

TRANSFORMING TERRAINS

A SITE'S NARRATIVE SHAPED BY THE OCCUPANCY OF EXTERNAL FORCES

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the requirements for the degree of Master of Design



Figure 1. Juno, J, *Rock Terrain Cast*, Plaster, 2023.

ABSTRACT

This research investigates a methodology as a means to translate the narrative of a site's transformation, through giving presence to the marks embedded within the terrain. Drawing and casting processes are used predominantly to articulate a narrative of the external forces occupying a site. The purpose of the developed methodology is to understand how a terrain has been shaped over time due to the influence of the external forces occupying its surfaces. Throughout this research the methodology has been trialled on three sites in Tamaki Makaurau Auckland: Takapuna Beach (coastal), pavers outside my house (domestic), and St Paul Street (urban). The most significant and present forces identified throughout this research have been caused by human intervention and by erosion. This research communicates the immeasurable timeline of a sites transformation. By undertaking methods of drawing and casting to identify, then visualize the trace embedded upon its terrain.

Traces of external forces are recorded and embedded in the ground causing and becoming a part of the site's narrative of transformation. Drawing lines and making marks translates material transformation into a narrative that can depict terrain as an accumulation of transformations over time. Identifying the terrain as a compression of layers forms a snapshot of its compact timeline, while also providing the opportunity to read each individual layer of transformative detailing. Through both the drawing and casting processes, each layer becomes a moment preserved. The process of reading is important because it speaks to the geological process creating compressed layers of time; unpacking these layers we can begin to more deeply understand a site's compressed transformation.

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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed

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INTRODUCTION

This research developed out of a familiar perspective that saw the narrative of a site's transformation through the surfaces of its terrain. It has become an investigation to refine a methodology that sets out to understand the terrain as a result of external forces occupying its surfaces. Three different case studies were undertaken. Takapuna Beach (coastal), pavers outside my house (domestic) and St Paul Street, AUT (urban). At each site an acting external force was identified as one of the major causes of change: Takapuna was erosion; the pavers and St Paul Street were human. The occupancy of people and erosion over time are present as forces that activate terrain to become a collective trace of its occupants. Trace is revealed through the material transformations of the terrain's surface; this research aims to give weight to that narrative. Through exploring how the immeasurable timeline of transformation can be visualized, it also aims to create a refined set of methods that can be applied to any site. In the following chapter, the contexts regarding the terrain, and the occupancy of external forces identified throughout this research using drawing and casting as methods of reading and translation, will be outlined.

My ambition and aim at the beginning was to understand and interpret site through a developing methodology, to create surfaces that compressed timeline and narrative of a site's transformation. In this, I was able to focus on the visual documentation without leaning into the forces that were occupying the space causing the transformation to occur. As the project developed from the first case study, I recognized erosion as an external force that occupied and influenced the transformation of the site's terrain. As my perspective began to focus on the external forces occupying the site, the research developed into a refined methodology approaching site. Drawing became a more significant and continuous method to record each moment of transformation which I began to identify as layers that made up the terrain, suggesting a visualization of its timeline. As the research progressed, I questioned how to cast the site in the same way that I was drawing it, in order to create a timeline. My drawings compress the narrative, whereas my castings are a conflation of the terrain's narrative. The compression sits each layer alongside the other, keeping each transformation as an individual moment in time. Conflation, however, suggests a merging of the layers, each moment of transformation transitioning into the other, making it slightly harder to visualize individual layers of transformation through time. Each type of making gives significant weight to the timeline but in two different ways.

My findings at St Paul Street were discovered through a more refined version of methodology, therefore presenting the most thorough understanding of how the occupancy of external forces initiate and become a part of the site's narrative of transformation. The research concludes with my exhibited findings of St Paul Street in the form of a curated series of drawings and a collection of cast artefacts. Each expresses the narrative of how humans, as the active external force, have influenced and then embedded in the transformation of the St Paul Street terrain over time.



Figure 2. Juno, J. *Material Deconstruction Experimentation 1*, Plaster, 2022.

THE TERRAIN'S NARRATIVE: CONTEXTUAL REVIEW

OCCUPYING THE TERRAIN

Occupy - “to fill, exist in, or use a place or a period of time”.¹

Over the course of occupying space, external forces have a weighted presence and can influence the transformation of a terrain. This research identifies occupancy as the process an external force undergoes while acting and having an impact upon the terrain. The second and third site case studies both examined concrete terrains. Concrete specifically has no “intrinsic form” as its material is man-made and will continue to be constructed and influenced by external forces.² Trace of human’s occupancy of concrete terrains become a part of the terrain’s narrative of material transformation. Seen in this light, concrete surfaces become extensions and reflections of human occupation and set the perspective this research has for all sites and their terrains.

My understanding of the terrain as a reflection of its occupants is expanded by the work of artist Ramon Todo. Todo collected rubble and debris from building sites and suggests that each object holds memories of time and history embedded within – a result of the external forces that had occupied the objects.³ Each object’s surfaces suggest a compression and narrative of time.

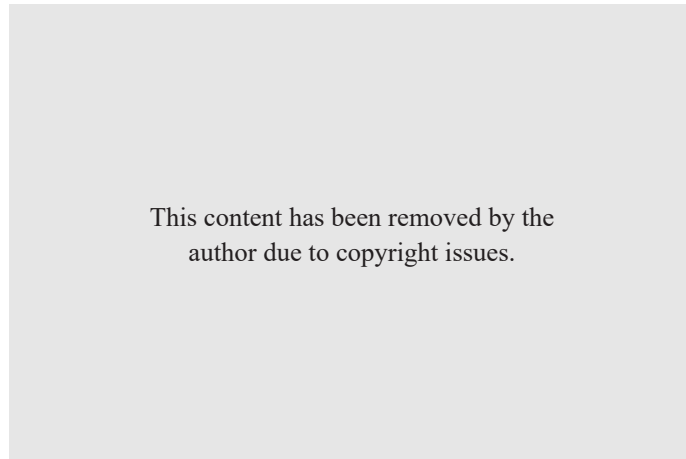


Figure 3. Ramon Todo. *Basalt and Glass*, 2015.

<https://www.thisiscolossal.com/2020/10/ramon-todo-debris-sculptures/>

¹ Cambridge Dictionary, “occupy.” <https://dictionary.cambridge.org/dictionary/english/occupy>.

² *Liquid Stone: New Architecture in Concrete*, ed. G. Martin Moeller and Jean-Louis Cohen, Jr (New York: Princeton Architectural Press, 2006).

³ Grace Ebert, “Lustrous Strips of Glass Bisect Debris, Bricks, and Semi-Precious Stones in Ramon Todo’s Sculptures,” 2020, accessed February 8, 2023, <https://www.thisiscolossal.com/2020/10/ramon-todo-debris-sculptures/>.

Landscape architect George Hargreaves in *Hargreaves: The Alchemy of Landscape Architecture* sees a terrain as a palimpsest and this research project draws on this understanding.⁴ Palimpsest can be defined as both “a very old document on which the original writing has been erased and replaced with new writing” and “something that has changed over time and shows evidence of that change”.⁵ When writing surfaces were scarce, the written material would be erased, and the surface reused. If the erasure process wasn’t successful the original layer of markings could be seen once the surface was written on again. This revealing of layer and narrative compressed into surface aligns with my research method when I begin to draw a site.



Figure 4. Juno, J. *Concrete Palimpsest Symonds Street*, Photography, 2023.

⁴ George Hargreaves, Julia Czerniak, Anita Berrizbeitia and Liz Campbell Kelly, *Hargreaves: The Alchemy of Landscape Architecture* (UK: Thames & Hudson, 2009).

⁵ The Britannica Dictionary, “Palimpsest.” <https://www.britannica.com/dictionary/palimpsest>.

Hargreaves' firm saw the terrain "as a series of layers that accumulate on a site over time".⁶ As they found traces that had been erased, they reintroduced them often as a symbol, in order to reconstruct a site's complex history and unique identity. The layers of the terrain hold the trace of its occupants' identity. Earlier in the research, I identified the terrain as a working document that underwent transformation due to the external forces occupying its surface.⁷ This concept of seeing each layer of markings aligns with my research when I begin drawing a site. The weight of occupancy, specifically for a site overlaid with concrete, would either conceal earlier layers of land beneath the surface, or the surface layer would transform and potentially break down until the layers beneath become visible again.

Artist David Maisel's work *Library of Dust* (2015) expands on how surfaces can hold a sense of identity. Maisel's photographs provide evidence that the transformation of a surface can reveal a visual narrative. Corroding copper cannisters were observed and photographed, in which (due to chemical reaction) the build-up of new surface detail and layers suggested a story of time.⁸ The following section looks into the reading of a terrain's layers in order to discover a narrative and experience of external forces occupying space.



Figure 5. David Maisel. *Library of Dust 157*, Photography, 2005. Used with permission of the artist.

⁶ George Hargreaves, *Hargreaves: The Alchemy of Landscape Architecture*. 2009.

⁷ The Britannica Dictionary, "Palimpsest."

⁸ Jacob Mikanowski, "The Art of Decay," *The Point*, 2015, <https://thepointmag.com/criticism/the-art-of-decay/>.

READING A SURFACE

As this research interprets occupancy as a downward force on a terrain, the trace of external forces becomes embedded into the ground through transformation presenting as lines, cracks, and marks within the surface layer of the terrain. These marks can be read as dialogue to present a narrative and give insight into the transformation of a terrain. Through understanding the dialogue, we learn to understand the significant presence external forces have within the narrative of a terrain's transformation.

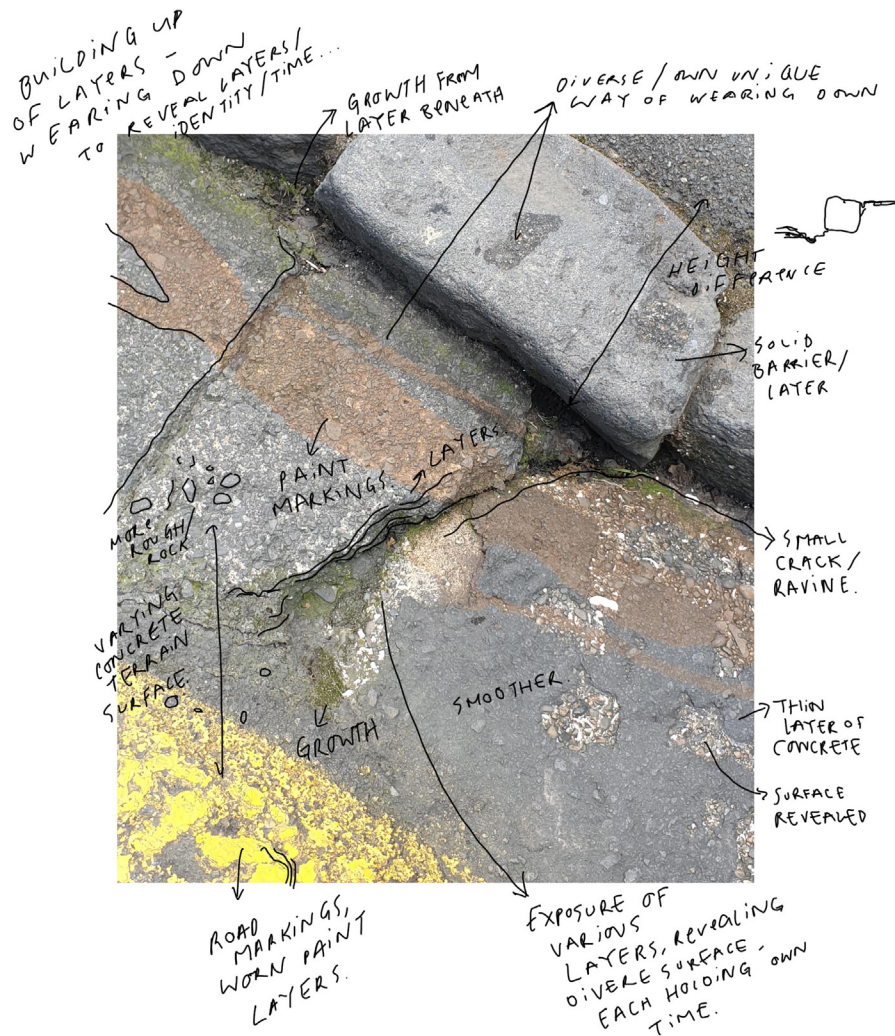


Figure 6. Juno, J. *Annotated Concrete Surface I*, Photography/Digital, 2023.

Location: St Paul Street, AUT.

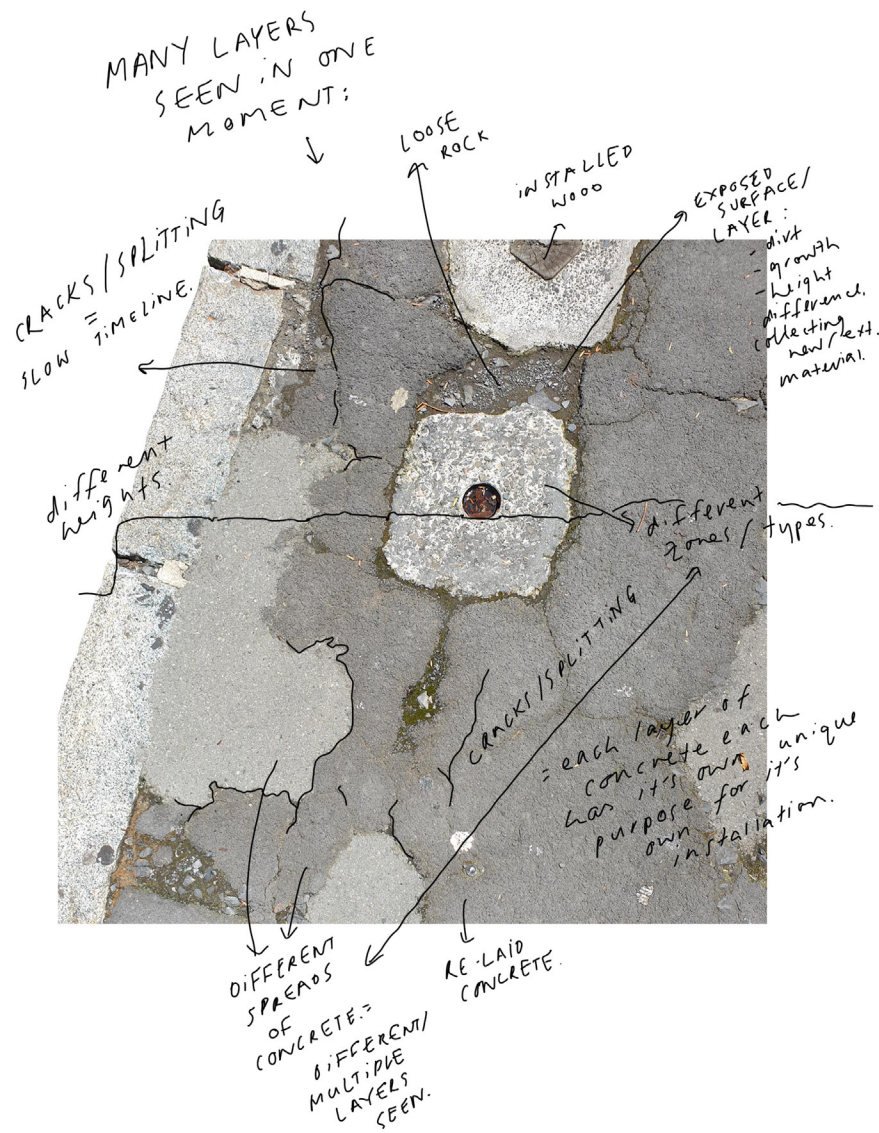


Figure 7. Juno, J. *Annotated Concrete Surface II*, Photography/Digital, 2023.
 Location: St Paul Street, AUT.

Landscape architect Anne Whiston Spirn, in *The Language of Landscape*, suggests that people occupying space can become authors of the land and that a “...landscape is the sum of countless dialogues”.⁹ In a similar light, geographer Mike Crang suggests that landscapes become a “record of change” and that they are “the sum of erasures, accretions, anomalies, and redundancies over time”.¹⁰ Together, it suggests that the concept of a terrain becomes the outcome of how it is being occupied and can be read through these outcomes.

Brooke Carlson discusses in *Time Trace* how “each mark that results from the body in motion is a record of a moment in time” (Fig 8).¹¹ This notion expands on teachers and artists Mick Maslen and Jack Southern’s discussion of how a drawn line becomes “a manifestation of the life energy of the person that made it” further emphasizing how marks made upon surfaces can contribute to the overall narrative of a site.¹²

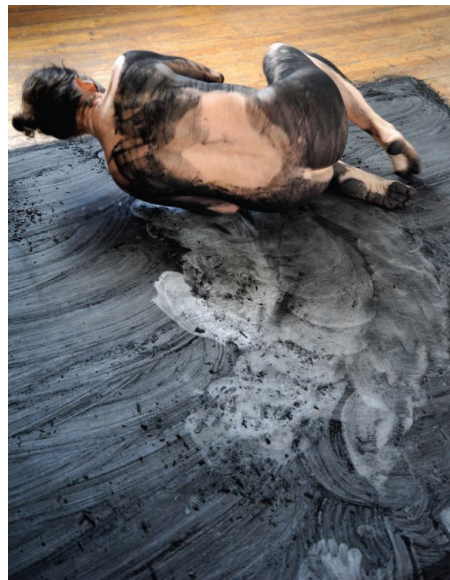


Figure 8. Katrina Brown and Rosanna Irvine. *what remains and what is to come*, 2015. Used with permission of the artists.

⁹ Anne Whiston Spirn, *The Language of Landscape* (New Haven and London: Yale University Press, 1998), 40.

¹⁰ Chip Colwell, “A Palimpsest Theory of Objects,” *Current Anthropology* 63, no. 2 (2022), <https://doi.org/10.1086/719851>, <https://www.journals.uchicago.edu/doi/abs/10.1086/719851>.

¹¹ Brooke Carlson, “Time Trace: A drawn perception,” (2016). file:///C:/Users/jjuno/AppData/Local/Packages/microsoft.windowscommunicationsapps_8wekyb3d8bbwe/LocalState/Files/S0/146/Attachments/time%20trace[2299].pdf.

¹² Jack Southern and Mick Maslen, *Drawing Projects: an exploration of the language of drawing* (black dog publishing 2011).

TRANSLATION THROUGH DRAWING AND CASTING

Drawing and casting become methods to translate my own understanding of the terrain's transformations over time and the cumulative effect of the layering of external forces. Throughout this research during the site case studies, I have been drawing and casting in response to rock and concrete terrains, with each cast object presenting different surface outcomes, as the identified force acting upon it was unique.

Figure 9. Juno, J. *Pavers Surface Detail Tile*, Mortar, 2022.



Figure 10. Juno, J. *Rock Terrain Surface*, Plaster, 2023.

Hargreaves reintroduces lost or erased layers back into site – they don't directly reconstruct the past but create them in a way that informs occupants of the site's history.¹³ Each drawn and cast line throughout this research informs how I view the terrain as a compressed layering of transformations over time, each layer presenting as a moment of transformation that holds trace of the force that caused it. The pieces created are completely unique in how they encapsulate a site; they come from my own perspective of experiencing a landscape as an occupant and from external forces which occupy the surface of a landscape.

Artist Hongjie Yang expands on the concept of encapsulating the experience of time within a singular moment. Yang's series *Radical Fossils* (2016) investigates how immeasurable time of material transformation can be compressed into one object, through which insightful narratives of timelines are evoked.¹⁴

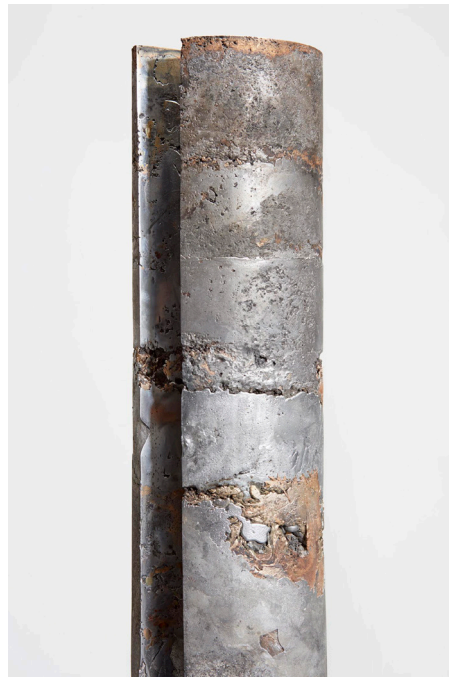
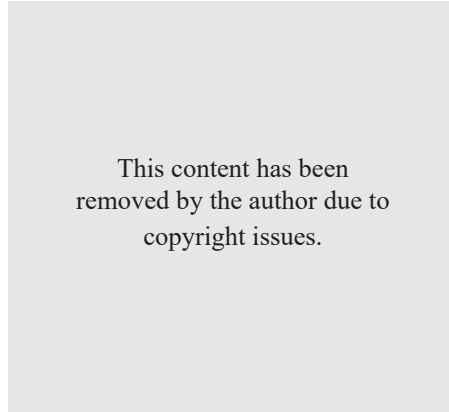


Figure 11. Hongjie Yang. *Radical Fossils III*, Aluminium, bronze, brass and ceramics, 2016. Used with permission of the artist.

¹³ George Hargreaves, *Hargreaves: The Alchemy of Landscape Architecture*.

¹⁴ "Radical Fossils 3," 2016, accessed February 19, 2023, <https://hongjieyang.nl/Radical-Fossils-III-2016-Aluminium-Bronze-Brass-and-Ceramics-90-x-14>.

