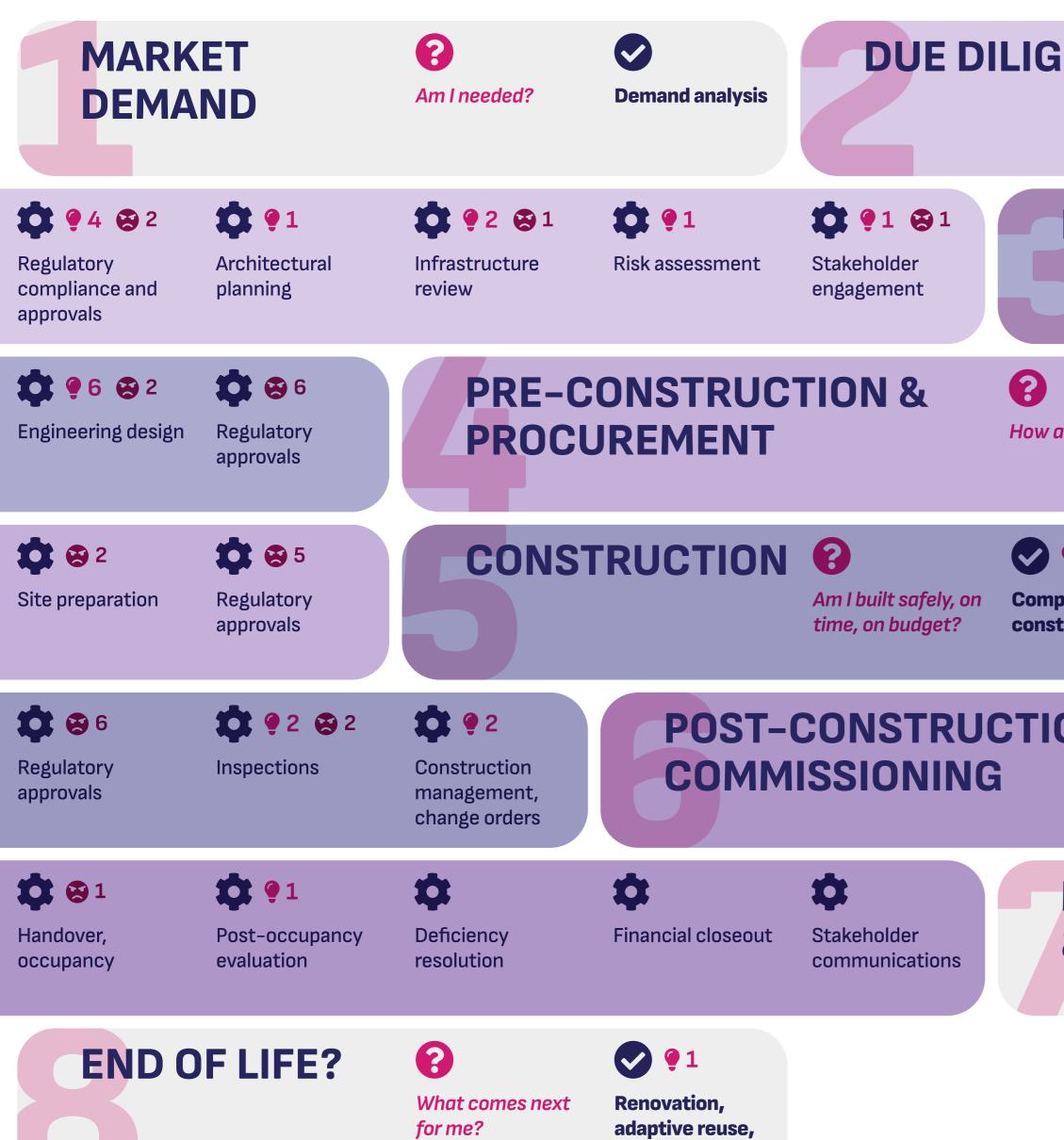
END-TO-END HOUSING PRODUCT *The Lifecycle of a Home*



demolition

ΓΙΟΝ	Legend		OUESTION the home asks in this phase	OUTCOME the home needs to go to next phase	Correction of the support the outcome
GENCE	<pre> • 1 Am I feasible? </pre>	<pre></pre>	Feasibility study	Site analysis	Legal due diligence
DESIGN	8 ENGIN	EERING	 ? ? 3 How am I designed? 	 9 3 2 1 Permit applications 	Aaster planning
am I built?	Green light for construction	Construction management plan	Construction budget, schedule	Supply chain procurement process	Logistics, inventory
9 1 npleted struction	Construction stages	t Transportation	Mobilization of temp facilities, equipment, utilities	to Installation, assembly	D Health, safety
ON &	Contract to be used? How to improve me?	Cocupancy	Commissioning	Final inspection, punch list	Regulatory approvals
	ENANCE ATIONS	Am I cared for so I can care for my people?	Upkeep, compliance, management		





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Financial assessment

\$? 2

Architectural, landscape design

1 • 4 • 1

Off-site manufacturing, prefabrication

() ? ?

