

The OAA Guild Medal

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A Place for Urban Food Systems.

Architecture plays a key role in connecting people to urban food systems. Beyond technical aspects, improving visibility and accessibility is a challenge.

Through literature reviews, case studies, and design research, this thesis prioritizes the concept of a scaffold to integrate urban food systems into the greater urban narrative. A potential outcome is a food hub, where the scaffold concept enables participation through material and spatial transparency and tactility, particularly within the opportunistic context of adaptive reuse.

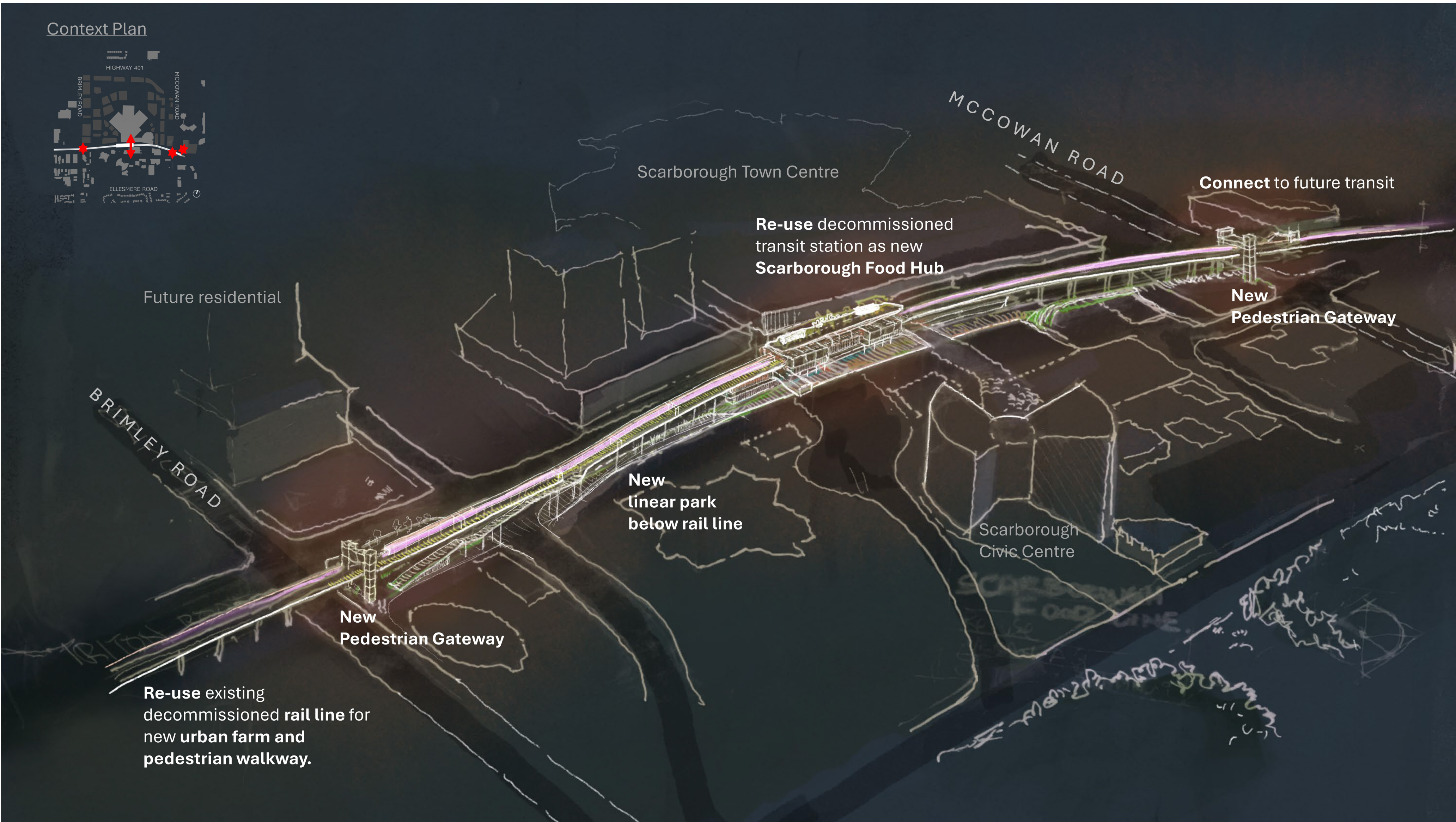
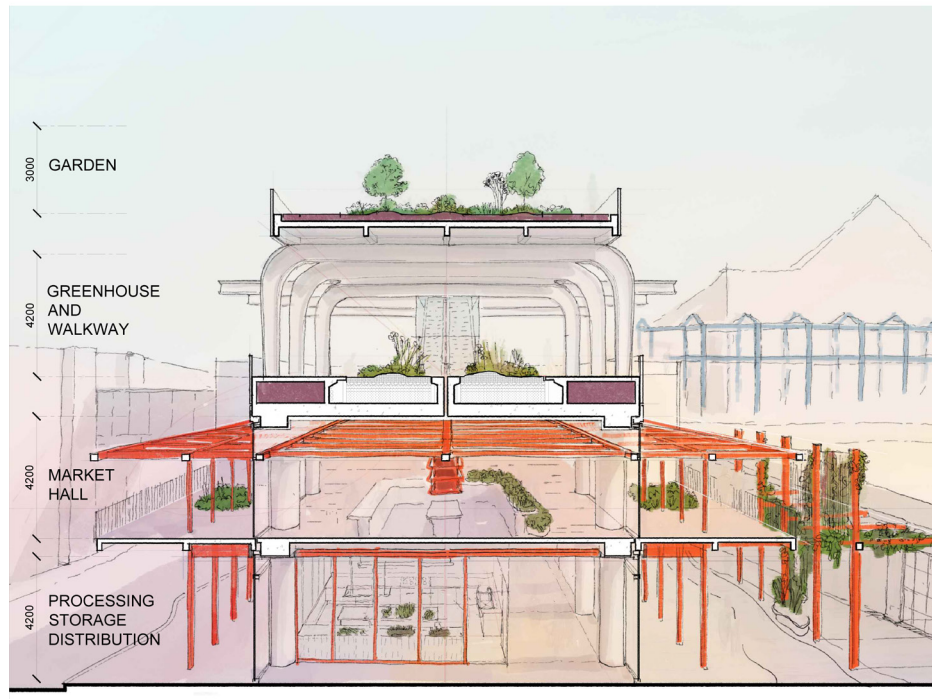
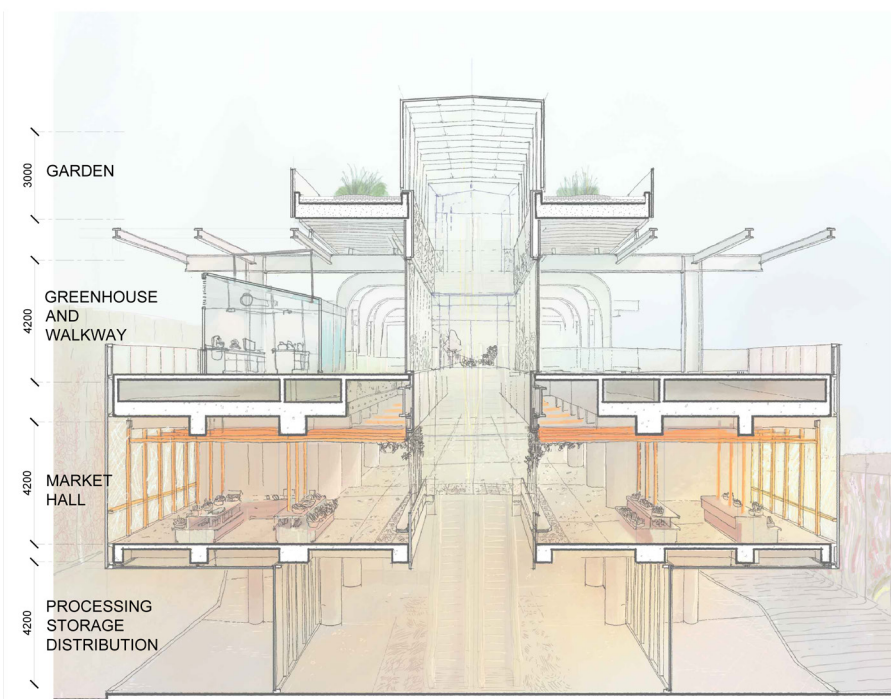
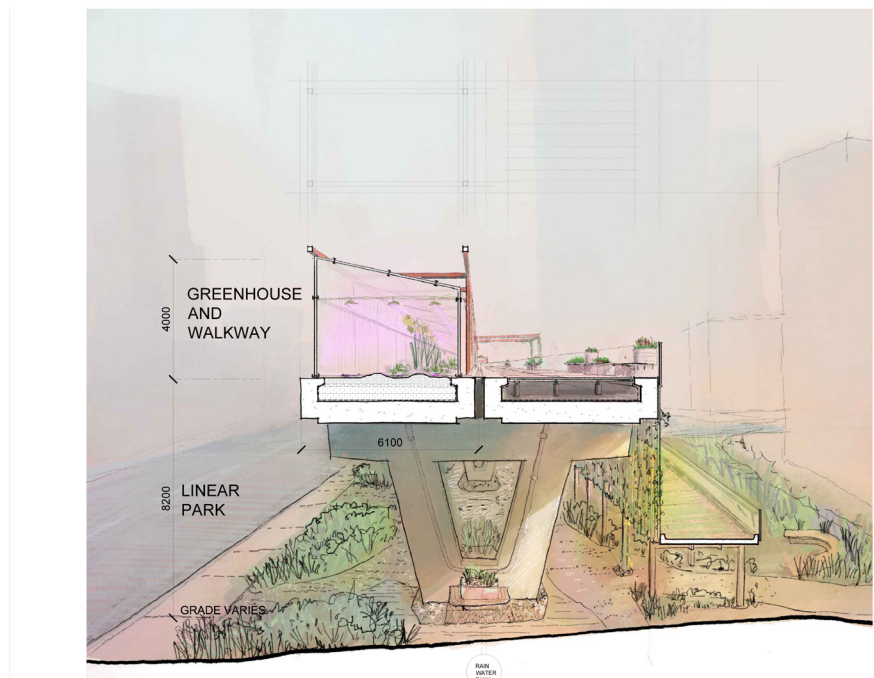
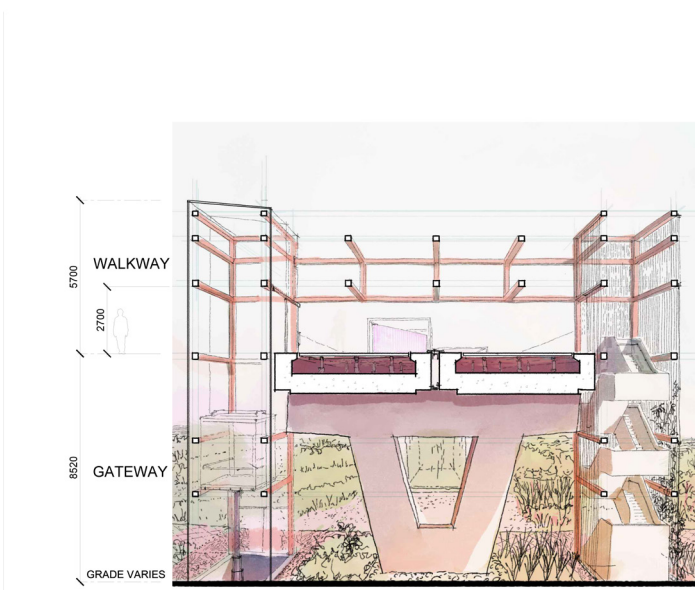
The response hypothesizes that a localized urban agriculture system can promote tangible food systems literacy and enhance food access that is culturally and locally appropriate. Reciprocally, a localized urban agriculture system advances