Figure 12. Rachel Whiteread. *Untitled (Air Bed II)*, Polyurethane rubber, 1992.
<https://www.tate.org.uk/art/artworks/whiteread-untitled-air-bed-ii-t06731>



Artist Rachel Whiteread solidifies time through casting the space humans occupy. While slightly different to my own research, she also evokes the significance of the recording and giving weight to human trace. *Untitled Air Bed II (1992)* demonstrates how the trace of external forces such as human occupancy can be recorded within the space that humans occupy.¹⁵ The weight of a person's body leaves an impression upon the surface of an air bed, therefore shapes the space contained within the inside of the air bed. The solidifying of this space preserves and visualizes the space occupied by a body. The perspective taken in each drawing and casting is that of an occupant within a site. To translate the terrain through drawing and casting, I needed to occupy it in the same way an external force would so that I could unpack the layers of dialogue.

In the concluding section of this chapter, I acknowledge how the research and exploration of site came quite intuitively. Contextualizing it alongside other artists and designers refined and aligned with my thinking regarding the terrain quite significantly, particularly as palimpsest is discussed and defined by Hargreaves. This became valuable in understanding how the perspective of a site that arises when I draw it, differs from the one that I experience when occupying that same site in person. Sporn revealed an invaluable perspective of how one can view terrain as dialogue that gives insight into diverse and countless histories, which helped me define my intuitive understanding of the terrain's transformation narratives in greater depth.¹⁶

¹⁵ "Rachel Whiteread: Shedding Life," 1996, accessed February 20, 2023, <https://www.tate.org.uk/art/artworks/whiteread-untitled-air-bed-ii-t06731>.

¹⁶ Sporn, *The Language of Landscape*, 40.

TRANSLATING A TIMELINE: METHODOLOGICAL STATEMENT AND METHODS

My research is a methodological approach to investigating a terrain in that its narrative of transformation may be revealed through its surface. This chapter discusses my way of seeing terrain, and introduces the methods that I have developed into a refined series of steps that enable the reading, translation and visualization of a terrain's narrative which inevitably transforms over time.

METHODOLOGY

The understanding of a terrain is diverse and complex in the way it is read by those who occupy it. My methodology is a site-based analysis that makes a reading of a terrain's transformation through surface detailing such as erasure, cracks and worn surfaces. Spirm discusses how we might understand the dialogue embedded within the landscape, noting that "reading landscapes reveals the past" and through their surfaces "history can be deciphered". Each set of methods becomes an investigation to decipher the dialogue of terrains.

This research has been conducted across a number of sites – culminating in a live project with the Auckland City Council, in St Paul Street that runs through AUT. This site became my third case study in order to trial out the methods of analysis. Since understanding Ramon Todo's perspective on how surfaces can tell stories and share knowledge about the site they have come from, my observational perspective of all materials has grown. This way of seeing becomes significant when occupying a site and drawing it. These moments of revealing the narrative materials encapsulate continue to inspire ideas and decision-making in how I experiment when creating surfaces that respond to occupation of external forces. Over the course of my research, case studies have been performed on Takapuna Beach, concrete pavers outside my house, and St Paul Street, AUT (further discussed in depth in the following chapter). The first two sites were chosen as they presented surfaces that had undergone transformation from external forces. The impact of these forces drew my interest and curiosity. Site visits unfold over a series of practices, including isolation of the terrain, walking, photography, drawing, and casting. Each of these stages presents an opportunity to take a reading of the terrain. Lines, layers, and casting are seen as a moment of time, compressed and layered.

¹⁷ Anne Whiston Spirm, *The Language of Landscape* (New Haven and London: Yale University Press, 1998), 27.

¹⁸ Ebert, "Lustrous Strips of Glass...".

ISOLATION OF THE TERRAIN: WALKING/PHOTOGRAPHY

When I have chosen a site, sometimes all the factors of the environment's activity start to smother my initial intentions and aims of site analysis. This can be overwhelming, and I lose track of where to begin. In order to realign my focus, I imagine the terrain isolated from its built environment. Through this focus I look at the terrain, trying to decipher the external force that may be occupying its surface, resulting in the current dialogue. Seeing the details allows me to begin the research of unpacking the terrain's narrative of transformation over time.

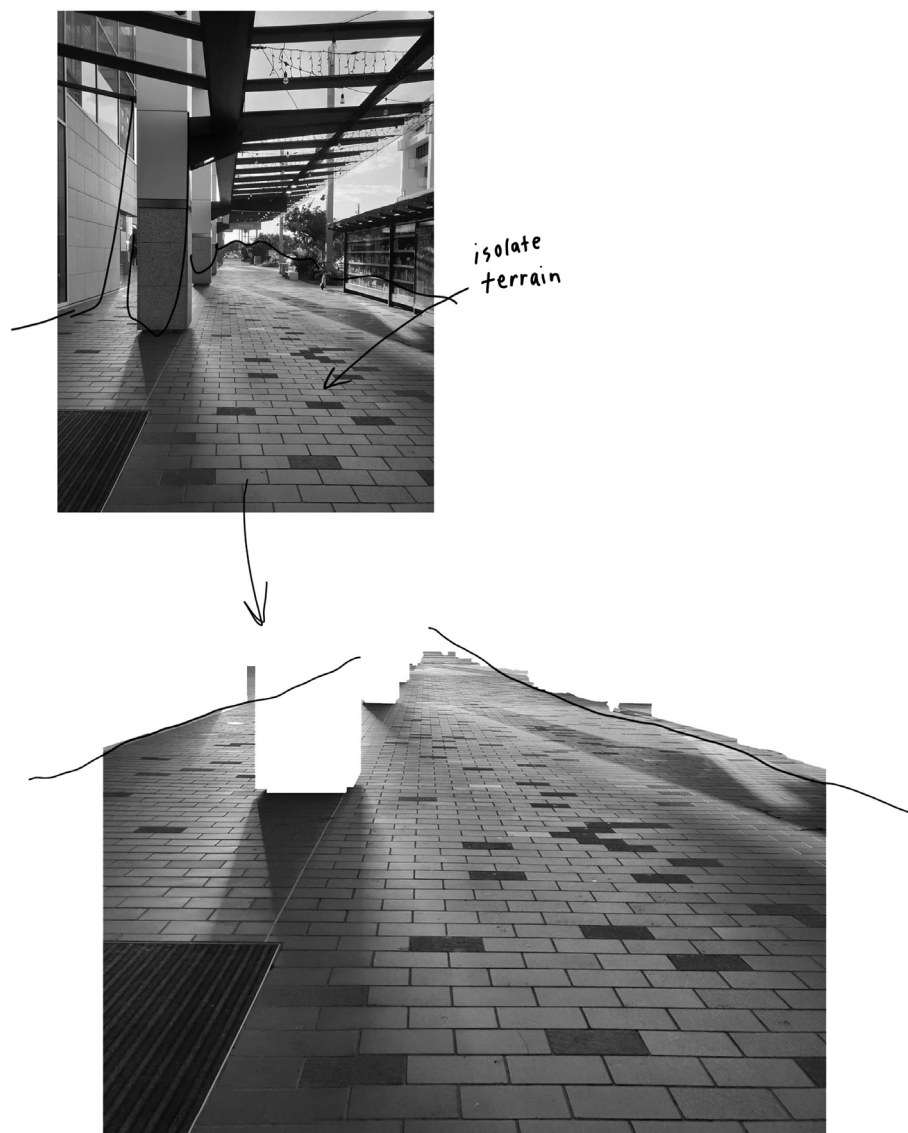


Figure 13. Juno, J. *Isolation of the Landscape*, Photography/Digital, 2023.

I begin walking through the site, aware of how both myself and others are occupying the terrain. As I established myself in Takapuna, so did the water – slowly eroding and breaking down the layers of rock terrain. Relating to the pavers and St Paul Street, I occupied the spaces, walking and sitting, being aware of the external forces of both human and geological occupancy.

While my focus is situated on the terrain, I repetitively walk it, as walking the site builds up knowledge of the acting external forces. As I walk, I take photos without looking through the lens. The camera becomes an extension of myself, recording and documenting. I take photos of the terrain I walk upon and the spaces my body faces. I try to capture the experience of my body occupying space. It becomes a recording (survey) of my own spatial experience and an initial mapping. Through photography, the site becomes flattened and preserved. The photographs recorded are then used as a reference for analysis during the drawing process.



Figure 14. Juno, J. *Takapuna Site*, Photography, 2022.

EXTRACTING LAYERS OF THE TERRAIN

Through drawing, my understanding of the site is constantly evolving. Each mark upon the terrain's surface is drawn on transparent paper creating the first weighted visualization of how the research identifies the terrain as a series of layers. Philosopher Alain Badiou states that "Pure drawing is the material visibility of the invisible" suggesting the importance drawing holds within this research.¹⁹

Significantly, layering informs how the drawn lines and traces of the site sit together, representing the terrain in a new light. In order to suggest a timeline of the layers I began to question how they could be compressed. As compression is defined as "press together", it is important for each drawn line to remain as an individual layer.²⁰ I found it important to keep the lines from each drawing separate, as they were integral recordings of transformation throughout time. The drawn layers were scanned, enlarged and printed onto the same piece of paper; the repetitive use (of the same piece of paper) acted as a reminder of the terrain as a document being repeatedly transformed by external forces occupying and influencing its surfaces. Drawing becomes a process to reveal the layered marks and suggests the weight external forces can have upon a terrain.

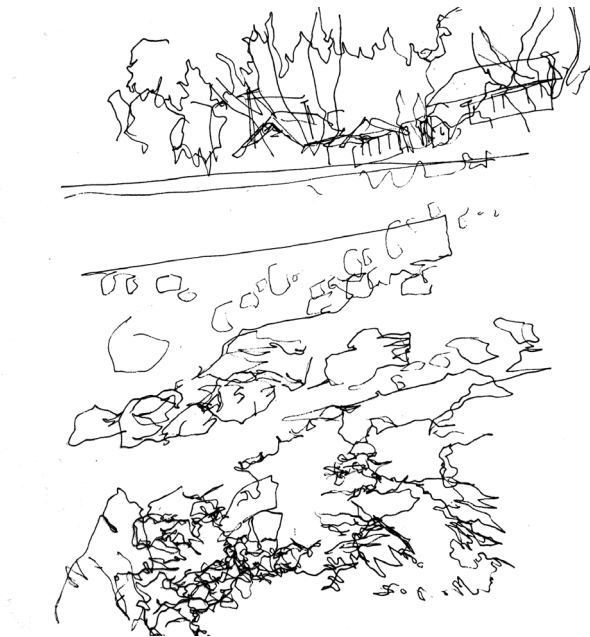


Figure 15. Juno, J. *Takapuna Drawing 1*, 2022.

¹⁹ Jean-Luc Nancy, *The Pleasure of Drawing* (New York: Fordham University Press, 2013), 78.

²⁰ Collins Dictionary, "compress." <https://www.collinsdictionary.com/dictionary/english/compress>.

CONFLATING LAYERS OF THE TERRAIN

As I begin to cast the layers, they shift from two dimensions to three, speaking to the weight of each layer and the duration of time. Throughout this research, drawing and casting have become two methods that work alongside each other, each revealing a different way of reading the site. Drawing extracts and then compresses the layers, while casting conflates the layers together. To conflate is “to fuse into one entity; merge”.²¹ The merging of layers is an idea applied to casting, as plaster is poured to form one entity that can be altered in order to reveal and suggest other layers. The narrative of the terrain’s transformation is uncovered as I alter the cast object’s surfaces. I act as the external force occupying the surface of the cast object, altering and deconstructing its surfaces to encapsulate the narrative of how an external force occupying a surface can transform it, embedding a trace. I cast layers of transformation in plaster because it creates more depth within one surface. The cut between smooth and rugged speaks to the transformation, emphasizing the results of occupancy.



Figure 16. Juno, J. *Material Deconstruction Experimentation 2*, Kiln-Fired Plaster, 2022.

²¹ Dictionary.com, “conflate.” <https://www.dictionary.com/browse/conflate>

Figure 17. Juno, J. *Material Deconstruction Experimentation 3*, Sand-Blasted Plaster, 2023.



Throughout this research process, drawings and cast objects begin to reveal narratives and provide insight into how they can be read depending on how I install them into an environment. Different arrangements suggest how conversations about the impacts of external forces influencing the transformation of a terrain may arise. *Transforming Terrains* aims to share new ways people can understand the sites they encounter through connecting them with the terrain. This research journey is one where ideas are constantly being revealed and discovered over time, similar to how the layers of the terrain arose as a result of drawing and then casting. The method of casting continues to provide diverse opportunities into how the translation of the terrain can be visualized – as I progress I practice methods of isolating the terrain through walking/photography, drawing, and casting.

COMPRESSING IMMEASURABLE TIME: PRACTICE

This research has changed my own interpretation of surface transformation and evolved into a more refined understanding of how the weight of external forces are translated through the surface of a terrain; a line can be invisible, seen, drawn, walked, and cast. Each of these lines and the way they are traced reveal a deeper understanding of the significance of time a terrain holds. My practice has always sat with and responded to the terrain. A key idea that has always remained consistent is how the surfaces of a terrain or an environment reveal the experienced time the overall site has undergone. This research was initially focused on my methods and how I could use them to read the terrain as a recording of time and transformation. Each method was used to draw out the impacts of the external force's occupancy embedded within a terrain. Throughout the duration of this research, there has been an initial investigation into plaster as a material as it held potential diverse outcomes of how its surface could speak about my ideas of terrain transformation.

Over the course of this research, three sites have been used as case studies to develop and refine my methodology for approaching the site. This chapter discusses the approach taken to unpack each one. The first section looks at Takapuna Beach. As this was the first where I trialled my methods, I had not reached the conclusion that I would be focusing on human occupancy as an external force influencing the transformation of the terrain, but investigated erosion as the primary cause. The second discusses the site case study of pavers outside my house. The third section examines the site case study of St Paul Street, at AUT. The second and third case studies were investigations that both identified human occupancy as the external force influencing and contributing to the transformation of the terrain within each site.



Figure 18. Juno, J. *Takapuna Rock Terrain*, Photography, 2022.

CASE STUDY ONE: TAKAPUNA BEACH

In the early stages of my research, I didn't have a specific 'why' for which site I would select. Takapuna Beach struck me as it presented an interesting rock terrain. Initially the choice of site was not that significant, the important part was being able to trial my methods in order to unpack a site. I was interested in how I could use my methods to understand the story of the transformation coastal environments were undergoing due to erosion. During the study, I understood erosion from the tide on the rocky terrain as the external force influencing change.



Figure 19. Juno, J. *Takapuna Terrain Erosion*, Photography, 2022.

In order to document the effect of erosion, I drew the rock terrain coastline. I didn't draw when I was inhabiting the site as it would have taken my focus away from indulging in the experience of occupying space through explorative movement. The beginning of occupying a site is a continuous sensory experience. The specifics of touch come through movement; I dragged my hand across the rocky terrain as I moved along and through this movement could feel the differences in the terrain, which created an awareness when drawing it later. As I moved, I photographed my body occupying space. I later traced the lines my eyes followed within the image taken. As much as the final drawing holds value, I find more significance in each individually drawn line. As painter Cy Twombly says, "Each line is inhabited by its own history, it does not explain, it is the event of its own materialization".²² While each of the lines respond to the Takapuna coastline, they do not recreate exactly what is there but become a translation of the narrative I have perceived while occupying the site.

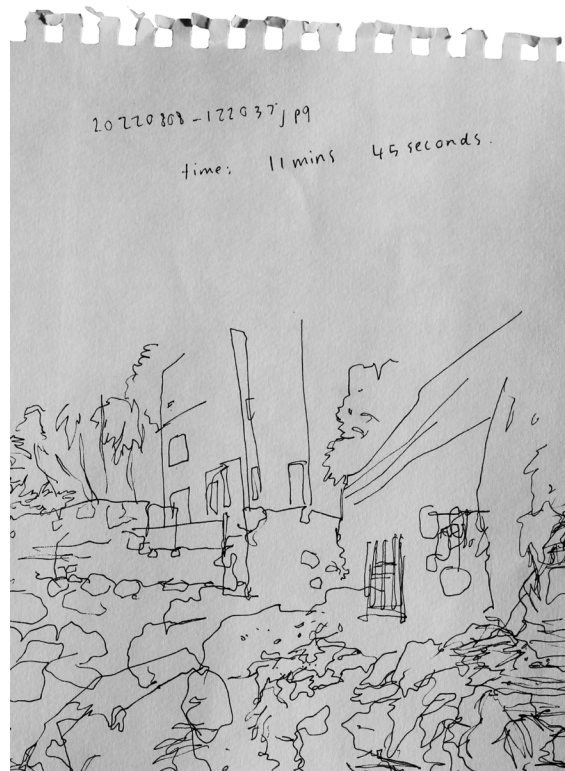


Figure 20. Juno, J. *Takapuna Drawing Detail*, 2022.

The time taken to document a layer of the site is listed at the top of each original drawing.

²² Jean-Luc Nancy, *The Pleasure of Drawing* (New York: Fordham University Press, 2013), 42.



Figure 21. Juno, J. *Takapuna Drawing 2*, 2022.



Figure 22. Juno, J. *Takapuna Drawing 3*, 2022.

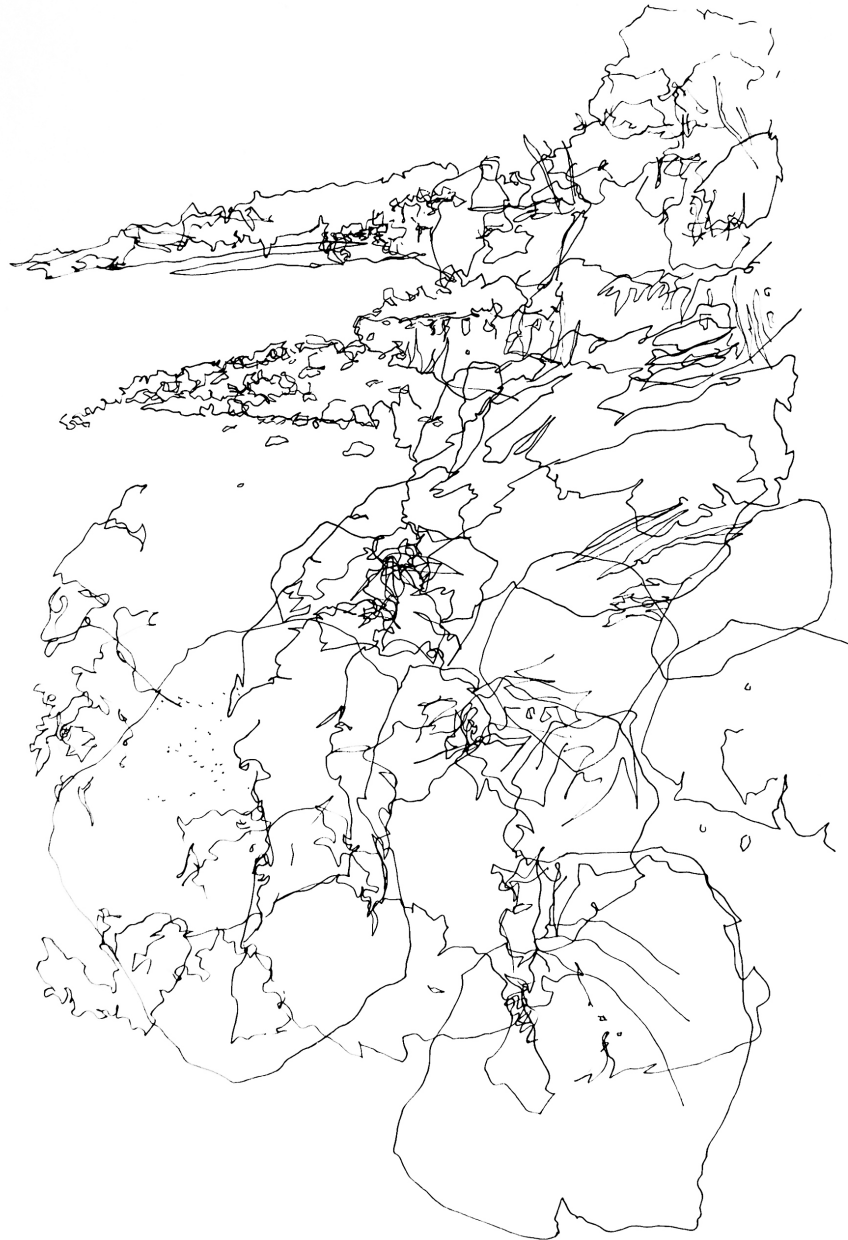


Figure 23. Juno, J. *Takapuna Drawing 4*, 2022.