Quality control, assurance

‡ ? 2

Documentation, closeout

Phase 2 DUE DILIGENCE			Legend QUESTION the home asks in this phase	Image: Note of the systemImage: Note of the systemCUTCOME the home needs to go to next phaseACTIVITY to support the outcome	OPPORTUNITYPAIto exploreto re
B Am I feasible?	<image/>	Feasibility study	OSite analysis	bb Legal due diligence	Image: bit with the second s
	Image: Community facilitation Image: Community facilitation	 Al-generated highest, best use 	Site selection		Financing and reprint
CompleteRegulatorycompliance andapprovals	<image/> <section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header>	<image/> <section-header><section-header><section-header></section-header></section-header></section-header>	Kisk assessment	<image/>	
<image/> <list-item> We e e Building code, design standard co-pilot Digital compliance check for owners and regulators Regulatory readiness Gommon data environment We e Continuous regulation updates challenge industry standardization </list-item>				<image/> <image/> <image/>	

industry standardization

SDIGITAL

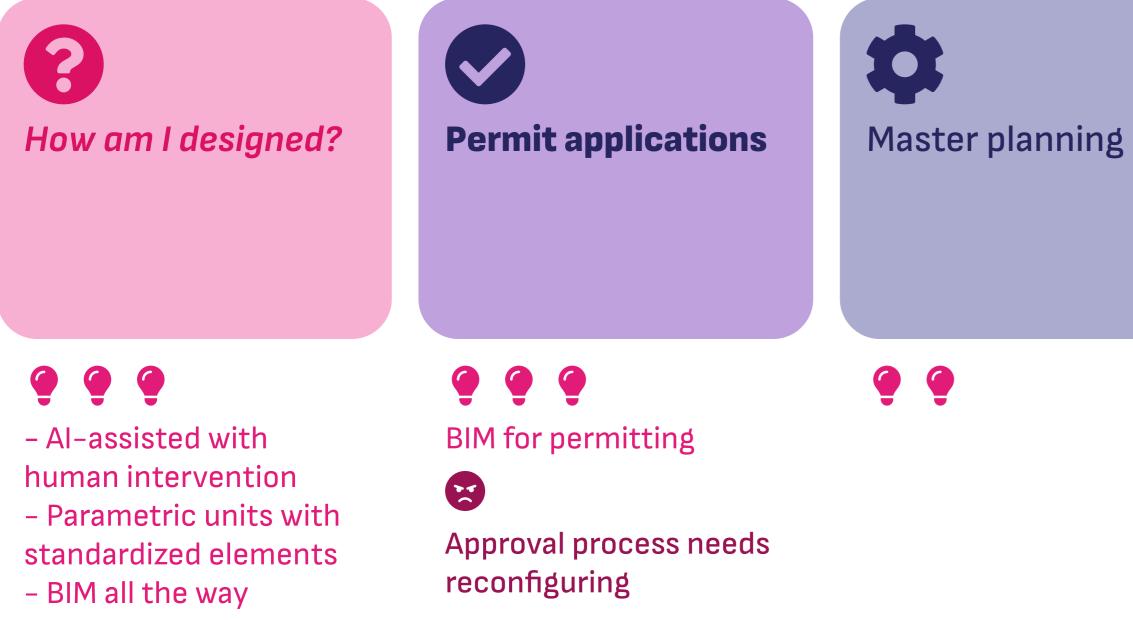


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and related



Phase 3 **DESIGN & ENGINEERING**









the home needs to

go to next phase



ACTIVITY to support the outcome



Architectural, landscape design

99







- BIM-led - Optimize and standardize production design - Al-assisted design



Pre-construction constructability would inform design and engineering to be efficient

- Needs digitization - Liability risk with prefab and preapproval





Regulatory approvals



Phase 4 **PRE-CONSTRUCTION & PROCUREMENT**



Off-site manufacturing, prefabrication

Figure out how to make wood modules more precise; current process is people in a shed, not on site



Volume to justify investment in economies of scale



- Robotics - Digital twins **Regulatory** approvals

Needs digitization





QUESTION the home asks in this phase



the home needs to

go to next phase



ACTIVITY to support the outcome

OPPORTUNITY to explore



Construction budget, schedule





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Transparent availability of goods



