

Adaptive City

Towards Emerging Industrial Ecologies

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Fig 1. Front Cover | Rock Bay North Industrial Lands 1951

Production, storage & distribution of goods in ad-hock patterns on adjacent lots [space swapping];
Aerial photo unknown; Illustration by author

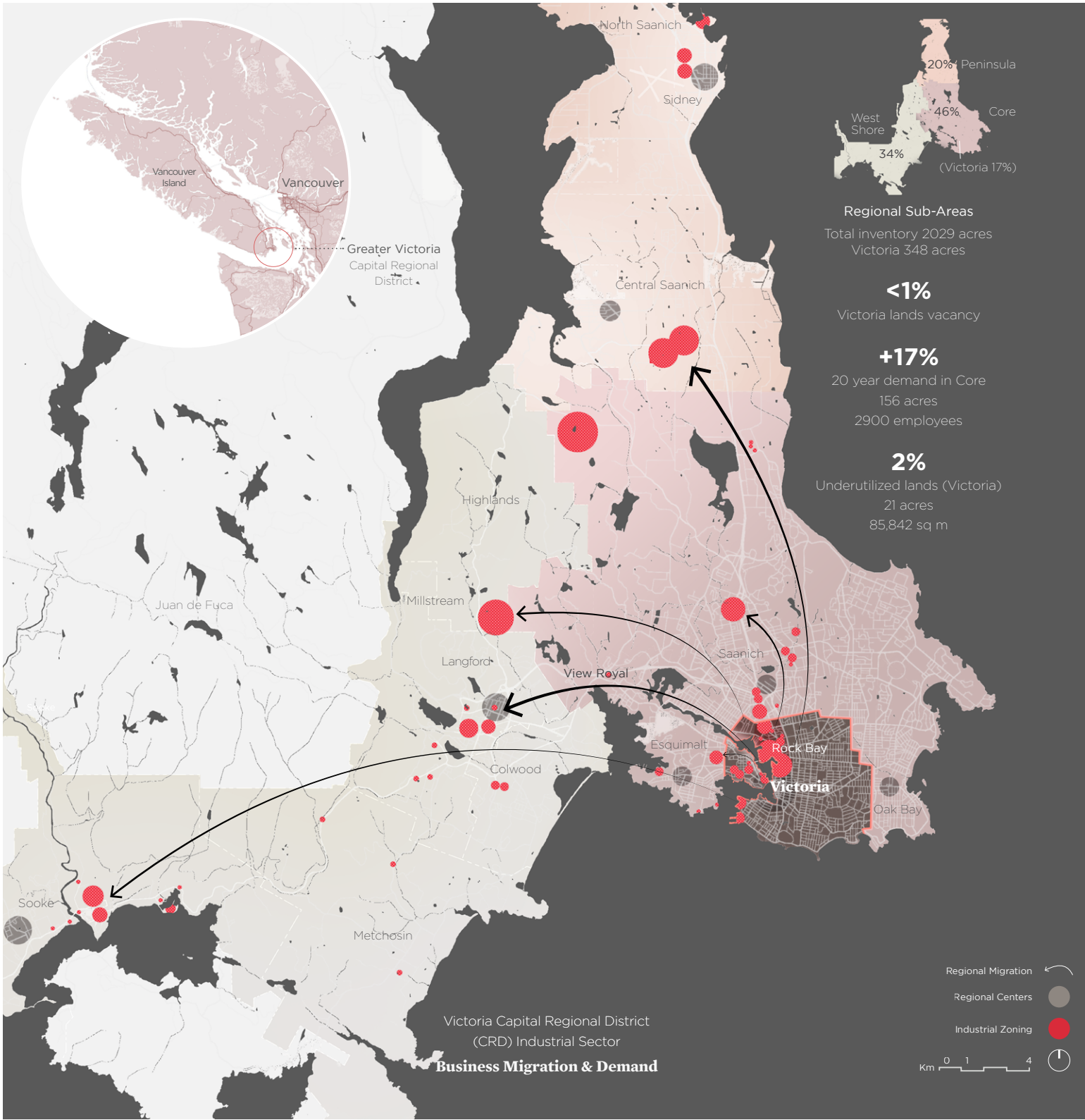
Fig 2. Inside Cover | Rock Bay North Industrial Lands 2019+; Small business Incubator as an adaptive
distributed catalyst; Aerial image Google; Illustration by author

Abstract

Located on the East shore of Victoria BC Upper Harbour, the Rock Bay Industrial District—the Workshop of the City—is home to a critical reservoir of living income employment, businesses and services essential to the economic health and resilience of the City. Extreme land shortage, paired with aged low-density building stock and high property taxes, have contributed to an affordability crisis threatening viability of the area. The impacts are wide reaching: forcing anchor businesses to migrate regionally, depleting the area’s diversity and development confidence. This highly constrained environment places enormous pressure on small businesses to maintain viability for the area, resulting in inflation, renovictions, and potential large-scale future rezoning.

As a case study that acts across urban and building scales, Adaptive City explores the district’s immediate and interim time frames over three phased scenarios. It envisions as a case study, a distributed small business Incubator that operates within social, economic and spatial domains to increase adaptive capacities of stakeholders and viability of the area. Furthermore, it posits that utilization of existing resources, and amplification of patterns that businesses currently use to subvert affordability pressures, are essential for access, diversity and continuity in the area. Measures required for the existing small-scale business ecosystem to weather future transformation, must focus on use-space flexibility, lean complimentary business models with opportunities for social and economic collaboration, and progressive regulatory policy in dialog with businesses, landowners and developers. By enabling social actors to structure the types of transformation that work for them in cost-appropriate—even ad-hoc ways—it is the aim of this thesis to catalyze the necessary ingredients for increased capacities across the spectrum of stakeholders and policy infrastructure.

Fig 3. (Over page) Regional Map: Business Migration & Demand
Source: CRD. "Industrial Land Inventory & Assessment." Report Draft & Maps. Capital Regional District. (December 2009). 6-11.



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Family

Without your support, energy, unconditional love, encouragement, and continual patience this opportunity would not have been possible. You have my deepest love and gratitude—this thesis is dedicated to you.

“Because [we] are alive, everything is possible”

– Thich Nhat Hanh

Acknowledgments

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I owe a debt of gratitude to project collaborators that generously shared their time and advice. The richness of your experience has contributed a depth of reality and clarity to the scenarios that helped to land the operations. Sincere and humble appreciation to Marc Cittone, Senior Community Planner with the City of Victoria, who was my policy and pitfall champion, and connector to other collaborators. Without your support and interest in the topic, the project would not have had the same contextual inquiry.

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Collaborators as Social Actors [Disclaimer]

This project imagines some of the thesis project collaborators as fictional social actors in roles that they may or may not actually occupy in life. The thesis outcomes are by no means promoted, endorsed, or commissioned by the collaborators; nor does the author suggest that they should occupy the imagined roles in real life. With respect, gratitude and compliment, every effort has been made to handle the subject matter and collaborator placement within the scenarios with tasteful architectural inquiry. In the spirit of envisioning better ways in which our society can structure its urban environments, those included are held in the highest regard as knowledge resources, advocates, and speculative entrepreneurs—who in the scenarios—contribute to viable a-typical futures for Victoria’s citizens.

Cast of Collaborators



Marc Cittone
Senior Community
Planner



Ian Laing
Developer & Venture
Capital Investor



Catherine Holt
CEO, Victoria Chamber
of Commerce



Avery Stetski
Incubator Chair



Ross Taylor
Scenario 1: Distribution
software start-up owner;
Scenario 2 & 2+:
Collaborator entrepreneur



Tom Mercer
Scenario 2:
Tasting room owner
Scenario 2+:
Soft goods artisan



Sean Hoyne
All Scenarios:
Hoyne Brewing Owner
& Host Business

Fig 4. Cast of Collaborators in the roles of social actors in Scenarios 1, 2 & 2+; illustrations by author

Preface

“Form is an instigator of performances and responses, a frame that suggests rather than fixes, that maps or diagrams possibilities that will be realized only partially at any one time.”¹

This thesis draws heavily on resilience theory, and how the discourse has evolved since the 1970s, not by accident, but in parallel and in partial response to extensive fallout from post-industrial flux, fueling the rise of neoliberalism. Together, these forces of change have shaped our environments and land-use infrastructures, in tandem with growing hunger for the product and promise of property as a stabilizing domain and necessity; only to be the very societal material component continuing to provide agency for some, and inequities for others—we have much to reconsider. And now, under heightened spatial and socio-economic constraints due in part to an estimated 45% gross industrial land reserve loss from peak in the 1970s and more projected (Fig 5), Victoria’s industrial area is nearing another system-identity threshold and transformation, very near a formal shift into an unknown ‘stability’ regime for which it is currently ill-equipped.