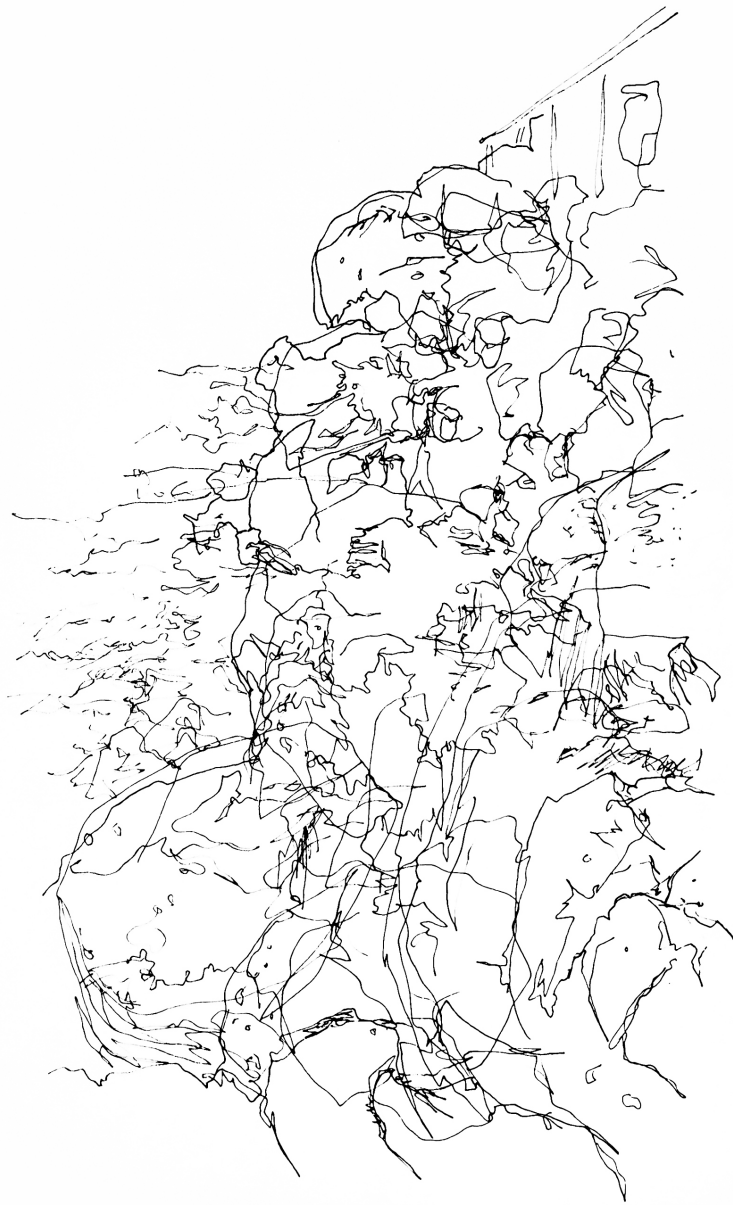


Figure 24. Juno, J. *Takapuna Drawing 5*, 2022.



Figure 25. Juno, J. *Takapuna Drawing 6*, 2022.

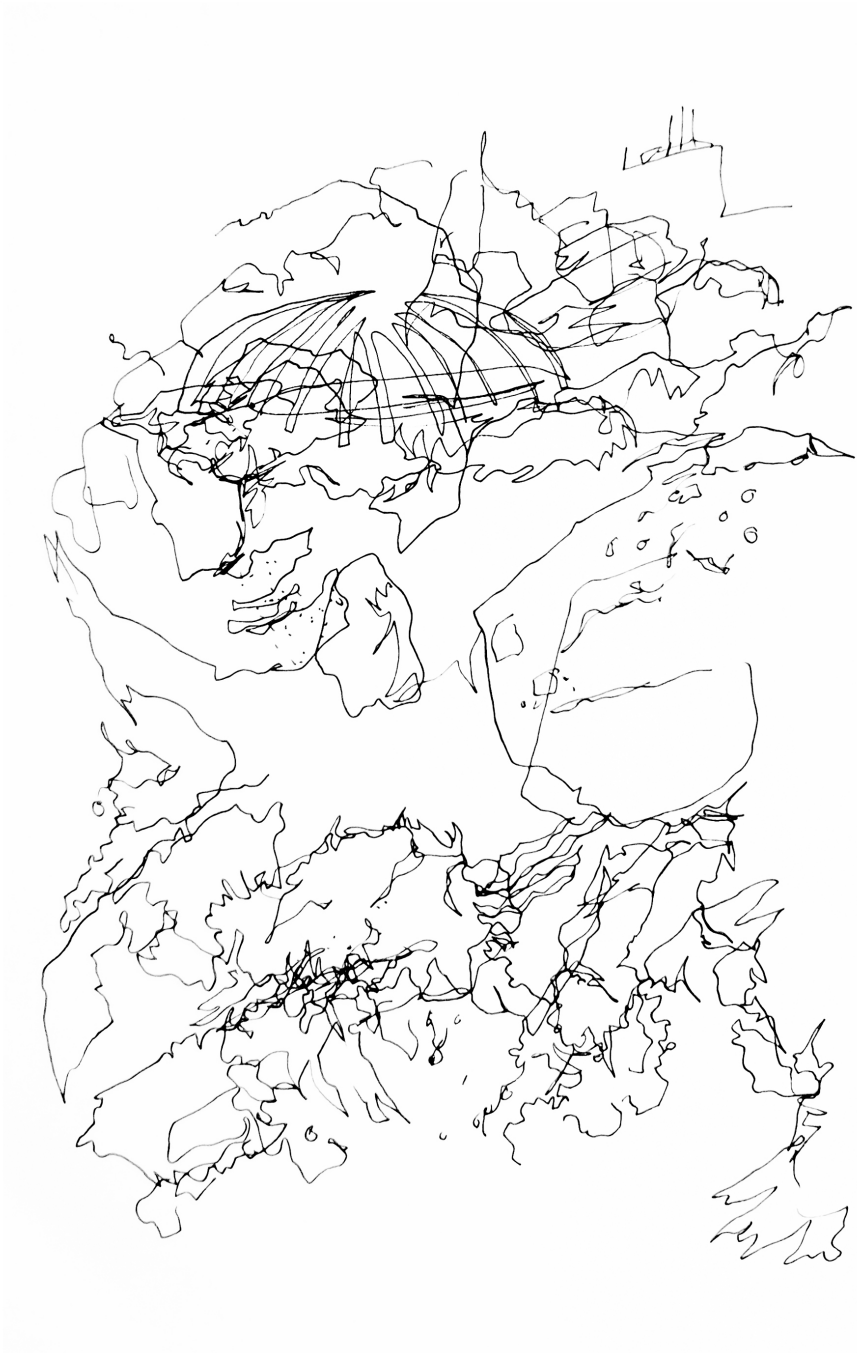


Figure 26. Juno, J. *Takapuna Drawing 7*, 2022.

After drawing each image, I digitally layered them upon each other to create a drawing that held multiple recordings of trace embedded due to erosion. The drawing became an insight into the depth of transformation the site had undergone and a timeline of each moment of change.

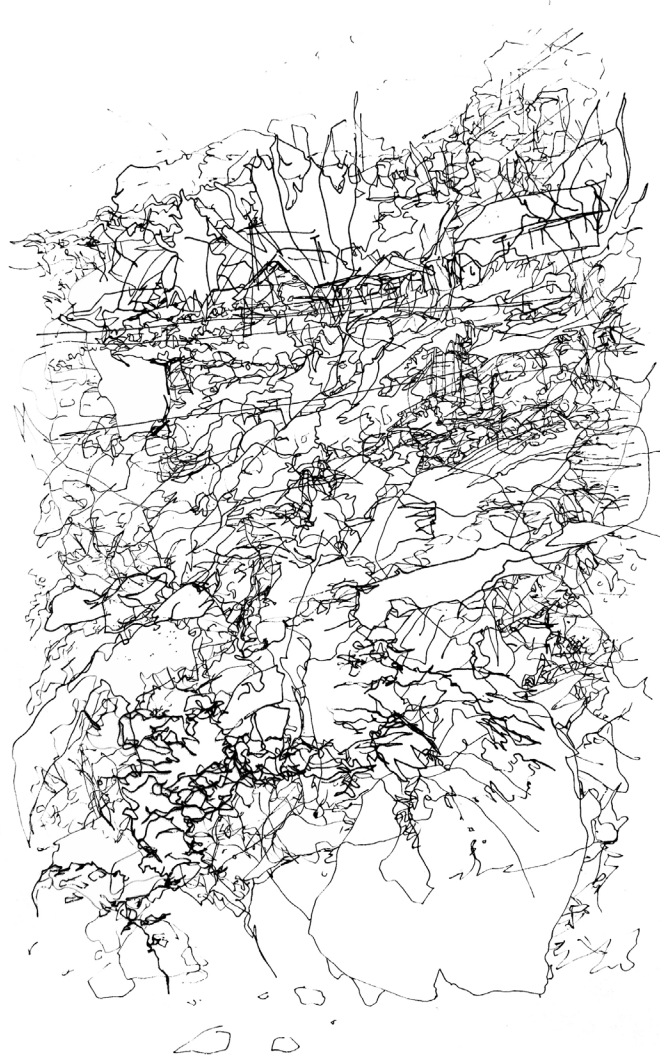


Figure 27. Juno, J. *Takapuna Drawings Layered*, Digital, 2022.

As I was trialling out my methods, I decided to create some form of a site map. I wanted to create an artefact that situated my movement and occupancy during the course of my time spent within and throughout the environment. I laid out nine pieces of paper, aligned them together, and placed my collected materials; rocks, shells, and sand, upon the paper. I then used a mixture of water, indian ink and charcoal to trace my movements around the paper. Reflecting on the processes, I have come to understand this site map as a mapping of my own independent experience of occupancy.



Figure 28 (left). Juno, J. *Mark Making Test*, Water, charcoal, indian ink, 2022.

Figure 29 (below). Juno, J. *Mapping Occupancy*, 2022.
Photograph of reflective mark marking left to dry.





Figure 30. Juno, J. Artefact - Mapping Occupancy, 2022.
The final state of the artefact holds traces of sand - a reminder of the process.

I cast the detail of the rocky terrain; when revealed, the surfaces acted as representations of the rocky terrain along the Takapuna coastline. Upon reflection I have come to understand how they are preservations of terrain detail. Transformation through erosion of rocky terrain is inevitable – these moments of change present as ephemeral. By taking moulds and then casting them I am able to preserve a detail of the terrain’s timeline, gaining insights into how surfaces can be short-lived and temporal.



Figure 31. Juno, J. *Casting Eroded Terrains*, 2022.
Process of casting plaster onto moulds taken of Takapuna’s terrain.



Figure 32. Juno, J. *Preservation of Ephemeral*, Photograph, 2023.



Figure 33. Juno, J. *Preserved Detail 1*, Photograph, 2023.



Figure 34. Juno, J. *Preserved Detail 2*, Photograph, 2023.

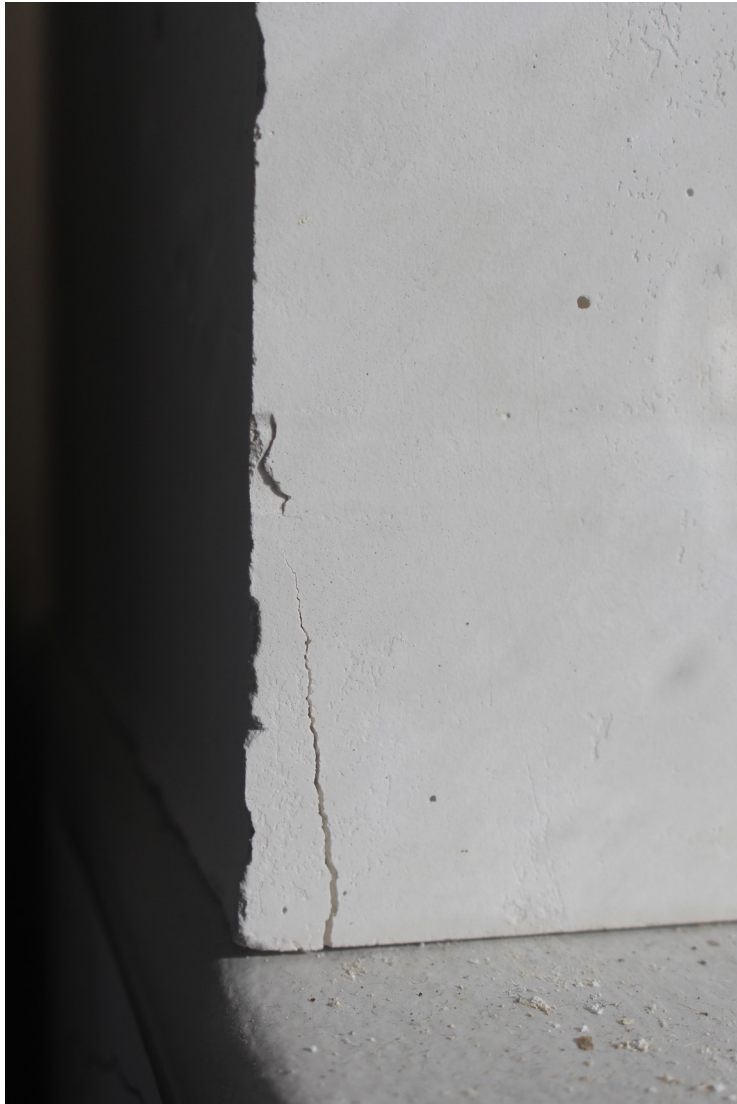


Figure 35. Juno, J. *Slow Transformation*, Plaster, 2023.

Figure 36. Juno, J. *Surface Experimentation 1*, 2022.
Arranging Pinky-sil moulds for casting.



Figure 37. Juno, J. *Surface Experimentation 2*, 2022.
Placing sand upon the edges of Pinky-sil moulds taken to experiment with surface detailing.



Figure 38. Juno, J. *Takapuna Terrain Cast 3*, Photography, 2023.



Figure 39. Juno, J. *Takapuna Terrain Cast 4*, Photography, 2023.

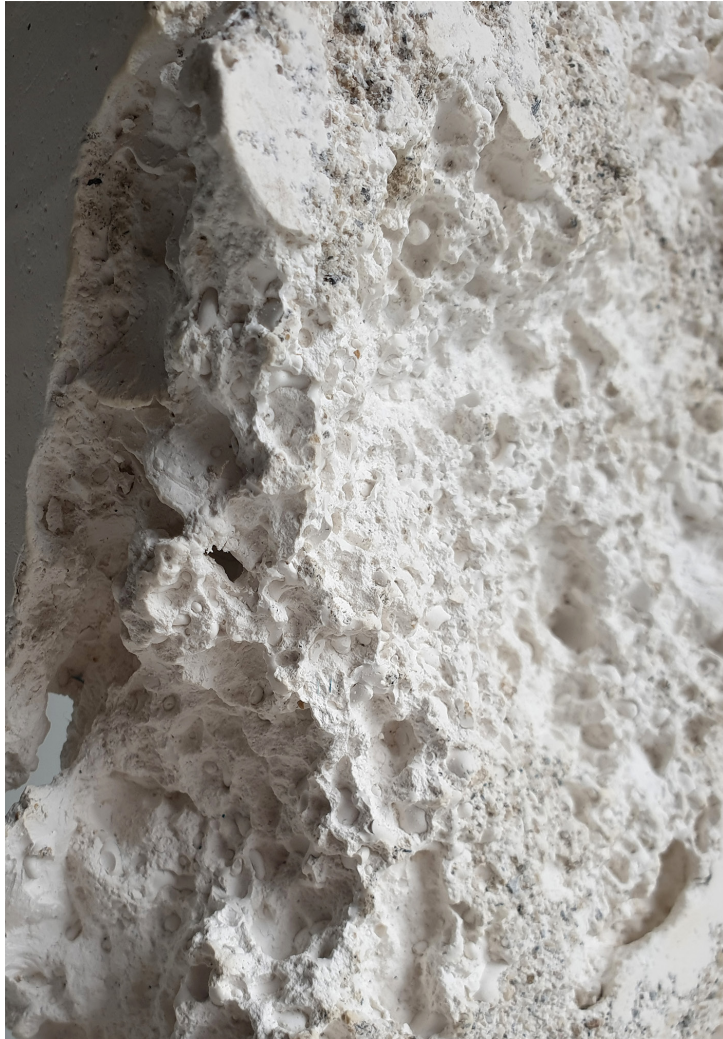


Figure 40. Juno, J. *Takapuna Terrain Cast 5*, Photography, 2023.

Figure 41. Juno, J. *Contrasting Surfaces*, Photography, 2023.
Sitting different casts together to see how their surfaces interact.



Each plaster surface was cast individually with no intention of lining up with others cast. However, when together each cast seems to align with one another through line.

Figure 42. Juno, J. *Aligning Surfaces 1*, Photography, 2023.



Figure 43. Juno, J. *Aligning Surfaces 2*, Photography, 2023.





Figure 44. Juno, J. *Aligning Surfaces 3*, Photography, 2023.

I then cast a plaster site map in order to translate the marks. Initially, there was a concept to create a site-less map in order to isolate the rock terrain from its environment to exaggerate the significance of the terrain's surface treatment. The significance of emphasizing the surface detail to evoke a sense of transformation remains important. However, the drawn lines and cast surfaces are made with the intent of evoking a narrative and couldn't be made with the aim of becoming site-less. Whilst reflecting on this stage of the research, I came to recognize the mapped terrain set in plaster as a preserved artefact resembling a site map that identifies terrain as a result of external forces occupancy.



Figure 45. Juno, J. *Site-less Map*, Plaster, 2022.



Figure 46. Juno, J. *Site-less Map Grid Arrangement*, Photograph, 2022.



Figure 47. Juno, J. *Site-less Map Surface Detailing 1*, Photograph, 2023.

Figure 48. Juno, J. *Site-less Map Surface Detailing 2*, Photograph, 2023.



This study was significant for trialling out my methods as I was able to experience a wide variety of approaches to surface within the site and to explore telling the narrative of erosion through drawn and cast line. The value of this study has grown significantly through the development of my methods and reasonings for this research in that the meaning behind everything I created in response to Takapuna Beach has become clearer and feels more whole. I was able to recognize the strength in my approach to drawing out my individual experience of occupancy and give weight to the outcomes of external forces embedded in the terrain. This knowledge continues to inform my research of documenting occupancy.

CASE STUDY TWO: PAVERS

After Takapuna, I selected a different kind of site; a smaller, domestically located space to see how my methodology would play out on a different kind of terrain. I decided upon the concrete pavers that line the ground at the back of my house. I selected this site as I saw the pavers as a collective terrain whose surfaces were the result of external forces acting upon them. The most significantly active force upon the pavers I recognised as that of myself and my family.



Figure 49. Juno, J. *Pavers Site*, Photography, 2022.

Drawing this site was initially challenging as the surface of the concrete terrain was not continuous, but broken up into a grid. To begin I drew upon different drawing approaches provided within Maslen and Southern's *Drawing Projects: an exploration of the landscape of drawing*.²³ The approaches challenged having a lack of control while drawing. I was interested to see how this could impact the way I approach site. Inspired by the different approaches I drew different moments of activation I could see – cracks, worn concrete and grass growing through the space between each paver. Resulting in lines that were drawn a little more loosely across the page. Each paver's surface was quite similar, so the drawings resulted in repetitive lines and forms. This site became more of a reflection on how the site was being transformed through the consistent movement and force of human occupancy.

Figure 50. Juno, *J. Pavers Site Drawing 1*, 2022.



²³ Southern and Maslen, *Drawing Projects*.



Figure 51. Juno, J. *Pavers Site Drawing 2*, 2022.



Figure 52. Juno, J. *Pavers Site Drawing 3*, 2022.



Figure 53. Juno, J. *Pavers Site Drawing 4*, 2022.



Figure 54. Juno, J. *Pavers Site Drawing 5*, 2022.

These drawings were then digitally layered, losing some of their shaded detailing to create clear drawn lines: a mapping of terrain as a result of external force. The loss of line through translation was not planned or expected and came with a realisation that through loss of drawn line, gaps occur in the narrative the drawings are intended to convey.

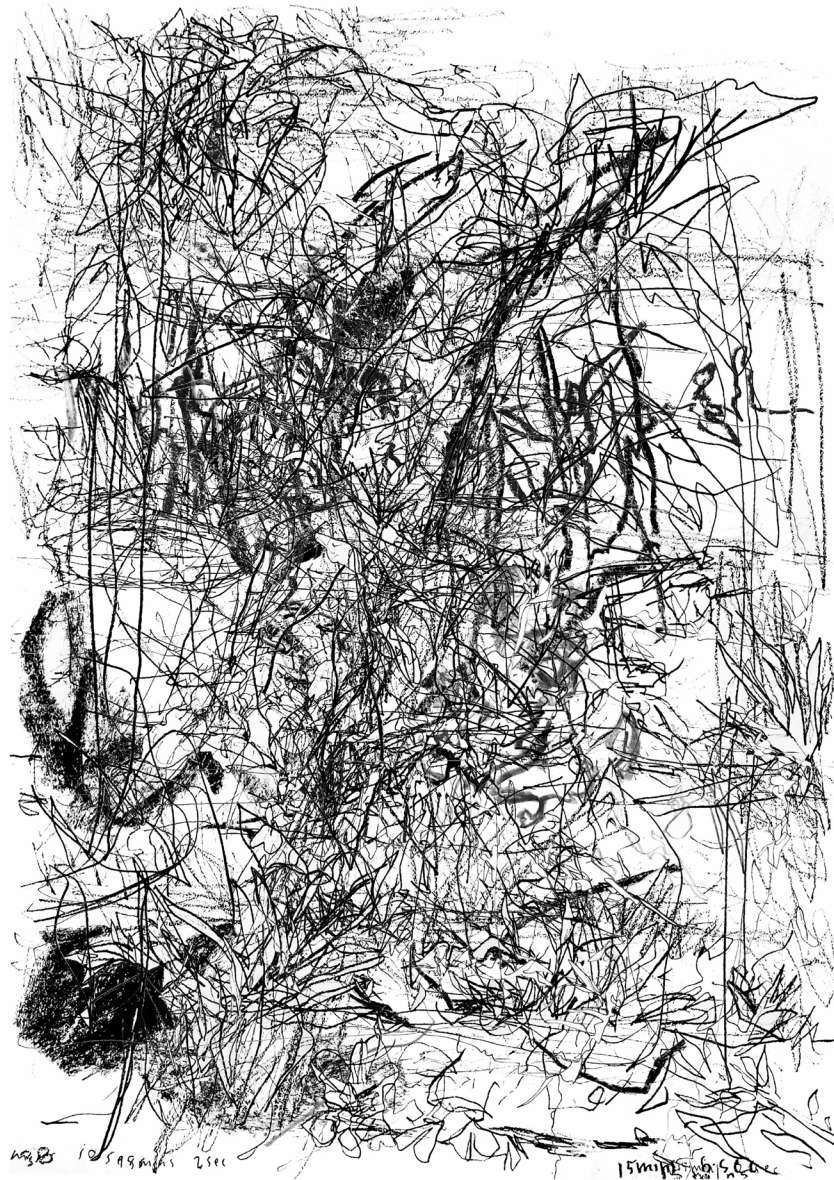


Figure 55. Juno, J. *Pavers Site Drawings Layered*, Digital, 2022.