Data network for prefab manufacturers to improve supply chain efficiencies



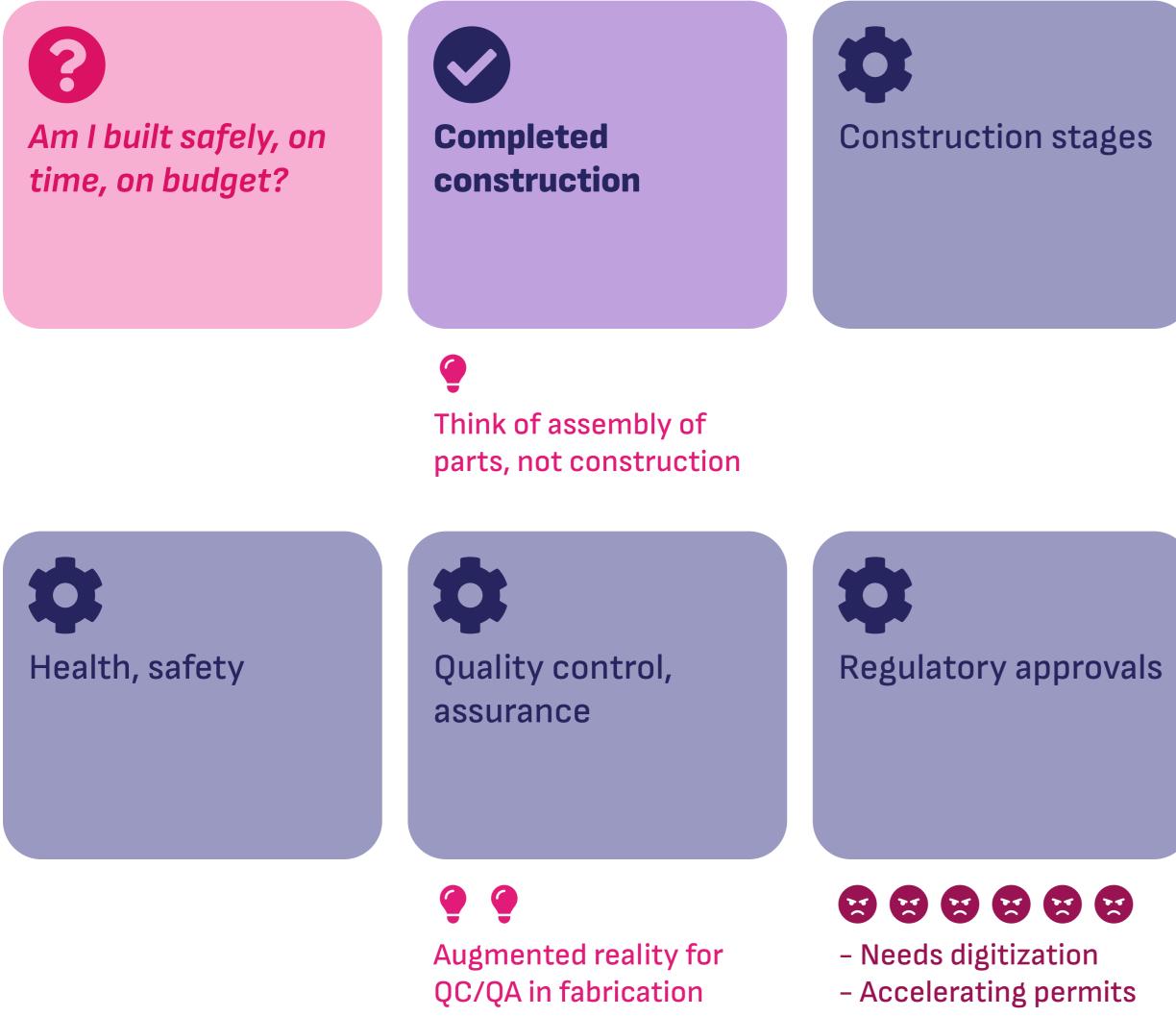








Phase 5 CONSTRUCTION





QUESTION

this phase

the home asks in



the home needs to

go to next phase



ACTIVITY to support the outcome

OPPORTUNITY to explore

Ø Transportation

Mobilization of temp facilities, equipment, utilities



Inspections Construction management, change orders

9 9

Augmented reality for inspections and compliance to BIM model

Air testing for 25 different 4plexes built the same is expensive and redundant







Phase 6 **POST-CONSTRUCTION & COMMISSIONING**



Lifecycle management

Barcode and sensing tech for POE





QUESTION the home asks in this phase





ACTIVITY to support the outcome

9 **OPPORTUNITY** to explore

Final inspection, punch list



the home needs to

go to next phase

Occupancy permit, business licence

Documentation, closeout

9

9





Financial closeout



Stakeholder communications