At this critical juncture, Adaptive City looks to the evolution of resilience theory as it applies to the transformation of Victoria’s urban fabric. From Engineering Resilience: defined by robustness, elasticity and rebound to original form;² underpinning

¹ Kenneth Michael Hays, “Introduction: Points of Influence and Lines of Development.” In *Points + Lines: Diagrams and Projects for the City*. by Stan Allen, New York: Princeton Architectural Press, 1999 1st ed re, 2012. 5

² Charles L. Redman, “Should sustainability and resilience be combined or remain distinct pursuits?” *Ecology and Society* 19(2), (2014): 37. <http://dx.doi.org/10.5751/ES-06390-190237>; Merriam-Webster, “Definition of Resilience.” Web. <https://www.merriam-webster.com/dictionary/resilience>,

our infrastructures, grids and shorelines. Followed closely by Ecological Resilience: “...a dynamic process encompassing positive adaptation within the context of significant adversity,” informed by dynamic and living processes found in our natural environment, economies, cultures, and governance.³ Holling describes resilience not as a system’s ability to retain its stability under stress, but as a system’s capacity to persist its relationships.⁴ These precursors to more recent movement in the discourse, found embodied throughout the fabric and story of the City, are yielding to more holistic mental models that buffer complexity and variables within nested systems.

Specifically, “...Social-ecological Resilience [which] assumes that the constructed and the natural environment have intrinsic qualities of engineering and ecological resilience (latitude, resistance, precariousness, panarchy—[vertical and lateral nested systems and hierarchies])⁵ as well as transformability, but the adaptive capacity lies in the social domain, with the actors that will organize and order the transformation of the system.”⁶

³ C. S. Holling, “Resilience and Stability of Ecological Systems.” 20; Suniya S. Luthar, et al. “The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work.” *Child Development* 71, no. 3 (2000): 543–62.

⁴ *ibid.* 1

⁵ Craig R. Allen et al. “Panarchy: Theory and Application.” *Ecosystems* 17, no. 4 (June 2014): 578. <https://doi.org/10.1007/s10021-013-9744-2>.

⁶ Walker et al. 2004, qtd in, Laboy and Fannon, “Resilience Theory and Praxis: A Critical Framework for Architecture.” 46.

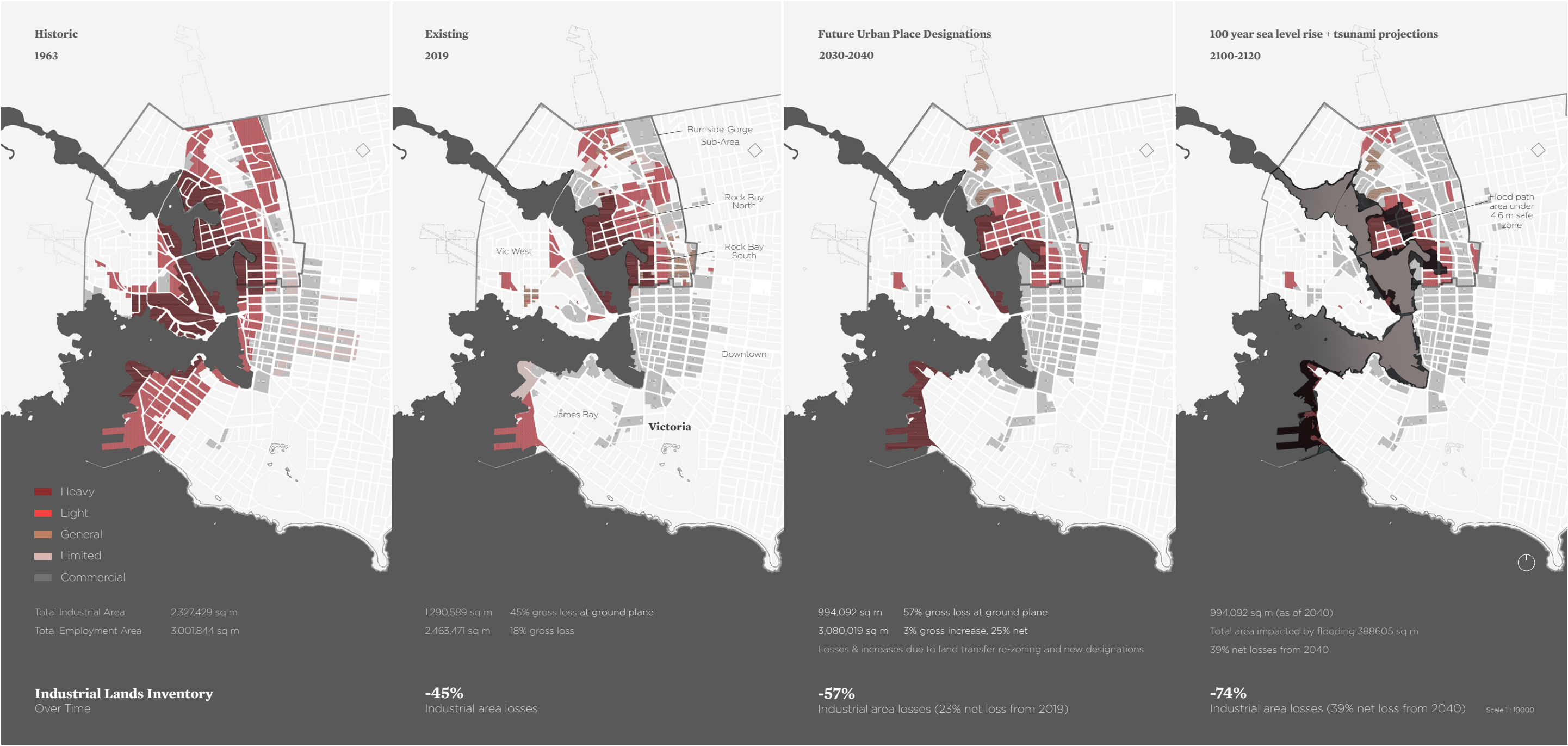


Fig 5. Industrial lands Inventory, Gross losses since 1963 (Original diagram to scale); Data sources: 1963 Zoning map, "A Collection of Historical Maps and Air Photos," VicMap; 2019 live Zoning data, VicMap; "Urban Place Designations," City of Victoria. "Burnside Gorge Neighbourhood Plan," BGNP. (2019); "Tsunami Hazard Zone Map" (2013), VicMap; Diagram & calculation estimates by Author

Where this thesis finds traction, is in the focus on cultivating system characteristics that enable dynamic probing and flexion of boundaries that embrace regular change, referred to as ‘Graceful extensibility,’⁷ This open model builds upon the agency of social actors to develop elasticity and transformability within built and social environments, to absorb stressors and bounce forward rather than returning to the same (undesirable) system state. Moreover, architecture and urban design are uniquely positioned to advocate for social and spatial frameworks, due to their ability to mediate both domains, shifting the dominant approach from a “...desire to control change in systems assumed to be stable, to managing the capacities of social-ecological systems to cope with, adapt to and shape changes.”⁸

⁷ David Woods, “Four Concepts for Resilience and the Implications for the Future of Resilience Engineering.” 7.

⁸ Peter Christiaan van Veelen, “Adaptive Planning for Resilient Coastal Waterfronts: Linking Flood Risk Reduction with Urban Development in Rotterdam and New York City.” 58.)

Landing in Rock Bay

The premise of this thesis is to utilize tactical design operations across urban and building scales to imagine modalities of flexible spatial occupation within highly constrained conditions found in Victoria’s industrial district. By leveraging latent capacities within built fabric, emerging business models, and policy, this thesis seeks to enable social actors to increase economic viability and diversity, while shaping new forms of cultural engagement with the area.

Activated through social and economic alliances between stakeholders, a small business Incubator advocates for key policy shifts that give agency to social actors, in recognition of material and spatial constraints. Rather than traditional incentives, the matter is instead focused on policy shifts that unlock flexibility obscured in the formalization of the area’s Euclidean zoning⁹ and subsequent spatial conditions. Upon shifting zoning regulations in favor of relational flex space at ground, these latent capacities are regained as tools of agency by businesses and landowners. In this way, vernacular patterns of behavior (Fig 6) become drivers for design operations and new business alliances. Spatially, these include: utilization of adjoining or nearby available exterior space, such as surplus surface parking, or open air storage

⁹ Pritchard, Jamieson Frederick. “Rural by Nature, Industrial by Trade: Creating a New Industrial Zoning Regulation for Salt Spring Island,” n.d., 11-14. <https://open.library.ubc.ca/media/stream/pdf/310/1.0300041/5>; Defines Euclidean Zoning in the context of BC regulations.

