- 1. AUTONOMOUS PLAYING ORGAN
- 2. CIRCLE PACKING FRAME
- 3. ACOUSTIC ARENAS
- 4. ACOUSTIC PIPING
- 5. HAMMER MECHANISM CABLING



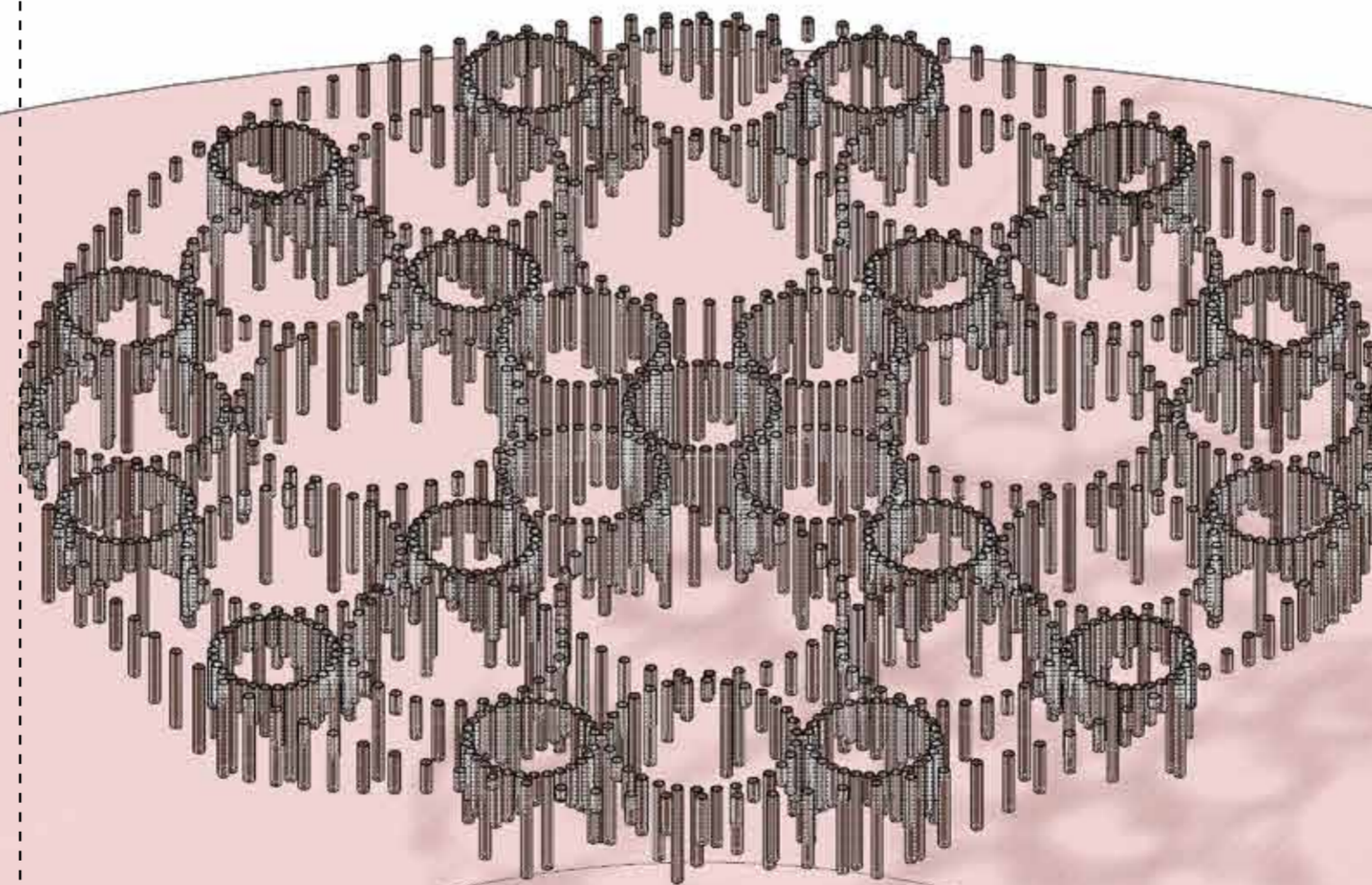
PAVILION 02 // GROUND FLOOR PLAN

- 1. AUTONOMOUS PLAYING ORGAN
- 2. CIRCLE PACKING FRAME
- 3. ACOUSTIC ARENAS
- 4. ACOUSTIC PIPING
- 5. HAMMER MECHANISM CABLING
- 6. STRUCTURAL COLUMN