Digital layering led to casting concrete tiles. The first tiles held surface details of occupation. Moulds of moments of activation were formed, poured mortar solidified these details. Through casting, the act of preservation arose; I wasn't entirely sure of what the castings specifically meant for the site I was responding to but had in my mind an idea of a growing collective surface. This is coincidentally strange, considering I focus on the details of wearing away and breaking down over time, yet I was looking to create a growing surface.



Figure 56. Juno, J. *Preserving Surface Detailing Process*, Plastercine, mortar. 2022.



Figure 57. Juno, J. *Mortar Tiles Surface Detailing*, Photography, 2022.

I then created another set of tiles that explored the process rather than the outcome. At this point I was questioning why I drew and cast in grids. Therefore, when casting into a series of small cardboard boxes, I spread sand across each box to attempt breaking the grid so the final tiles could become a set of artefacts not separated by a grid. This process of experimenting with the idea of a grid was significant at the time as it enabled my to focus completely on the process rather than the outcome.



Figure 58. Juno, J. *Breaking the Grid*, Sand, 2022.



Figure 59. Juno, J. *Concrete Tile*, Concrete, sand, 2022.



Figure 60. Juno, J. *Concrete Tiles Set*, Concrete, sand, 2022.

Even though I separated the site's timeline into individual layers (tiles), by setting them together, a sense of time was evoked. If they are arranged in a vertical stack, they begin to speak to time differently. They each become a layer of preserved time. After casting the tiles, I didn't know how to progress with the site analysis (especially as I was documenting a terrain that was made up of grids). I wasn't sure how to approach that. This site case study has a shorter duration. However, the experimental side of drawing and casting was productive, and my conceptual understanding of the site had moved to an understanding of the impact of external forces on a terrain's transformation.



Figure 61. Juno, J. *Vertical Timeline*, Concrete & Mortar Tiles, Photograph, 2023.

CASE STUDY THREE: ST PAUL STREET

This site was part of a street activation project I was able to work on alongside the Auckland Council for St Paul Street, which runs through AUT's city campus. Initially, the site was a little overwhelming. To align my focus, I began by isolating parts of the terrain surface that revealed the impacts of occupying external forces – such as people. I drew the street in two sheet layouts, in portrait and of the terrain from a bird's eye view perspective. Through a portrait layout, I would draw from an image I had taken of the street from inside one of the buildings or from the side of the street. I broke up what I could see into layers. I would draw one side of the street on the first piece of paper and then the other side of the street on the next piece of paper. For the terrain series drawn from a bird's eye view perspective, I had taken images of the terrain as I occupied and walked the street. I drew the surface detail from each image. Through creating multiple drawings on transparent paper, I was able to build up a collection of layers of drawn time.



Figure 62. Juno, J. *St Paul Street Site*, Photography, 2022.

Figure 63. Juno, J. *St Paul Street Site Terrain*, Photograph, 2022.
Reading St Paul Street Terrain Surface.



Figure 64. Juno, J. *St Paul Street from WE's Interior*, Digital/Photography, 2022.

Looking beyond the windows as an approach to begin drawing out the layers of site.

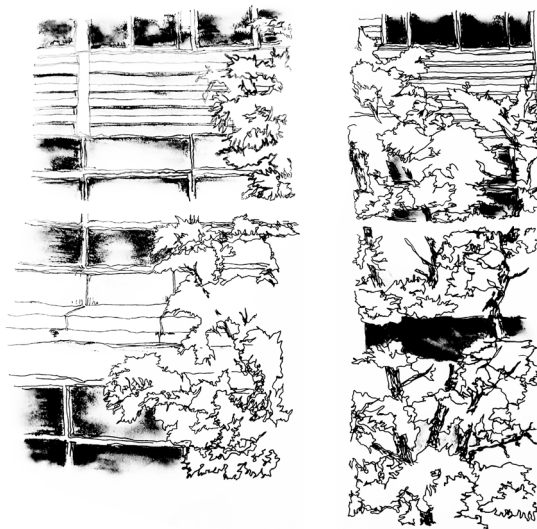
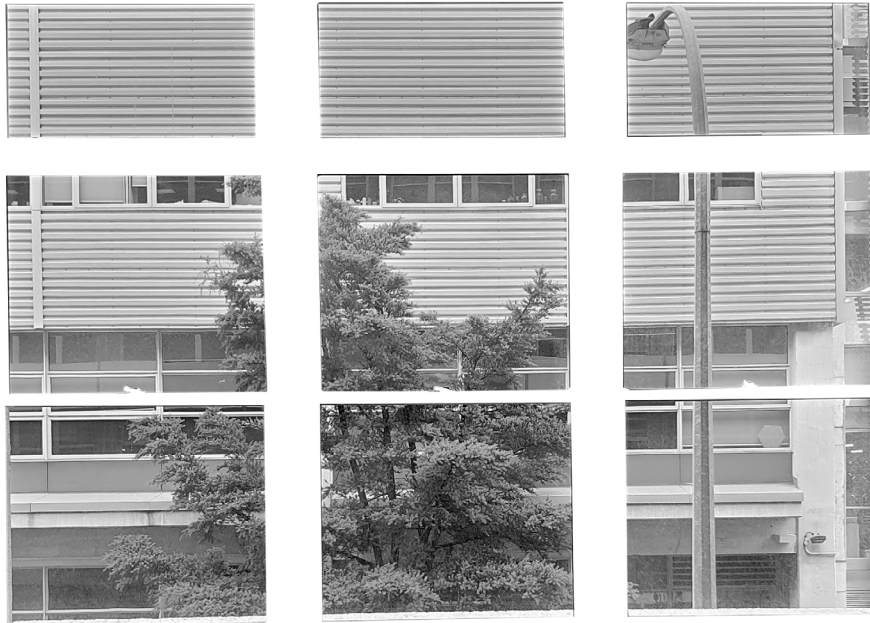


Figure 65. Juno, J. *St Paul Street Drawing*, Digital, 2022.

Drawing of St Paul Street contained within the left and middle window panes.

Figure 66. Juno, J. *Stacked Drawings*, Photography, 2023.
The drawings are kept in a stacked pile, resembling how the research views terrains as stacked layers.

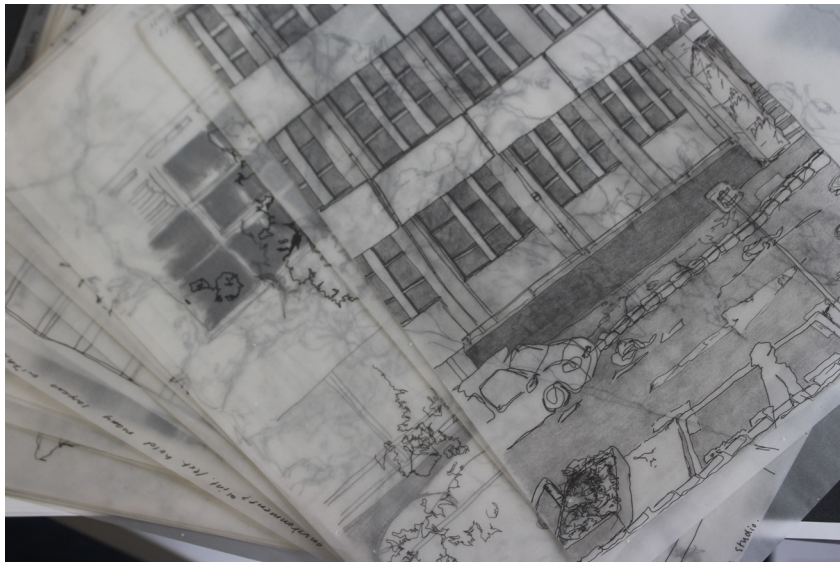


Figure 67. Juno, J. *Transparent Paper Type*, Photography, 2023.
Transparent paper enables the layers of drawings to be seen while stacked upon each other.

Figure 68. Juno, J. *Revealed Layers of Site 1*, Photograph, 2023.

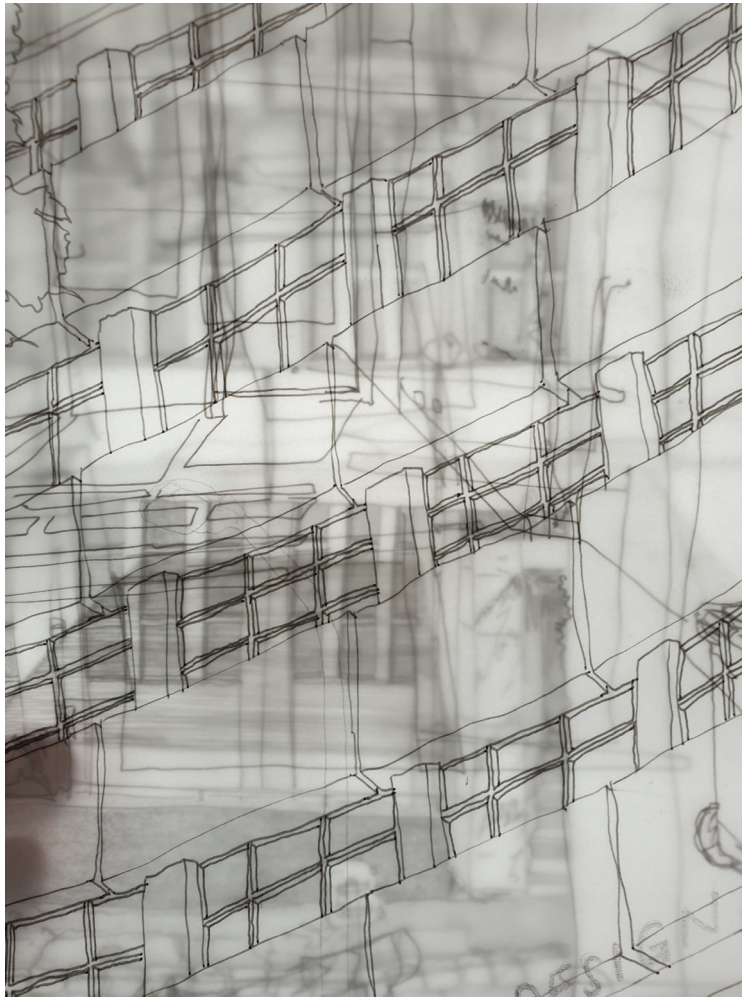
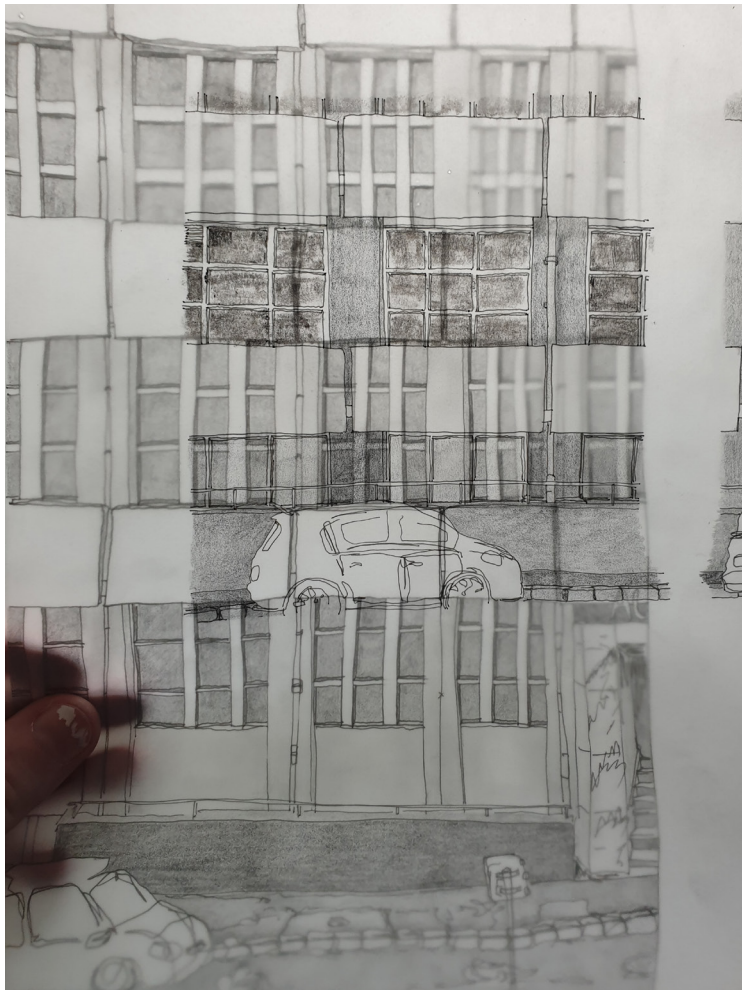
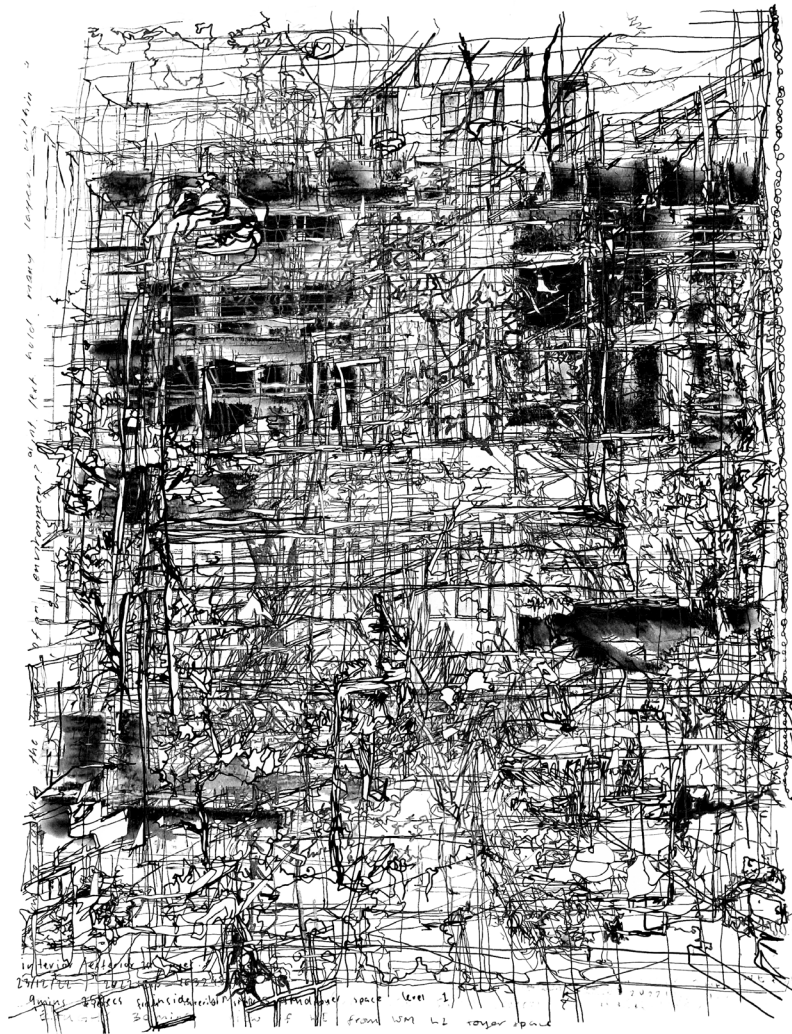


Figure 69. Juno, J. *Revealed Layers of Site 2*, Photography, 2023.



I continued to draw and build upon my version of the street while gaining knowledge and developing ideas around the site. The more I drew, the more I could understand what the impacts of occupancy looked like and how this became a part of the terrain's narrative of transformation which arose as cracks, markings, worn concrete, and re-applications of fresh concrete. I then digitally layered all of my recordings, and whilst some of the drawn detail was lost in digital translation, they did reveal the terrain in a new light. Through printing, these compiled drawings compressed lines revealing the weighted impact of occupancy on the terrain.



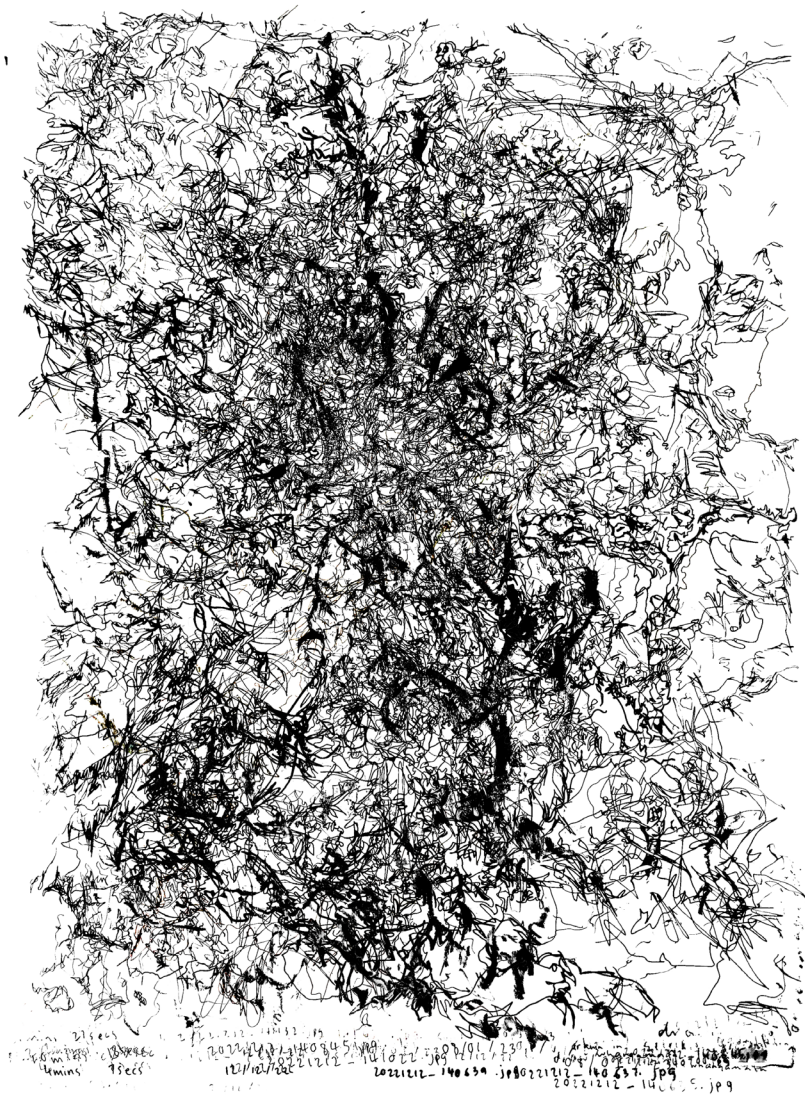


Figure 71. Juno, J. *Layered Terrain Drawings*, Digital, 2022.

During the initial stages of this case study, I wasn't sure how to cast the site as I needed a reason as to which parts I would cast, and why. To try out a method for casting, I took my series of terrain drawings and aligned them together to create a reimaged terrain resembling only the trace of occupancy embedded within St Paul Street. In order to cast this, I created linework to outline the formed terrain and used this as a guide for creating a cast. I used sand to mark out the drawn terrain and poured plaster over the top.

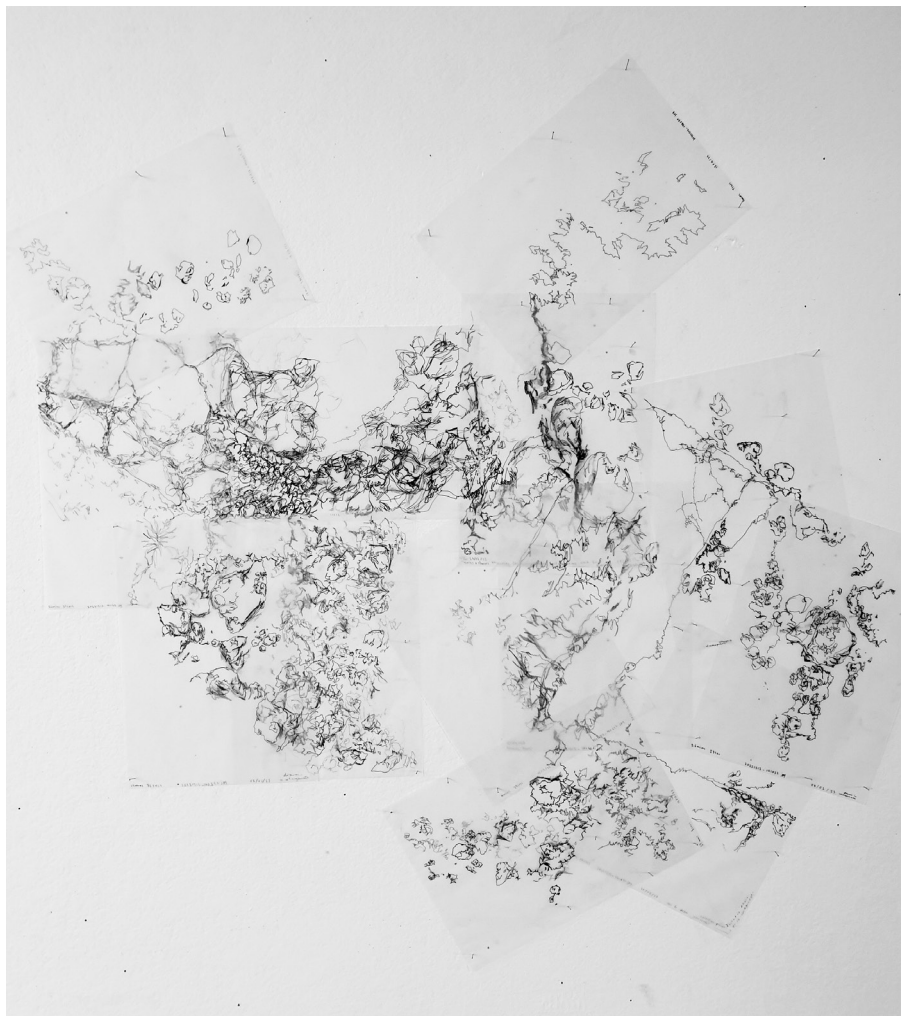


Figure 72. Juno, J. *Aligned Terrain Drawings*, Photograph, 2023.



