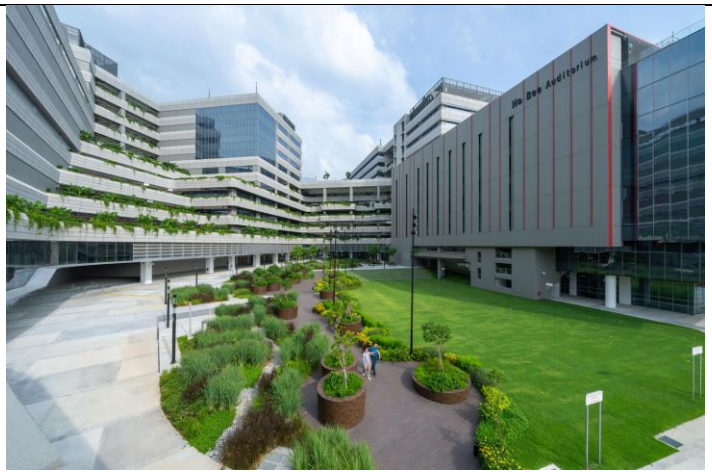
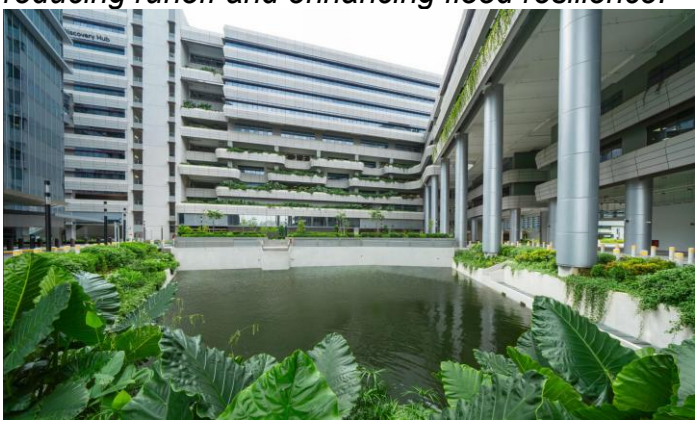
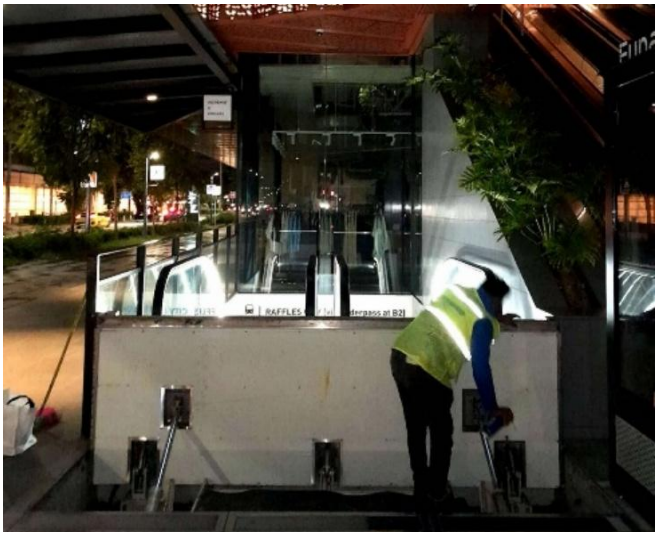
Annex B: Examples of flood-resilient developments

Developments	Details
Singapore Institute of Technology (SIT) Punggol Campus	- SIT Punggol Campus' design and architecture harnesses nature to enhance flood resilience - Its network of green and blue spaces serves a dual purpose of community spaces during dry weather while managing stormwater during rainfall events: o **Wet detention ponds** manage excess rainfall runoff while serving as aesthetic visual anchors within the campus o **Sunken plazas and open lawns** serve as functional permeable surfaces that allow rainwater to soak into the ground, reducing the generation of rainfall runoff. The sunken plazas also transform into floodplains to temporarily hold rainwater during storms. Surrounding pathways ensure unimpeded movement around the plazas in all weather conditions o **Gravel swales, rain gardens, and cleansing biotopes** slow, capture and filter pollutants from rainwater, while integrated elements such as rain chains and a "waterfall" mesh screen ensure internal drainage is sensitively managed. o Treated rainwater harvested is used for SIT's drip irrigation initiative  *Caption: Vertical greenery helps cool the campus environment and guide rainwater flow to areas designed for controlled drainage.*