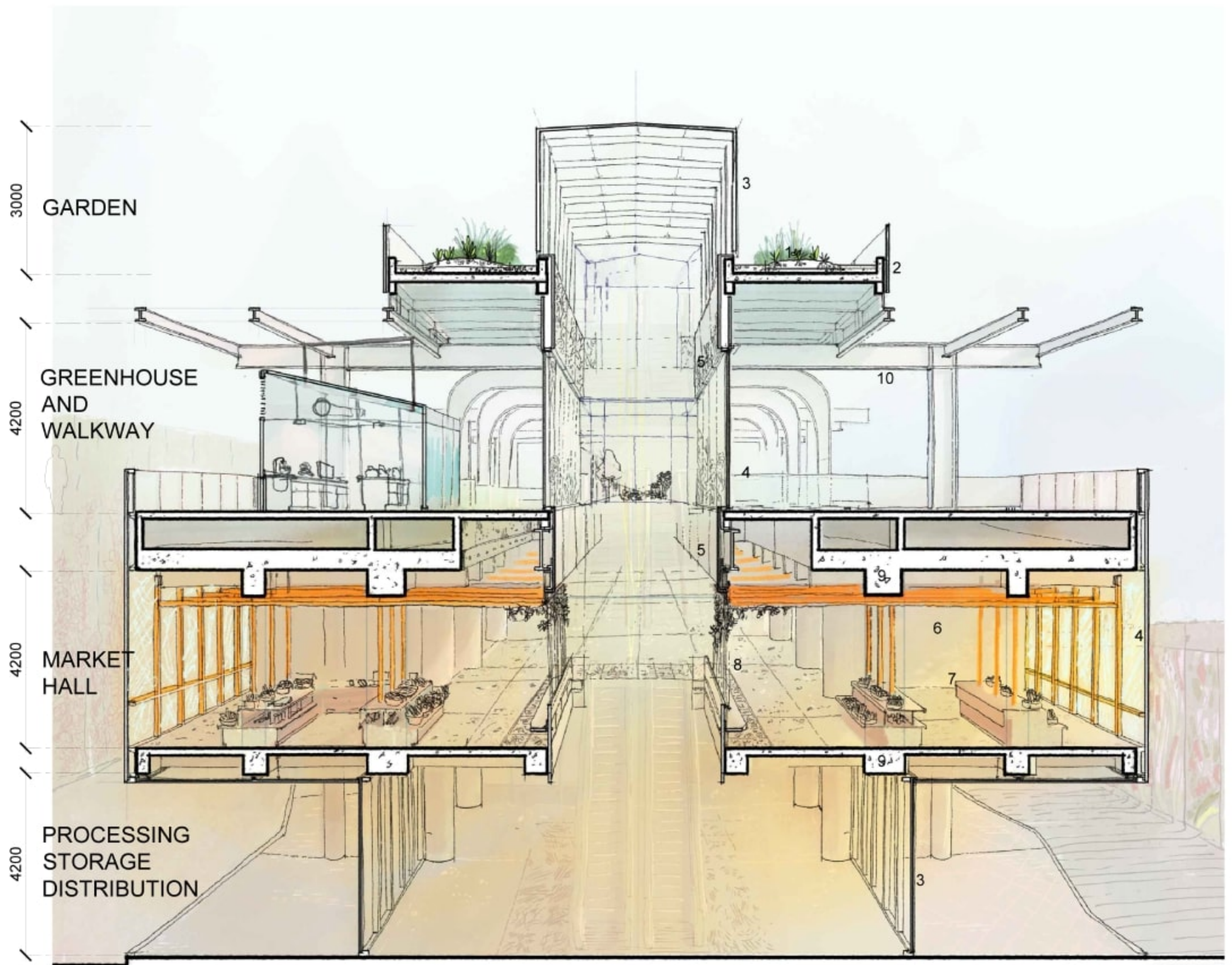
stronger social and civic experiences through emphasis on a pedestrian scale experience. That is, the food system of this thesis is spatially and materially visible and accessible for people.