Figure 73. Juno, J. *Terrain Outline*, Digital/Photography, 2023.



Figure 74. Juno, J. *Casting Terrain*, Plaster, Digital/Photography, 2023.
Sand represents drawn terrain in fig.73.



Figure 75. Juno, J. *Cast Terrain*, Plaster, Digital/Photography, 2023.
The drawn terrain becomes embedded within plaster.

Translating a two-dimensional drawing into a three-dimensional cast, revealed the drawing in a new light. The surfaces formed were vastly different from the original drawing and they gave me weight to the idea of occupancy, revealing the depth of impact and weight over time.



Figure 76. Juno, J. *Stacked Surfaces*, Plaster, Photography, 2023.
The rough edges and surfaces begin to represent the weighted force of external occupants.



Figure 77 (top). Juno, J.
Aligned Surfaces, Plaster,
Photography, 2023.



Figure 78 (left). Juno, J.
Traces of Force, Plaster, Pho-
tography, 2023.

My research was created with the intent of being used to understand the weight of occupancy on a terrain, whereas the council project challenged the outcome of this methodology and offered an opportunity to then use it as a method to inform the design and construction of a street bench. The form rose up from the terrain, allowing the vertical surfaces to provide a narrative of the terrain's transformation.

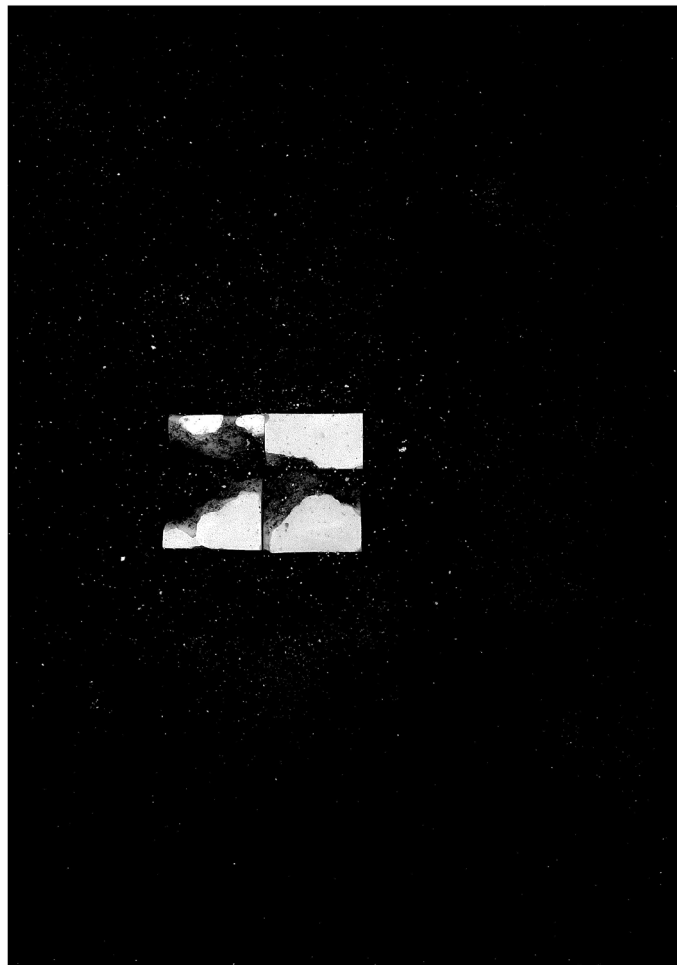
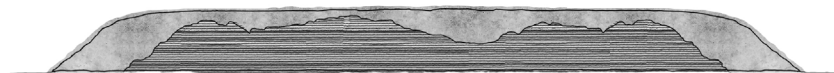
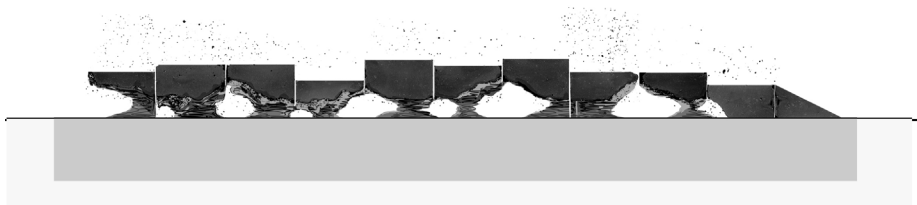
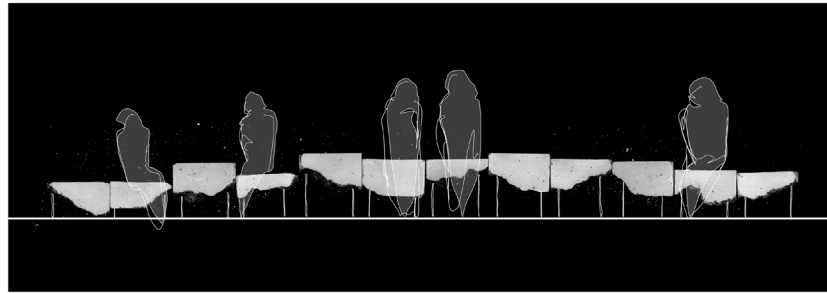


Figure 79. Juno, J. *Scanning Plaster to See*, 2023.
Scanning the cast plaster objects in order to see them from a new perspective.

Figure 80. Juno, J. *Street Bench Development*, Digital Collage/Drawing, 2023.



The form and surface design evolved into a layered time; I used a printer to scan each A4 drawing and then enlarge and print each onto a single piece of A0 paper. It was important that the drawings were individually scanned and printed onto the same piece of paper, a process that mimics that trace of human occupancy embedded in the site.

Understanding the decision-making regarding methodology to retain the sense of time in my prints is significant and emphasises the importance and purpose of my research. When each drawing is printed separately onto the same piece of paper, the layers of lines sitting upon each other are apparent (Fig 83), however if the drawings are layered together digitally or a photocopy is taken of a final layered print, the lines are immediately flattened. Retaining individual layers but compressing them, conveys a sense of the convergence of time and terrain.



Figure 81. Juno, J. *Scanning/Printing Process*, Photography, 2023.



Figure 82. Juno, J. *Layered Printing of Portrait Drawing*, A0 Cartridge Paper, Photography, 2023.

Figure 83. Juno, J. *Layering of Lines Detail*, Photography, 2023.



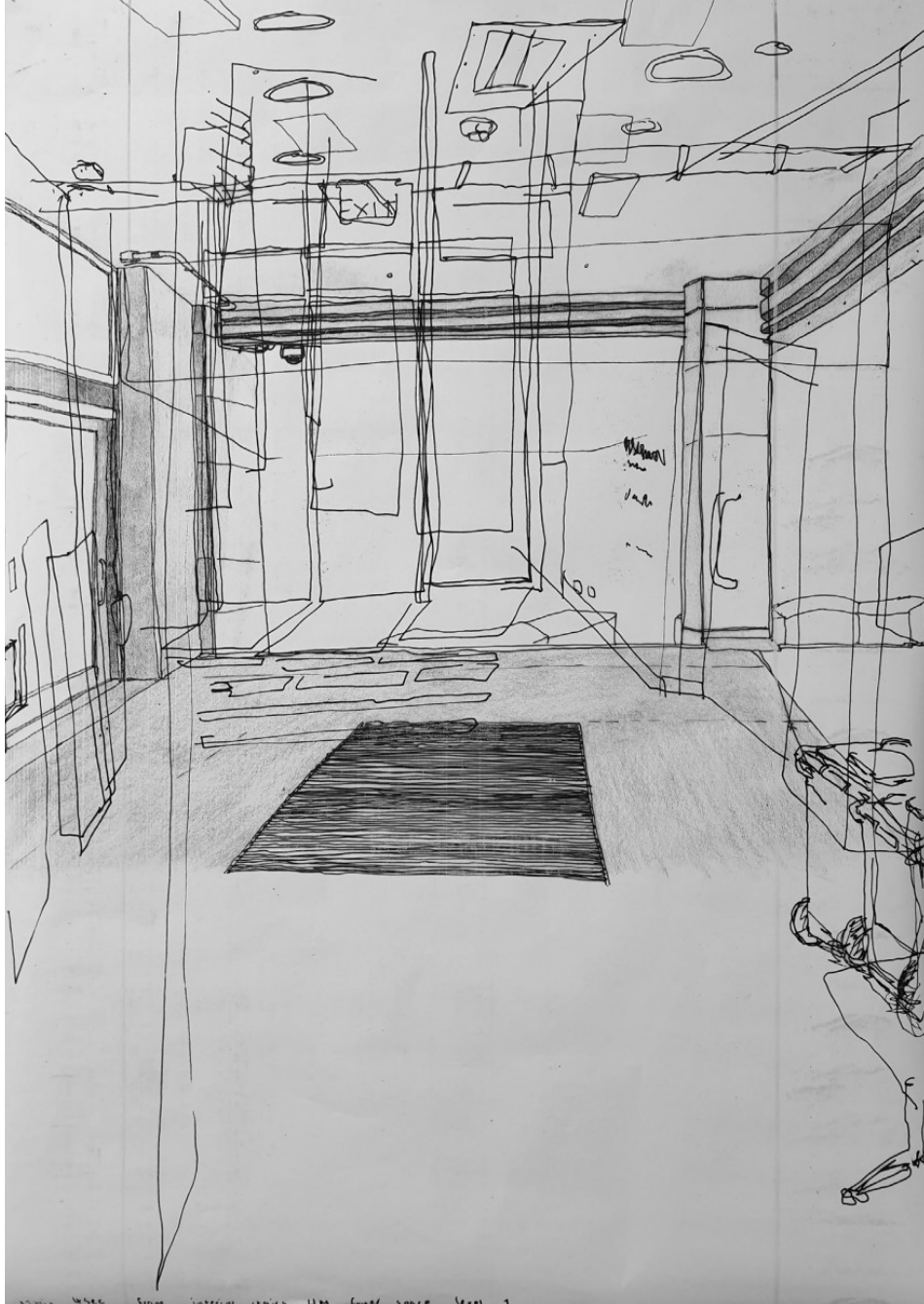


Figure 84. Juno, J. *Scanned/Printed Portrait Drawings Experimentation 1*, A0 Cartridge Paper, 2023.

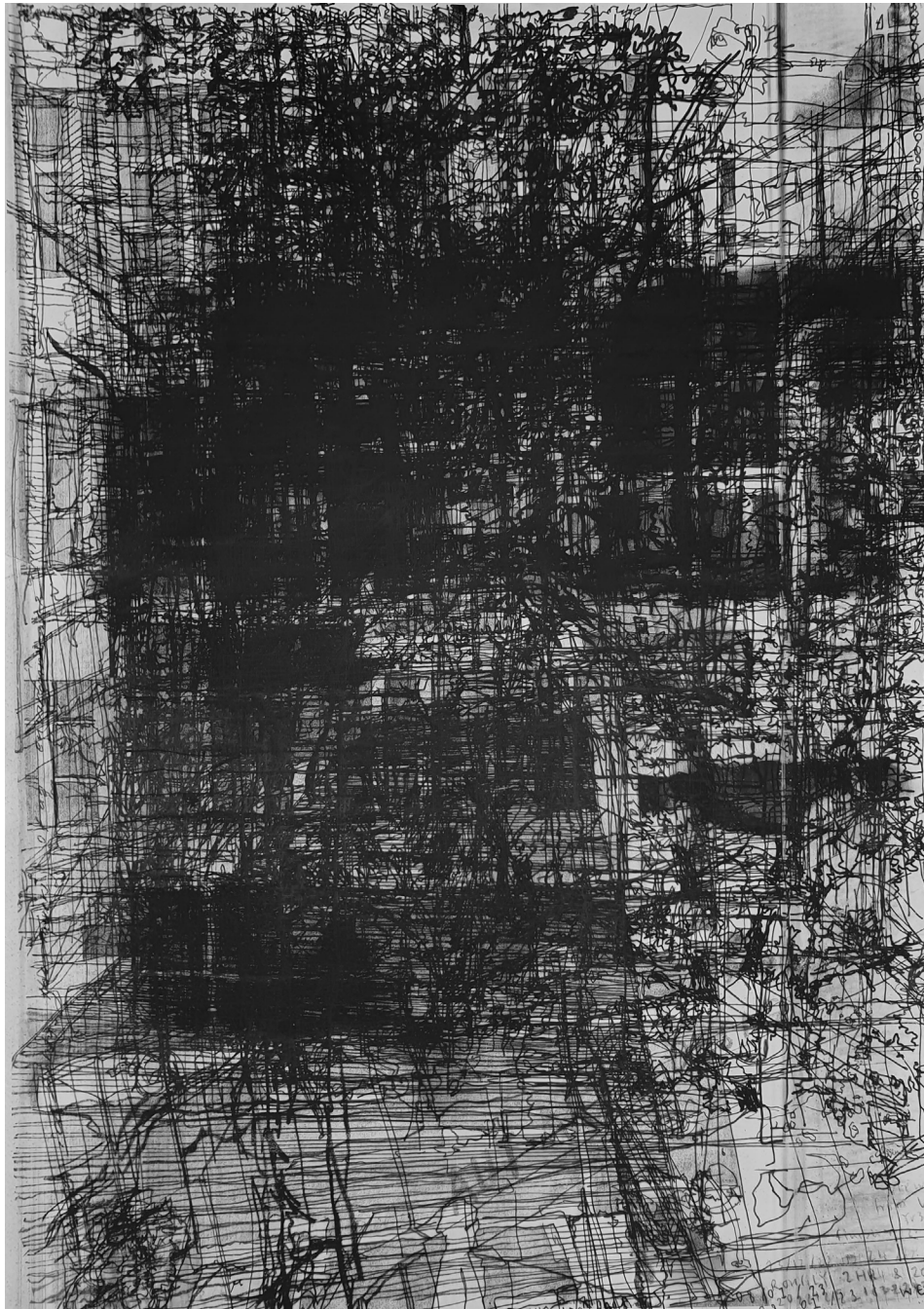


Figure 85. Juno, J. *Scanned/Printed Portrait Drawings*, A0 Cartridge Paper, 2023.

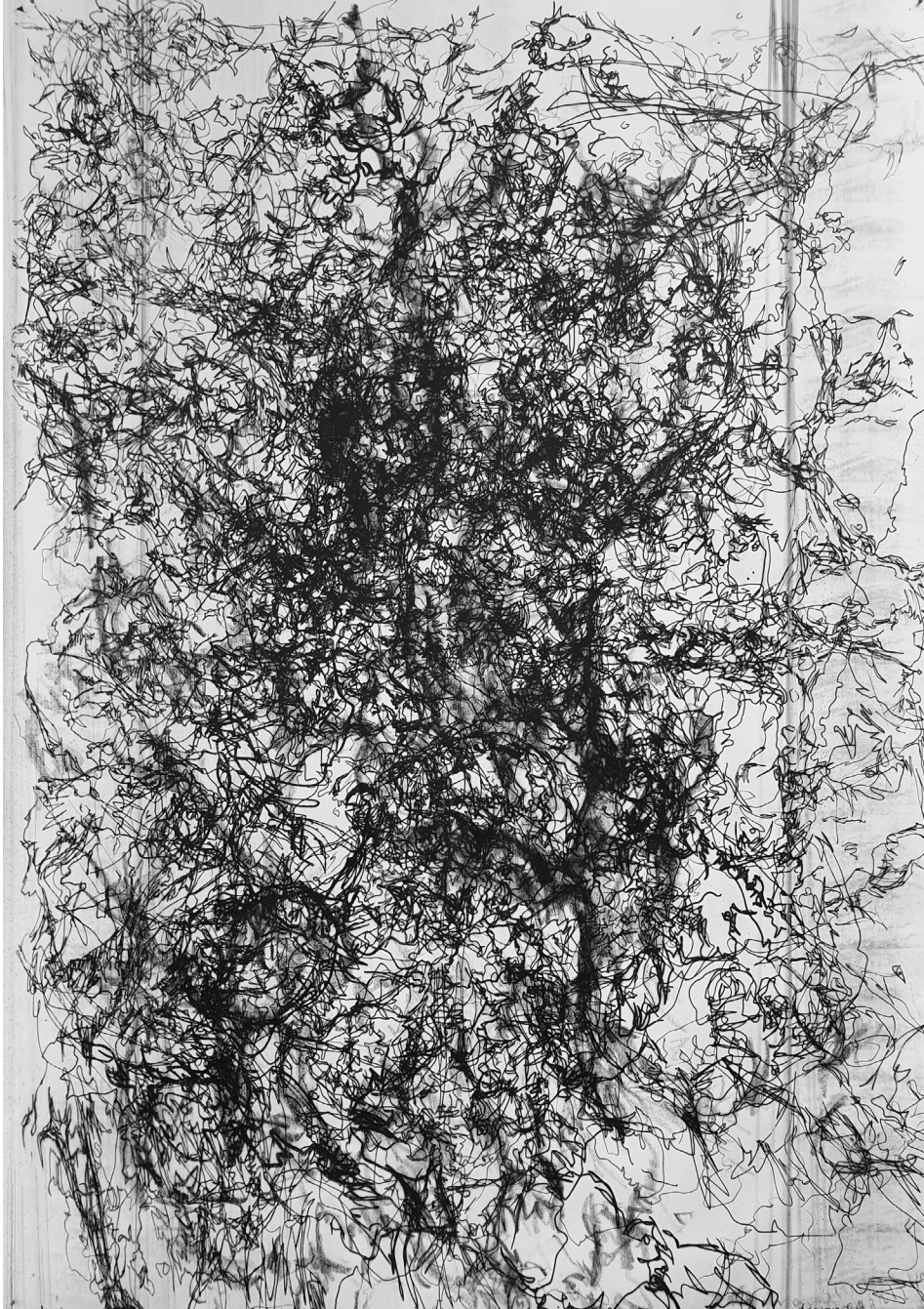


Figure 86. Juno, J. *Scanned/Printed Terrain Drawings*, A0 Cartridge Paper, 2023.

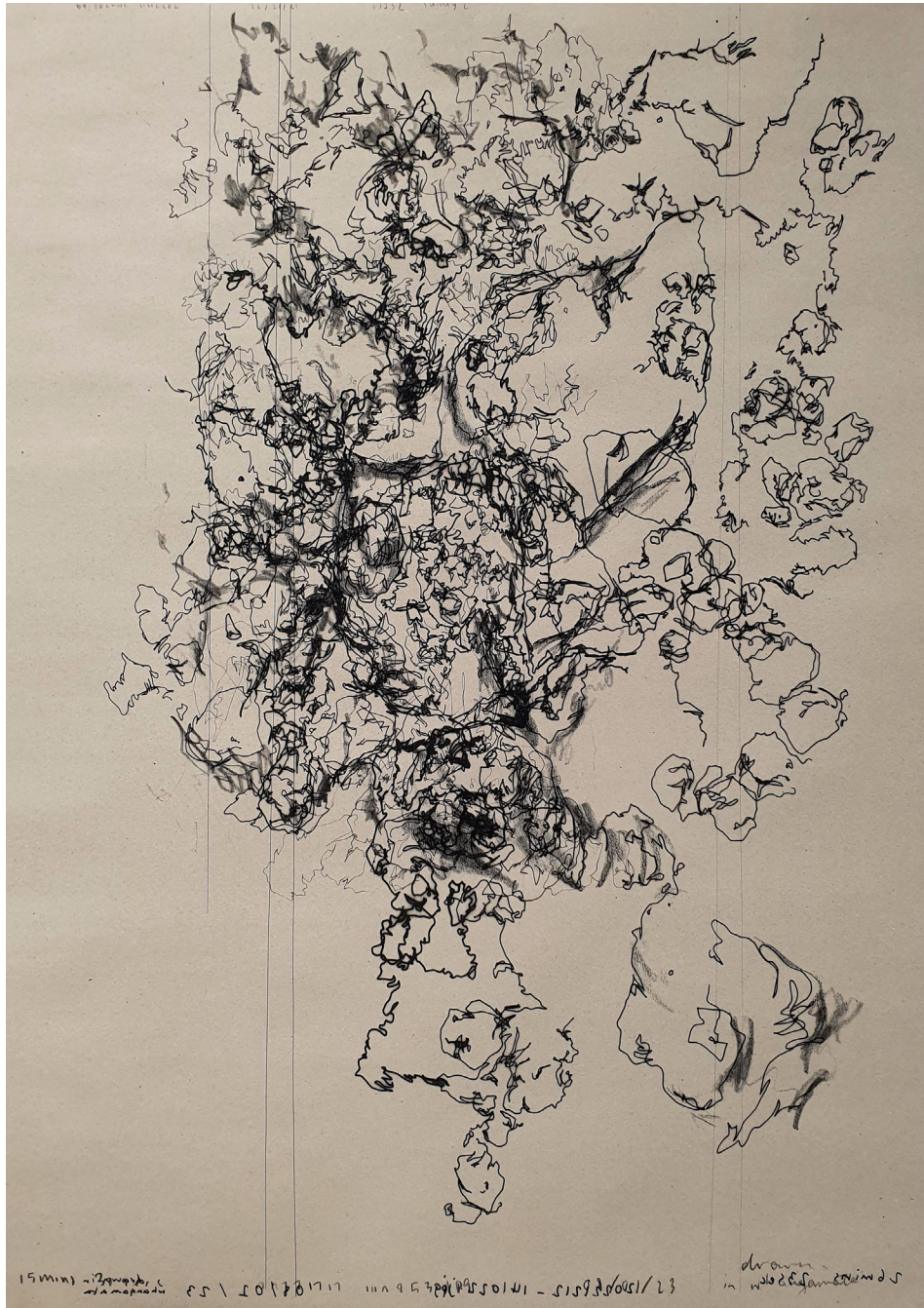


Figure 87. Juno, J. *Scanned/Printed Terrain Drawings Experimentation I*, A0 Cartridge Paper, 2023.

