



P3b Canopy Project

Group HADID A2
Jessie Zhuang 20845100
Justin Quong 20828755

As an extension to the V1 Reclad Project, a canopy and vestibule were constructed to highlight the V1 South 2 main entrance. The canopy's design prioritizes three design aspects with the first being shading and shelter, wayfinding, and continuity with the building's facade. The extruded fins that overhang support sheets of polycarbonate that provide sufficient shading for passing pedestrians. The protruding design of the fins contrasts with the rounded and closed facade fins and acts as a form of wayfinding. The intention of the design was to keep consistency with the fin wave/curtain pattern that is present on the facade.

Canopy Design Precedents:

Canopy Fin Concept



Miami Beach Convention Center, Miami USA

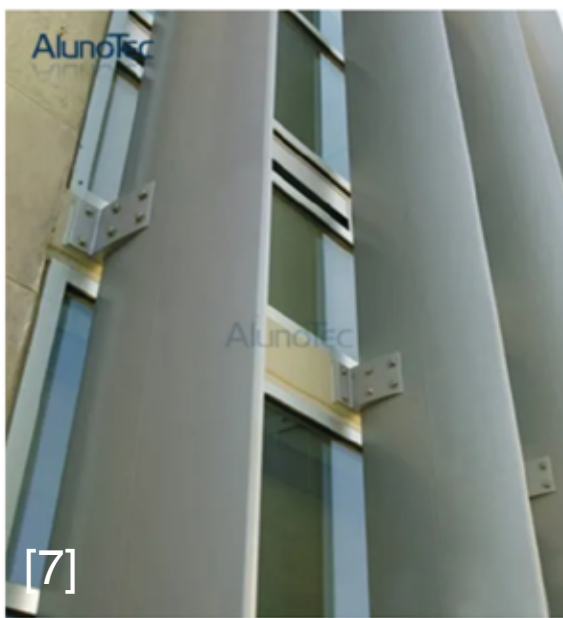
- Cantilevered Fins extruding out of the building indicate entrances
- Glass Panels under fins to protect from rain and provide shading
- Parametric fins and canopy resemble a wave-like pattern
- Fin design attach to curtain wall



Curtain

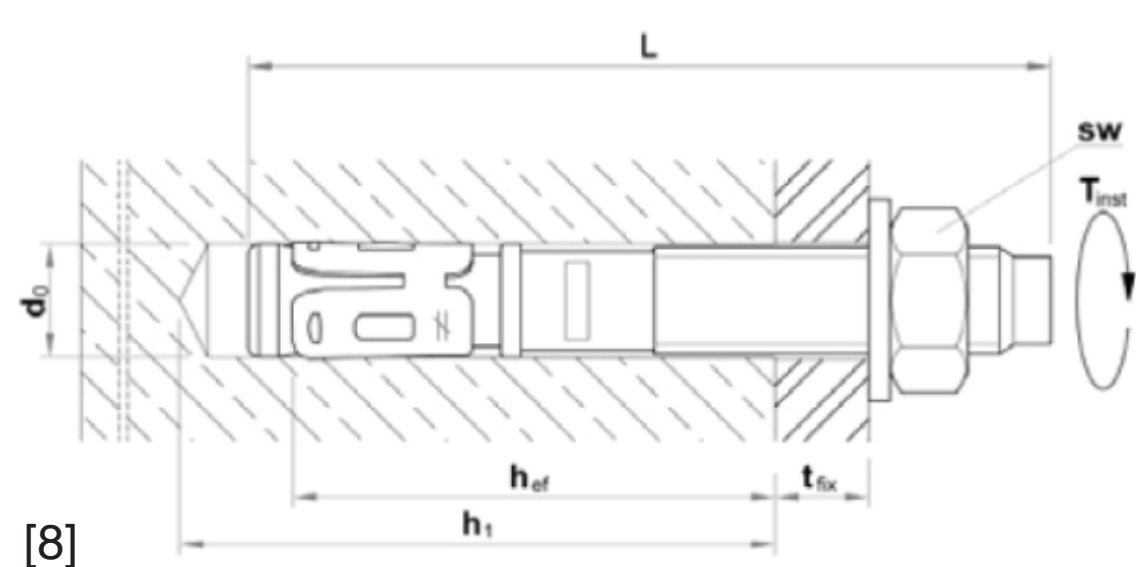
- Curtain curves perceived as calming and free-flowing
- Allow sunlight to pass through and provide shading

Fin Connection



Vertically perforated fins aluminum sun louver for facades

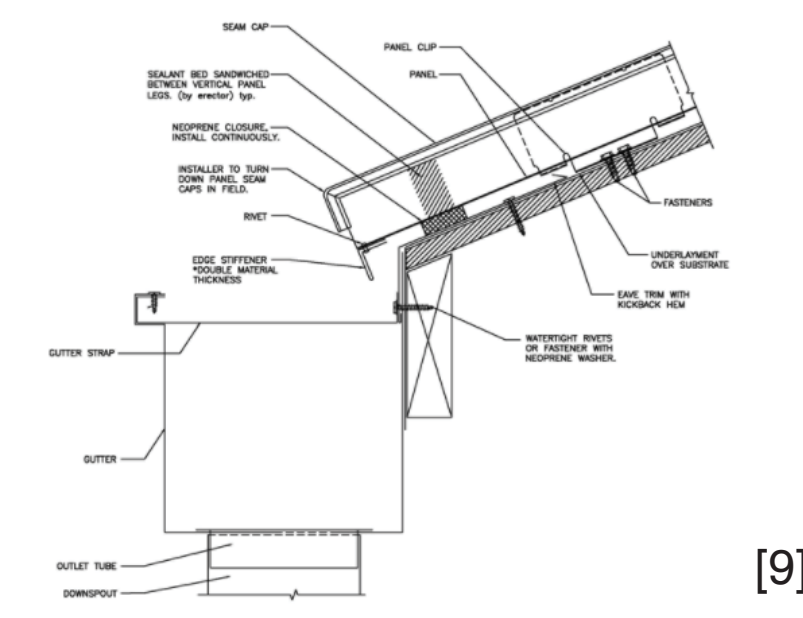
- Use of angle plates tied to floor slabs