Visibility and accessibility of a local food cycle model is explored in a design proposal in Scarborough, Ontario, Canada, which converts a portion of the decommissioned TTC Line 3 public transit line and Scarborough Centre transit station into an urban farm and food hub.

Scarborough Centre is an opportune area for investigation with the acknowledgment of future residential development and transit connections that allow the design to hypothesize succinct integration within these urban narratives. The integration of a food hub allows for weekly farmers’ market and market hall environment to engage both the adjacent civic and commercial presences on site. The design

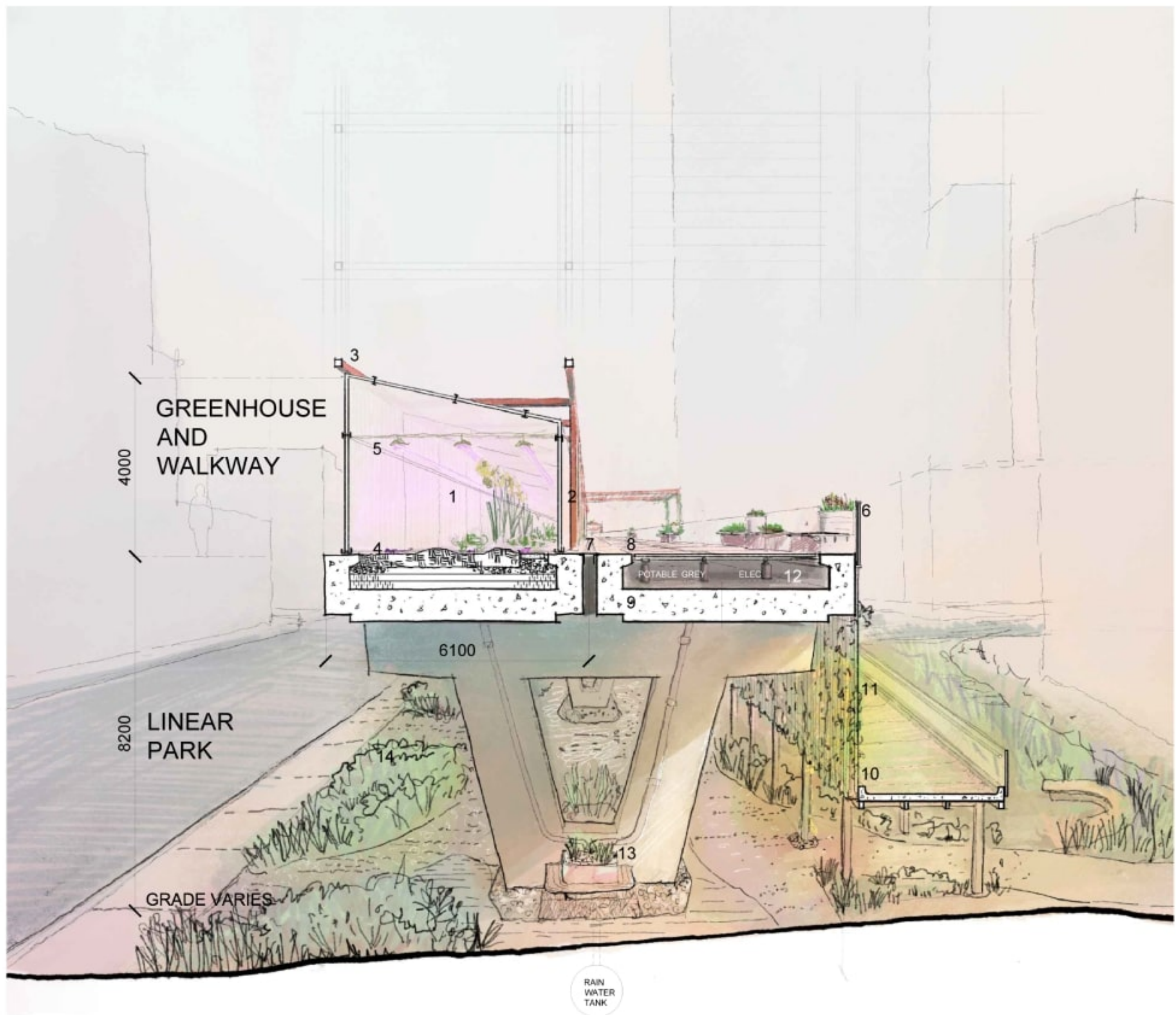
demonstrates that modest and light insertions based on a scaffold concept offers visible and accessible opportunities for public participation in food systems in unexpected places.