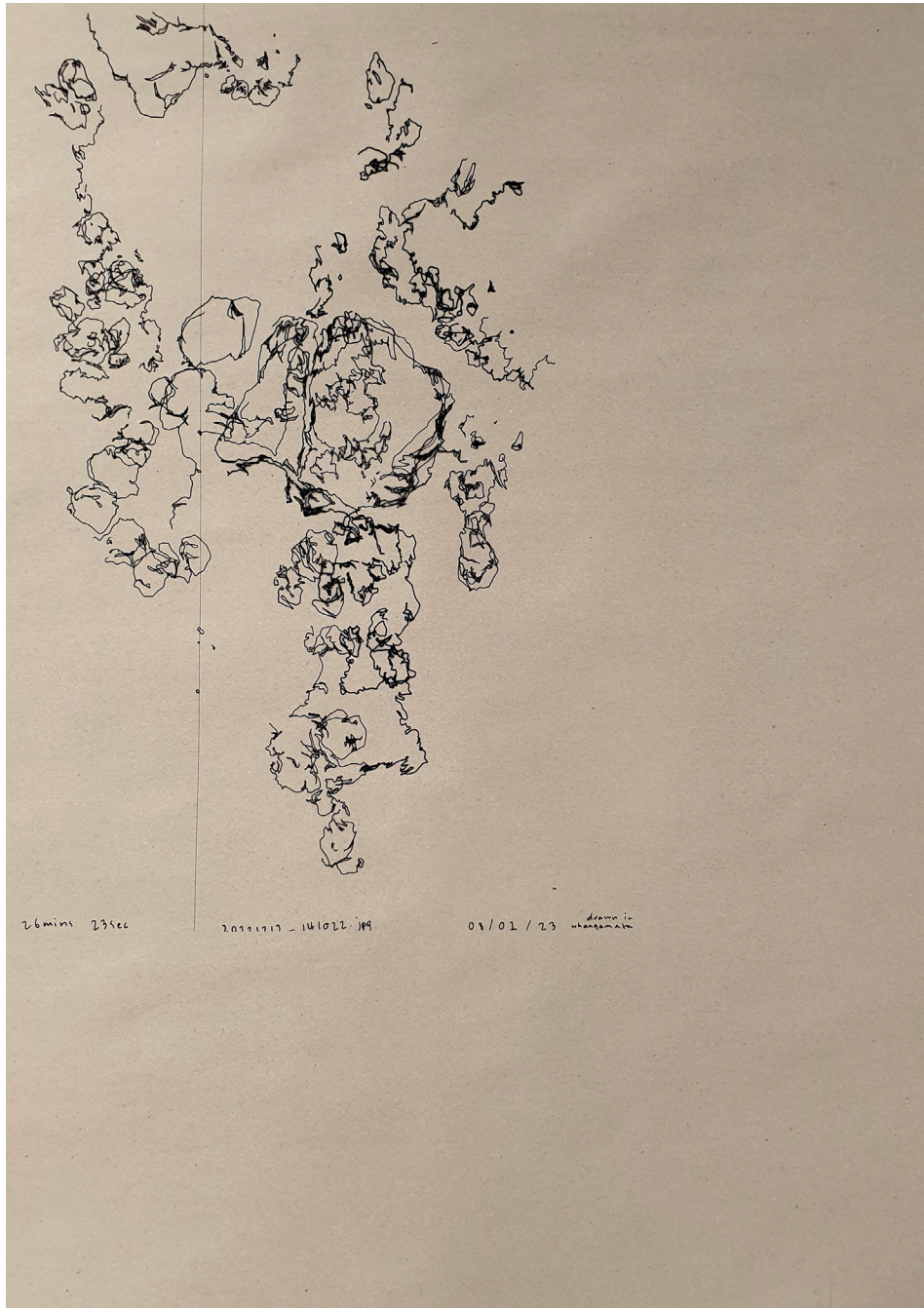


Figure 88. Juno, J. *Scanned/Printed Terrain Drawings Experimentation 2*, A0 Cartridge Paper, 2023.

The case study of St Paul Street was significant in the development and refining of my research. The practice of drawing became a tool of resolution that enabled me to understand the site as I drew it. By pinning up my A0 compression of time drawings, I was able to reflect on St Paul Street in a new light. The drawings began to encapsulate spatial experience and the impact external forces have on the shaping of a terrain over time. Through St Paul Street, I came to understand that in each drawing, line, or cast to date, was a snippet of the terrain's timeline and became a trace of the external forces that had influenced the transformation of the terrain. I refined my thinking regarding the constructive nature of my drawing and casting processes in response to the perceived wearing away and deconstructive nature of a terrain's transformation that I was questioning during the study of pavers outside my house. Each crack, worn, or developed surface of a terrain becomes its own layer of time as a result of an external force. The building up of line through drawing and casting speaks to the site's vertical layered timeline of transformation. When occupying the site, this concept of the terrain presenting as a vertical layering of recorded time is somewhat metaphorical, revealed through my A0 drawings. Through analysing coastal, domestic and urban sites, my research which remains as methodology, has become more refined as the tools of how to document the trace of external forces throughout various terrains have been discovered.

CONCLUSION

The methodological approach for the research was a refined approach to unpacking surface layers of a site in order to understand the terrain as a result of external forces occupying the surface of a terrain. The structure emphasised processes of understanding through reflection and experimentation while occupying, drawing, and casting. The value and knowledge discovered and developed during each case study has been outlined throughout each chapter and remain embedded within the accumulation of drawn lines created over the course of the past year.

This thesis has explored occupancy of external forces and their habitual presence within coastal, domestic, and urban terrains. My version of terrain exists as a collective layering of transformations as a result of external force's occupancy. Earlier, I described terrains as records that allow us to engage in the timeline of a site. My research into three site case studies has outlined the significance of occupants have on the shaping of the sites they inhabit. The terrain began to identify as a narrative translating its own transformation – its timeline. My methodology was significant in the unfolding of my own understanding of occupancy and how I could document traces. My drawings and castings became a performative experience of occupancy in themselves. This inquiry has also further clarified my own development as an occupier and practitioner, causing me to question the ways in which I occupy space in order to speak through line and surface. The placement of drawings and cast objects offer a diverse experience of the different ways occupancy can be understood, perceived, and read, revealing terrain in a new light in which occupancy influences the way it is shaped. Worn surfaces, cracks, layered and re-laid concrete, are translated into embedded marks through my own interpretation of giving weight to occupancy.

INSTALLATION

The exhibition consisted of a collection of my A0 drawing experimentations made in response to St Paul Street, alongside all casts made throughout the duration of the research (including material experimentation and responses to sites: Takapuna, Pavers and St Paul Street).

The drawings were in an arrangement that suggested a visual accumulation of lines. The drawings on the left were one scanned layer of lines and the drawings on the far right were around 30 layers of lines. The casts were arranged in a sense of stillness to movement – they became a reflection upon how different methods of casting can capture site differently. In that some became a preservation of site, whereas others became a live transformation that shared insight into the sites they responded to.

The exhibition gave opportunity for the work to be read and deciphered by people who encountered them. The drawings especially, became activated through connections made with people. The most layered and darkest drawing sparked curiosity and drew people in as it wasn't as easy to articulate/read as the others. Throughout installation and exhibition, the collection of drawings and castings became a result of my occupancy.



Figure 89. Juno, J. *Exhibition: A0 Drawings & Casts*, Photography, 2023.



Figure 90. Chapman, Paul. *Activation through Exhibition*, Digital Photograph, 2023. Used with permission.



Figure 91. Juno, J. *Accumulation of Line*, Photography, 2023.



Figure 92. Juno, J. *one to two layers of lines*, Photography, 2023.



Figure 93. Juno, J. *a build of line layers*, Photography, 2023.



Figure 94 (above). Juno, J.
*Complete compression of
lines*, Photography, 2023.



Figure 95 (left). Juno, J.
Drawings and Casts, Pho-
tography, 2023.



Figure 96 (left). Juno, J.
Cast in-situ: Takapuna,
Photography, 2023.

Figure 97 (below). Juno, J.
Cast in-situ: Pavers, Pho-
tography, 2023.





Figure 98. Juno, J. *Cast in-situ: Material Experimentation (Plaster)*, Photography, 2023.



Figure 99. Juno, J. *Cast in-situ: Material Experimentation (Plaster) 2*, Photography, 2023.



Figure 100. Juno, J. *Cast in-situ: Material Experimentation (Plaster) 3*, Photography, 2023.



Figure 101. Juno, J. *Installation: Layers of lines revealed in-situ*, Photography, 2023.



Figure 102. Juno, J. *Layers of Lines revealed*, Photography, 2023.



Figure 103. Juno, J. *Layers of Lines revealed 2*, Photography, 2023



Figure 104. Juno, J. *Layers of Lines revealed 3*, Photography, 2023

ADDENDUM

The drawings created throughout the duration of the third site case study: St Paul Street. These drawings were used for the creation of the A0 drawings.

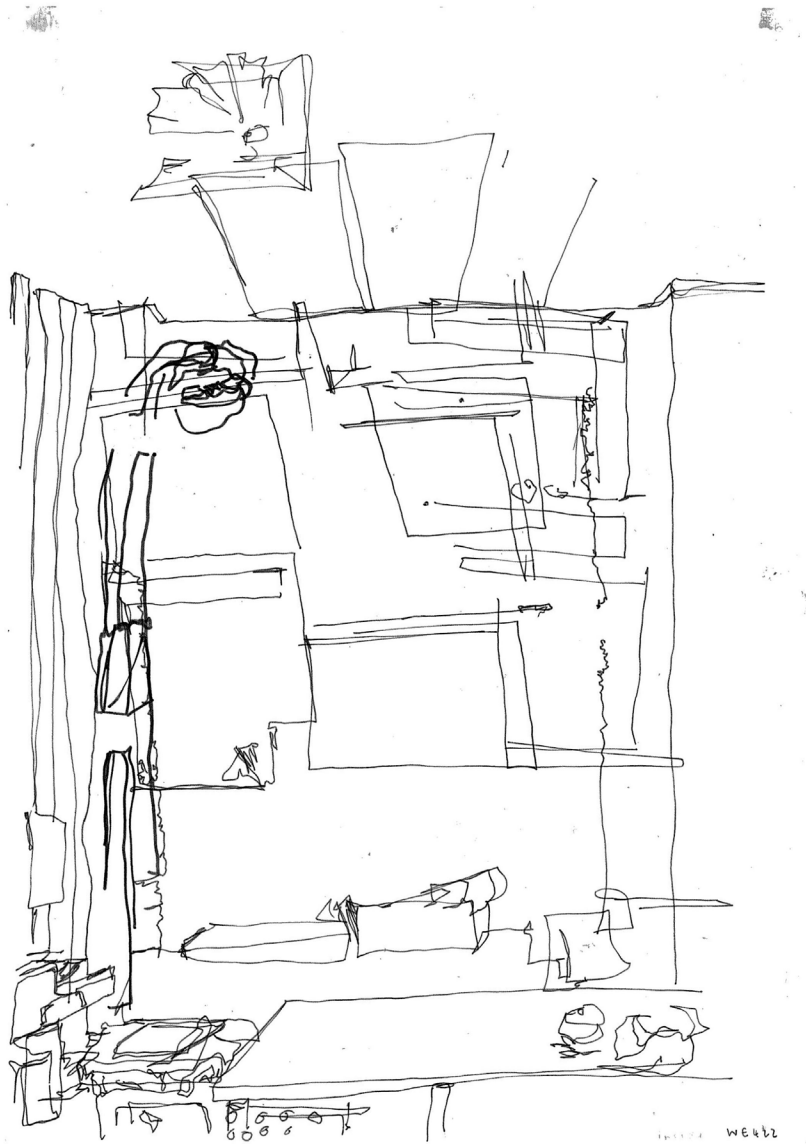


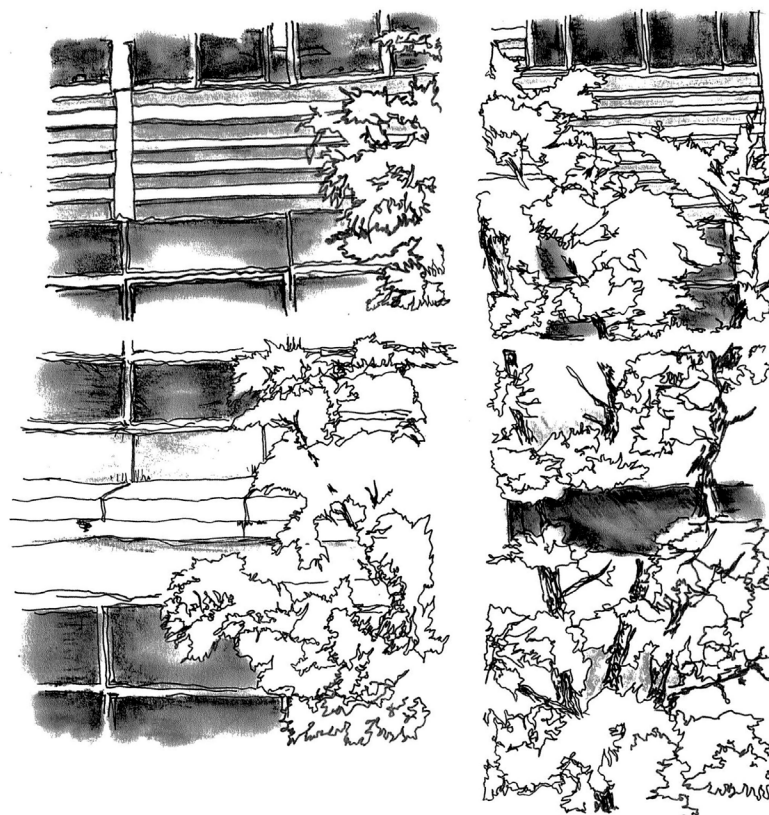
Figure 105. Juno, J. *St Paul Street Portrait 1*, Scanned A4 Drawing, 2023



26 mins 27 secs

WE422 (beam) same position as 1st draw

Figure 106. Juno, J. *St Paul Street Portrait 2*, Scanned A4 Drawing, 2023



MORE THAN 1/30m, 1/30m, 1/30m! WINDOW OUTSIDE WE 432

Figure 107. Juno, J. *St Paul Street Portrait 3*, Scanned A4 Drawing, 2023



Figure 108. Juno, J. *St Paul Street Portrait 4*, Scanned A4 Drawing, 2023



FLOOR WC LEVEL 5 (BOYHEAD STUDIOS 1/2 WAY OPEN WINDOW)