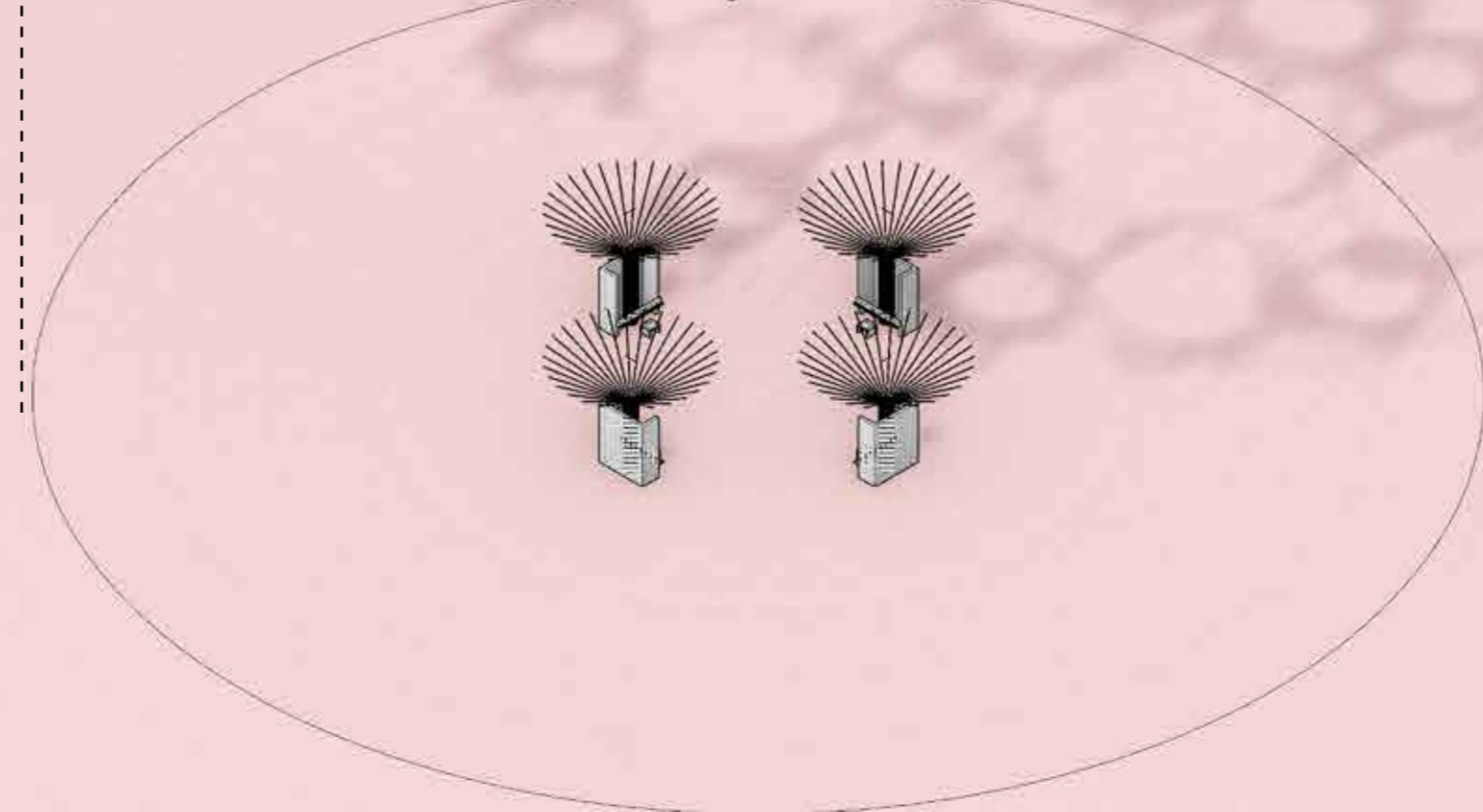




+01 CIRCLE PACKING FRAME



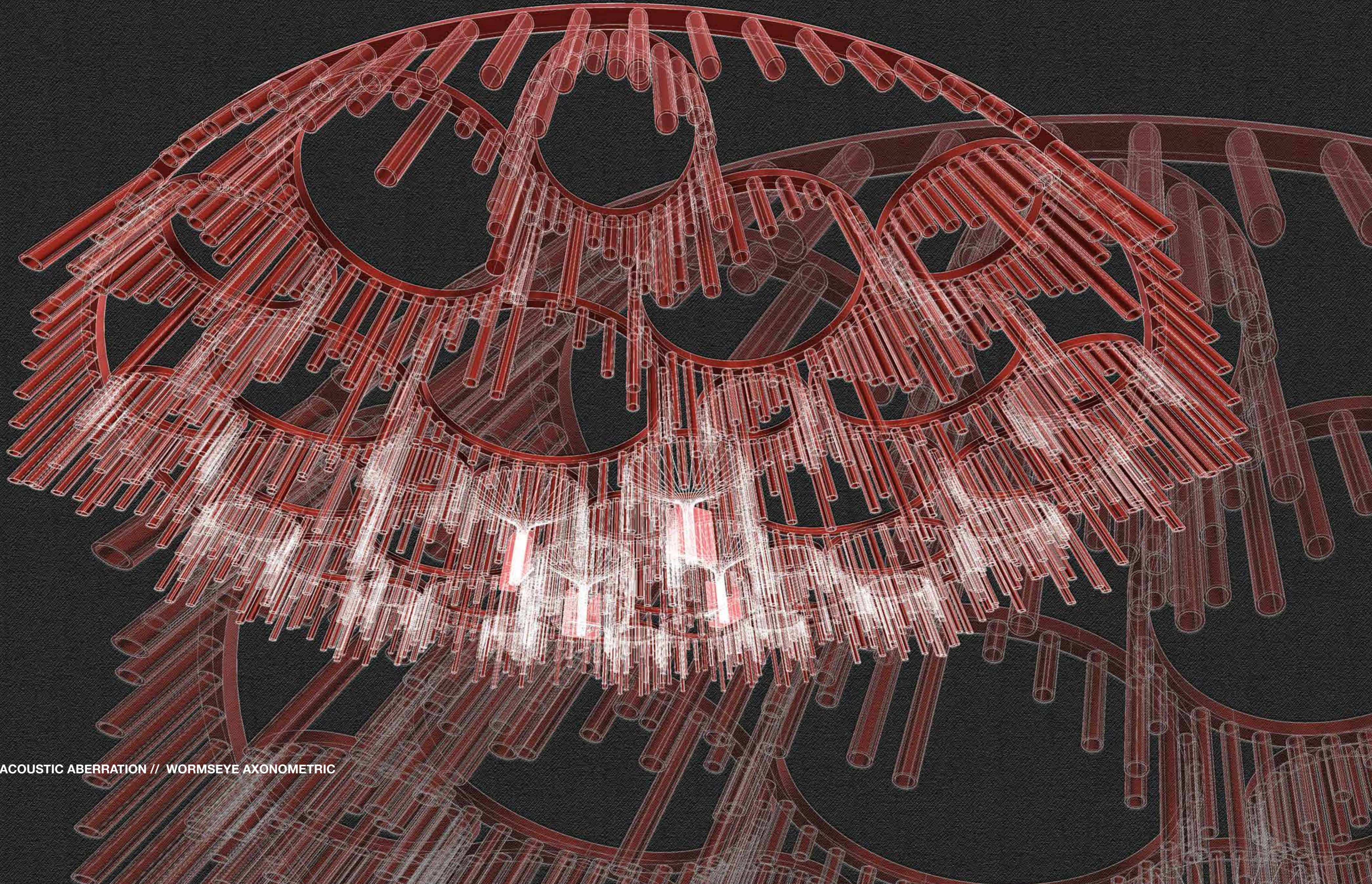
+00 BRONZE PIPE FOREST



+00 AUTONOMOUS PLAYING ARENAS







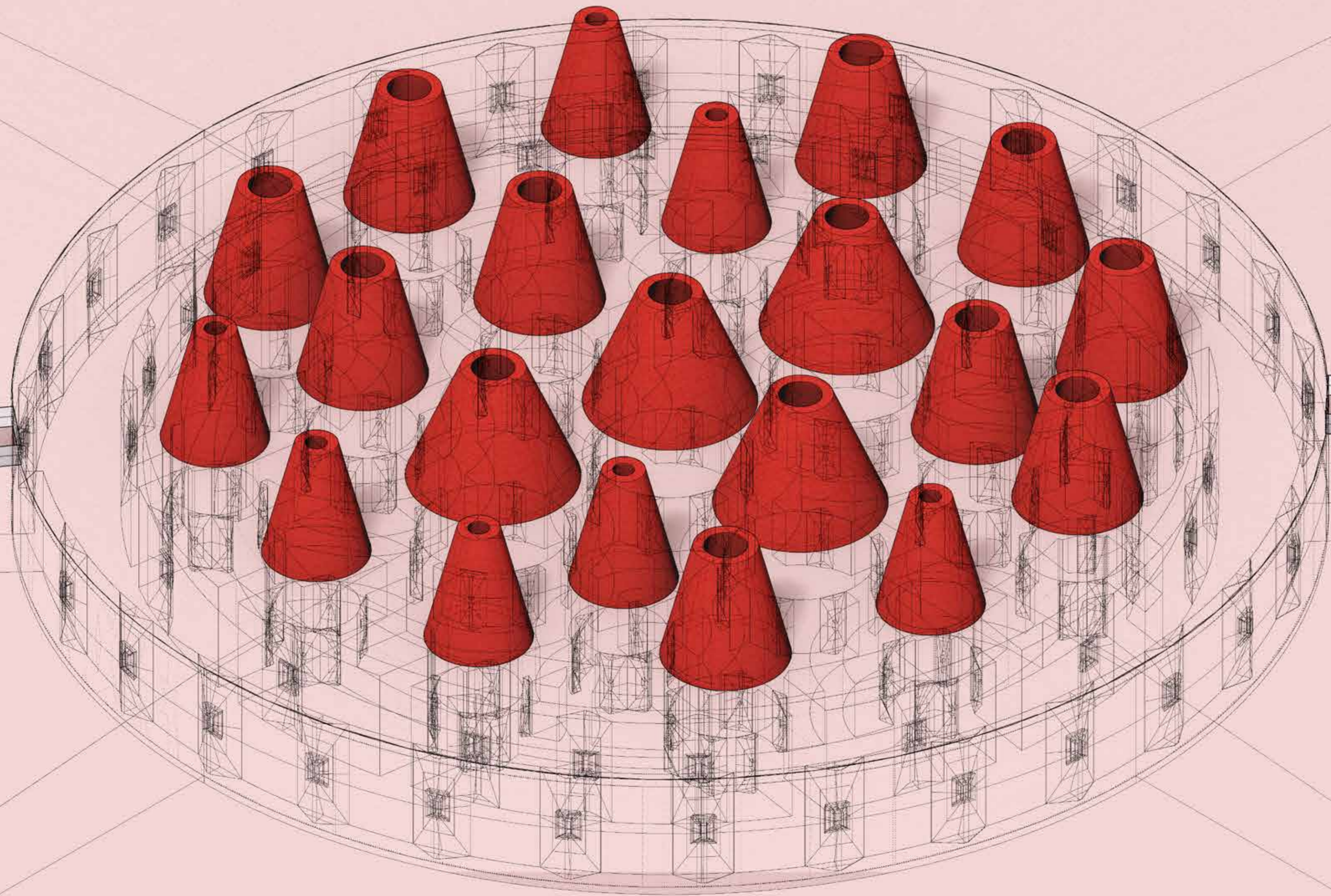
ACOUSTIC ABERRATION // WORMSEYE AXONOMETRIC

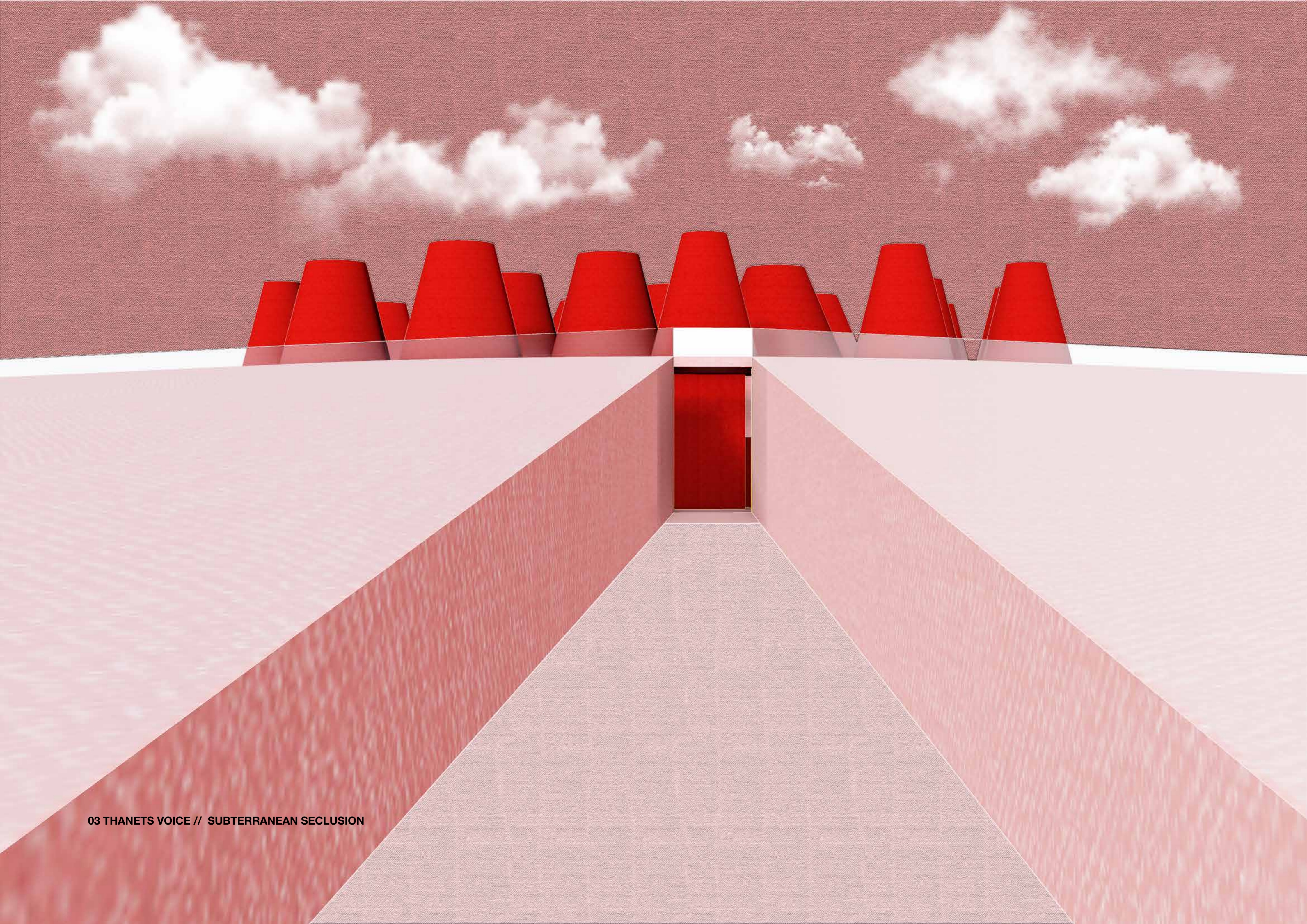


THANET'S VOICE

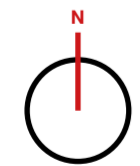
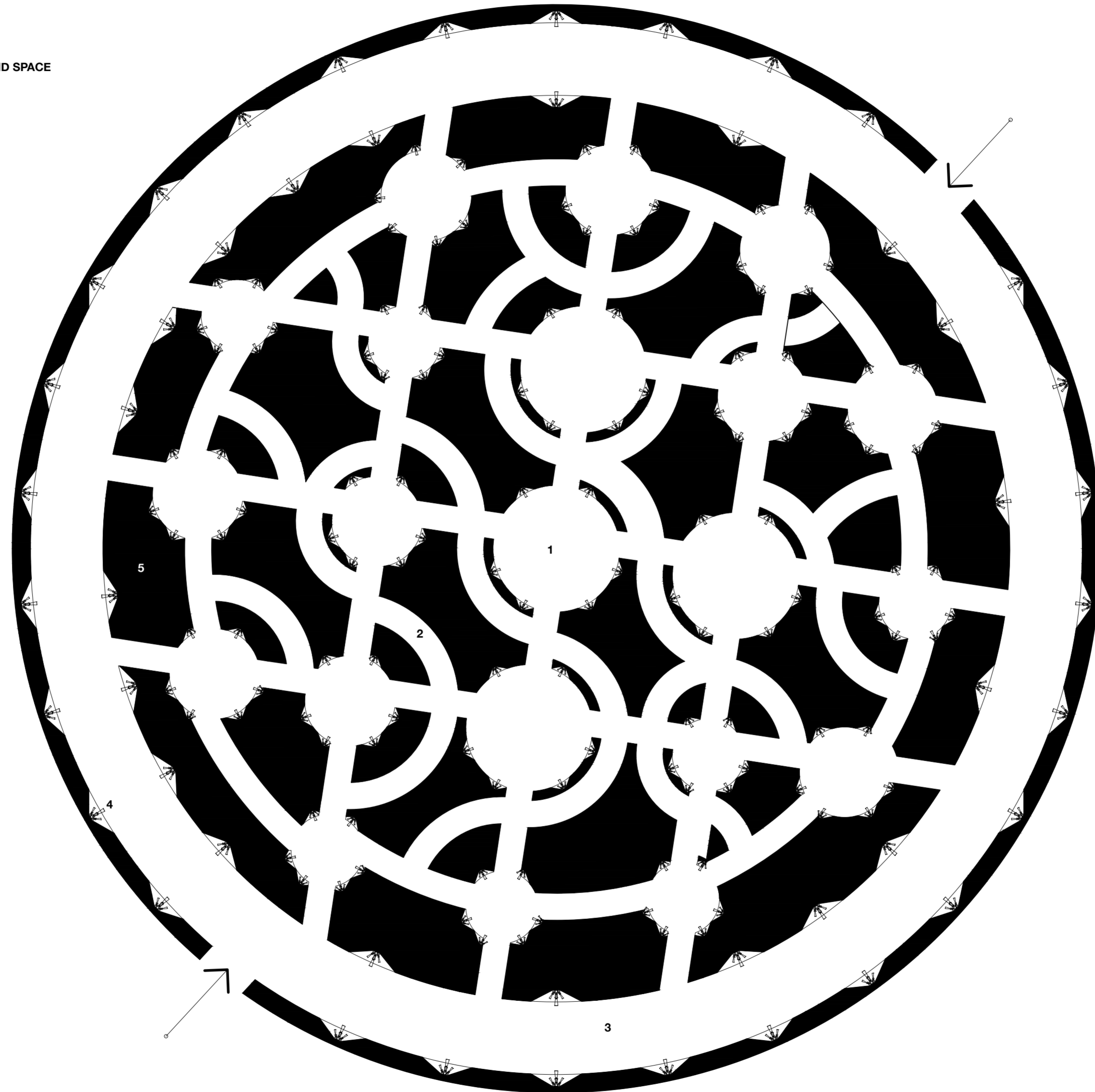
The final pavilion is situated between two loud helicopter sites to the east and west. This pavilion has both subterranean and raised levels. The upper level has cone channels which echo the sound produced beneath in the acoustic chamber. The lower level is sunken in landscaping to provide optimum sound quality and positive acoustic isolation. Once inside the subterranean level, the recorded