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areas for rental accessory buildings (space swapping); interior airspace as flex rental helpers for increased diversity (mezzanines); and allowances for inversions of currently provisioned 25% ancillary (complimentary; accessory)¹⁰ use on the ground plane that can be moved up, and swapped for flex space in collaboration

10 City of Victoria, “M-2 Zone, Light Industrial District: Part 7.2,” Zoning Bylaw. 3; Ancillary use, here referred to as Accessory Use. 2. <https://www.victoria.ca/assets/Departments/Planning-Development/Development-Services/Zoning/Bylaws/7.2.pdf>

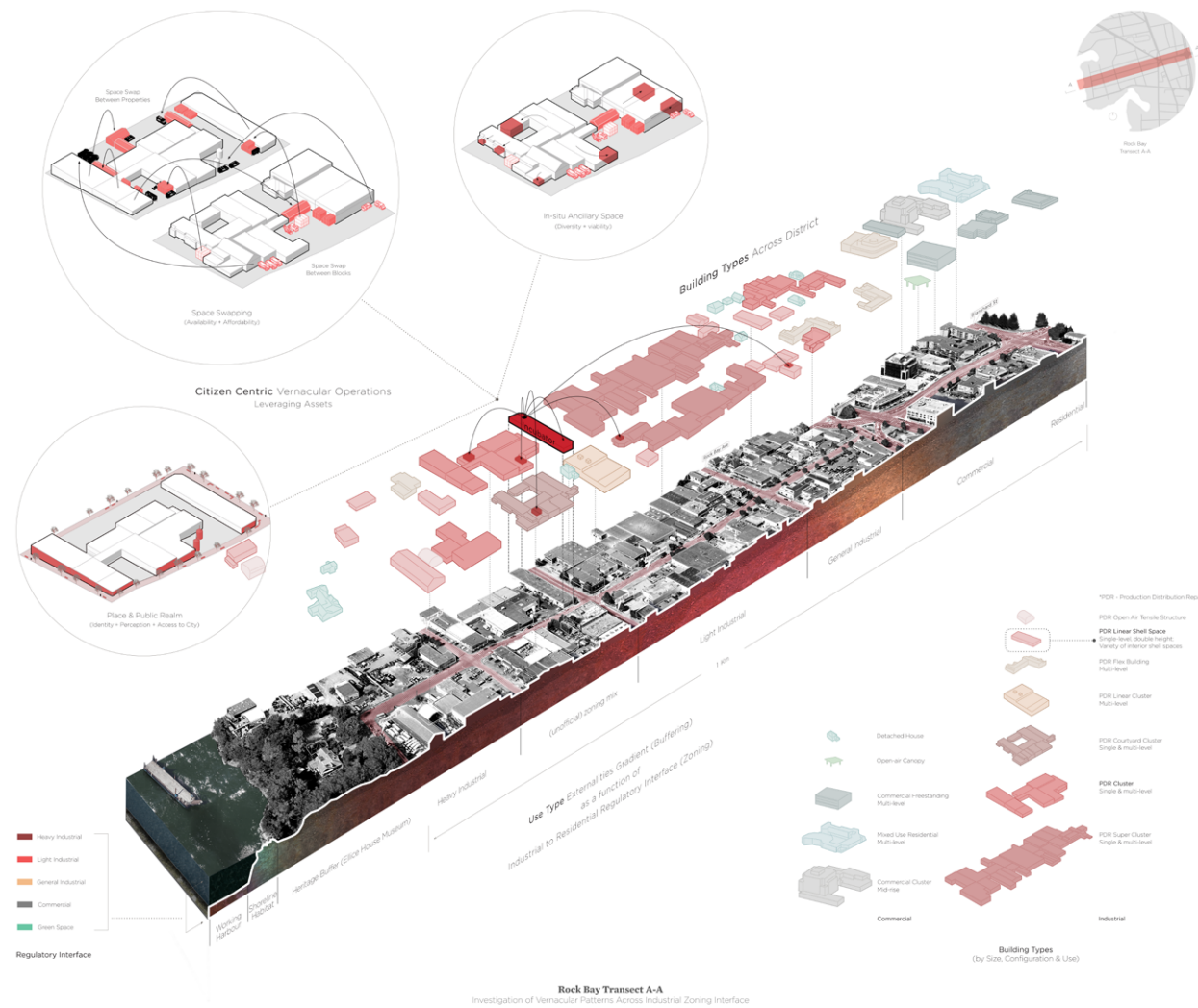
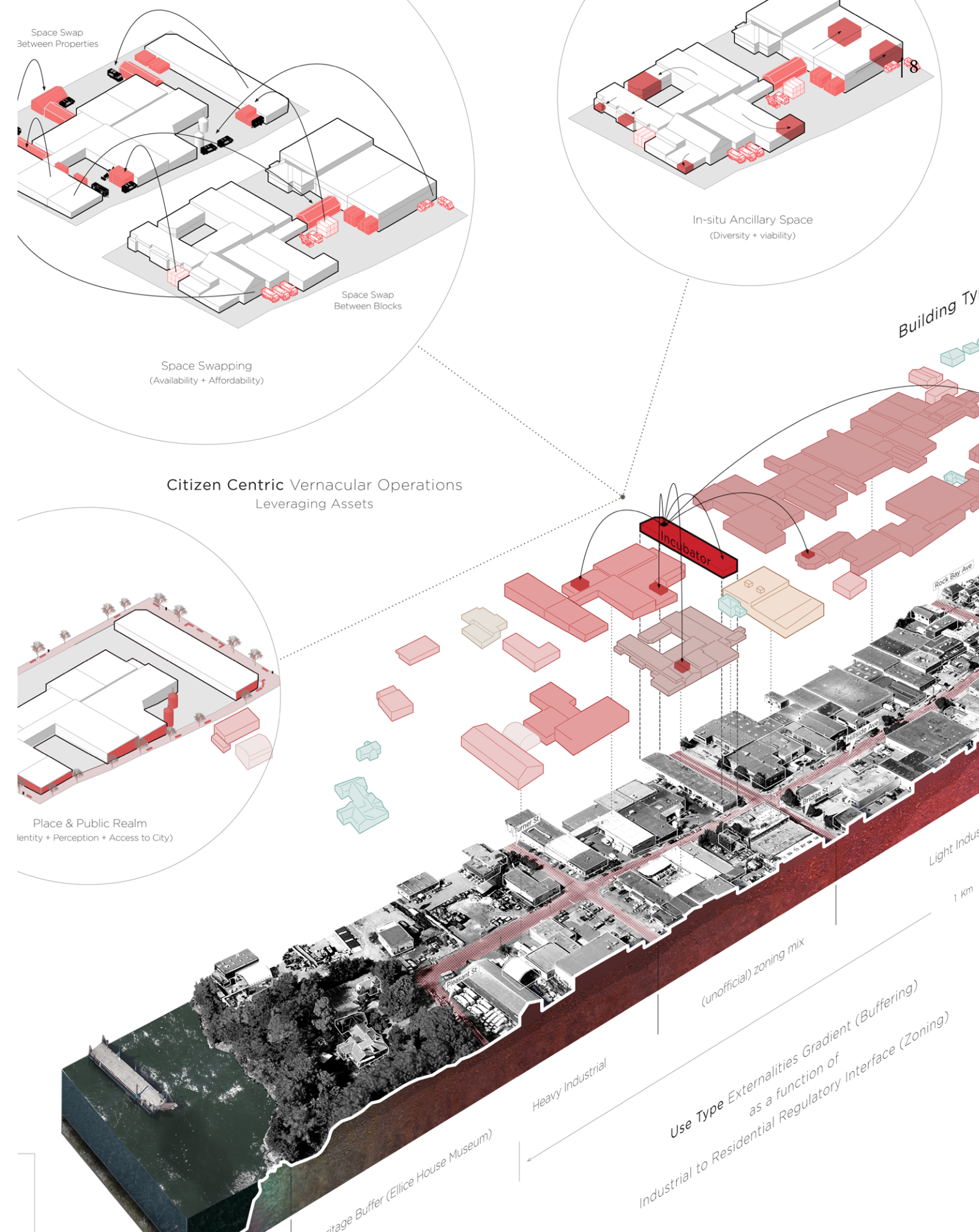


Fig 6. Rock Bay Transect A-A; A discovery of building typologies and local behavior patterns across the Zoning gradient of Rock Bay North; Diagrams by Author



with the primary occupant. These regained spatial capacities provide businesses with the ability to grow and shrink as needed, adding to a pool of operations that increase viability. Moreover, increased spatial flexibility provides avenues for new hybrid (complimentary) business models, contemporary industrial use with fewer externalities, and outsourcing of space for temporary ancillary support of primary production practices, carried out by more nimble business relationships.

Due to significant concerns of gentrification and land reserve erosion, flex space is currently prohibited in the industrial regulatory framework.¹¹ However, if bound to the existing ancillary use framework currently in the bylaws, administering flex space allowances could offer cost-appropriate measures for economic and amenity diversity, to build populace required for weathering future transformation, without rezoning and land area losses. This would allow for extensibility of businesses and fabric, towards eventual vertical density with diverse mixes of seed business typologies already in place. In the interim, by encouraging and amplifying social and spatial vernacular behaviors, already playing out in subversive and informal ways throughout the district, cultural continuity and place are carried forward, contributing to development of the industrial ecosystem.