Figure 109. Juno, J. *St Paul Street Portrait 5*, Scanned A4 Drawing, 2023



Figure 110. Juno, J. *St Paul Street Portrait 6*, Scanned A4 Drawing, 2023



ROUGH 30 mins view of WE from WM L1 foyer space

Figure 111. Juno, J. *St Paul Street Portrait 7*, Scanned A4 Drawing, 2023

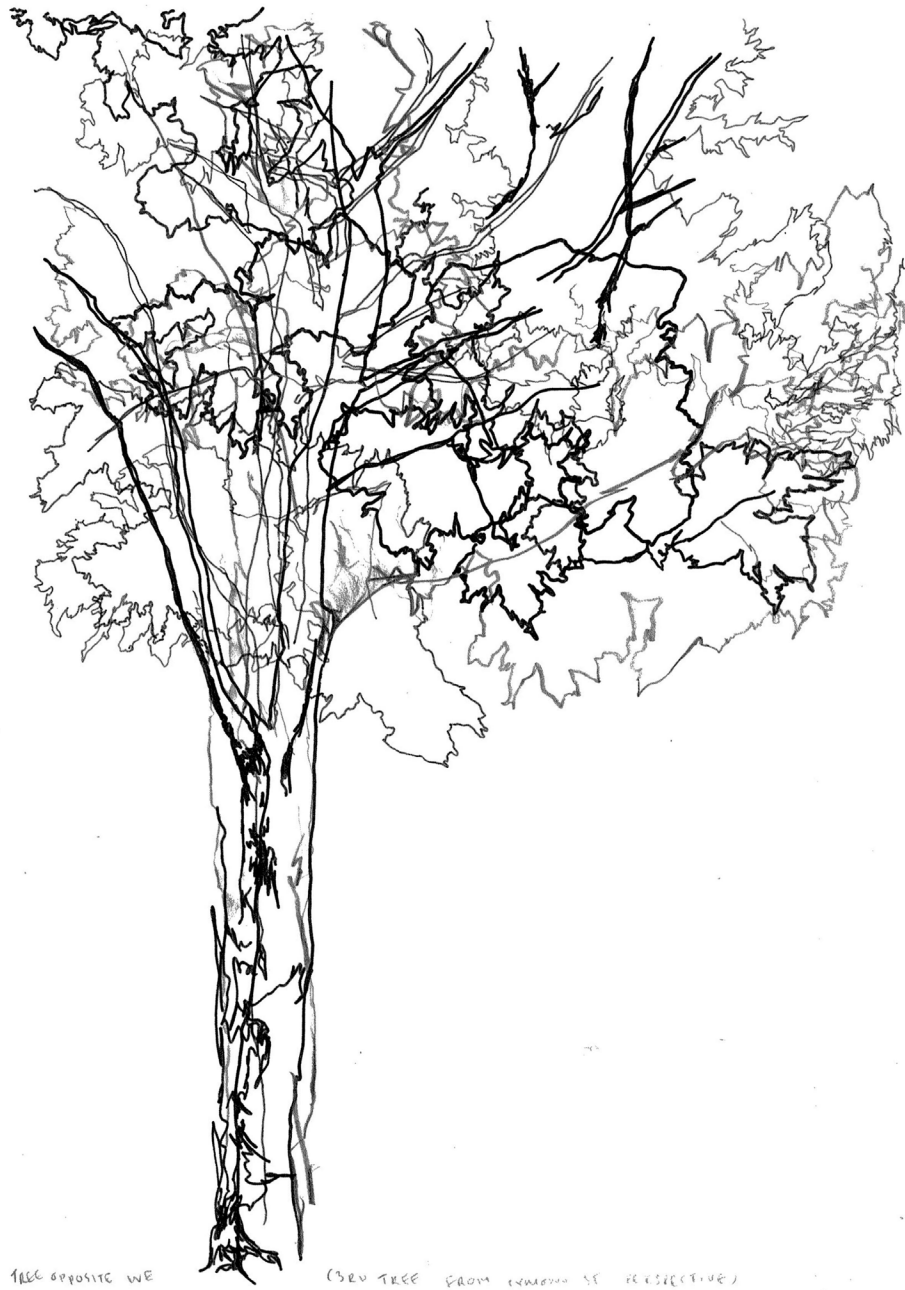


Figure 112. Juno, J. *St Paul Street Portrait 8*, Scanned A4 Drawing, 2023



Figure 113. Juno, J. *St Paul Street Portrait 9*, Scanned A4 Drawing, 2023

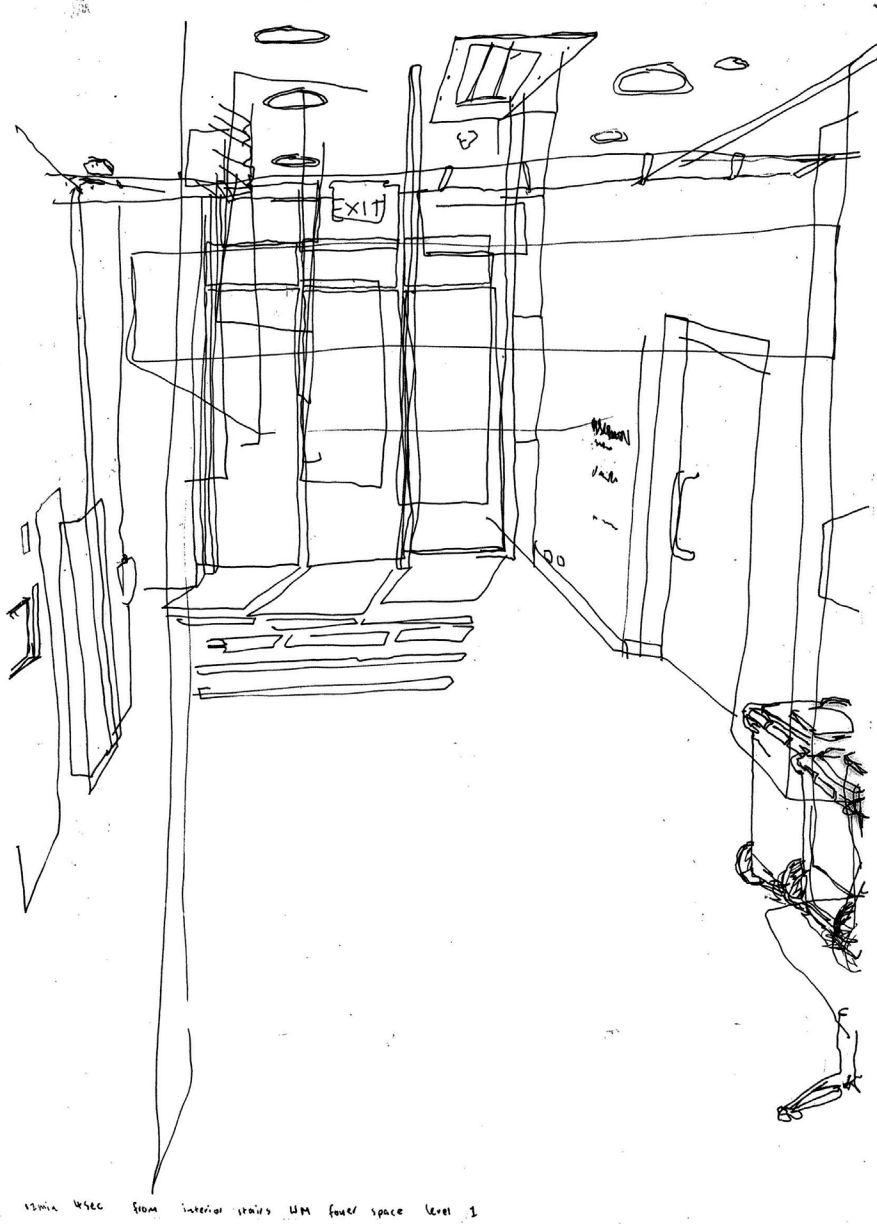


Figure 114. Juno, J. *St Paul Street Portrait 10*, Scanned A4 Drawing, 2023

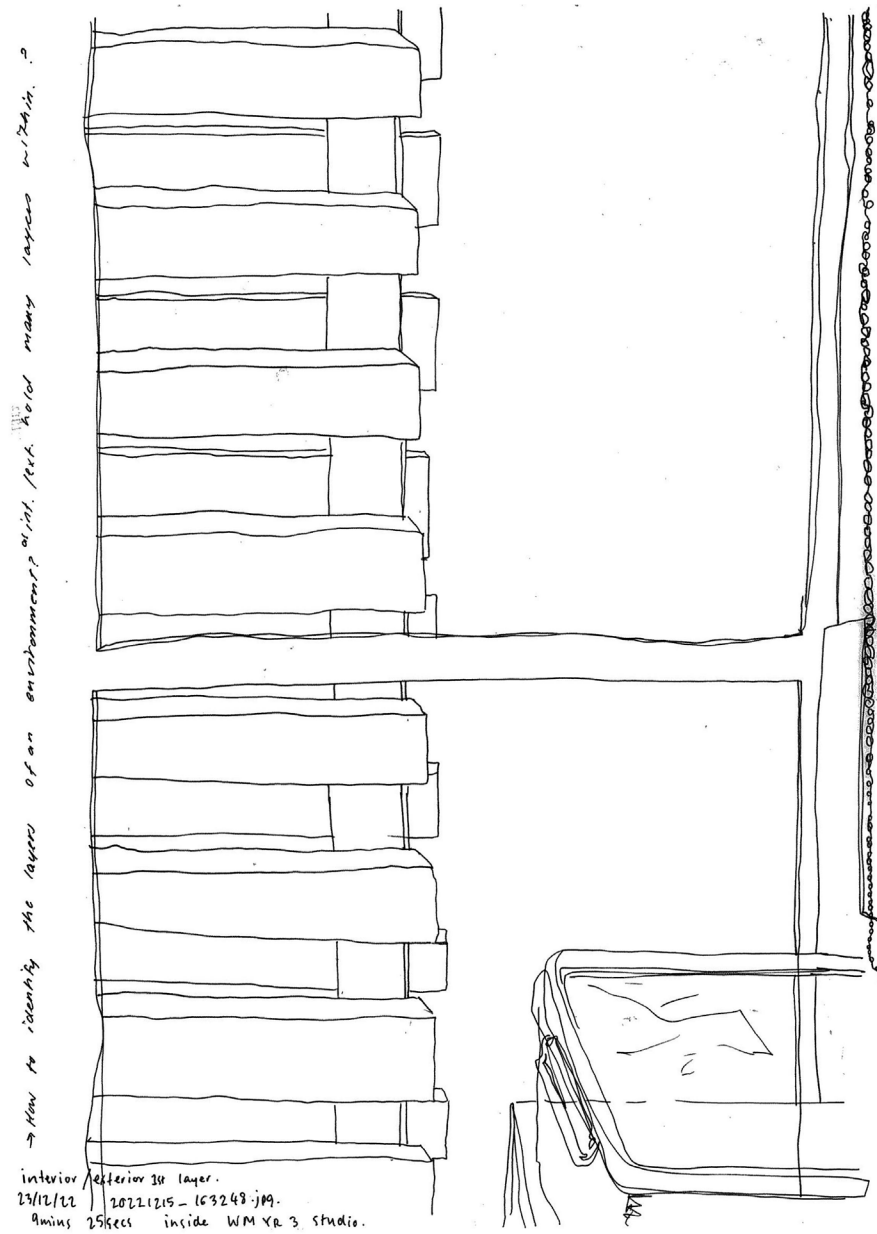


Figure 115. Juno, J. *St Paul Street Portrait II*, Scanned A4 Drawing, 2023

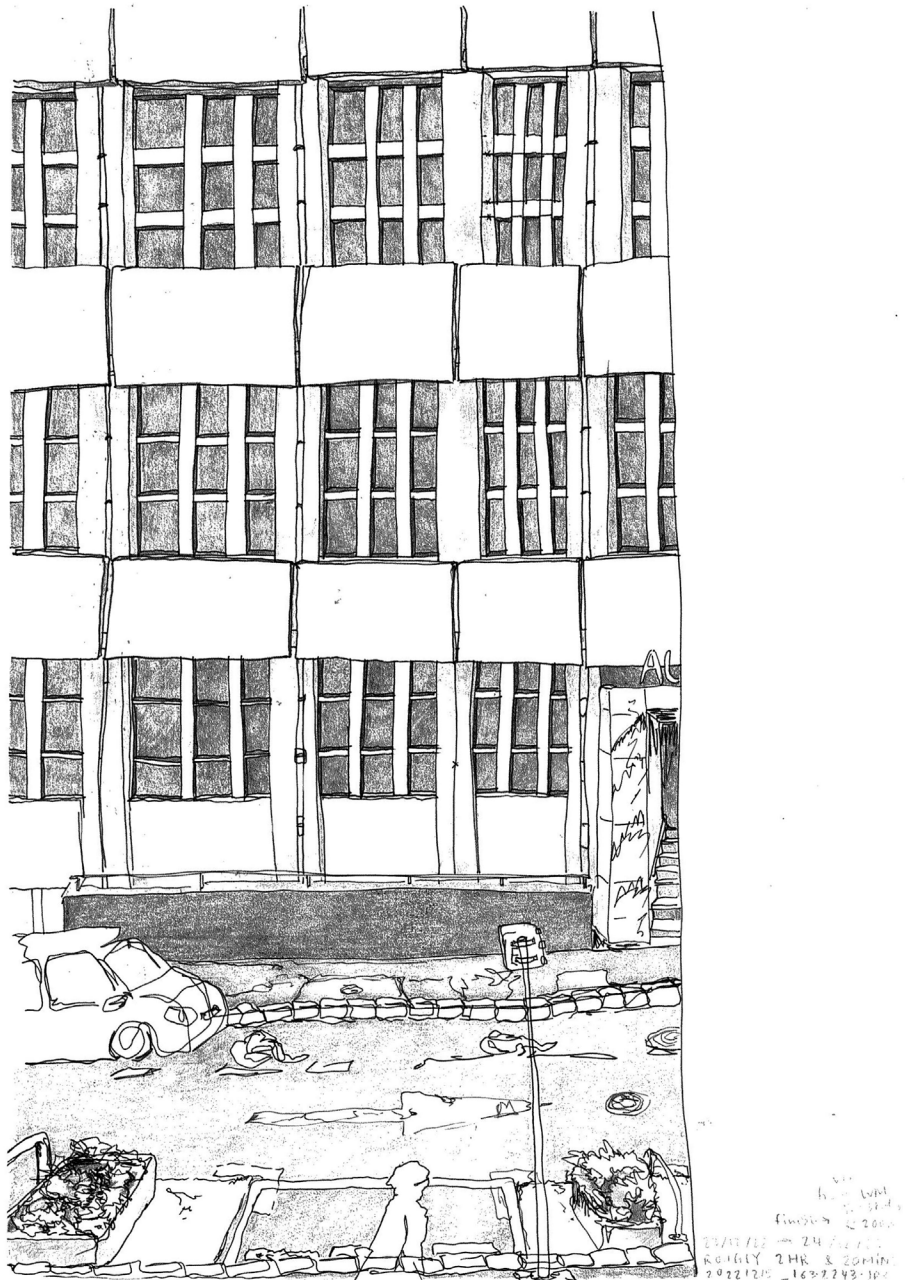


Figure 116. Juno, J. *St Paul Street Portrait 12*, Scanned A4 Drawing, 2023

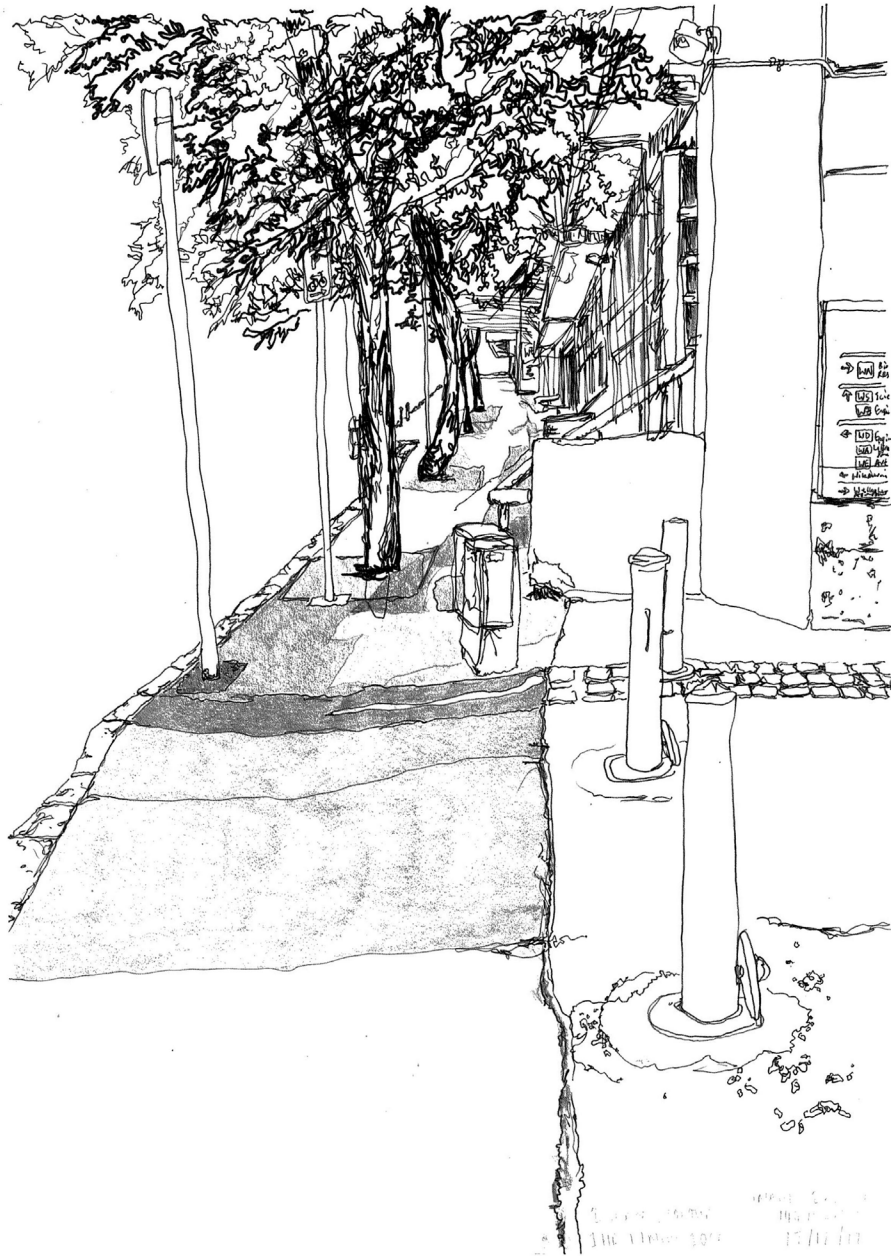


Figure 117. Juno, J. *St Paul Street Portrait 13*, Scanned A4 Drawing, 2023



28/12/22 1HR 11mins 9secs 20221209_144250.jpg

Figure 118. Juno, J. *St Paul Street Portrait 14*, Scanned A4 Drawing, 2023

30mins 34secs 20221212-124854.jpg PART 1 01/01/23

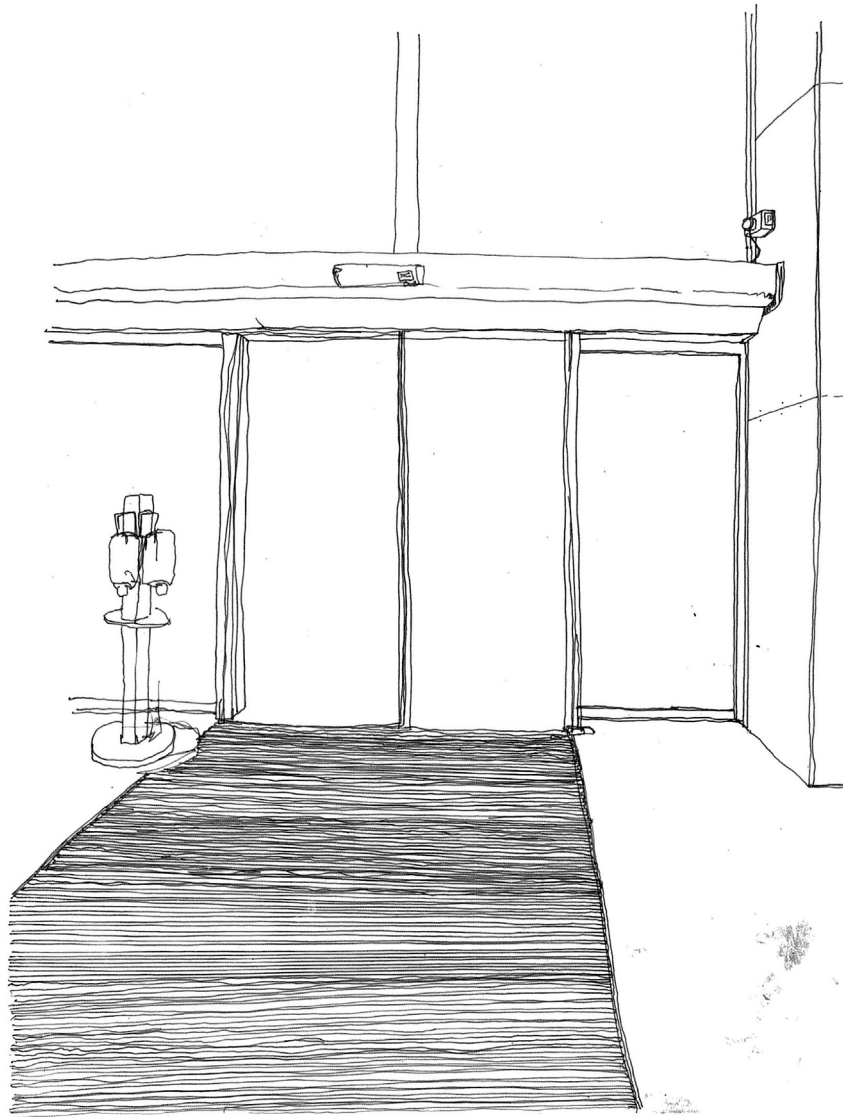
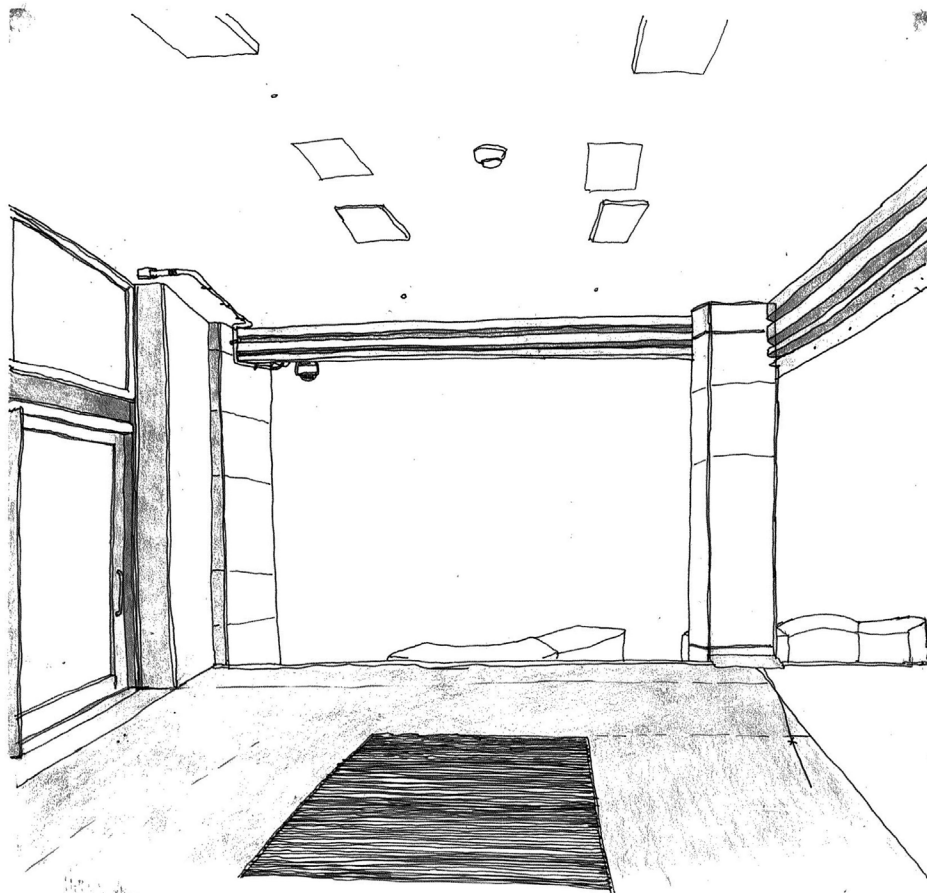
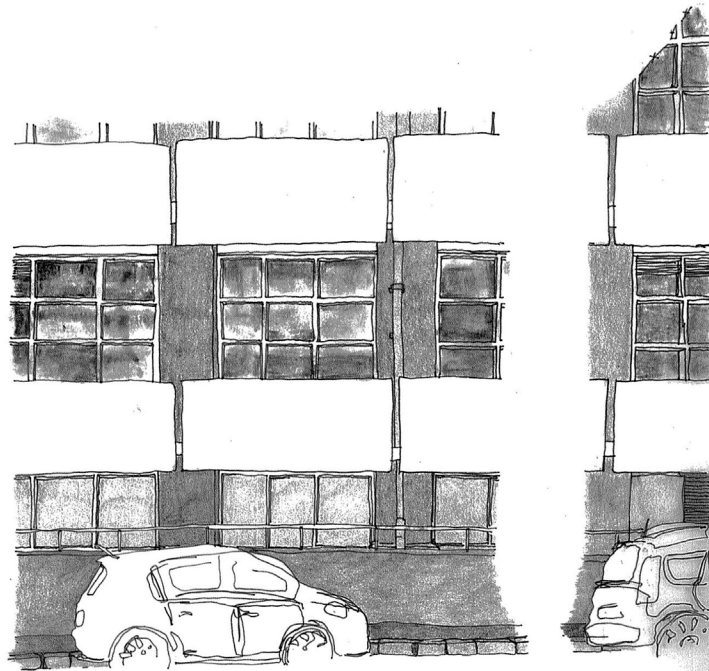


Figure 119. Juno, J. *St Paul Street Portrait 15*, Scanned A4 Drawing, 2023



26 mins 48 secs (without standing before shade/chalk) 20221212 - 124854-JP9 PART 2 08/01/23

Figure 120. Juno, J. St Paul Street Portrait 16, Scanned A4 Drawing, 2023



+ 33 mins 35 sec

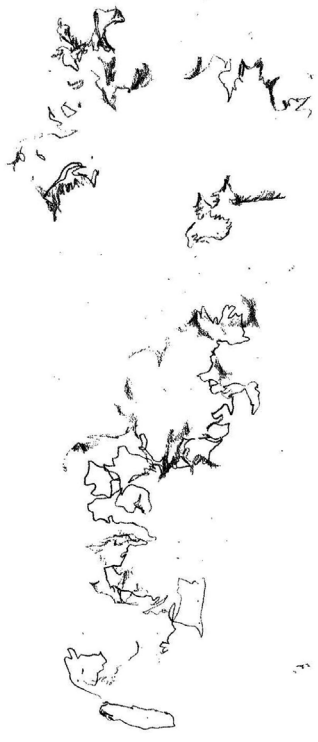
+ 7 mins 10 sec

+ 13 mins 28 sec (before shading)