sounds of Thanet are played through oscillating electroacoustic speakers embedded in the walls. The interior has three key factors. The first is the outer edge acoustic chamber which is a circular path on the periphery. The next is the dis-interaction paths that allow for isolation when the inhabitant sees fit. Lastly is the interaction circles which use the aspect ratio of surround sound to bring people together once they have navigated the sonic labyrinth at will. This pavilion overall brings people together as well as provides privacy. Therefore allowing the inhabitant to decide what they want to hear and experience.

PAVILION 03 // SITE LOCATION PLAN

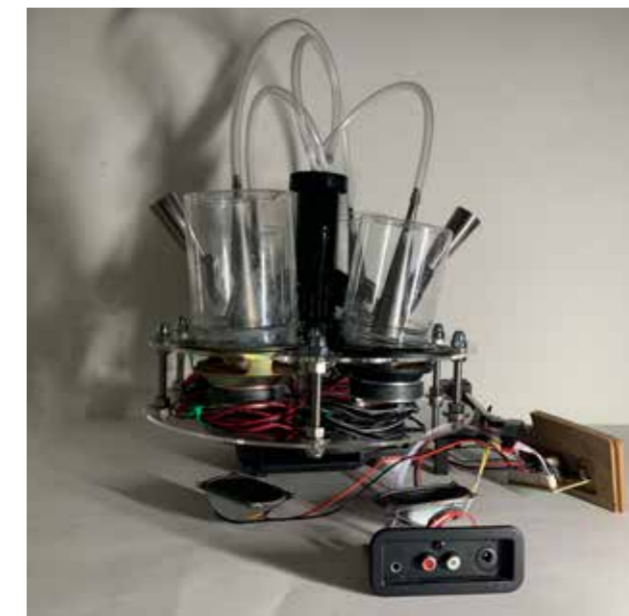
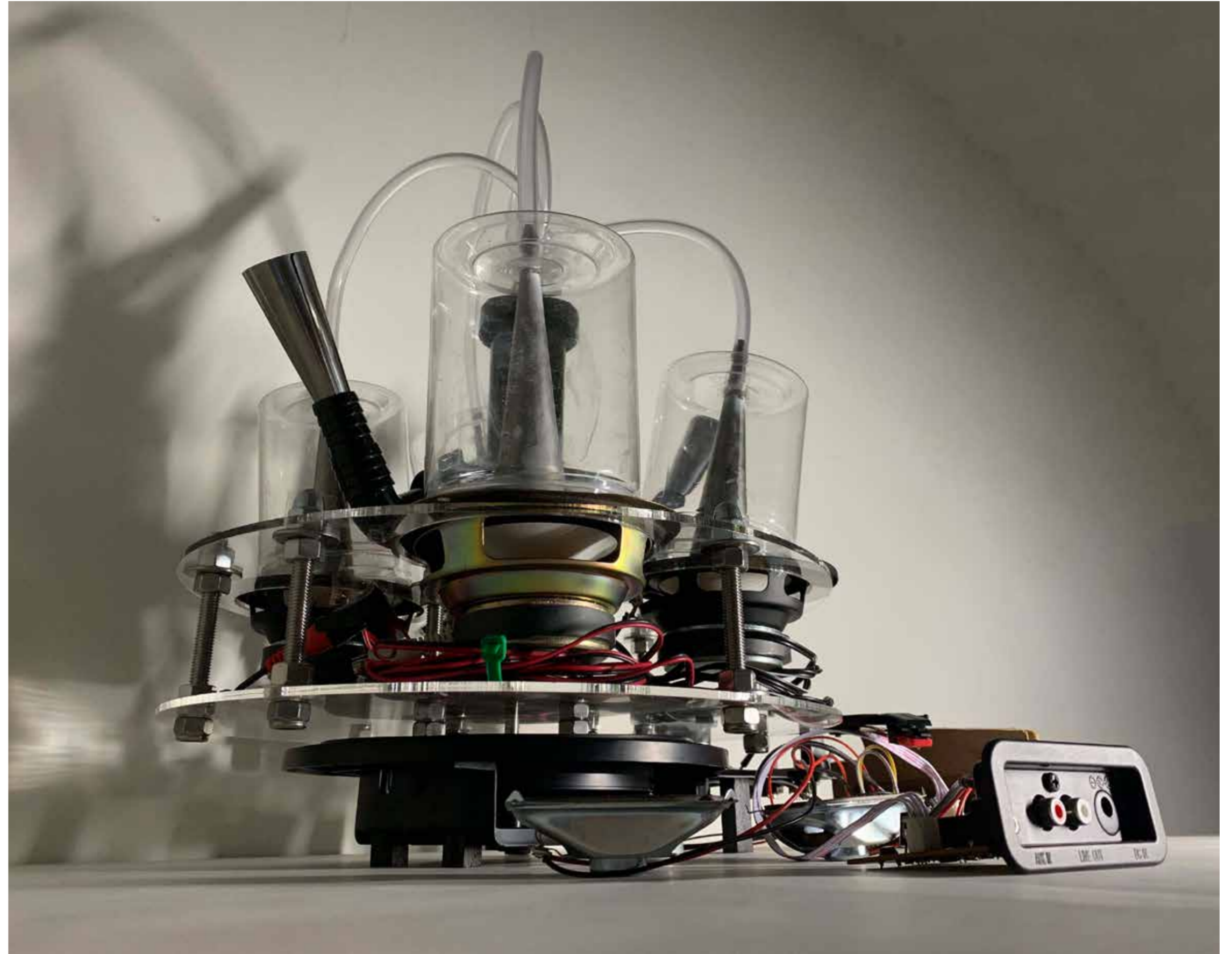
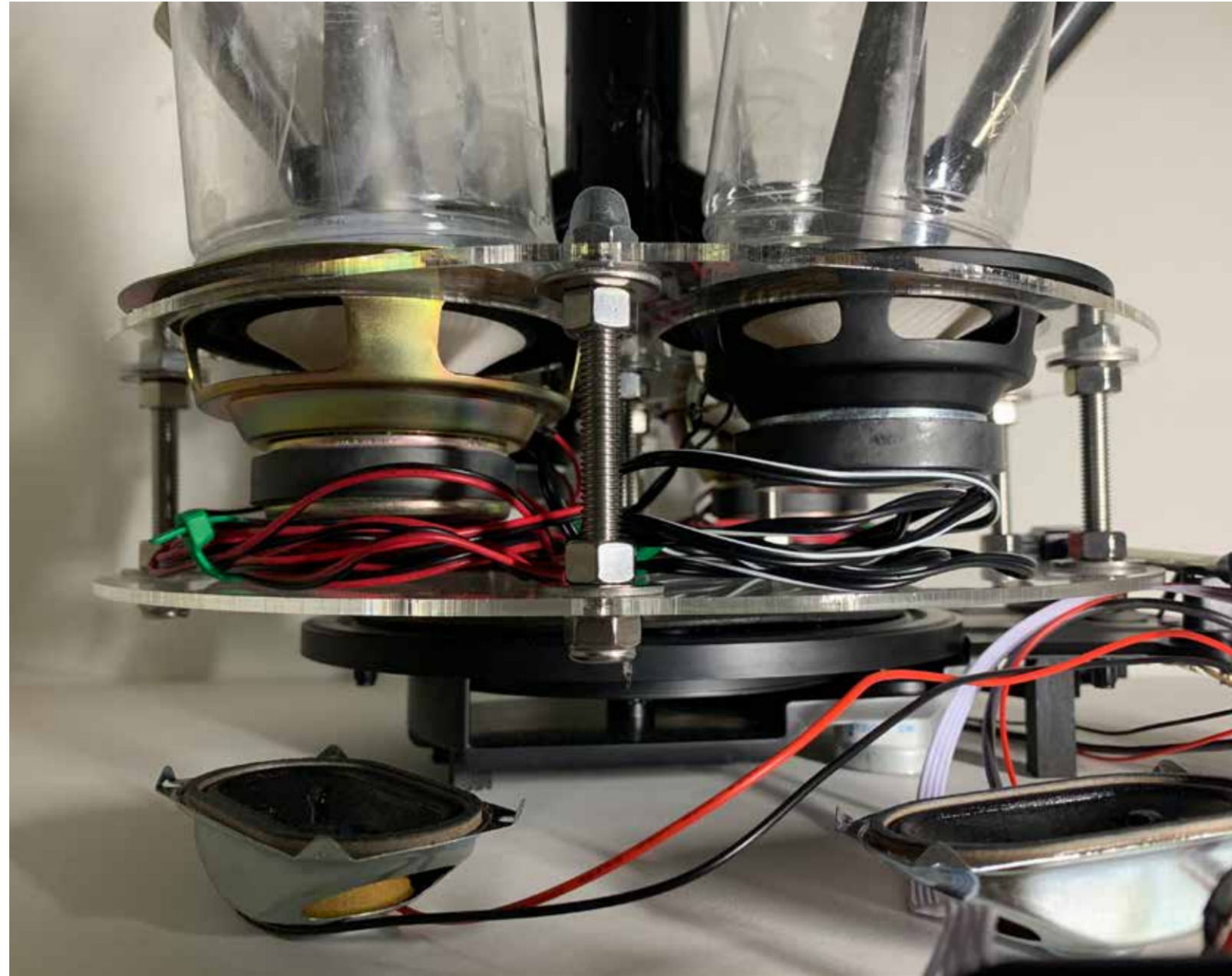