This approach “represents a paradigm shift, required as an integral aspect of holistic strategy to move beyond maintenance-level regimes... into states where the dynamics and capabilities of [stakeholders are enhanced]... so that they [can] more effectively respond to previously experienced and yet-to-be experienced forces of change.”¹²

¹¹ Marc Cittone, Senior Community Planner, City of Victoria; In person discussion 2019.

¹² Redman, “Should sustainability and resilience be combined or remain distinct pursuits?” 3.

Looking Back to Move Forward

A survey of the past 150 years has seen the land and shores of Victoria BC, Burnside-Gorge Upper Harbour and Rock Bay Industrial District transition from ancient stewarded threshold habitats, patterned with Lekwungen speaking Indigenous villages, to varying degrees of agrarian, industrial, and urban habitation. Historically, Songhees and Esquimalt First Nations communities who occupied the harbour lands for several thousand years, became displaced to residential use, and eventually large-scale industry: mainly sawmills, factories, tanneries, gas works, and asphalt among others uses (Fig 7). The early and mid-20th century saw the shorelines engineered, creek-draws filled and encapsulated, to make way for urban infrastructure.¹³

Fig 7. Rock Bay North, 1951;

Burnside aerial image; <http://vintageairphotos.com/1-79/>

¹³ “Burnside Gorge Neighbourhood Plan.” BGNP. (2019), 10; “Burnside Neighbourhood History”; refers to land



Like many port cities, Victoria's inner edges thrived with expansion of the population, peaking in the 1970s, and transforming through economic necessity to diversify into tourism, government, and services.¹⁴ Post-collapse of the staples industrial sector yielded a small and diverse core of industry and civic infrastructure that survives today, largely around Rock Bay, peppered along Vic West and the Burnside area, reaching up into Saanich. Comprised of around 450 Production, Distribution and Repair businesses (4200 employees), across manufacturing, construction, wholesale, transportation and warehousing; with 66 high tech businesses (600 employees), and 2500 public sector employees, the pool of employment contributes over 50% of the 12,500 employment positions in the area.¹⁵

Belying the importance of the area, the character of its fabric is a patchwork of residential remnants with vestiges of original boulevard trees, juxtaposed against aged concrete masonry warehouse-type buildings framed by underserved public realm, where sidewalks come and go. Frontage is primarily parking, loading, and bin-storage defined by extended drop-curbs and chain-link fencing. The character is what one would expect in the Workshop of the City, but hides the high-cost of land occupation and property tax realities four times that of residential areas.¹⁶ Under this rough-and-ready working environment, the ad-hoc quality of properties has developed to capitalize on open-air spaces adjoined to neighbouring lots with blurry public realm definition, for storage and parking. Connected to its historic past, these qualities give the area a unique utilitarian character that resists but invites gentrification measures as further pressure on the area's high costs of occupation.

reclamation between Bridge and Garbally Streets; Dennis Dennis Minaker, "Burnside Neighbourhood History" Victoria Heritage Foundation, Accessed Aug 06, 2018. <https://victoriaheritagefoundation.ca/Neighbourhoods/burnsidehistory.htm>; refer to Industry on the Upper Harbour 1862 to 1980s; "Chronological City History." Victoria Heritage Foundation, Website. Accessed, Jan 20, 2019. <https://victoriaheritagefoundation.ca/Misc/chroncityhistory.html>

¹⁴ "Victoria Harbour Plan." 56.

¹⁵ Burnside Gorge Employment Lands Report, City of Victoria, 2015. 10-13..

¹⁶ Author's calculation, based on publicly available property tax reports from VicMap



Fig 8. Rock Bay Industrial Area, figure ground; by Author

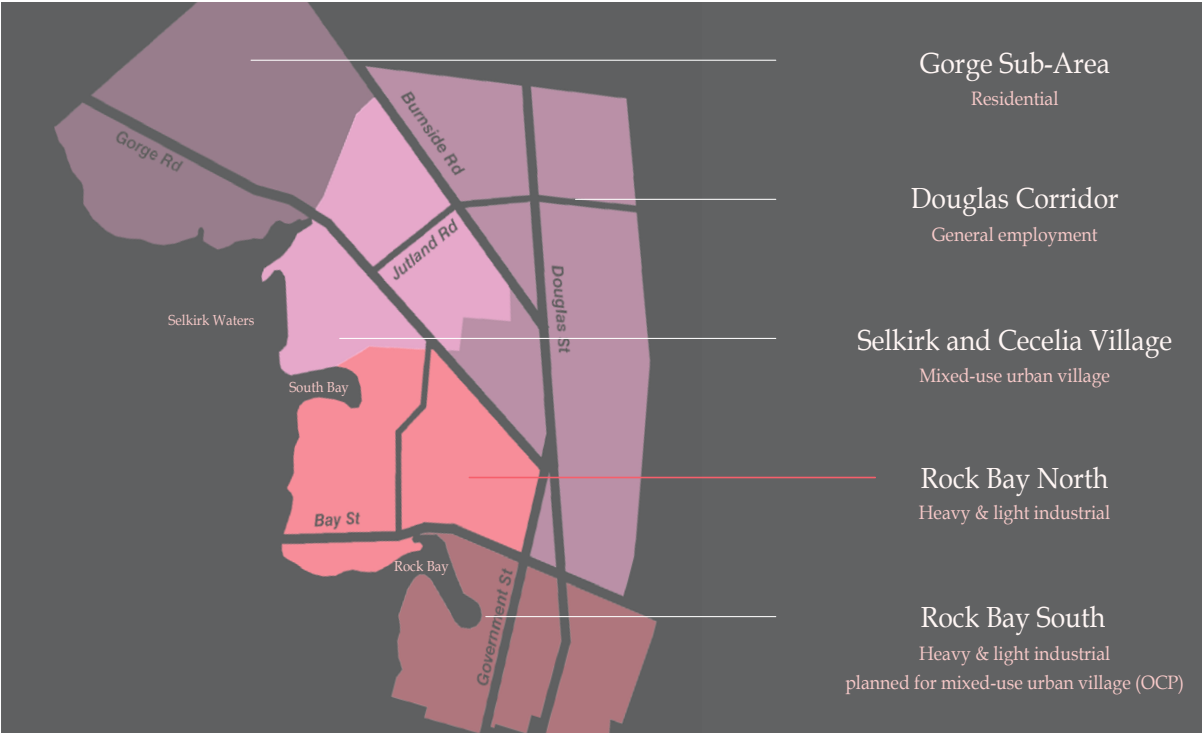


Fig 9. Burnside Gorge Sub-Areas; Diagram by Author; Map & Data Source: "Burnside Gorge Neighbourhood Plan." (2019). 9.

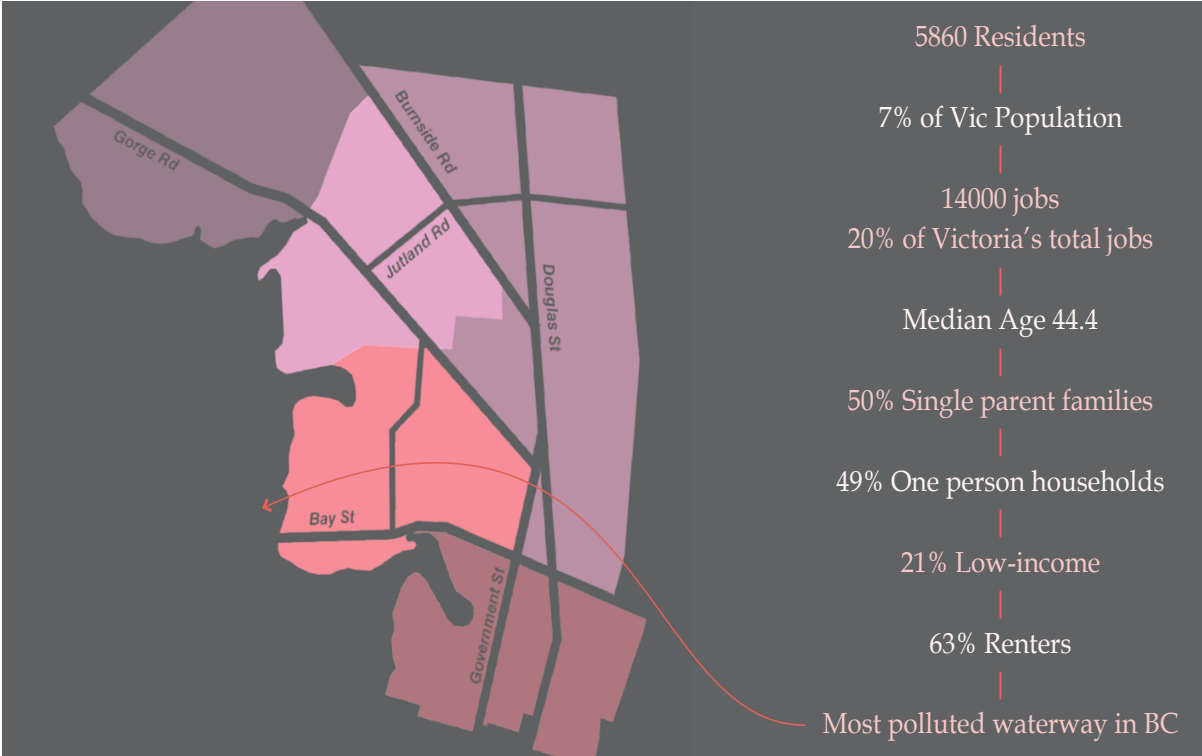


Fig 10. Burnside Gorge stats; Diagram by Author; Map & Data Source: "Burnside Gorge Neighbourhood Plan." (2019). 9-13.