Wedge Anchor

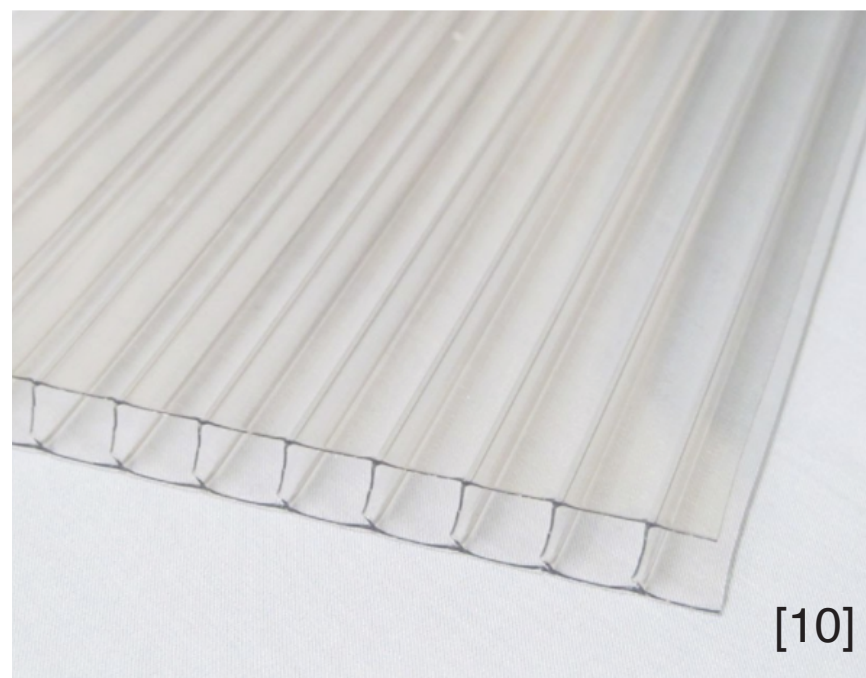
- Wedge anchors tie into the concrete floor slabs and expand when tightened
- Spacing of anchors are important, too close might cause cracking in concrete

Gutter/Drainage & Snow Load



Steel Eaves Gutter

- Steel provides a clean look compared to aluminum gutters
- Gutter funnels water out of outlet tube away from pedestrian traffic



Polycarbonate Sheets

- Polycarbonate sheet to act as a glass substitute
- Much lighter, cheaper, and more durable than glass
- Clamp underneath the proposed fins to provide shelter



1" diameter steel snow guards

- Prevent snow from piling up in front of the entrance



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Vestibule Design Precedents:



Standard aluminum glazed storefront doors

- Simple and clean look
- CMH outswing doors - keep a similar aesthetic
- Key card activated doors to enter living areas
- Doors to the vestibule do not require key card activation for easy exit
- Accessibility door buttons for accessible access



Citations:

[1] "Event management technology & Hospitality Solutions." [Online]. Available: <https://www.cvent.com/venues/miami-beach/convention-center/miami-beach-convention-center/venue-5044f0f1-ed41-402c-a797-92c17dd4b102>. [Accessed: 11-Apr-2021].

[2] "Curtains-Blowing-Home." City Furniture. [Online]. Available: <https://www.cityfurniture.com/odds-ends/wp-content/uploads/2015/10/curtains-blowing-home-issues.jpg>. [Accessed: 11-Apr-2021].

[3] "Unbreakable tempered glass storefront doors and windows." Unbreakable Tempered Glass Storefront Doors And Windows - Buy Glass Storefront Doors, Storefront Doors, Frameless Glass Door Product on Alibaba.com. [Online]. Available: https://www.alibaba.com/product-detail/Unbreakable-tempered-glass-storefront-doors-and_60776606611.html. [Accessed: 11-Apr-2021].

[4] Google Maps. [Online]. Available: <https://www.google.com/maps/@43.4703055,-80.5364277,3a,39.3y,41.92h,97.08t/data=!3m6!1e1!3m4!1sWcZqxElhxeVjHDNV0iB-YA!2e0!7!16384!8i8192?hl=en>. [Accessed: 11-Apr-2021].

[5] J. Eldred, "The 4 Types of Key Card Entry Systems - Buying Guide," Safe and Sound Security, 20-Aug-2020. [Online]. Available: <https://getsafesoundsound.com/2018/05/keycard-entry-systems/>. [Accessed: 11-Apr-2021].

[6] D. M., "Proper Automatic Door Opener Height - What You Need To Know, 21-Jan-2019. [Online]. Available: <https://blog.autodoorandhardware.com/2019/01/proper-automatic-door-opener-height.html>. [Accessed: 11-Apr-2021].

[7] "Hot Item" Vertically Perforated Fins Aluminium Sun Louver for Building Facades," Made. [Online]. Available: <https://alunotec.en.made-in-china.com/product/sSNnqdOMwRpi/China-Vertically-Perforated-Fins-Aluminium-Sun-Louver-for-Building-Facades.html>. [Accessed: 11-Apr-2021].

[8] SSI Anchors and Hammer Drill Bits - Wedge Anchors throughbolt WA - Simpson. [Online]. Available: <http://www.ssianchorsanddrill.com/Wedge-Anchors-throughbolt-WA-Simpson.html>. [Accessed: 11-Apr-2021].

[9] "Proper Design And Detailing Remain Critical As Metal Roofing Sales Continue To Grow," Design & Build With Metal.com. [Online]. Available: <https://designandbuildwithmetal.com/featured-content/2020/07/23/proper-design-and-detailing-remain-critical-as-metal-roofing-sales-continue-to-grow>. [Accessed: 11-Apr-2021].

[10] "Clear 10mm Twin Wall CoverLite® Polycarbonate Panel," Duralight Plastics, 12-Feb-2021. [Online]. Available: <https://www.duralightplastics.com/10mm-double-wall-coverlite-clear.html>. [Accessed: 11-Apr-2021].

[11] "Continuous Rod Snow Guards," Sieger Snow Guards. [Online]. Available: <https://www.siegersnowguards.com/a/continuous-rod-snow-guards.html>. [Accessed: 11-Apr-2021].