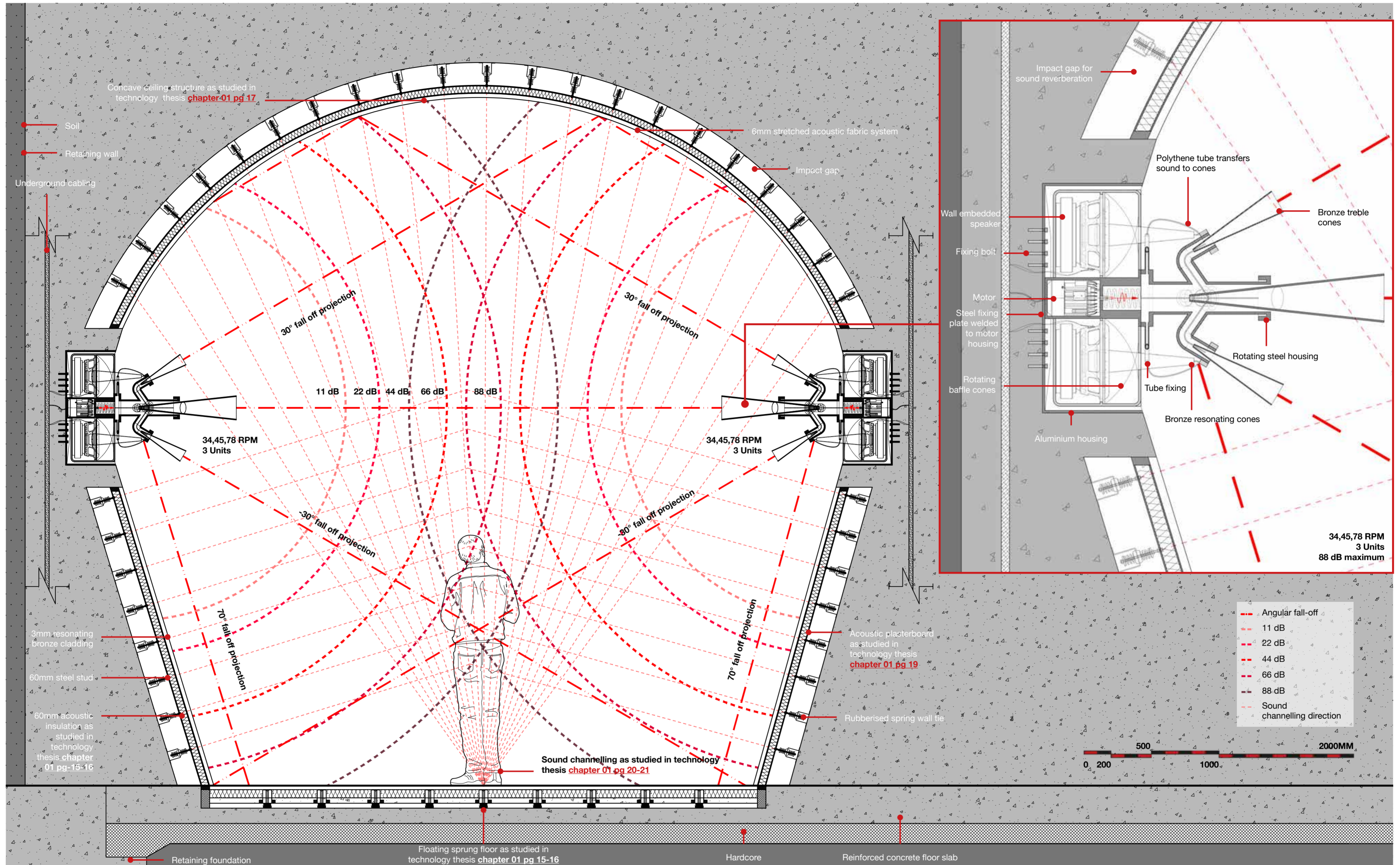
- 1. INTERACTION CIRCLES
- 2. DIS-INTERACTION PATHS
- 3. PRIMARY ELECTRO ACOUSTIC CHAMBER
- 4. OSCILLATING WALL EMBEDDED SPEAKER
- 5. SERVICING FOR THE ELECTROACOUSTIC SPEAKERS IN THE VOID SPACE