Fig 11. Turner St; photo by Author, 2019



Fig 12. Turner St; photo by Author, 2019



Fig 13. Corner of David St & Turner St; Google 2019



Fig 14. David Street frontage; Google 2019



Fig 15. Hillside Ave, between Driftwood and Hoyne Brewing; Google 2019



Fig 16. Hillside Ave & Bridge St, Hoyne Brewing; Google 2019

These spatial conditions have been shaped by regulation and use, but also have informed aspects of the regulations themselves. For example, the City’s Schedule C Parking Bylaws are influenced by the necessity of these behaviors, allowing for parking on neighbouring lots of up to 125m from a place of business.¹⁷ Within the scope of this paper, these patterns are codified as ‘space swapping,’ stemming from the historic practice of industry storing supplies and products on neighbouring lots (Fig 1 & Fig 7), including residential properties, as a matter of necessity and utilization of available space. In time, these open-air spaces were rezoned to buffer externalities associated with industrial use, as protections for residential occupants and industry alike.

Post-industrial conditions saw large-scale industry subside to a diverse mix of smaller businesses and services that contained many of their externalities in tightly connected double height buildings, largely in need of seismic upgrades, but low-tech and highly reconfigurable. In this way, Brand asserts that architecture can readily engage with adapting vernacular buildings, due to their low-tech and democratized materiality.¹⁸ To this point, the choices that operators and landowners have at the outset, are to partition these large shell spaces, with up to 25% ancillary supportive or complimentary use, or to build flex-space mezzanines up to 28.5% of the floor area.¹⁹ These mid-level spaces typically yield around half of the floor space lease rate,²⁰ equating to a net reduction to the ground floor lease rate of around 14% if utilized.

¹⁷ Schedule C: "Vehicle Parking Specifications," 2.2, 2a. City of Victoria. 11. <https://www.victoria.ca/assets/Departments/Planning-Development/Development-Services/Zoning/Bylaws/Schedule%20C.pdf>

¹⁸ Stuart Brand. How Buildings Learn: What Happens After They're Built. Penguin Publishing Group, 1995: General argument of book

¹⁹ Schedule A: "Mezzanine" City of Victoria.; "Mezzanine, means an intermediate floor assembly within a storey, which does not exceed 28.5% of the storey's floor area. (Bylaw 12-052 Adopted November 22, 2012)" <https://www.victoria.ca/assets/Departments/Planning-Development/Development-Services/Zoning/Bylaws/Schedule%20A.pdf>

²⁰ Devencore Realty. "PRIME COMMERCIAL / INDUSTRIAL FLEX SPACE FOR LEASE." Showing price psf of ground and mezzanine. This was compaired to other similar adverts in the area, and throughout the region. <http://www.devencorevictoria.com/listings/prime-commercial-industrial-flex-space-lease>

Scenario 1

Scenario 1 takes place in the immediate time frame, in an existing building known as 2740 bridge street, occupied by Hoyne Brewery and few other small businesses that aren't directly part of the scenario to keep it concise. The Incubator is approached by Sean Hoyne (Proprietor and Brewmeister), as a candidate for hosting a start-up on his mezzanine, as an opportunity to intersect new technologies with the brewery industry. A local candidate and entrepreneur Ross Taylor steps forward, who is looking to prototype production/distribution (PD) software that can be used broadly in factory settings to streamline PD processes. Ross and Sean forge an alliance that defines a residency period for Ross' technicians on Hoyne's mezzanine. The arrangement creates an in-situ learning environment, where the software can be tested on fermentation cycles and product distribution, and later scaled for other uses. The agreement and aspects of training are facilitated by the Incubator, and the space within Hoyne is procured for a residency period suitable to both parties: from one to two years, extendable or shortened as needed.

During this residency, the Incubator uses its office as an educational and networking center for Ross' team (among other startups), and for Sean, who registers his brewery in the acceleration program expressed as part of Scenario 2. The Incubator thereby offers a suite of additional resources to both the start-up and the host business to support growth such as: financing, grants, mentoring, access to skilled workers and training, conferences with local academic institutions (UVIC and Camosun College), and access to larger networks of business with venture capital.

This scenario, as with the following scenarios, is carried out across the district in multiple iterations simultaneously, thereby engaging the scale of the area, while catalyzing formative spatial and social operations across the district.