Client:

Campus Housing Waterloo
200 University Ave W
Waterloo, ON
N2J 4B6

Designers:

HADID A2
Justin Quong 20828755
Jessie Zhuang 20845100

Site:

Village 1 South 2 Entrance

Title:

Precedents

Scale: NTS Project: P3b Date: 4/12/2021

Drawing #:

A100



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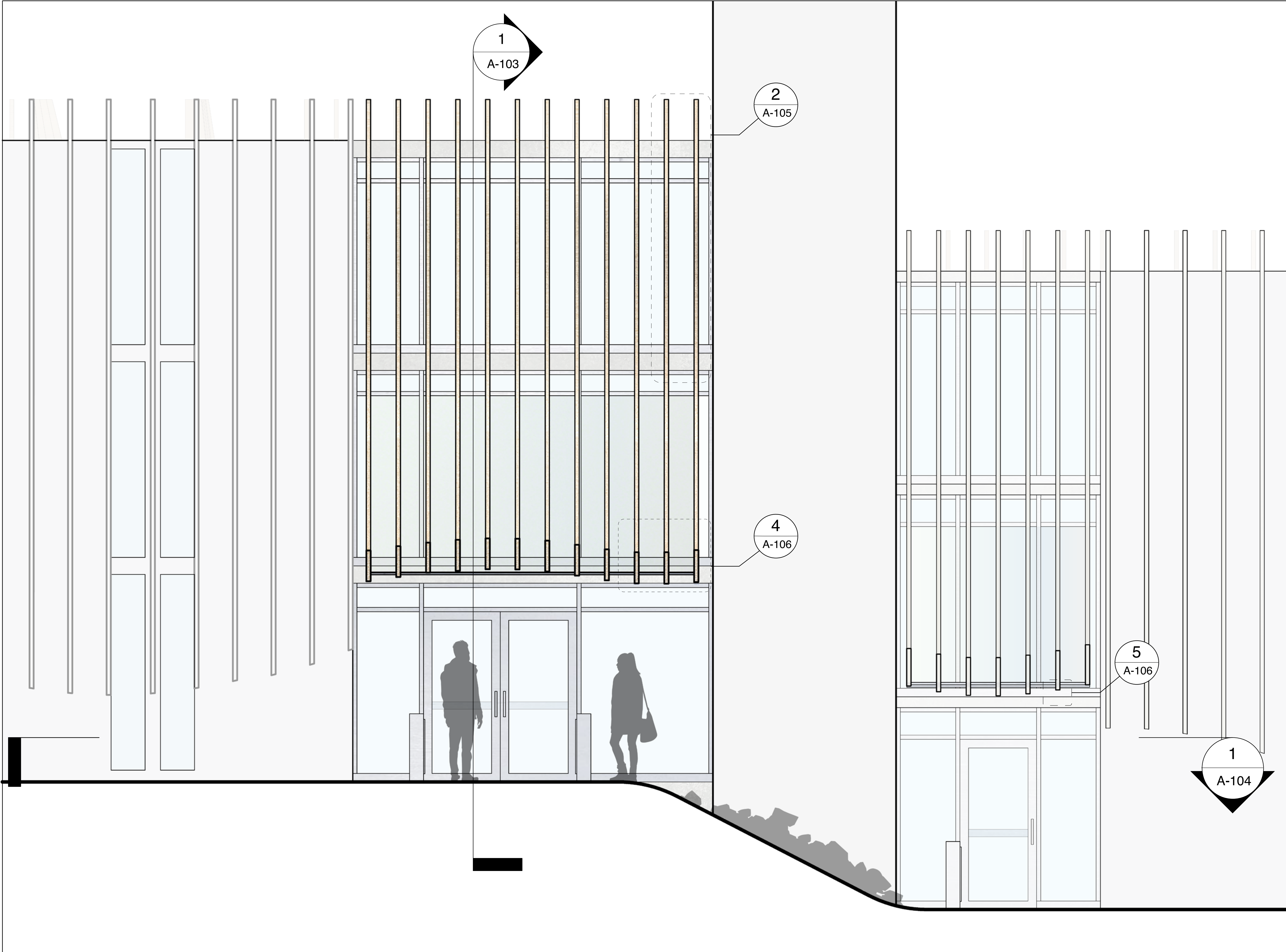
Designers:
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Justin Quong 20828755
Jessie Zhuang 20845100

Site:
Village 1 South 2 Entrance

Title:
Canopy Render

Scale: NTS	Project: P3b	Date: 4/12/2021
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Drawing #:
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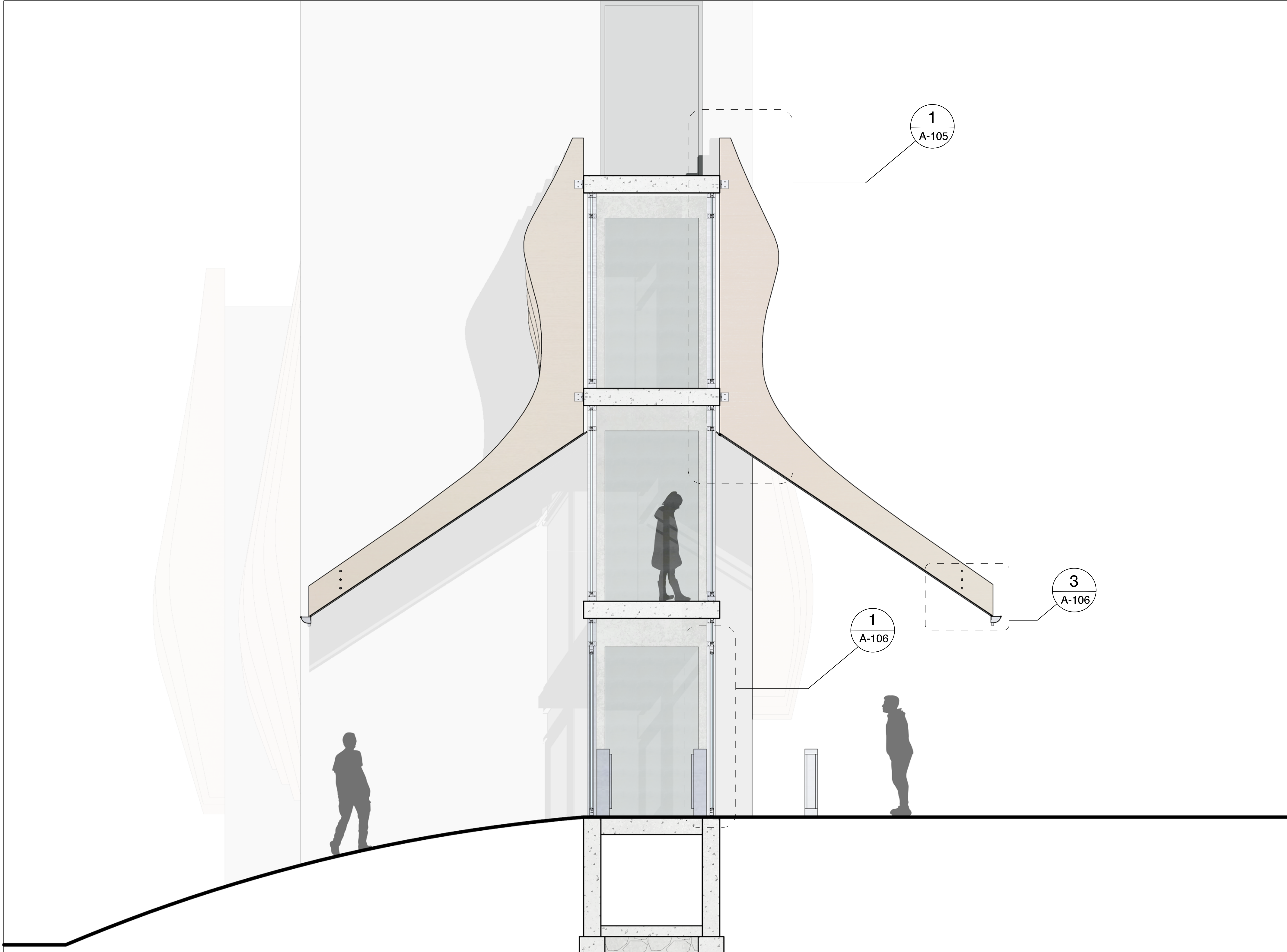
Designers:
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Justin Quong 20828755
Jessie Zhuang 20845100