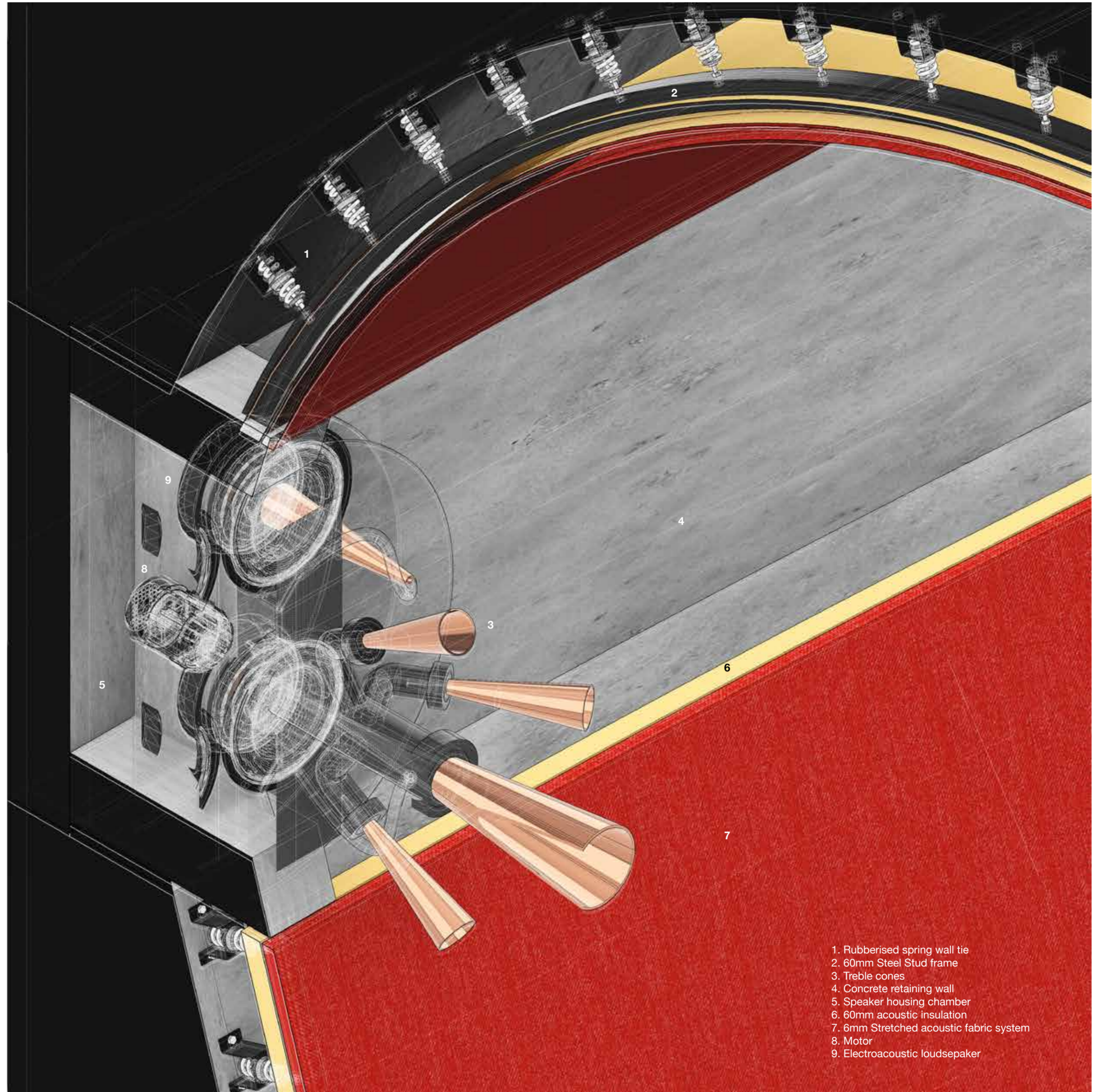
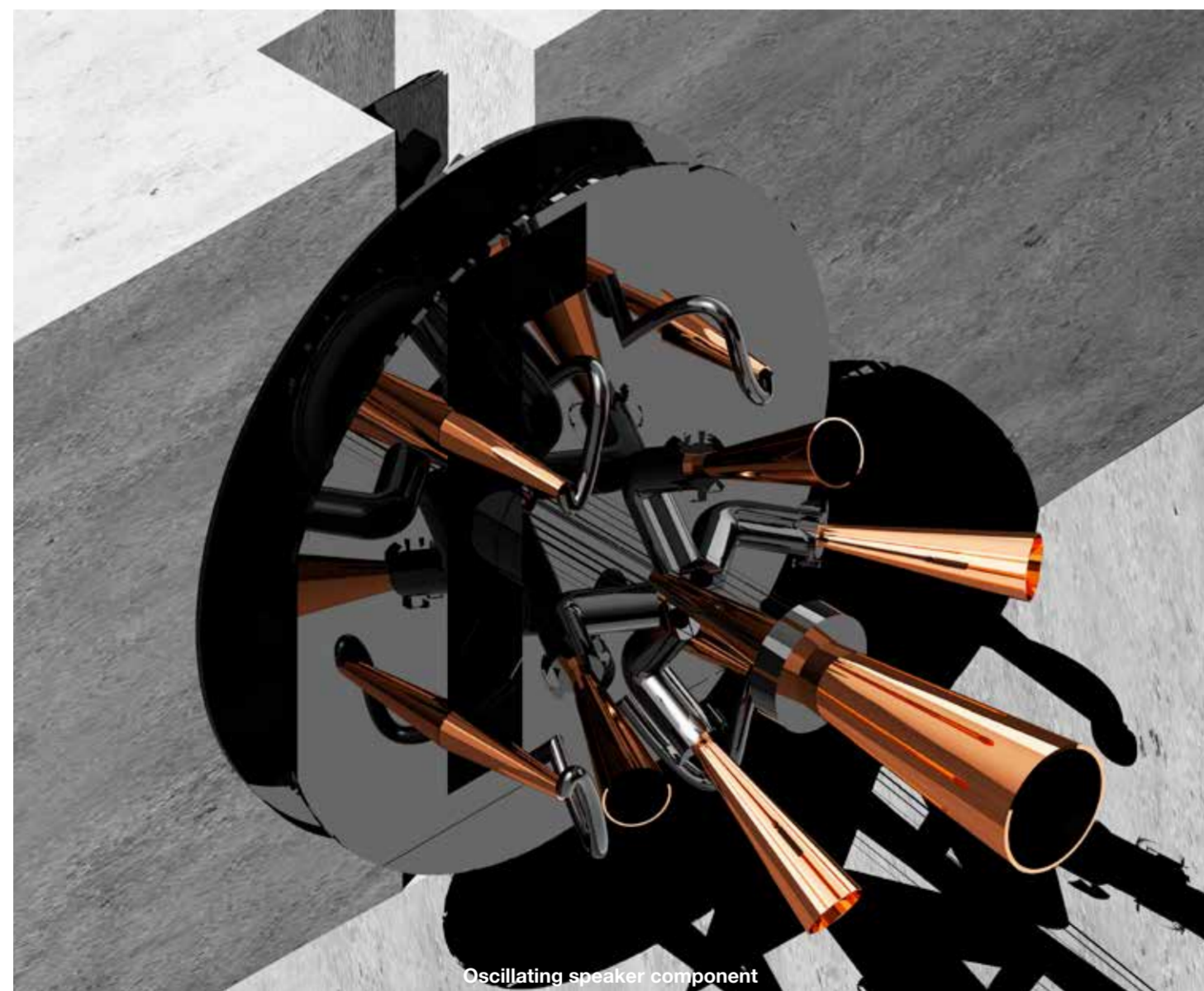
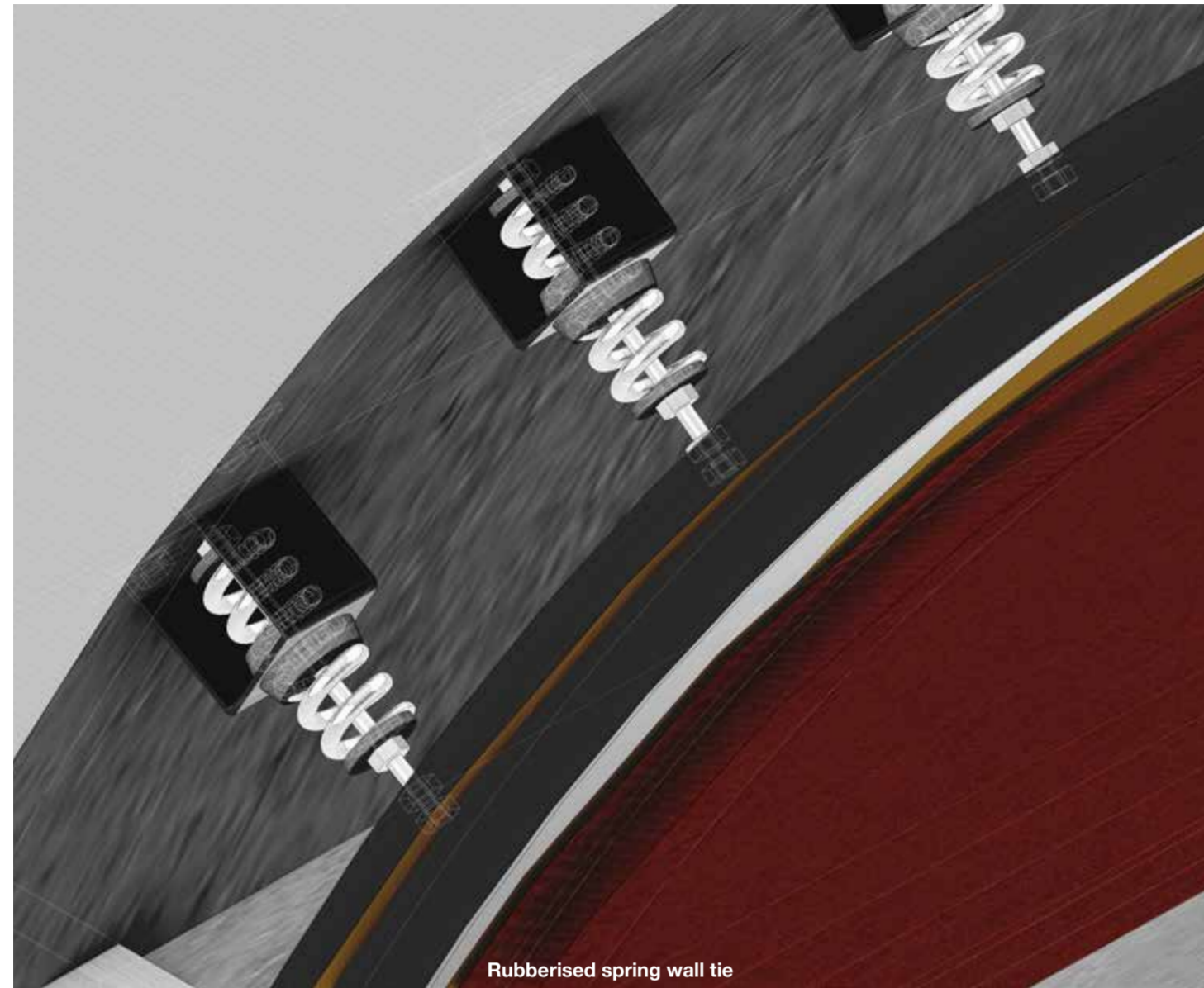
PAVILION 03 // GROUND FLOOR PLAN



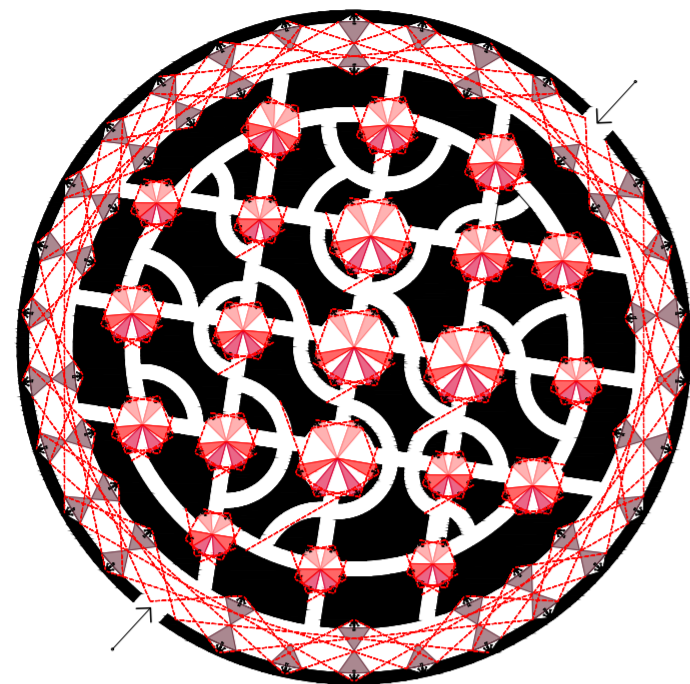
OSCILLATING SOUND // ELECTROACOUSTIC SKIN COMPONENT



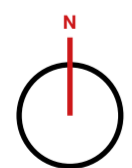
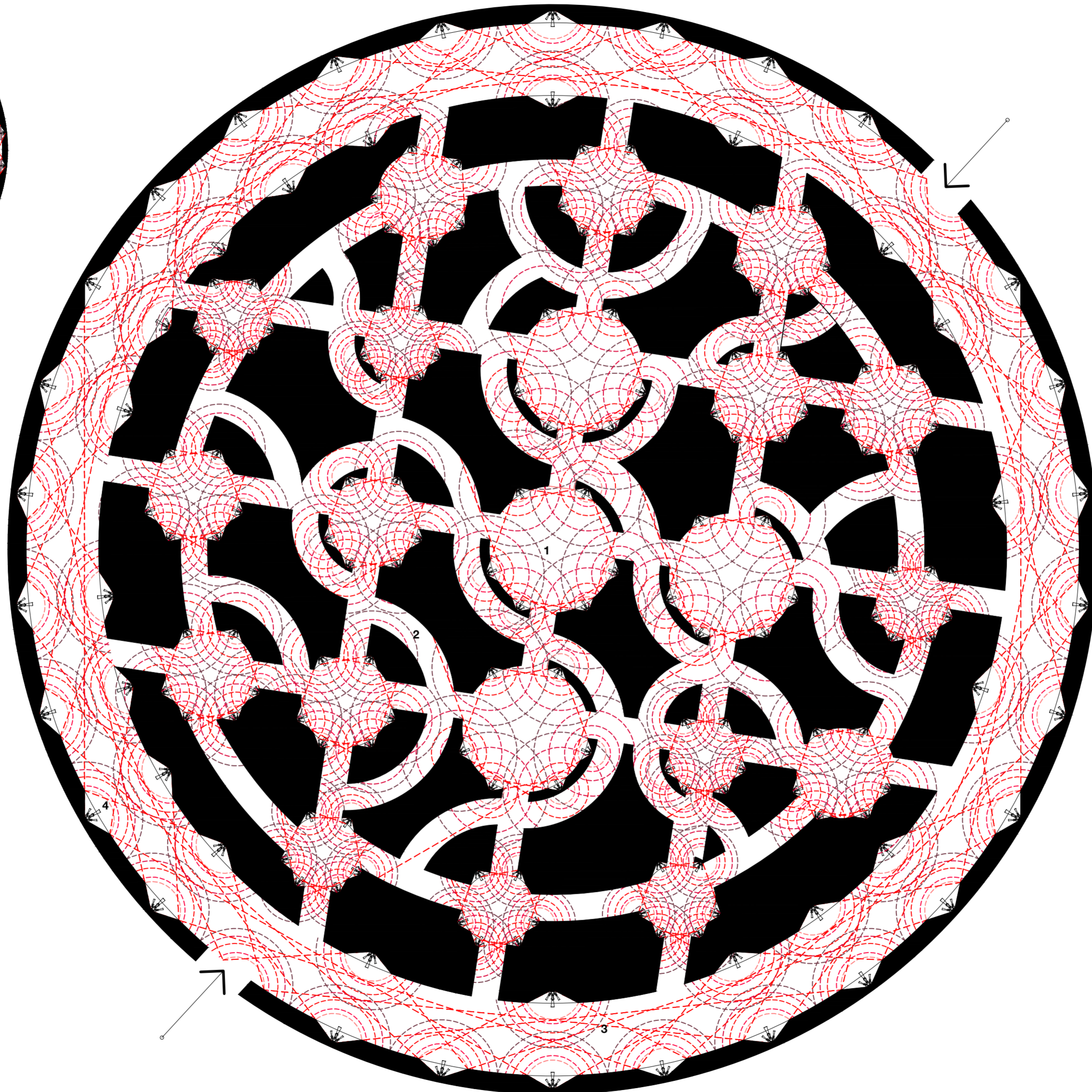
PAVILION 03 DETAIL SECTION // ACOUSTIC TECHNOLOGIES APPLIED