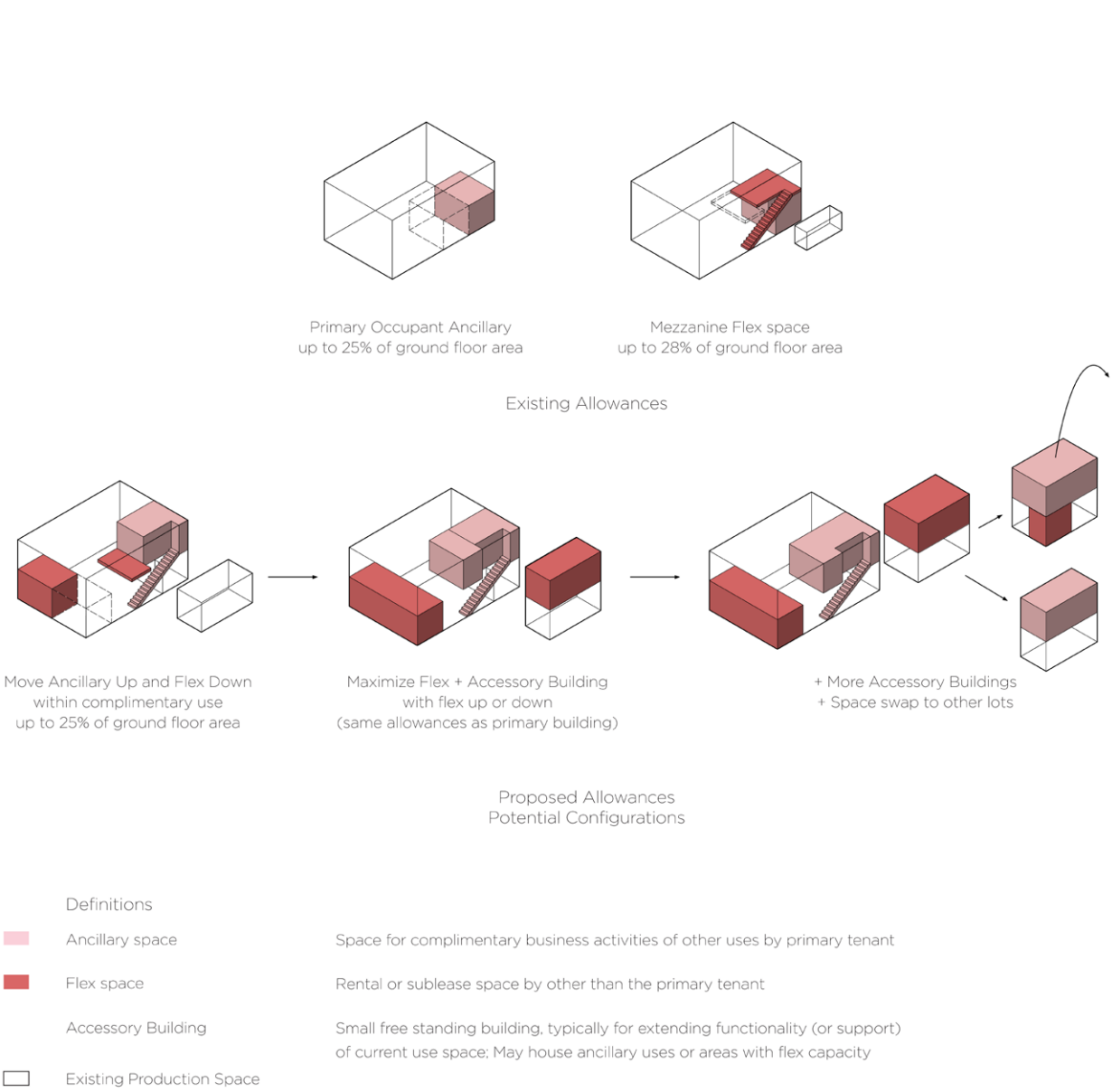


Fig 17. Spatial Operations Proposal: Thesis Diagram

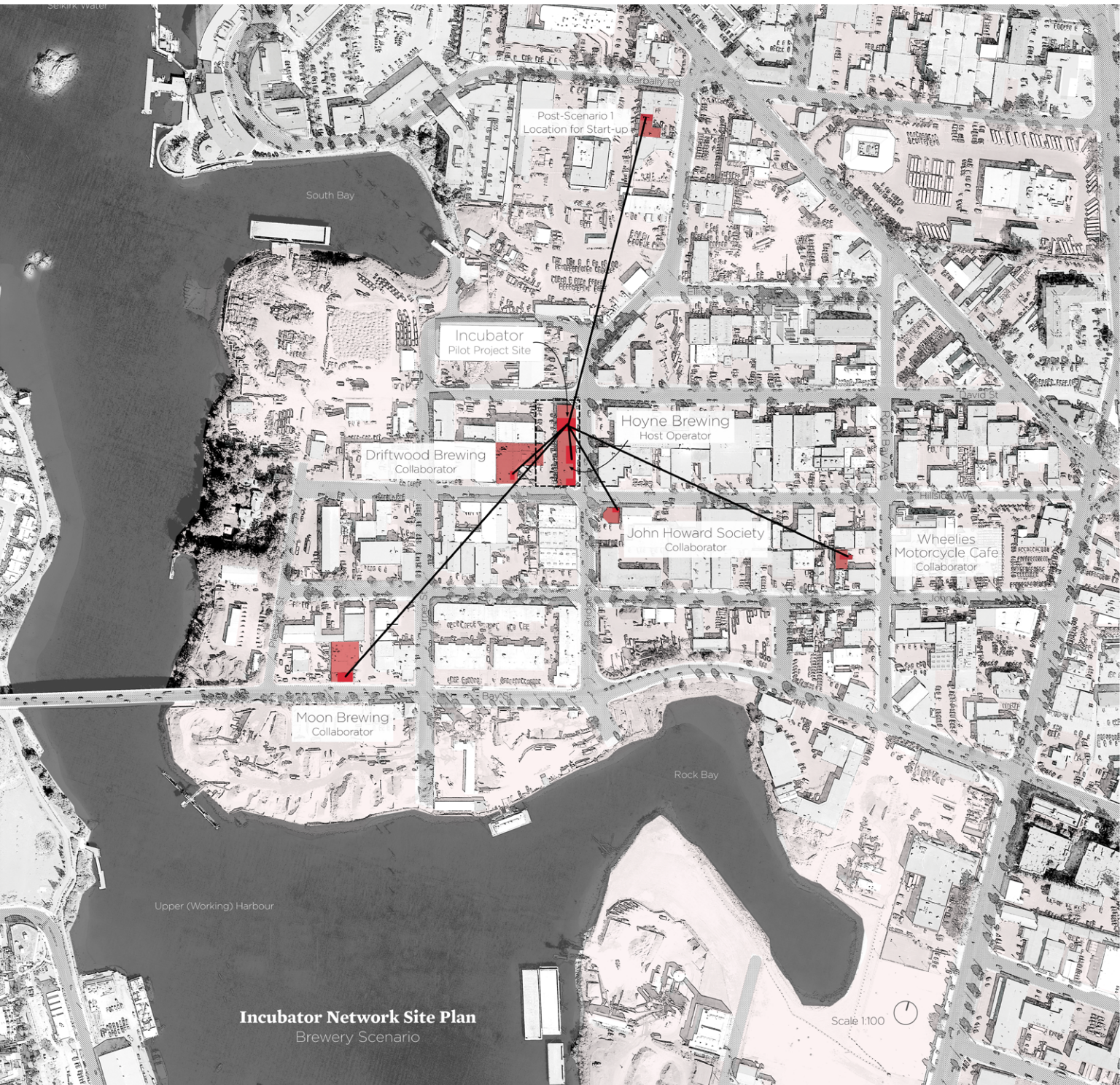


Fig 18. Incubator Network Site Plan; showing several possible scenarios within the brewery network. The central figure is the site of the three scenarios used as case studies.

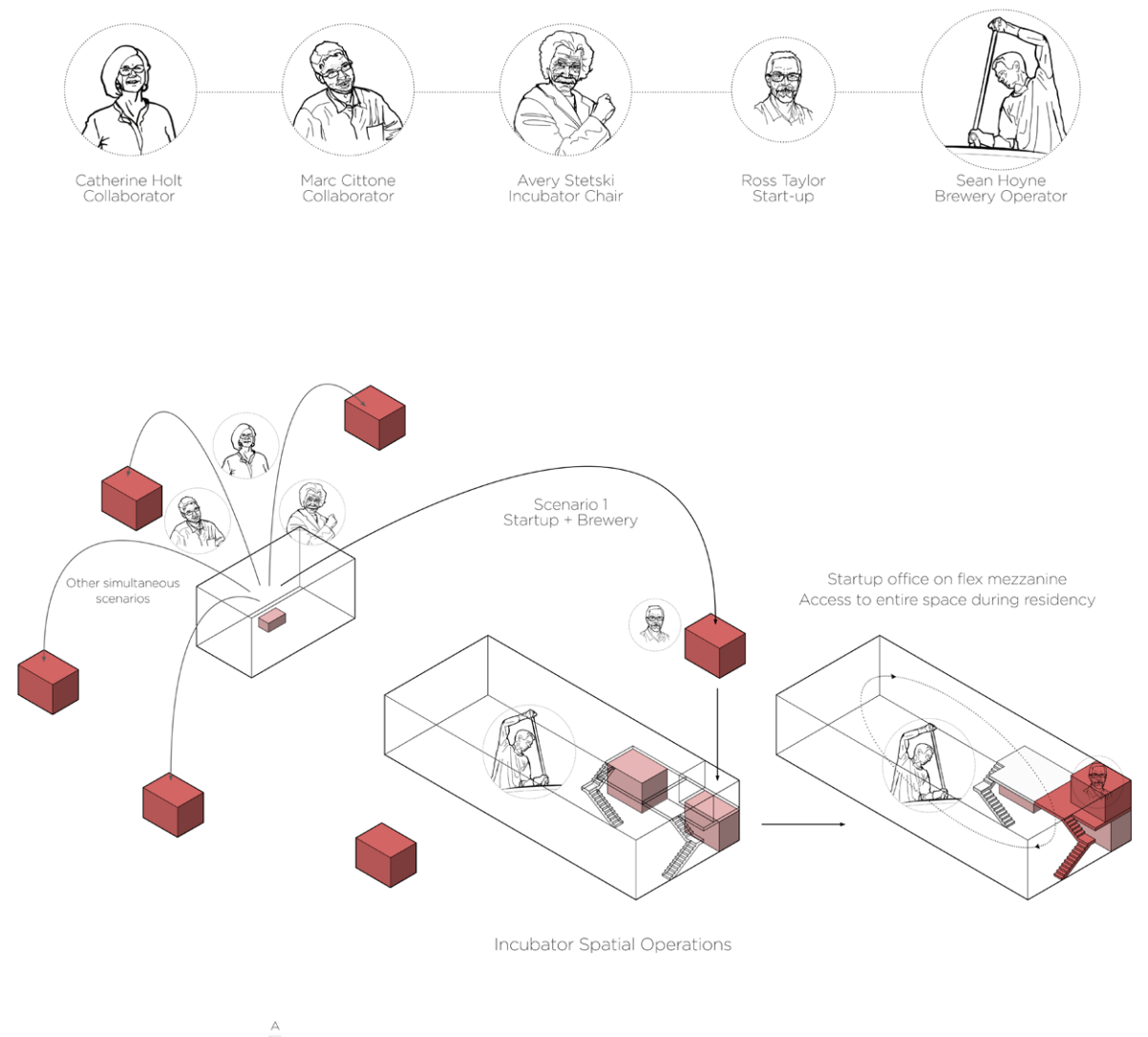


Fig 19. Incubator Spatial Operations: Scenario 1

Scenario 2

Scenario 2 takes place in immediate and interim time frames and relies on amendments to industrial zoning bylaws that enables an inversion of existing conditions for added elasticity of spatial constraints. The primary operation is to move flex space down and ancillary space up; or to allow a mix of the two on the ground plane as needed.

Tom, a local glass artisan is diversifying in response to rising lease rates and collaborates with the owners of Wheelies Motorcycle Café and Hoyne, to open a larger tasting room in Hoyne Brewing. As a complimentary business to Hoyne, Sean outsources the tasting room portion of his business to Tom and collaborators. He shares the costs of tenant improvements with both parties and the landowner, once registered in the Incubator’s business acceleration program and Tom’s group as a start-up. Sean uses the opportunity and alliances to focus on the production side of his business, where he reconfigures the brewery around lean business models (perfected with the help of Scenario 1 tech startup in earlier days), increasing production. Furthermore, by outsourcing to Tom’s group, both production and the tasting room can be scaled up, creating a fresh spatial condition where customers are immersed in an intensive craft-brewery atmosphere. Keeping the space authentic, the original mezzanine is extended as a gangway that weaves above the open tasting room space. A small core supports a compact prep kitchen at ground, facilitated as a satellite of Wheelies Café, while the tasting room is defined as a porous space whose walls are fermentation tanks. Inside the precession of tanks along the floor and gangway, serving and tasting space are focused around a centrally located bar, with space for seating and ordering. The previous office is moved up above the kitchen into the small core where it overlooks the production space, and the vacated room is converted into universal washrooms with access for patrons and staff. Not forgotten, the initial tasting room is then free to become another flex space with access to street frontage, or a continuation of the production space when needed.