Site:
Village 1 South 2 Entrance

Title:
Elevation

Scale: 1:20	Project: P3b	Date: 4/12/2021
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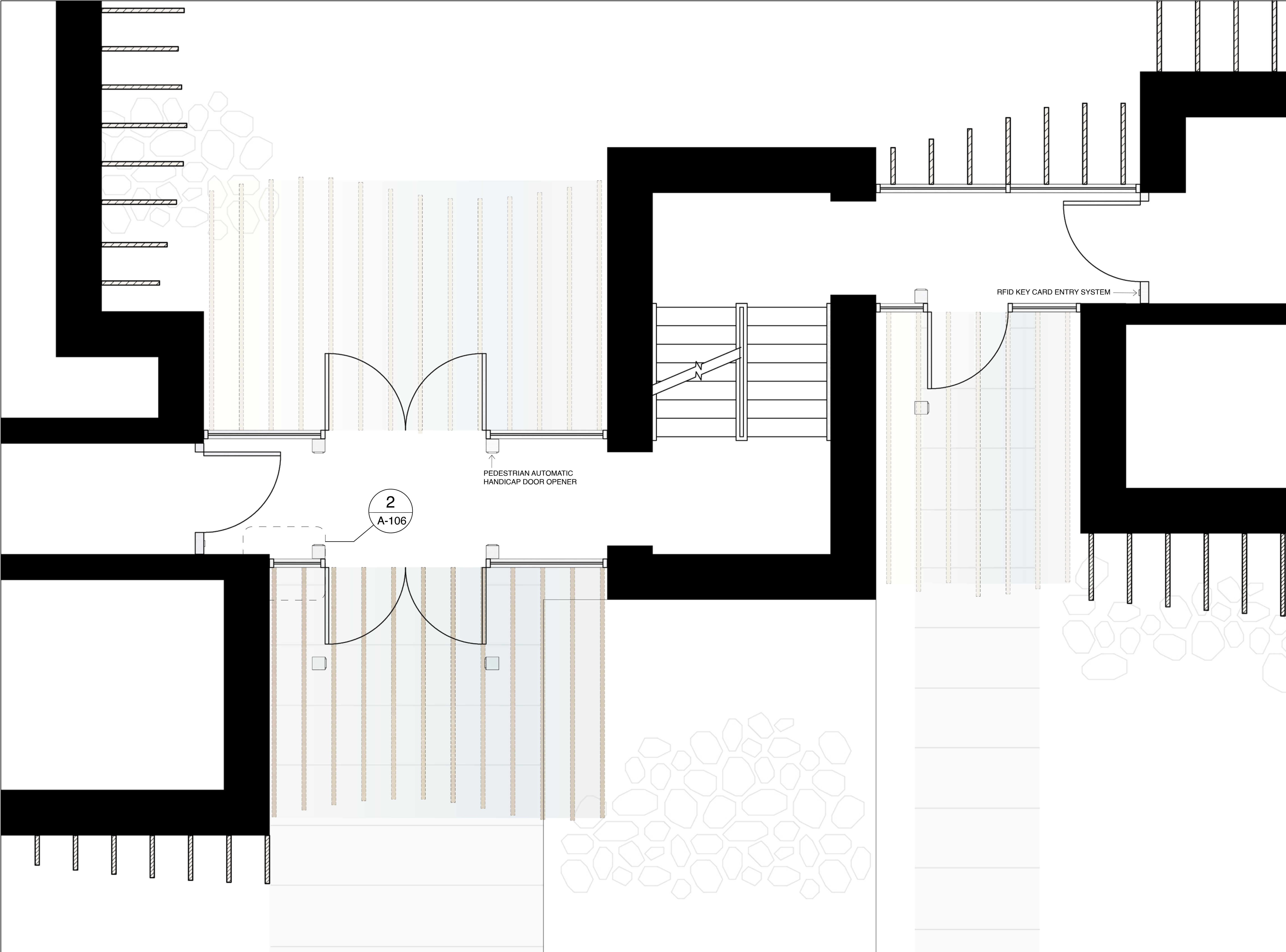
Designers:
HADID A2
Justin Quong 20828755
Jessie Zhuang 20845100

Site:
Village 1 South 2 Entrance

Title:
Section

Scale: 1:20	Project: P3b	Date: 4/12/2021
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Drawing #:
A103