AXONOMETRIC SECTION DETAIL // APPLIED ACOUSTIC SYSTEM & COMPONENTS



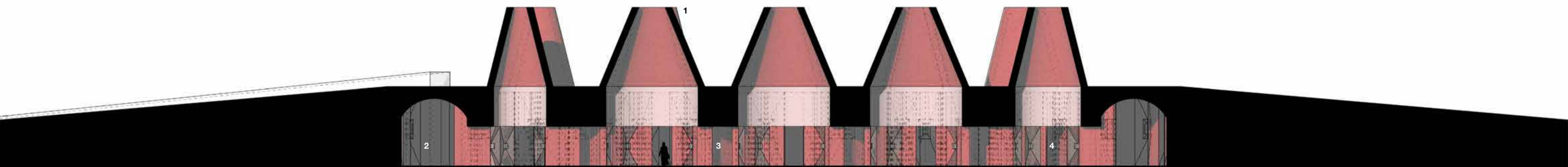
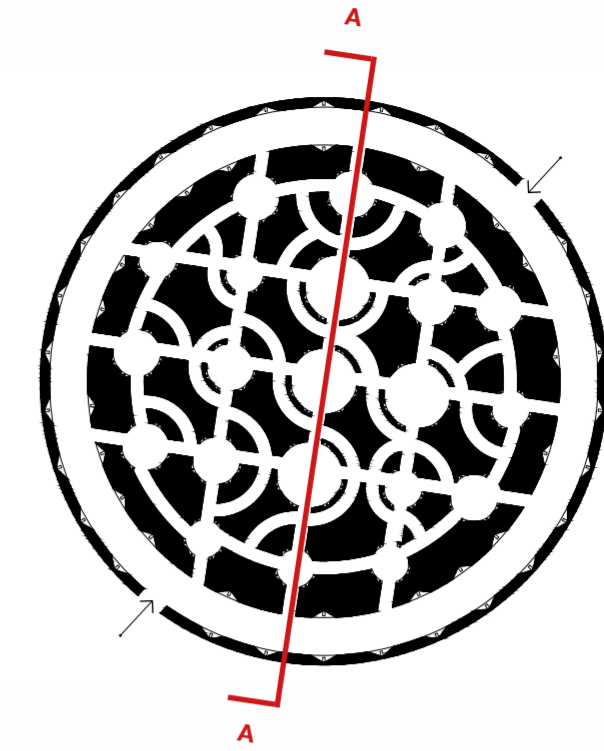
- 1. INTERACTION CIRCLES
- 2. DIS-INTERACTION PATHS
- 3. PRIMARY ELECTRO ACOUSTIC CHAMBER
- 4. INTERNAL WALL BUILT IN SPEAKER

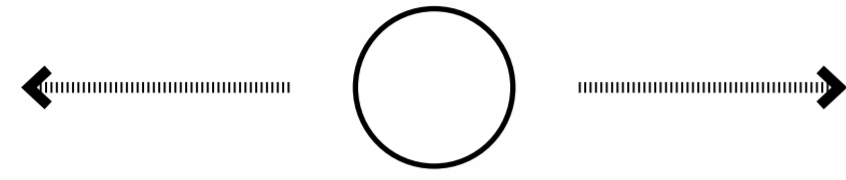


- 11dB
- 22 dB
- 44 dB
- 66 dB
- 88 dB

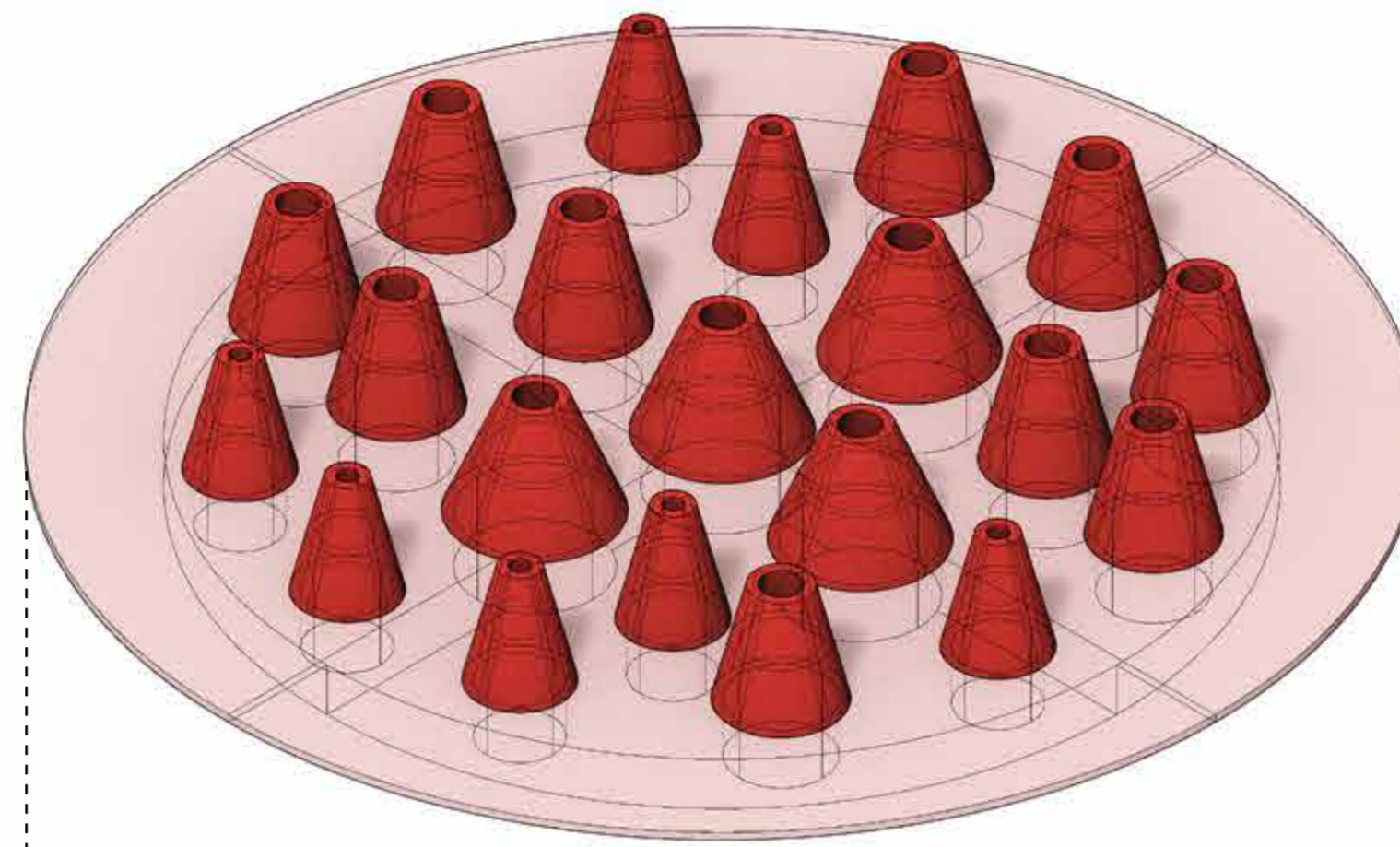
ELECTROACOUSTIC AMPLIFICATION // SOUND CONTOURS

- 1. SONIC ROOF ENCLOSURES FOR SOUND OUTPUT AT UPPER LEVEL
- 2. OUTER EDGE PRIMARY ELECTROACOUSTIC CHAMBER
- 3. DIS-INTERACTION CIRCULATION PATHS
- 4. INTERACTION CIRCLES