While scaling up, the configuration allows Sean around 20% capital cost flexibility due to the shared cost of the ground plane. The flex-spaces garners the same allotment as ancillary space at ground, but are sub-leased at the ground level market rate, while being accessible for Tom’s group due to size. Additionally, down the road, parts of the mezzanine could be returned to flex, if Sean were in need of downsizing.

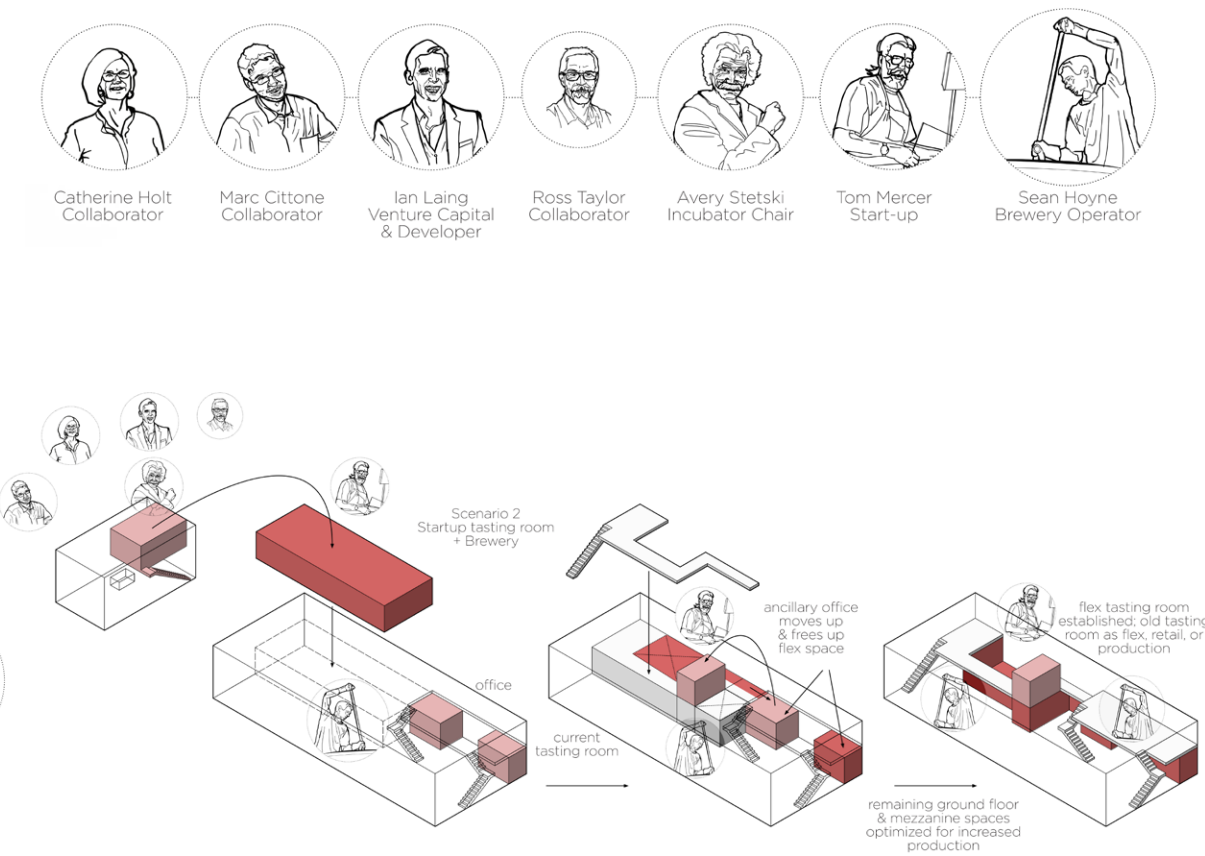


Fig 20. Incubator Spatial Operations: Scenario 2

Scenario 2+

This scenario could take place before or after Scenario 2 and relies on the existing zoning bylaws that allow for ‘more than one building on a lot.’²¹ under the same regulations as the primary building, to be leased for production at ground, with flex-space on the second level or mezzanine.

In this case, Sean Hoyne requires additional space for production, and settles on a strategy proposed by Incubator collaborators to build a small accessory building to house more tanks. The proposed site is over top of the existing pad the brewery created in its back-parking area. Since Sean had converted several of the spaces at 2740 Bridge street, he is able to consolidate parking and loading to the necessary 6 spaces, with two loading bays, utilizing the rest of the parking allotted space for his accessory building. He reaches out to the Incubator that pairs him with another startup and leases out the second floor (750 sq ft) space of the building at the market rate to subsidize the cost of design, construction and operation. Over time, Sean continues this process, helping his neighbour Driftwood brewing, to construct their own accessory space. The process is repeated, and Sean space swaps more buildings as satellites of his operations around the district to available lots that previously were used for open-air storage and parking. In this process, the Incubator facilitates more seed-businesses above ground, and underutilized open-air space in the area becomes more productive. The agile form-factor of the buildings allows configurations that create new unexpected opportunities for temporary occupation and public realm definition. These include craft-beer festivals, and night-markets hosted in spaces otherwise privileged for parking, loading and storage.

²¹ “M-2 Zoning Bylaw.” City of Victoria. Article 4: “More than one building may be sited on a lot.” 2.

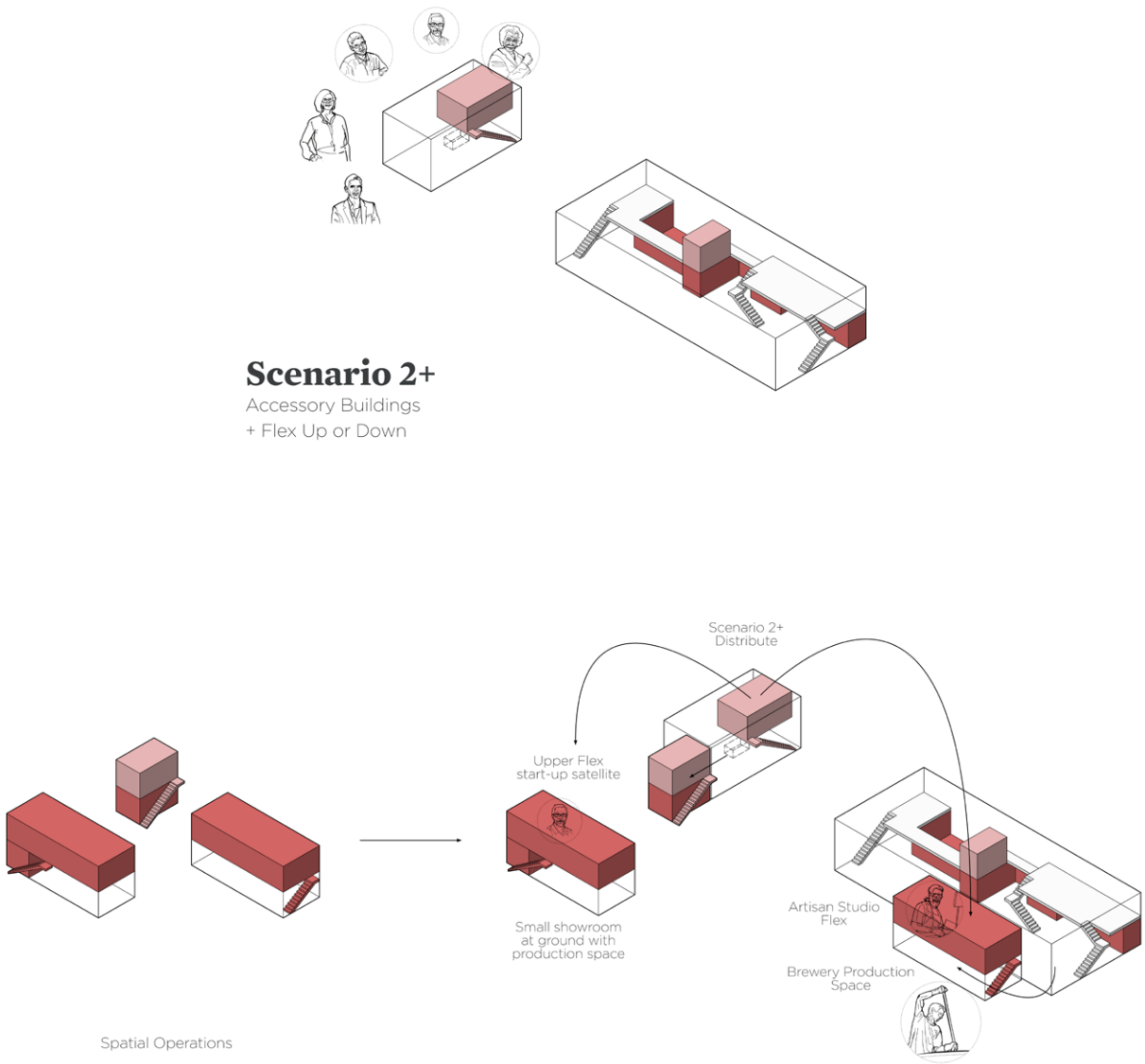


Fig 21. Incubator Spatial Operations: Scenario 2+

Conclusion

With Victoria's rising land values and resultant costs of occupation, access to the city is an urgent factor in providing a range of living-income employment options. It is the position of this proposal that city policy makers, business, and landowners be in dialogue concerning spatial issues central to increasing viability, access and diversity. All stakeholders have valuable roles to play in reducing these pressures where possible, and where the public interest is at stake.