20221212 - 124854.jpg PART 3

08/01/23

Figure 121. Juno, J. *St Paul Street Portrait 17*, Scanned A4 Drawing, 2023



4mins 28secs

12/17/22

20221212-146437.jpg

Figure 122. Juno, J. *St Paul Street Terrain 1*, Scanned A4 Drawing, 2023

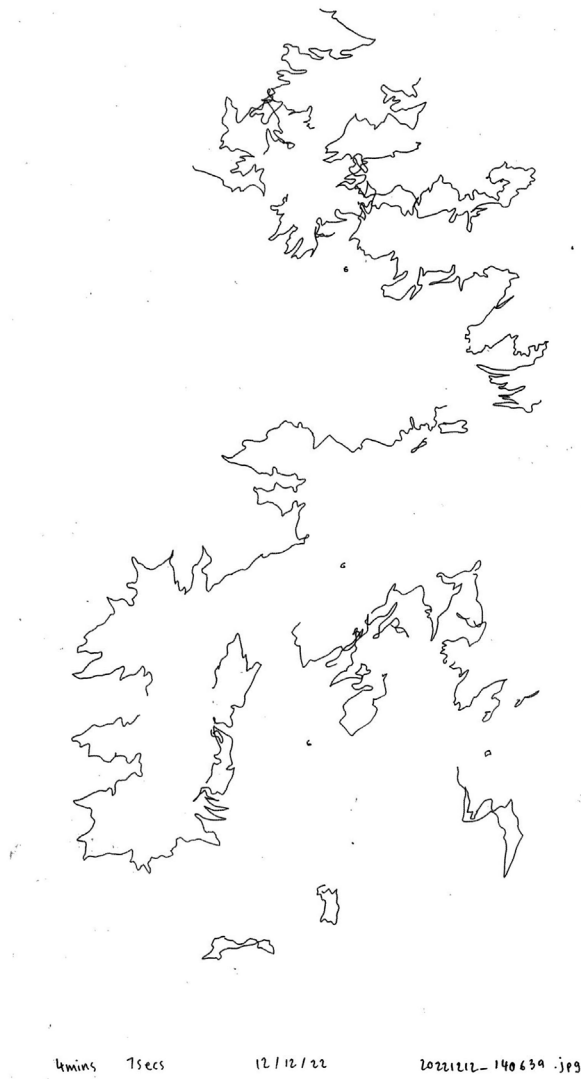
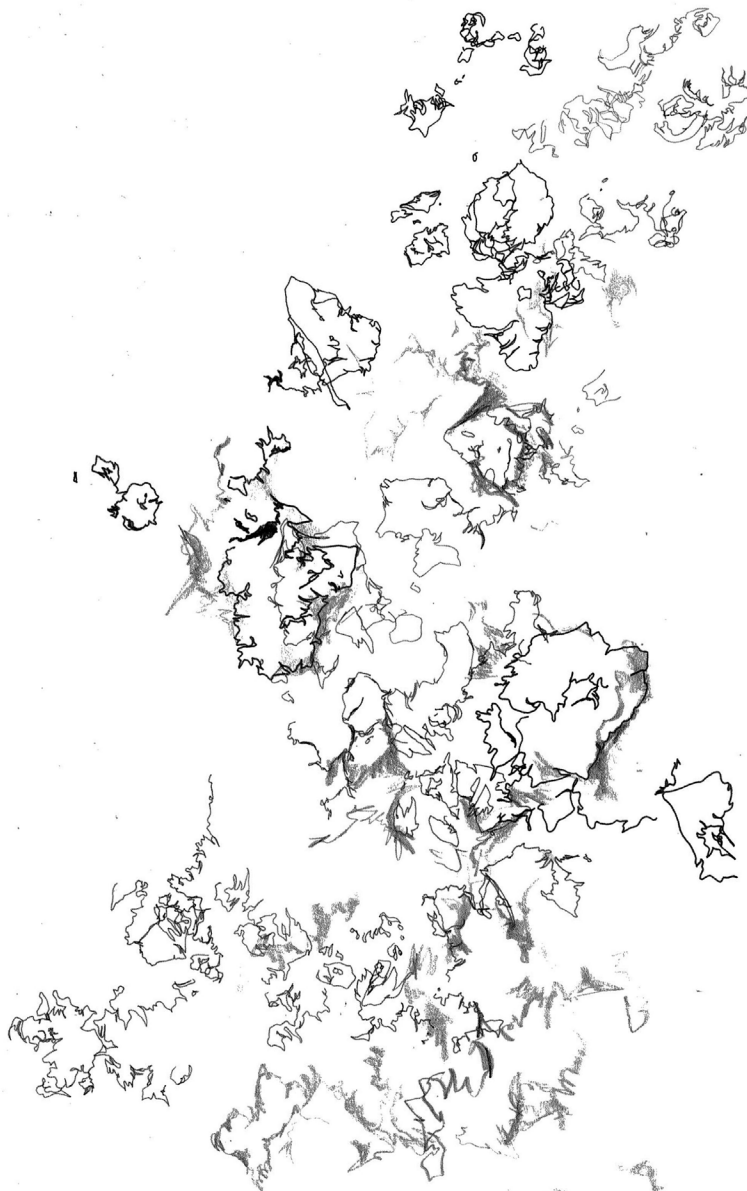


Figure 123. Juno, J. *St Paul Street Terrain 2*, Scanned A4 Drawing, 2023



Figure 124. Juno, J. *St Paul Street Terrain 3*, Scanned A4 Drawing, 2023



23 mm 8sec

12/12/22

20221212_146645.jpg

Figure 125. Juno, J. *St Paul Street Terrain 4*, Scanned A4 Drawing, 2023

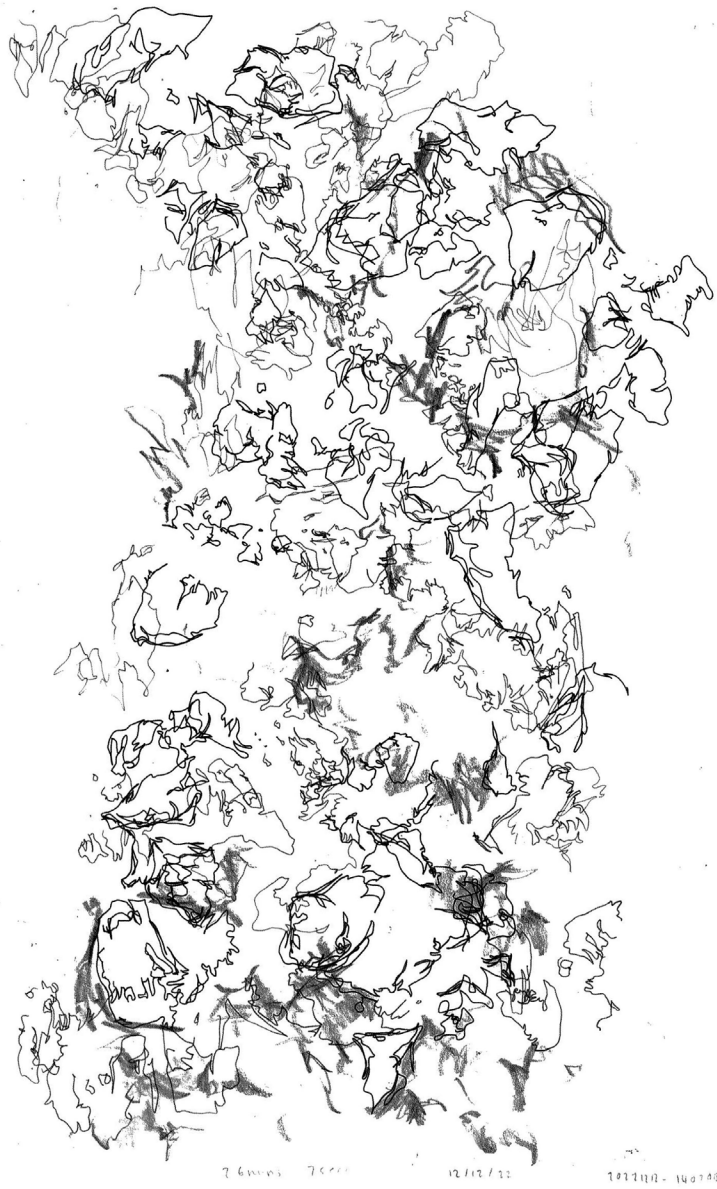


Figure 126. Juno, J. *St Paul Street Terrain 5*, Scanned A4 Drawing, 2023



Figure 127. Juno, J. *St Paul Street Terrain 6*, Scanned A4 Drawing, 2023



Figure 128. Juno, J. *St Paul Street Terrain 7*, Scanned A4 Drawing, 2023

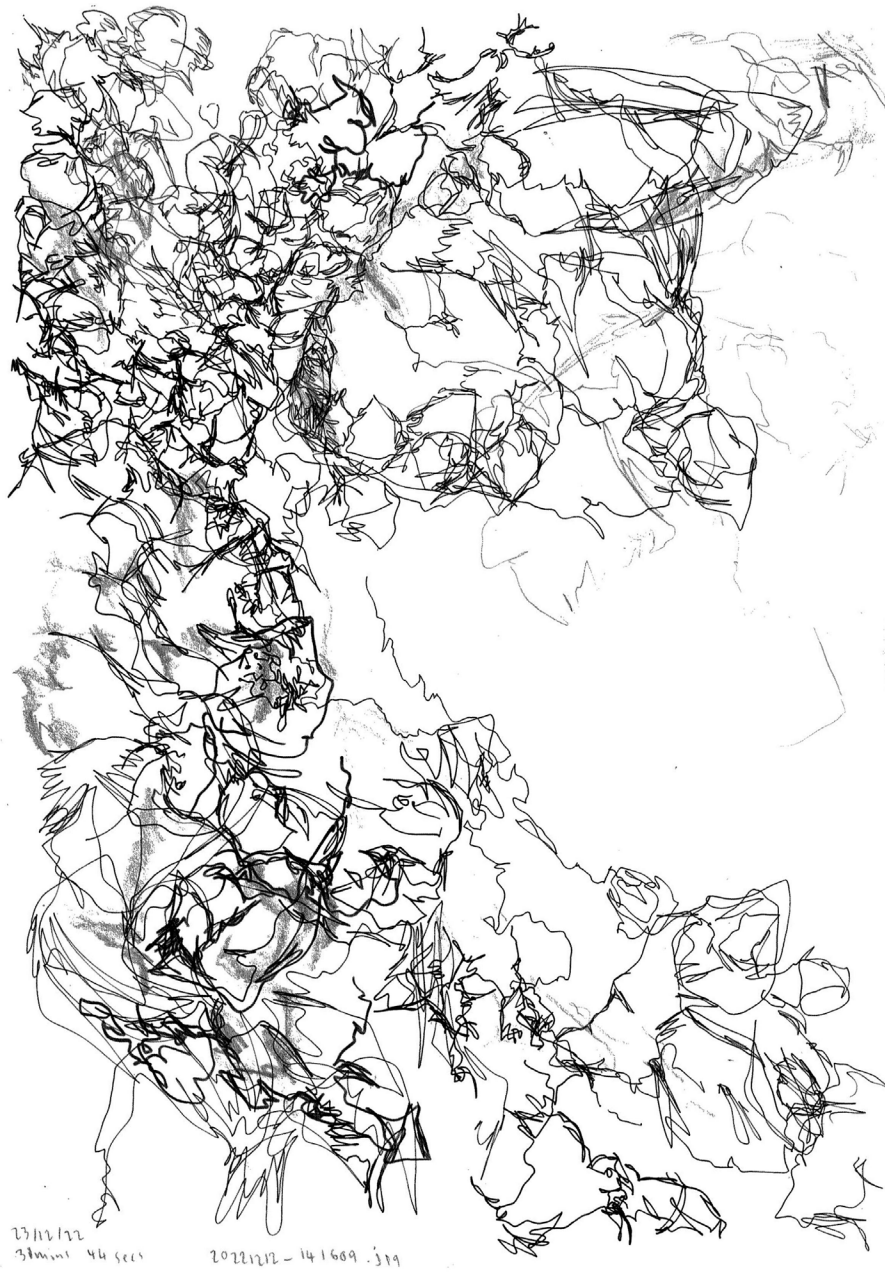
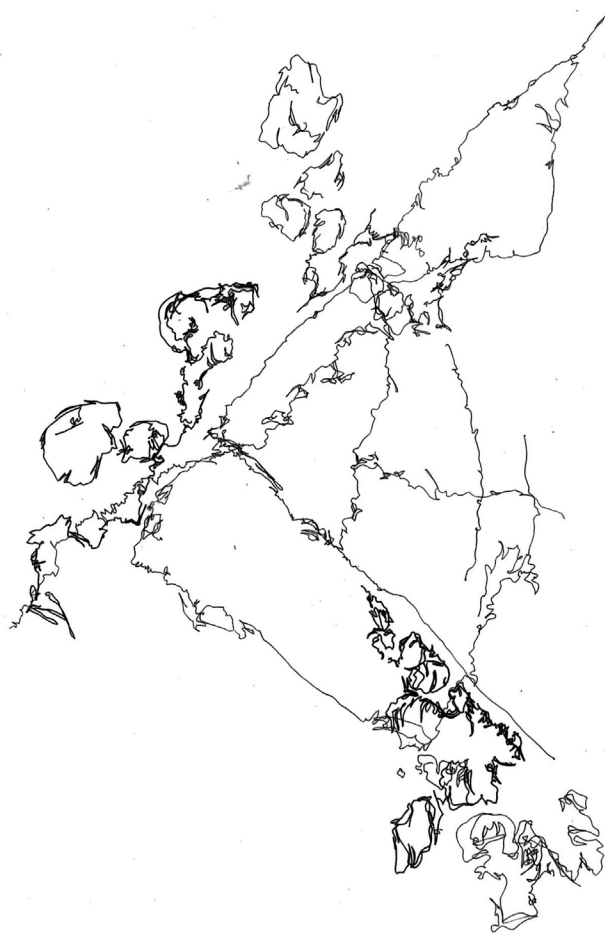


Figure 129. Juno, J. *St Paul Street Terrain 8*, Scanned A4 Drawing, 2023



10 mins 18secs

2022122_140845,19

08/01/23

drawn in black ink

Figure 130. Juno, J. *St Paul Street Terrain 9*, Scanned A4 Drawing, 2023



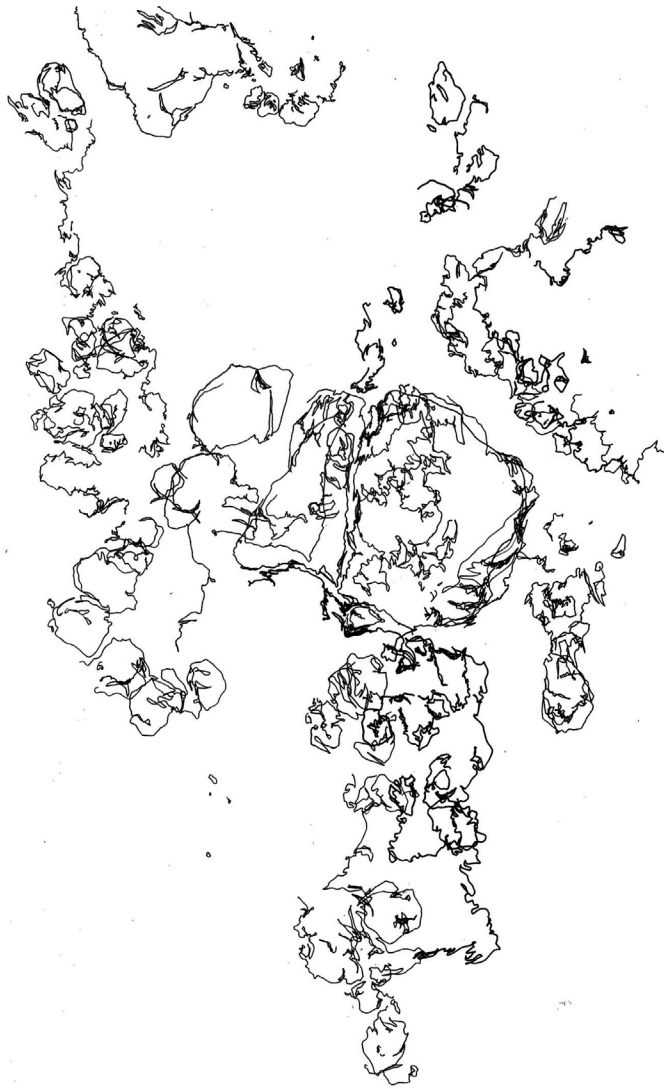
045min) 325 rcs

20221212_140,853.3pg

01/01/23

drawn
in whangarei

Figure 131. Juno, J. *St Paul Street Terrain 10*, Scanned A4 Drawing, 2023

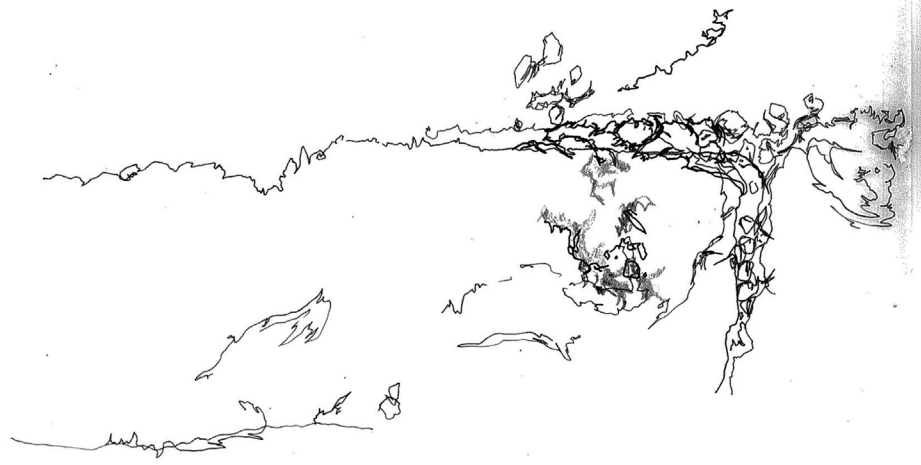


26mins 23sec

20221212 - 141022 - J09

09/01/23 drawn in
shanghai

Figure 132. Juno, J. *St Paul Street Terrain II*, Scanned A4 Drawing, 2023



11mins 14secs 20221212-541051.jpg 10/01/23 you to draw selective paving
concrete?
to be a
to be a
to be a

Figure 133. Juno, J. *St Paul Street Terrain 12*, Scanned A4 Drawing, 2023

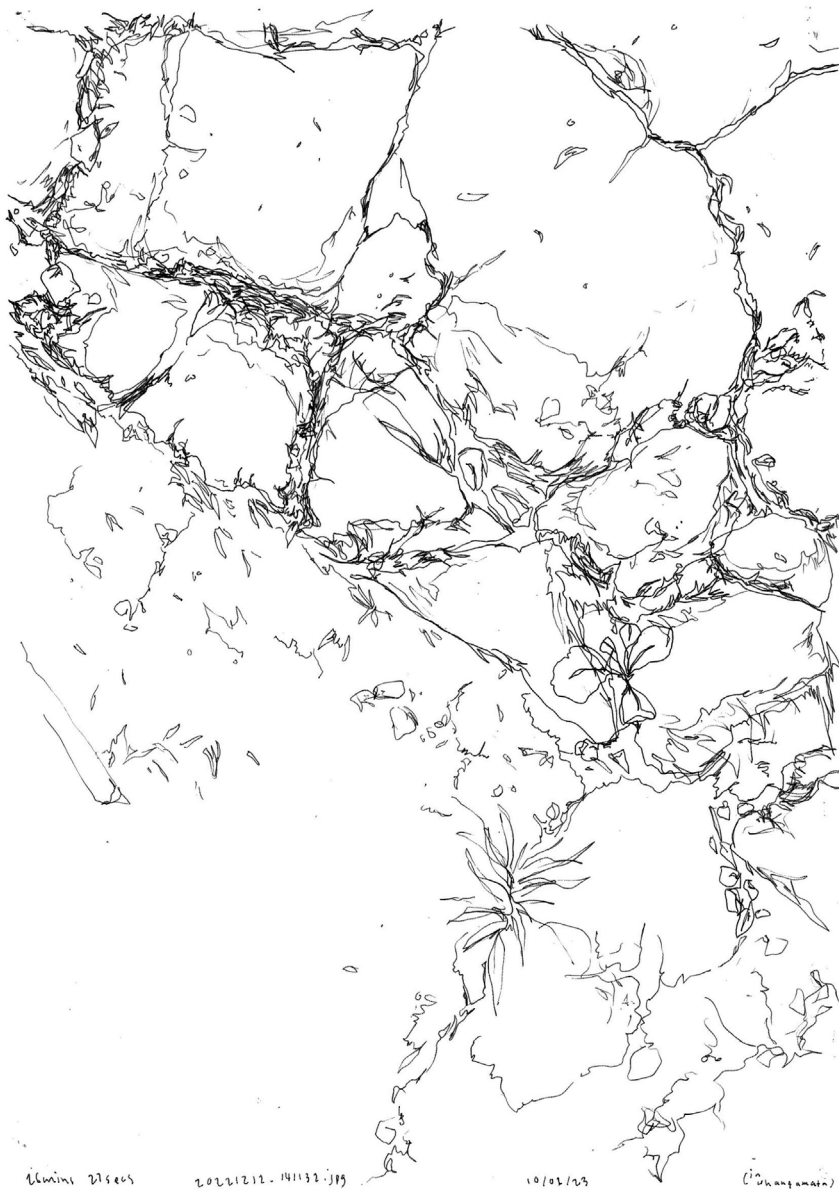


Figure 134. Juno, J. *St Paul Street Terrain 13*, Scanned A4 Drawing, 2023

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