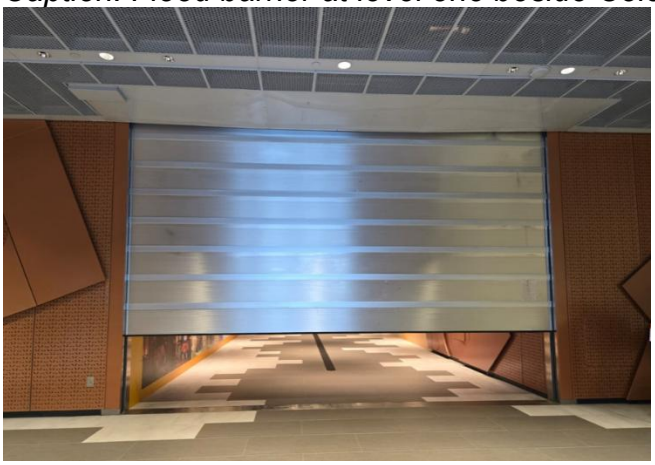
	 *Caption: Bioswales enhance campus life while supporting stormwater management. Their permeable design allows rainwater to soak into the ground and temporarily retain excess water during heavy rainfall, reducing runoff and enhancing flood resilience.*  *Caption: Stormwater collection ponds help manage excess rainfall by providing above-ground water storage, reducing reliance on conventional underground detention tanks. They also serve as attractive landscape features that enhance the campus environment.*

Funan	- CapitaLand Investment (CLI) had evaluated Funan's flood risks and its readiness in responding to such risks as part of a baseline study across its portfolio of assets
	
	- As part of the property's redevelopment, flood-resilient features were incorporated to help protect its occupants and interior spaces at key ingress points. These include:
	  ○ **manual raise-up barriers** at the outdoor escalator leading to the basement, exterior ground-floor lift lobbies, and access point to the switch room;
	  ○ **automatic flood barriers** at basement carpark entrances along North Bridge Road and Coleman Street; and
	  ○ **raised ramp platforms**, including at the pick-up/drop-off along North Bridge Road.
	
	- To complement these, Funan's operations team conducts regular routine checks which include annual inspection to validate compliance and functionality of their flood barriers. There are also

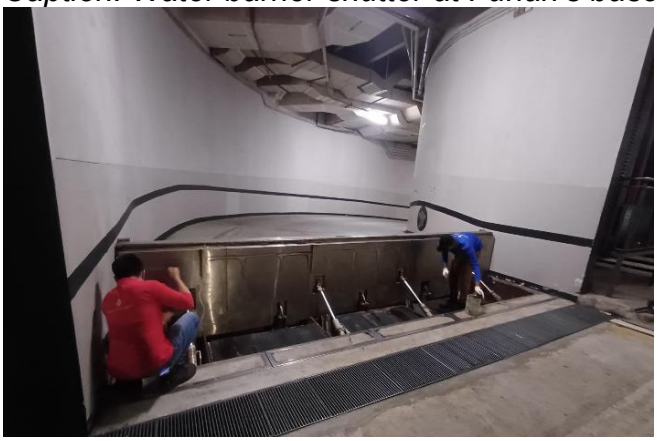
robust standard operating procedures for flood, water backflow and sprinkler activation events that are tested for readiness through coordinated exercises organised by CLI



Caption: Flood barrier at level one beside Coleman Street.



Caption: Water barrier shutter at Funan's basement passageway.



Caption: Funan's car park flood barrier to prevent flooding of basement.