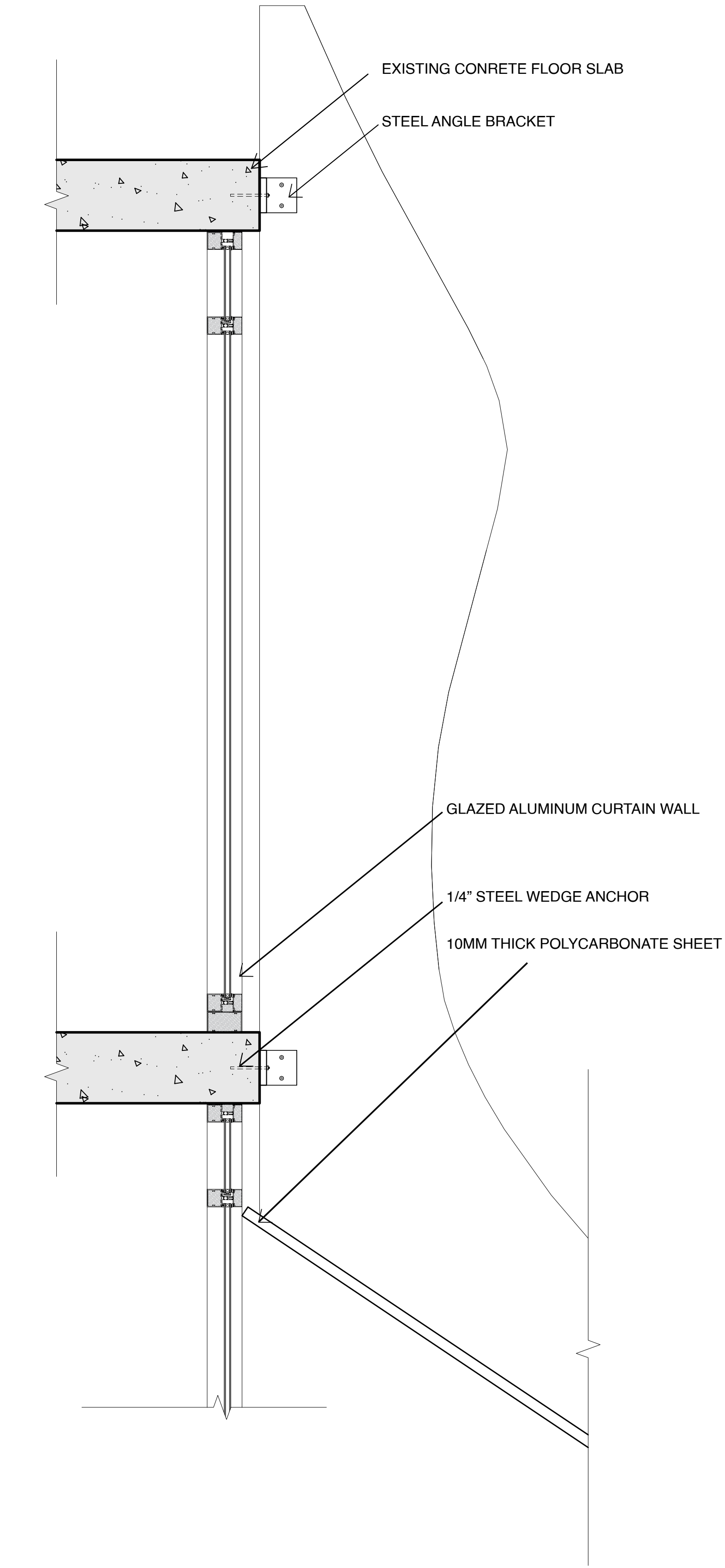
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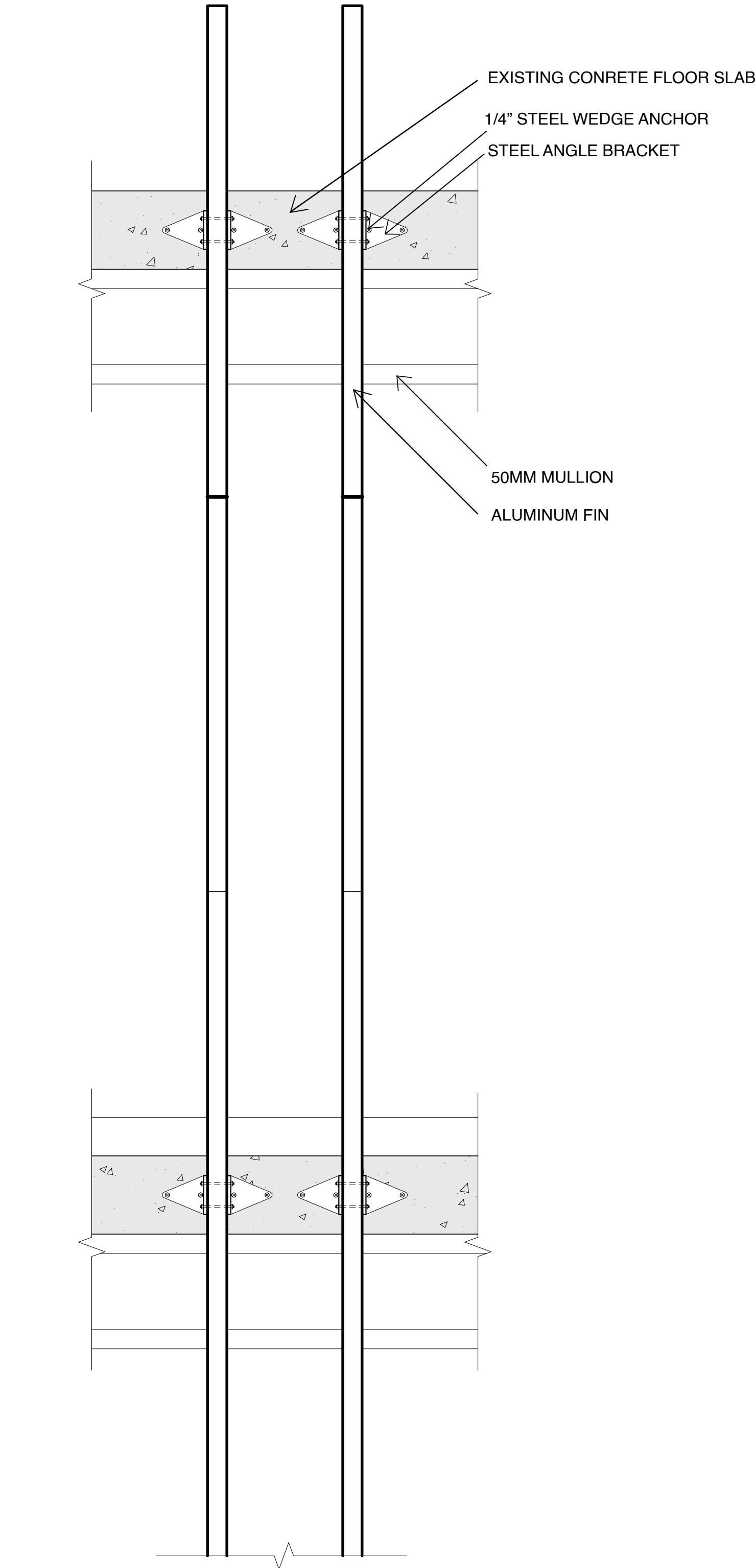
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Designers:		
HADID A2 Justin Quong 20828755 Jessie Zhuang 20845100		
Site:		
Village 1 South 2 Entrance		
Title:		
Floorplan		
Scale:	Project:	Date:
1:20	P3b	4/12/2021
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A104		