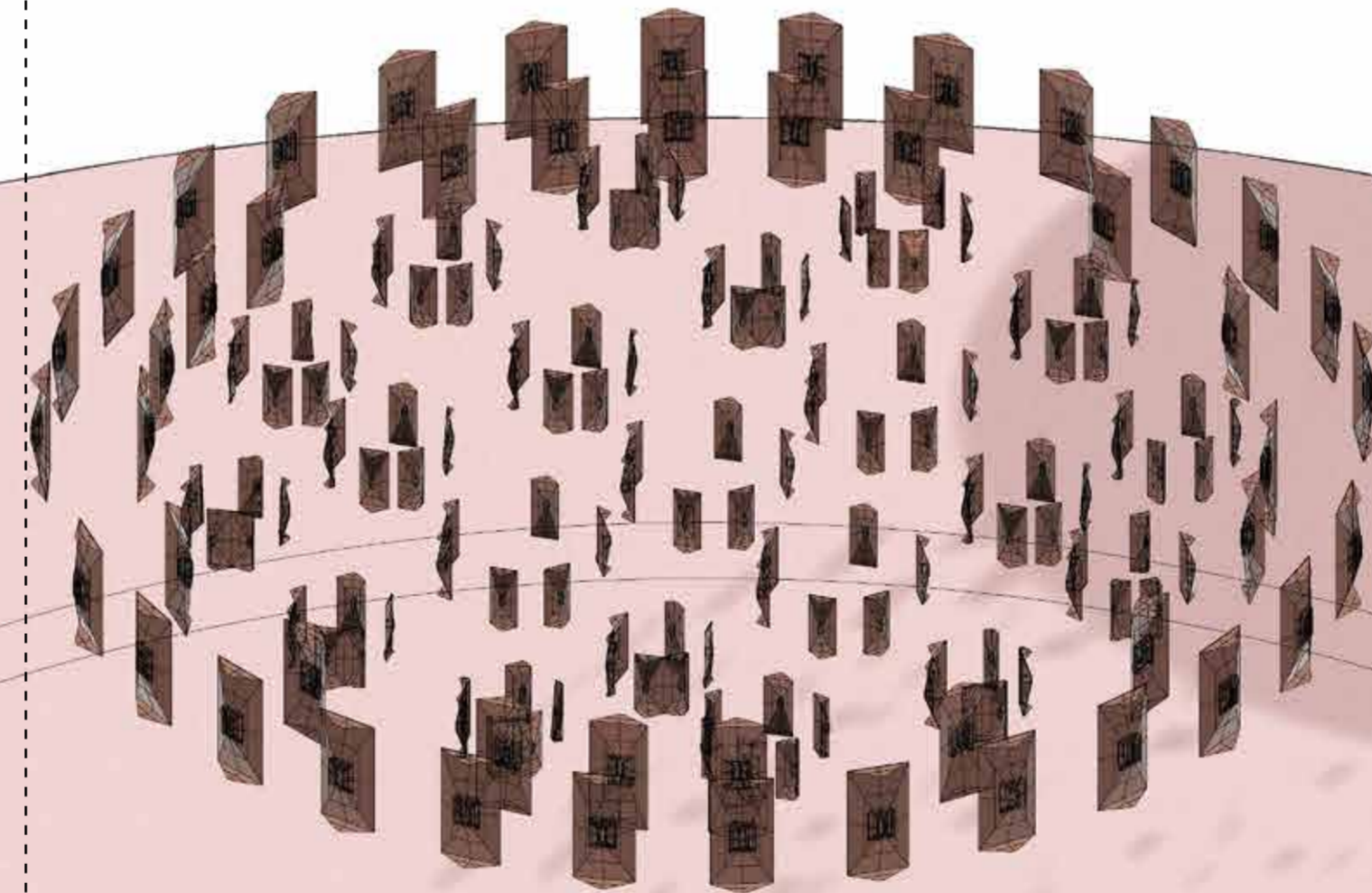




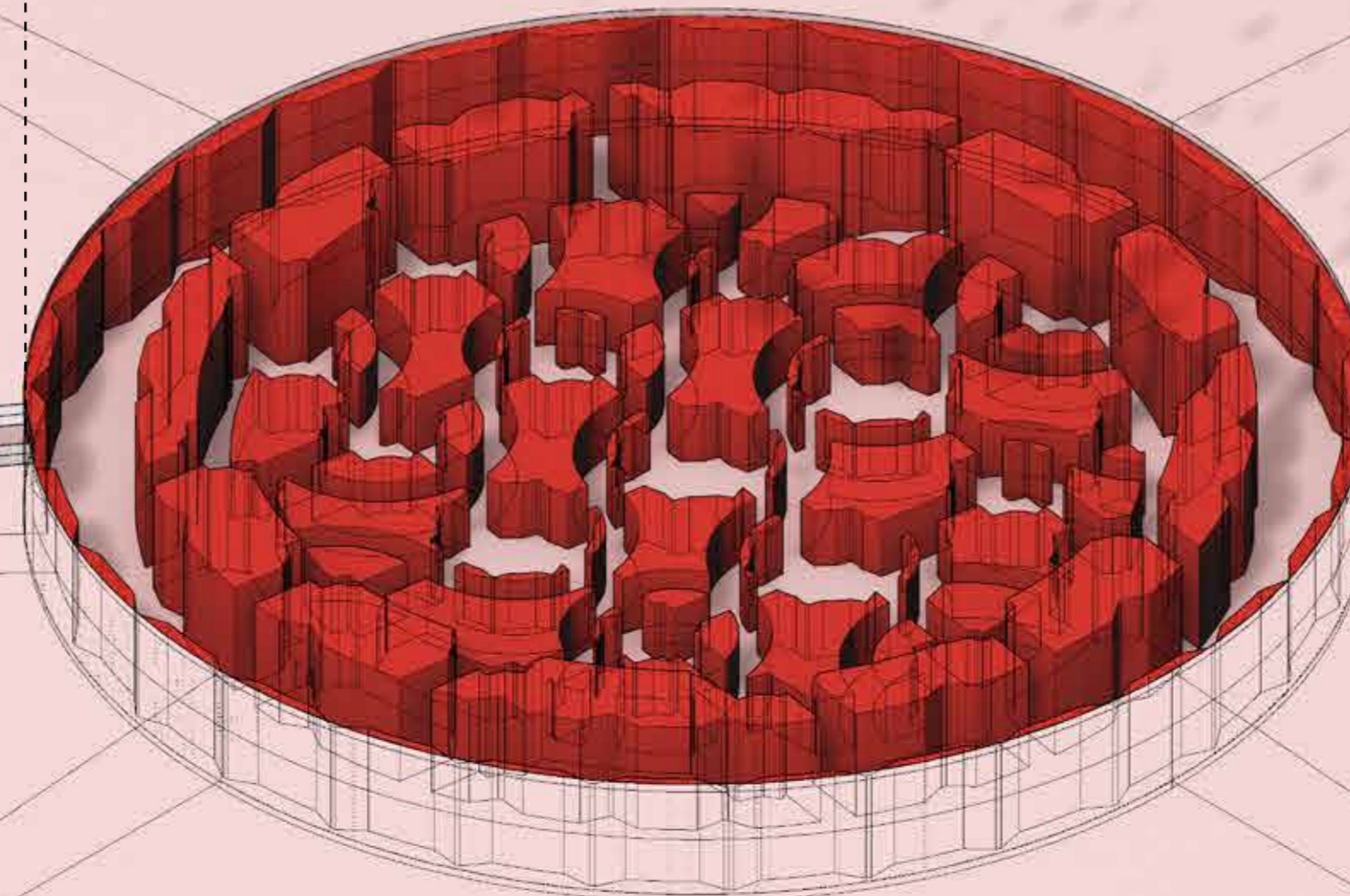
03 AMPLIFY



SONIC ROOF ENCLOSURES

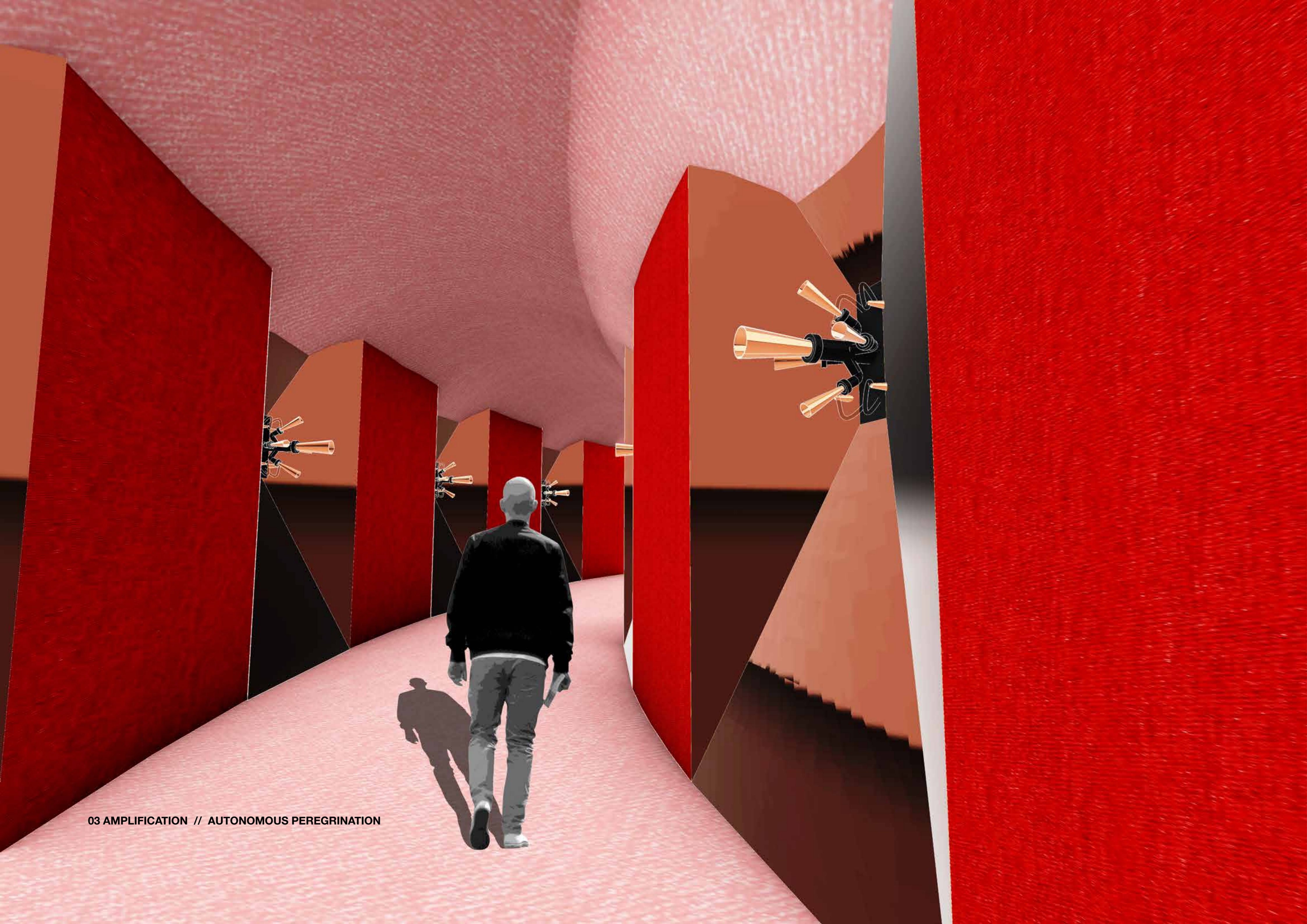


+00 SUNKEN ELECTRO ACOUSTIC CHAMBER

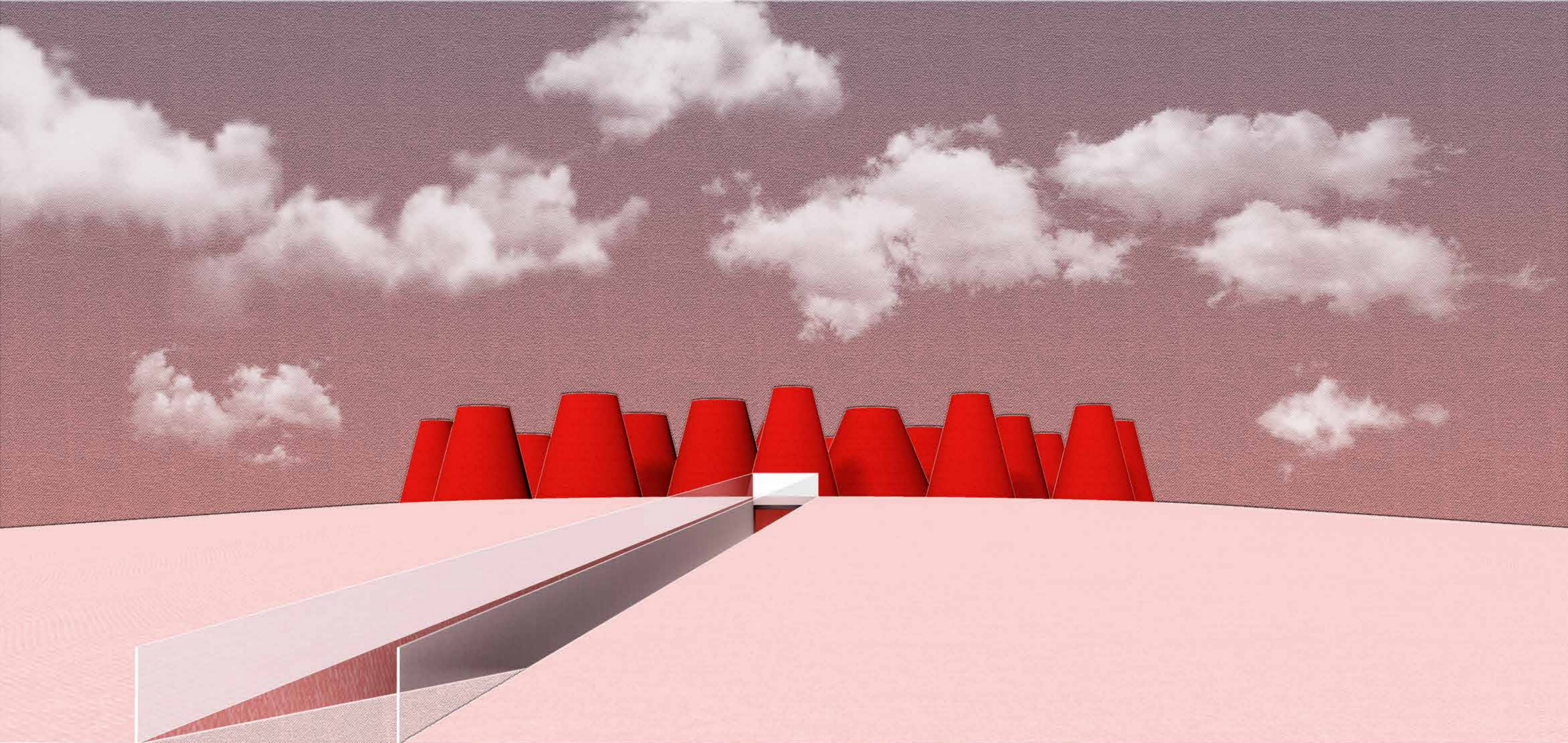


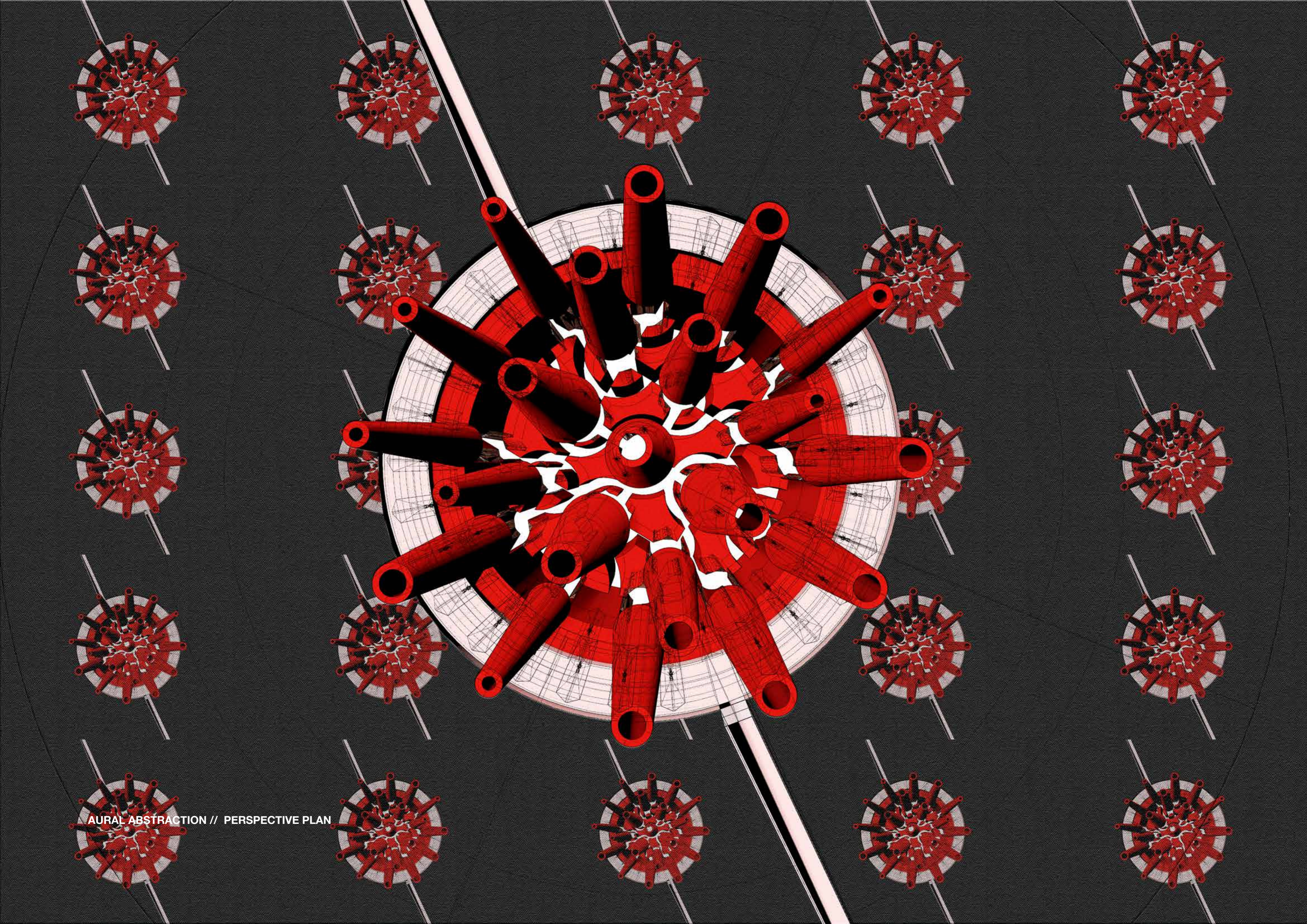
+00 DIS-SOCIAL / SOCIAL ACOUSTIC CHAMBERS

PAVILION 03 // AMPLIFICATION COMPONENTS



03 AMPLIFICATION // AUTONOMOUS PEREGRINATION