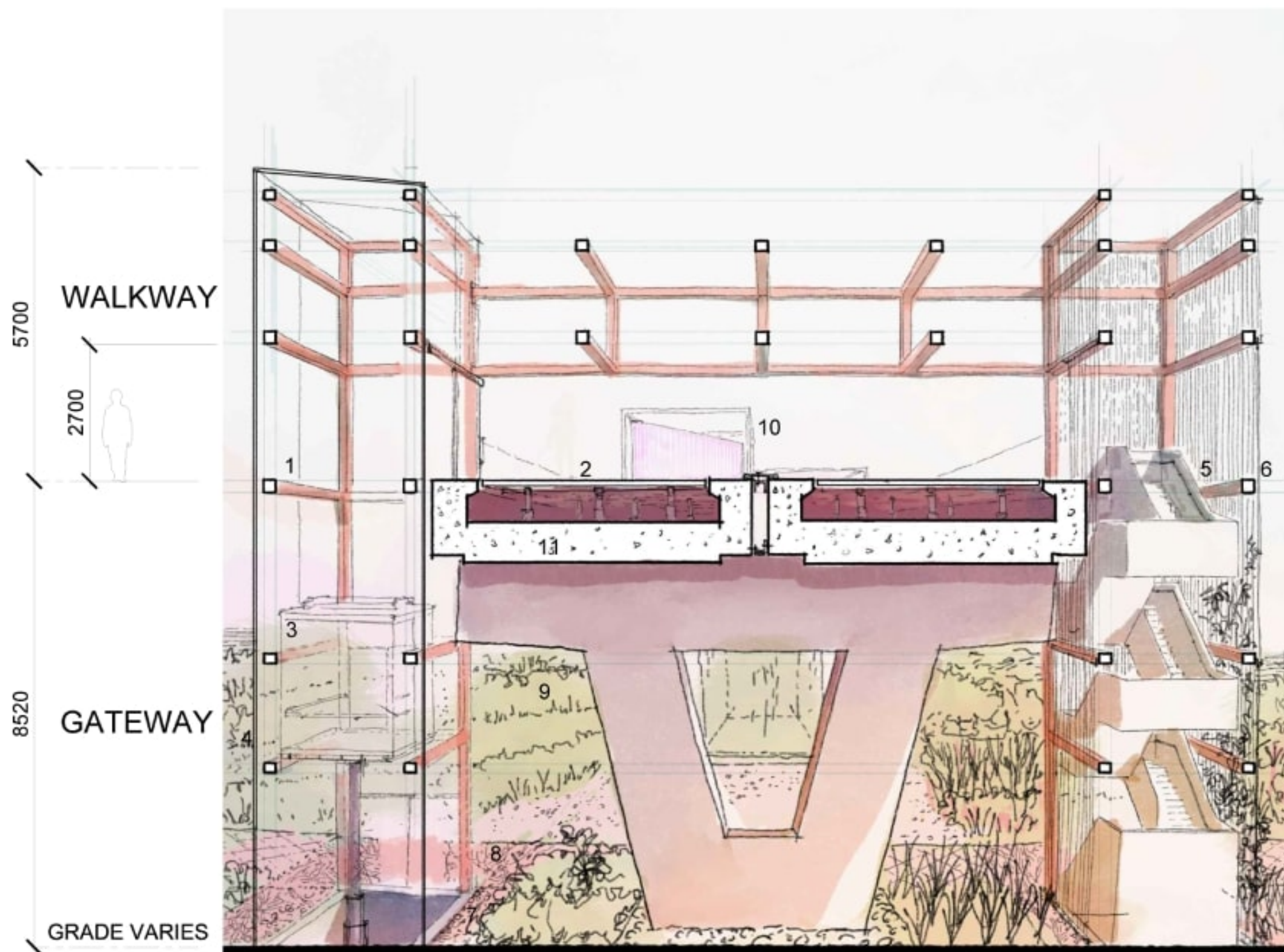
LEGEND:

1. 100-150mm ENGINEERED SOIL, FILTER FABRIC, CRUSHED GRAVEL, INSULATION, WATERPROOFING, LIGHT WEIGHT CONCRETE, 68mm METAL DECK.
2. 2X 6mm TEMPERED GLASS GUARDRAIL WITH LAMINATE INTERLAYER.
3. SSG CURTAINWALL
4. SSG CURTAIN WALL WITH INNER LAYER OF CAST GLASS OF "VEGETABLE" PATTERN.
5. 6mm THICK INTERIOR ALUMINUM PANEL WITH CNC CUT PATTERN OF "VEGETABLE" PATTERN.
6. 50mm X 50mm HSS SCAFFOLD SYSTEM ANCHORED TO EXISTING SLAB.
7. MARKET STALLS CONSISTING OF POLYESTER POWDERCOATED TOPS AND PERCEPTUALLY "HUNG" FROM SCAFFOLD TUBE.
8. TRELLIS CONSISTING OF STEEL CABLE TIE AND ROD ANCHORED TOP AND BOTTOM TO STEEL ANGLES.
9. EXISTING CONCRETE STRUCTURE TO REMAIN.
10. EXISTING STEEL STRUCTURE TO REMAIN.



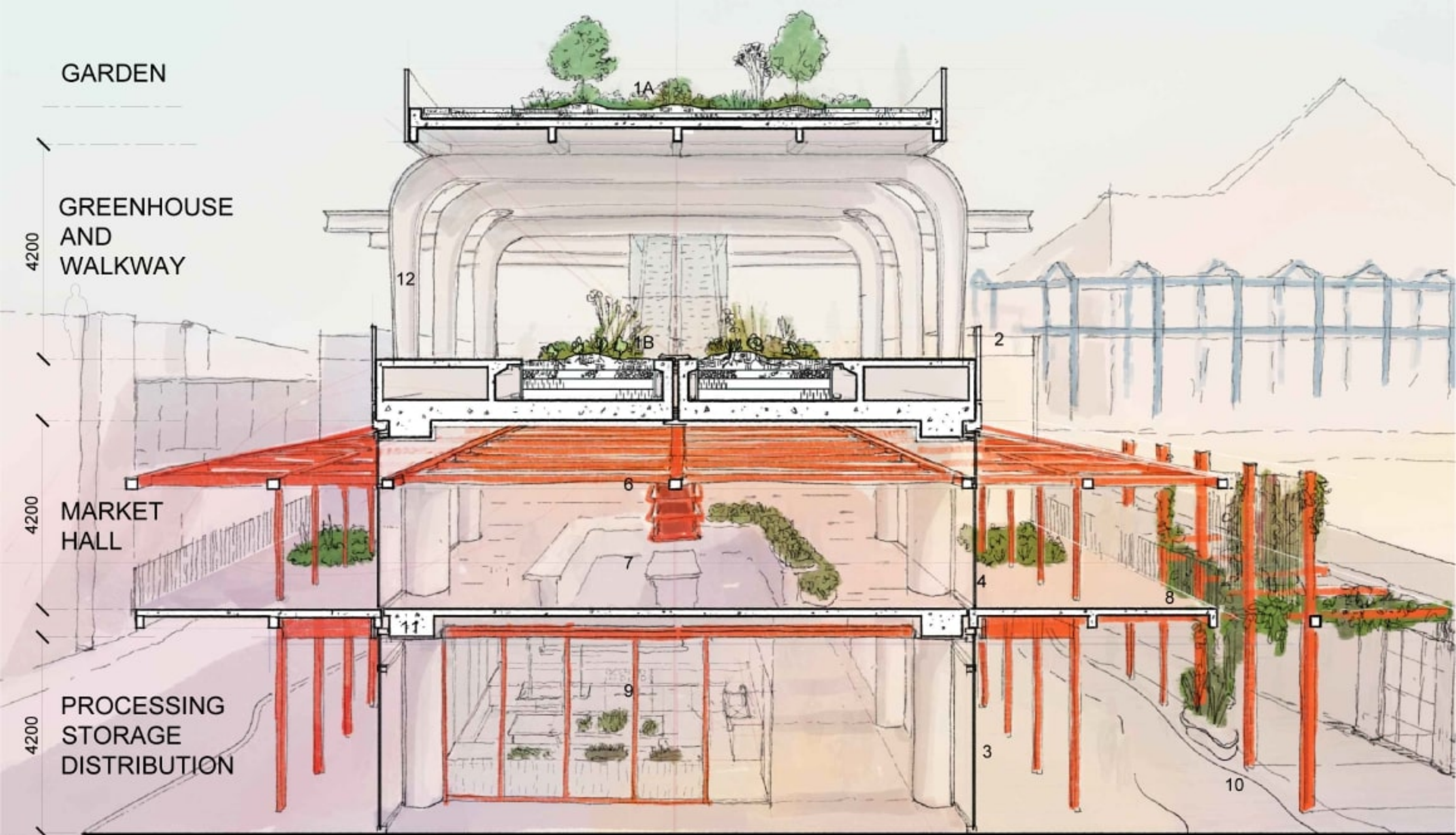
LEGEND:

1. GREENHOUSE CONSISTING OF TRANSLUCENT 25mm THICK POLYCARBONATE PANELS WITH ALUMINUM H-CHANNEL SUPPORT FRAMING.
2. 1500mm X 2400mm SLIDING BARN DOOR ACCESS CONSISTING OF POLYCARBONATE PANELS OF SAME THICKNESS AS GREENHOUSE.
3. 50mm X 50mm HSS GREENHOUSE SUPPORT SCAFFOLD ANCHORED TO EXISTING CONCRETE BRIDGE UPSTANDS. PROVIDE ADJUSTABLE CABLE ANCHORS AND ROD TO-FROM GREENHOUSE H-CHANNEL FRAMING.
4. 100-150mm ENGINEERED SOIL WITH GREY WATER IRRIGATION SYSTEM, FILTER FABRIC, CRUSHED GRAVEL, 350mm INSULATION FILLER, WATERPROOFING, EXISTING CONCRETE DECK.
5. UNI-STRUT OR SIMILAR MODULAR SUPPORT SYSTEM FOR LED GROW LAMPS AND MECHANICAL VENTILATION DUCTS
6. 2X 6mm TEMPERED GLASS GUARDRAIL WITH PHOTOVOLTAIC LAMINATE INTERLAYER. TIE PHOTOVOLTAIC SYSTEM TO GREENHOUSE LIGHTING SYSTEM. BENCH SEATING AND POLLINATOR GARDEN SPREAD AT MAX. 20m DISTANCES ALONG WALKWAY.
7. ALUMINUM EXPANSION TRACK BETWEEN BRIDGE DECKS.
8. RECYCLED LUMBER DECKING ON ADJUSTABLE PAVER PEDESTAL SUPPORT.
9. EXISTING CONCRETE STRUCTURE TO REMAIN.
10. NEW PEDESTRIAN AND MAINTENANCE RAMP CONSISTING OF 100mm REINFORCED CONCRETE DECK, 68mm METAL DECK ON PAINTED HSS MOMENT FRAME CONNECTIONS. PROVIDE 100mm UPSTANDS TO RECEIVE AGGREGATE EPOXY FINISH WITH COVE BASE.
11. TRELLIS CONSISTING OF CABLE TIE AND ROD TO STEEL ANGLES TOP AND BOTTOM.
12. MECHANICAL AND ELECTRICAL SERVICING TO RUN IN DEDICATED PLENUM BELOW FINISH FLOOR.
13. RAINWATER GARDEN AT EACH BRIDGE PIER, DRAIN TO "BIG-O" BELOW GRADE RAINWATER HARVESTING SYSTEM. PUMP UV-TREATED RETAINED GREY WATER BACK TO GREENHOUSE DRIP SYSTEM.
14. URBAN MEADOW CONSISTING OF POLLINATOR GARDENS AND CRUSHED GRAVEL WALKING PATHS.



LEGEND:

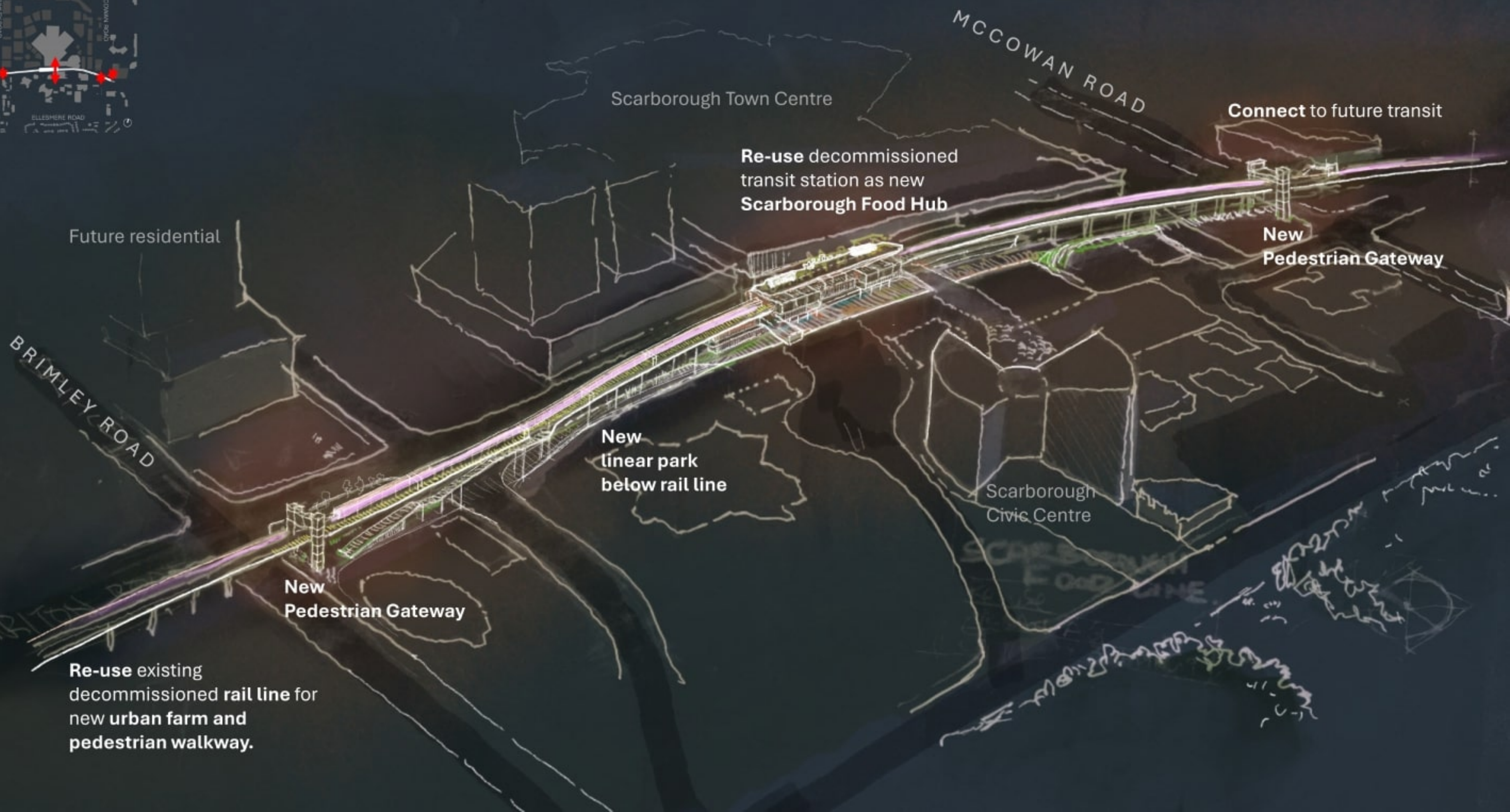
1. ARCHITECTURALLY EXPOSED STRUCTURAL STEEL: 200mm x 200mm HSS MOMENT FRAME STRUCTURE FULLY WELDED AND GRINDED, EPOXY PAINTED.
2. RECYCLED LUMBER DECKING ON ADJUSTABLE PAVER PEDESTAL SUPPORT.
3. ALL GLASS ELEVATOR, HYDRAULIC MACHINE ROOM-LESS TYPE, FRONT-SIDE CONFIGURATION.
4. 12.5mm TEMPERED GLASS ANCHORED WITH SPIDER FITTING CONNECTIONS TO HSS STRUCTURE.
5. SWITCH BACK STAIRS CONSISTING OF PAINTED 6mm THICK METAL GUARDRAILS
6. TRELLIS CONSISTING OF CABLE TIE AND ROD TO STEEL ANGLES TOP AND BOTTOM.
7. HARDSCAPING CONSISTING OF EMBEDDED "VEGETABLE" PATTERN ON CONCRETE PAVER.
8. PERMEABLE PAVERS.
9. URBAN MEADOW AND RAMP BEYOND.
10. GREENHOUSE "URBAN FARM" BEYOND.
11. EXISTING BRIDGE DECK TO REMAIN.



LEGEND:

- 1A. 100-150mm ENGINEERED SOIL, FILTER FABRIC, CRUSHED GRAVEL, STACKED LIGHT WEIGHT RIGID INSULATION, WATERPROOFING, LIGHTWEIGHT CONCRETE DECK
- 1B. 100-150mm ENGINEERED SOIL, FILTER FABRIC, CRUSHED GRAVEL, WATERPROOFING, EXISTING CONCRETE DECK
- 2. 2X 6mm TEMPERED GLASS GUARDRAIL WITH LAMINATE INTERLAYER.
- 3. SSG CURTAINWALL WITH BI-FOLD OVERHEAD DOORS EVERY 2400mm.
- 4. CONCERTINA DOORS
- 5. 6mm THICK INTERIOR ALUMINUM PANEL WITH CNC CUT PATTERN OF "VEGETABLE" PATTERN.
- 6. 50mm X 50mm HSS SCAFFOLD SYSTEM ANCHORED TO EXISTING SLAB.
- 7. MARKET STALLS CONSISTING OF POLYESTER POWDERCOATED TOPS AND PERCEPTUALLY "HUNG" FROM SCAFFOLD TUBE.
- 8. PATIO - LIGHT WEIGHT CONCRETE ON 68mm METAL DECK. 100mmX100mm HSS FRAMING MEMBERS
- 9. COMMERCIAL KITCHEN CONSISTING OF FULL HEIGHT GLAZING WITH FROSTED LAMINATE INTERLAYER
- 10. LINEAR PARK
- 12. EXISTING STEEL STRUCTURE TO REMAIN.

Context Plan



McCowan Road and Triton Road



Brimley Road and Triton Road



Before

After

Scarborough Centre Station



Before

Scarborough Food Hub



After