1 CANOPY TO FLOOR SLAB CONNECTION (SECTION)
1:10



2 CANOPY TO FLOOR SLAB CONNECTION (ELEVATION)
1:10



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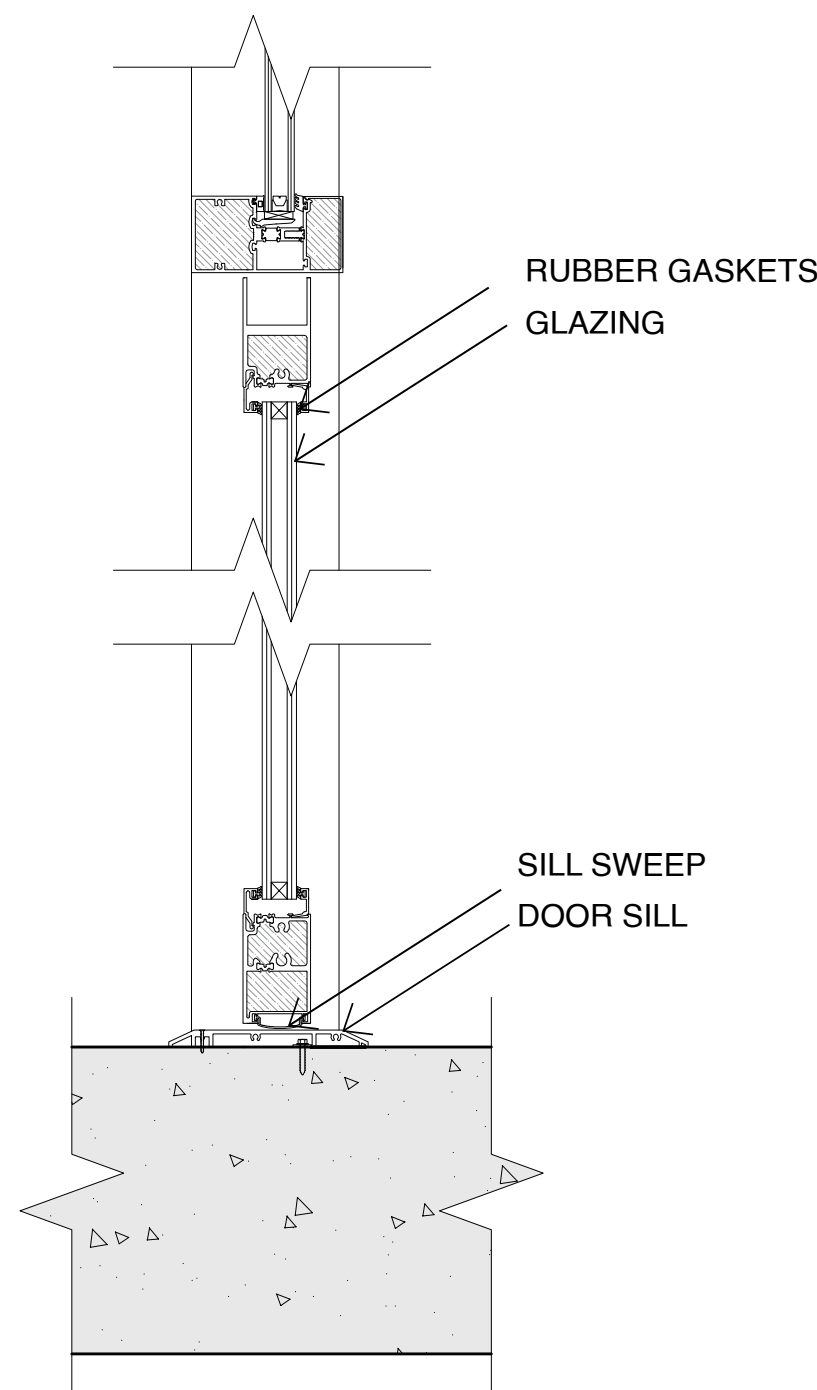
Site:
Village 1 South 2 Entrance

Title:
Canopy Fin Connection Detail Drawings

Scale: 1:10	Project: P3b	Date: 4/12/2021
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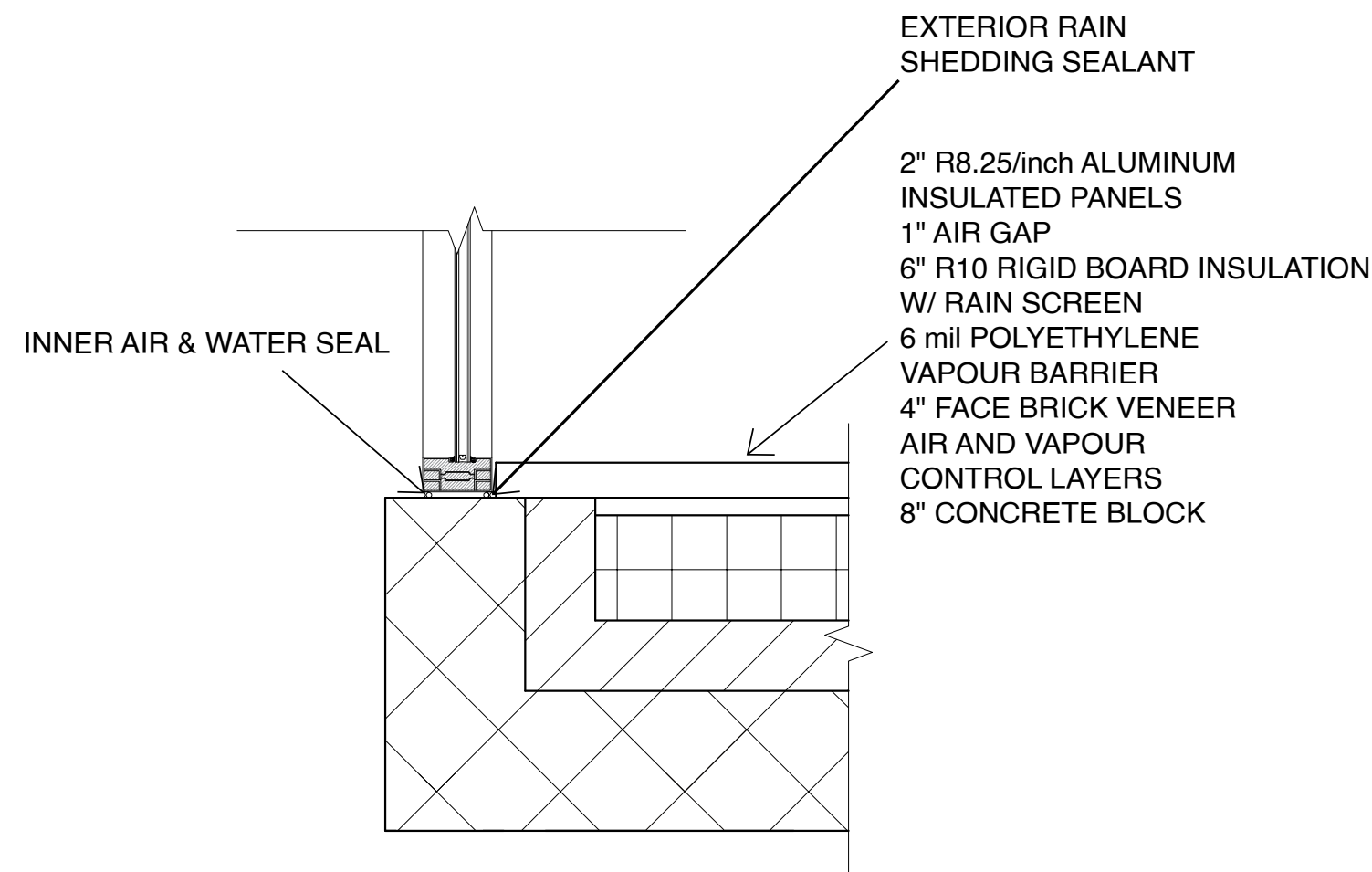
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1