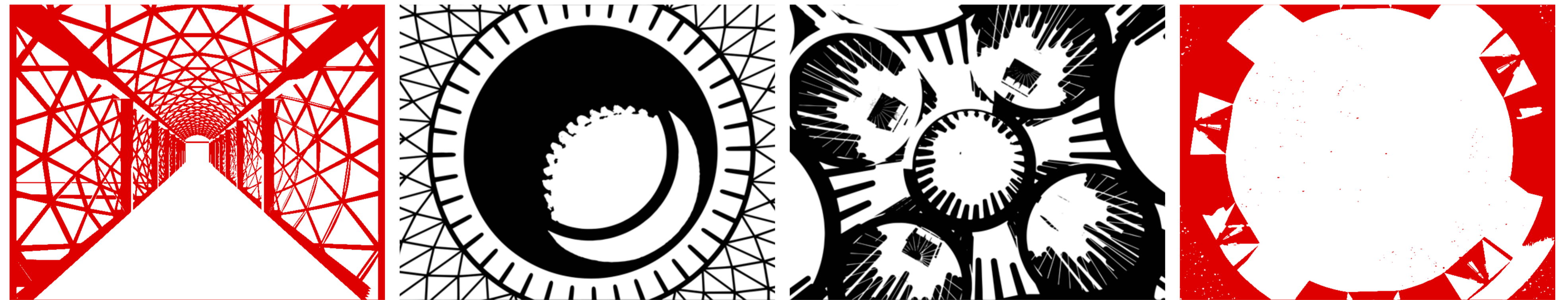
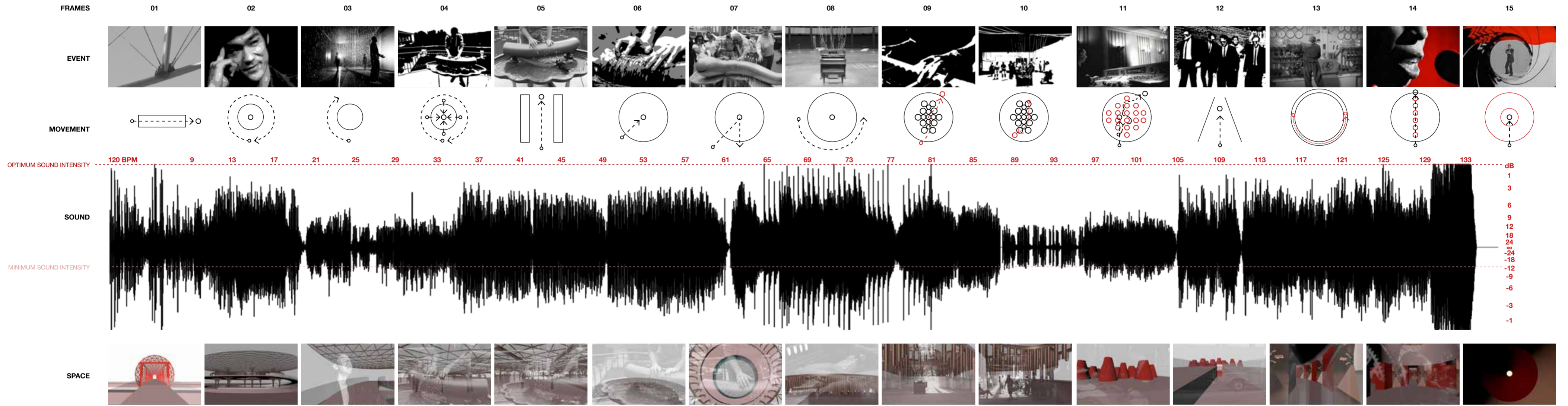




AURAL ABSTRACTION // PERSPECTIVE PLAN

TITLE: THE POLITICS OF SOUND
TIME: 4 MINUTES 30 SECONDS

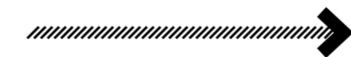
CLICK HERE FOR THE LINK TO THE FILM : <https://www.youtube.com/watch?v=HYREJ0loMFw>



// ENTRY POINT



CONVOCATION



AUTONOMOUS OEUVRE



FEEDBACK LOOP //

THE MANSTON TRANSCRIPTS // SONIC CINEMATOGRAPHY