By way of an “integrated spatial policy... an emphasis on: interactions as opposed to objects; [stakeholder] agency; dynamics not statics; embedding and emergence; multiplicity of relations versus homogeneity... strategic future vision for [resilient] and sustainable communities within a globally competitive framework...” can be created.²²

Informed by ecological systems, Allen argues that renewal “is a ‘trap’ that requires a high degree of specificity,” and depends upon community commitment, planning and design that brings “value other than pragmatism and practicality in the most extreme form.”²³ In this way, a measured spatial development approach must be highly contextual, and relies on multiple actors with shared vision and appreciation for the consequences of shaping the City. Massey argues, that the responsibility to engage in the socio-spatial process of architecture, requires a deep commitment

²² W. E. Steele, *Strategy-Making for Sustainability: An institutional approach to performance-based planning in practice*. Griffith School of Environment PHD Thesis. 2009: 57-8. https://www120.secure.griffith.edu.au/rch/file/7188dc55-9580-7ce9-3e72-12cadd520b4b/1/Steele_2010_02Thesis.pdf

²³ Stan Allen, “Landform Building 2015.” Filmed 2011. AA School of Architecture Lecture, YouTube video, 1:18:57. (Url in Bib).

to infusing equity into planning.²⁴ Moreover, contextual design requires using existing resources to maximum co-benefits, “...getting the most out of the infrastructure and the changes that you are making.”²⁵ This includes phasing development to reduce impacts and increase benefits while “working surgically” to avoid displacing existing tenants.²⁶

In closing, treating the industrial core as a key asset that must be both protected and given agency to intensify, can be encouraged in cost-appropriate and measured ways within existing conditions. Provided that density through emergence and relationship building within the existing community is focused around new ways to generate diversity and populace—without exacerbating affordability—while creating dialog and moments for co-evolution of the city.²⁷

²⁴ Doreen Massey, “Introduction - Chantal Mouffe and Doreen Massey.” *Spatial Justice: Radical Foundations*. Filmed 2011. The Centre for the Study of Democracy, University of Westminster, Debate, YouTube video. Accessed March 10, 2019.; Allen,. “Landform Building 2015.”

²⁵ Ed Parham. “Tools to integrate the Region, City and Neighbourhood.” Filmed April 02, 2015. Space Syntax, YouTube video. 14:07. <http://https://www.youtube.com/watch?v=2N3mpKvPbqo>

²⁶ Franc D’ Ambrosio; In person discussion , 2019.

²⁷ Bill Reed. “From Sustainability through Regeneration: Whole and Living System Design” March 01, 2010. Healthy schools conference lecture. Green Building Alliance, YouTube video. 1:16:27. (Url in Bib)

Precedents

These precedents have been selected for their ability to propose operations that utilize latent resources within the existing fabric, while increasing dialog of spatial issues. The intention is to reveal how tactical operations become intervention points for architects to engage with social and spatial realities, and how they interplay to generate new conversations about space, equity and design.”²⁸

To this degree, the precedents contain moves to discover new capacities within existing systems to support agency with positive co-benefits.²⁹ Trudeau affirms, “that the privileging of social equity can occur where there is an institutional champion that brings ‘patient capital’ and leadership to promote development that ultimately aims to generate environmental and economic benefits.”³⁰ This lens has been applied to each precedent while formulating a position. Additionally, the precedents reinforce the culture of the occupants in relation to “the beauty of the vernacular, of how things work,”³¹ and to the scale of development appropriate to each case. As tools for careful ‘champion-building’ in their own right, these cases capture the potential for architecture to re-frame built form, while elevating the essence and memory of its context and journey, “preserving parts of the decay and context, as a way of giving something additional to the contemporary.”³²

²⁸ Izaskun Chinchilla and Carlos J. Cenamo, “The Post-Millennial Revolution” *Design Anthology: Unit 22*. Bartlett School of Architecture, University College London (2017): 284. Issue. https://issuu.com/bartlettarchucl/docs/design_anthology_unit22

²⁹ Michel Labrie, “Regenerative Development.” UBC SALA, Course. Fall 2018.

³⁰ Trudeau, “Patient Capital and Reframing Value: Making New Urbanism Just Green Enough.” 228.

³¹ Allen, “Landform Building 2015.”; confirms that adaptation “Maintain[s] some of the original ideology.”

³² Ibid.,

Rooftops & Rookeries

[Occupy & integrate underutilized space]



Fig 22. Scale Model:
Interconnected rooftop view



Fig 23. Scale Model: Self-build car
park co-operative residences

James Christian proposes rooftop and garage adaptations in underutilized spaces throughout the “condemned housing of London’s past,” to enhance vibrancy and increase density without destroying existing housing stock. The project leverages design to “start conversations about density and community—to move the debate forward from the simple fact more housing is needed, to a more productive conversation about what kind of housing we should be building,” as a way towards opportunities for gathering and social interaction (Fig 22). “The London Bridge model of high-density commercial and domestic accommodation along a restricted thoroughfare was reimagined as a strip of interconnected multiple use units arranged along the rooftops of one of the estate’s long maisonette blocks (Fig 23).³³

³³ James Christian, “Rooftops & Rookeries.” Projects Office. Accessed April 5, 2019. (Url in Bib)

Roskilde Festival Folk High School

Nest & Layer Interior Airspace

Fig 26. Fenestration in new exterior wall, after reduction of shell; Photo by Ossip van Duivenbode.

COBE & MVRDV collaborated on an abandoned Danish factory adaptive reuse conversion to a Folk high school, on grounds of a famous yearly rock festival. The design retains some of the original structure, re-pours the exterior facade and organizes the interior with a series of inserts. The volumes and relationships of the inserts echo the layout, immediacy and vitality of a rock concert; working with the students and teachers through social code, while program is enhanced through adjacencies.³⁴

³⁴ COBE & MVRDV, "Timr." MVRDV, Website. 2019. Accessed April 5, 2019. <https://www.mvrdv.nl/projects/266/roskilde-festival-folk-high-school->

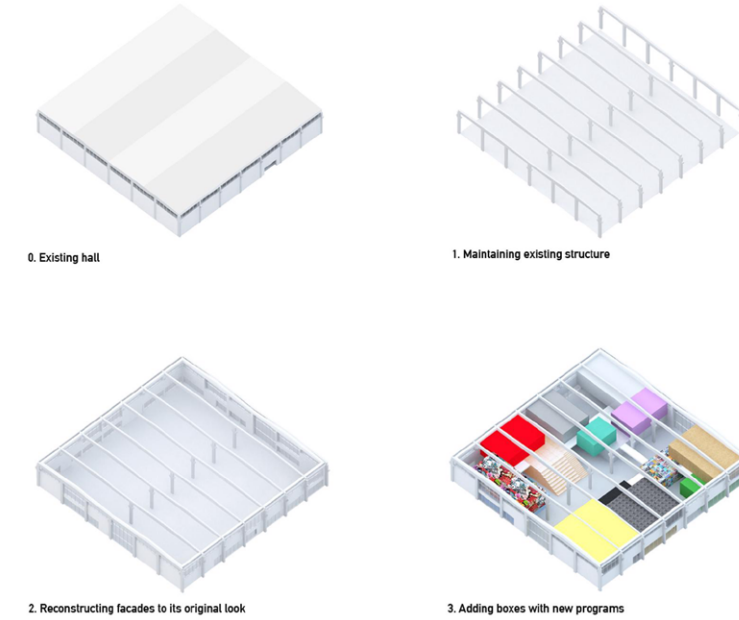


Fig 27. "Box-in-a-box" operation diagrams; COBE & MVRDV

Fig 28. The gallery free space is organized into programmatic zones, combining lecture, seating, library, gathering and circulation. Boxes of program stack and overhang creating pocket spaces and nooks for improvisation; Photo by Ossip van Duivenbode.



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