DOOR TO GROUND DETAIL

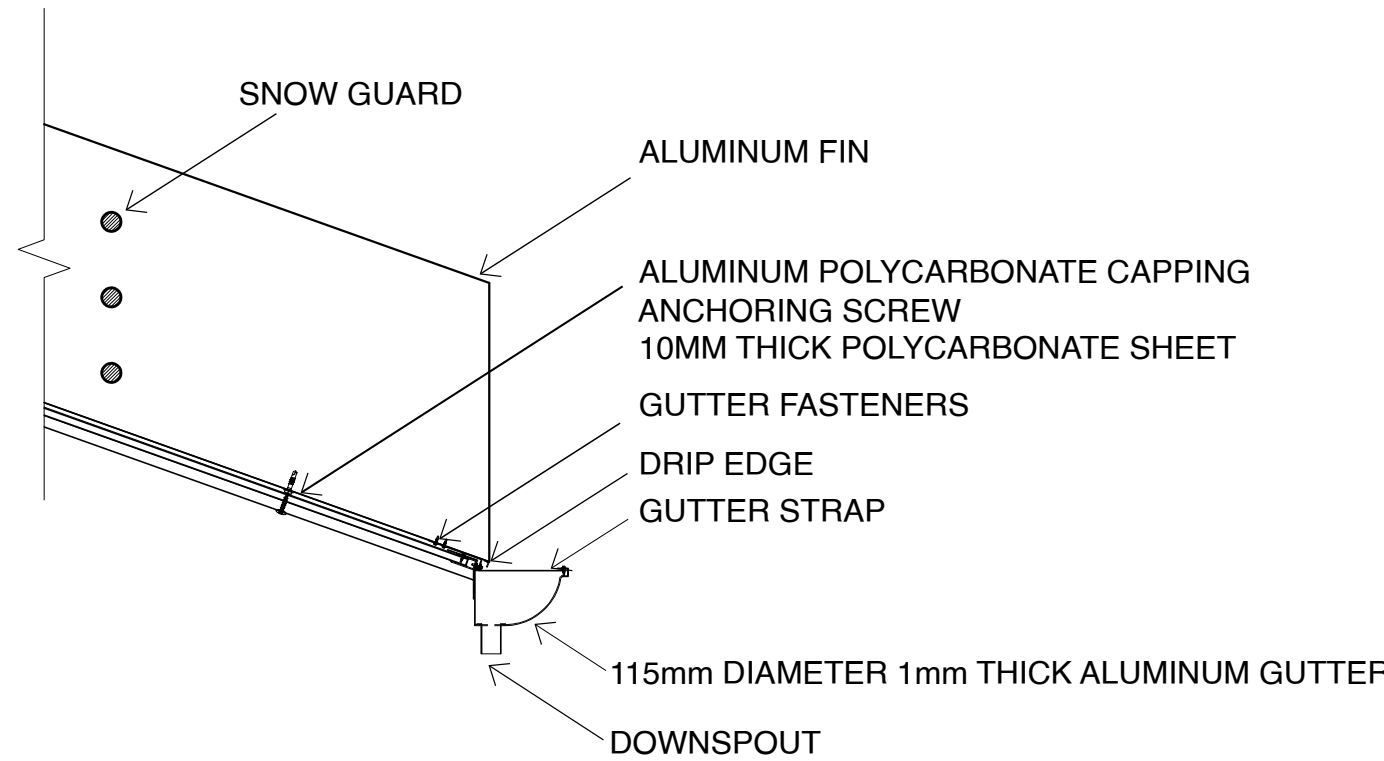
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2

VESTIBULE TO MAIN FACADE CONNECTION

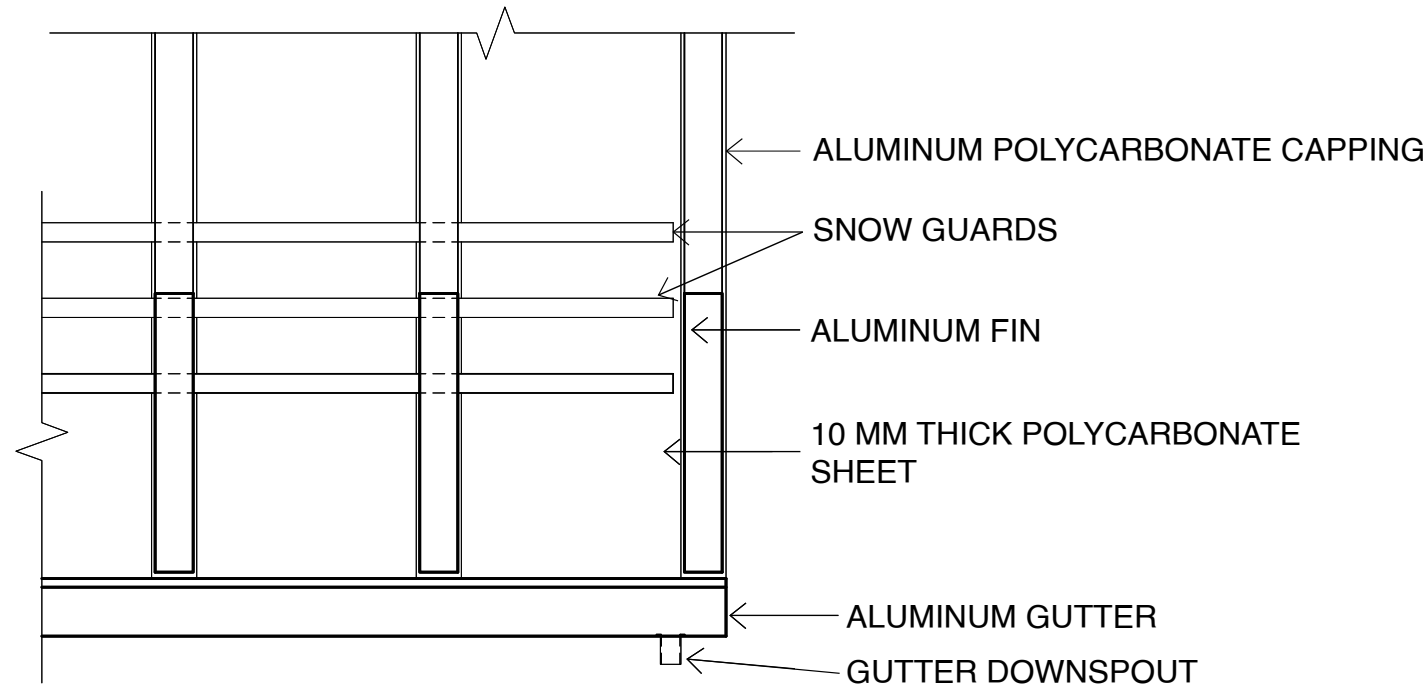
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3

SNOW LOAD & DRAINAGE DETAIL

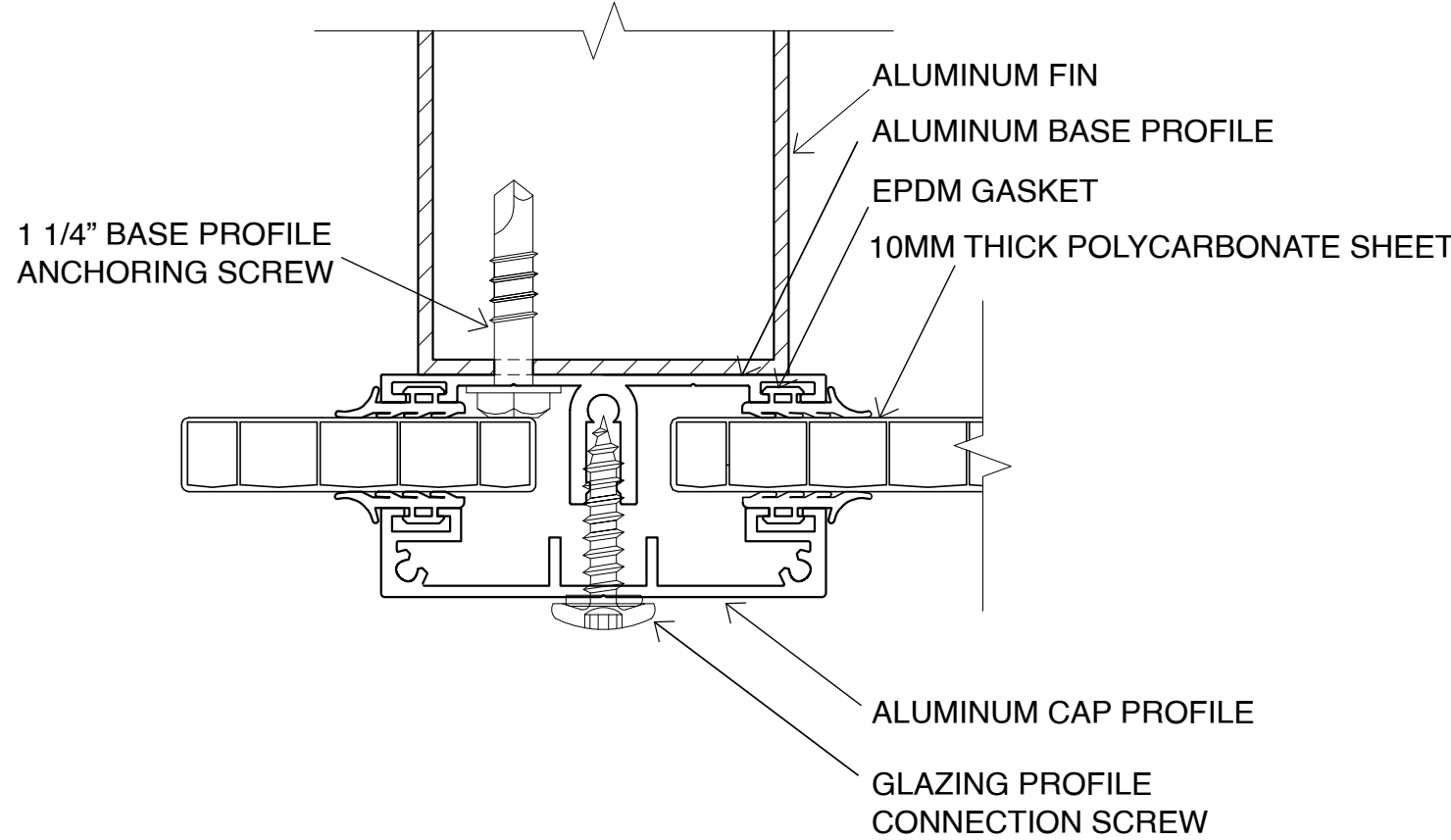
1:10



4

SNOW GUARD CONNECTION DETAIL

1:10



5

POLYCARBONATE CONNECTION DETAIL

1:1

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HADID A2
Justin Quong 20828755
Jessie Zhuang 20845100

Site:

Village 1 South 2 Entrance

Title:

Detail Drawings

Scale: 1:10, 1:1 Project: P3b Date: 4/12/2021

Drawing #:

A106