





#### Introduction

MTVH believes everyone should have a home and a chance to live well.

The Housing Sector faces a range of unprecedented challenges over the next 10 years. These vary from technological advancements, changes in the way we live and build to sustainability and how we minimise the impact of building new homes on the planet.

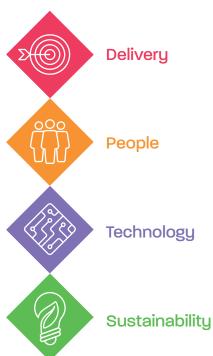
They also include a number of recent regulatory developments including:

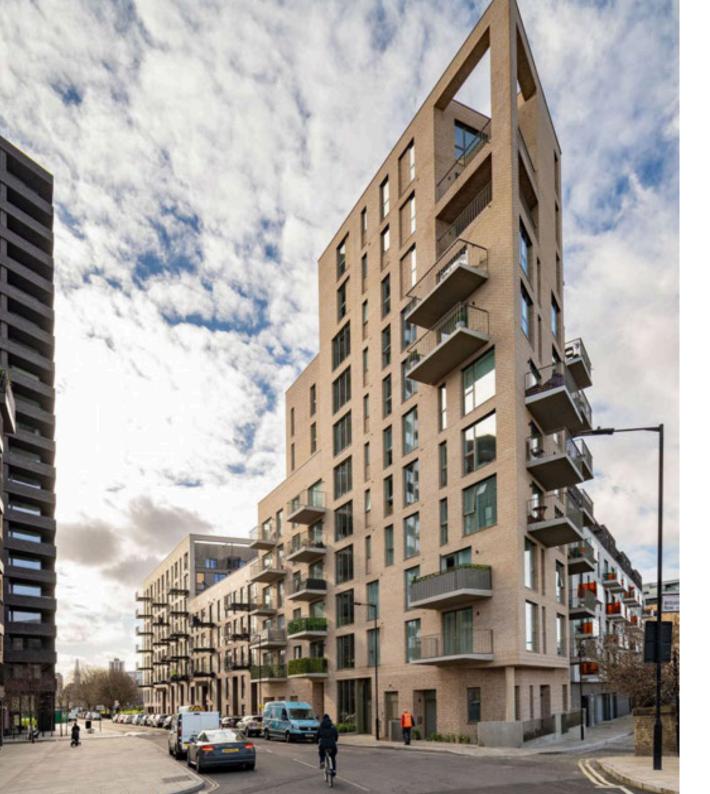


#### MTVH is committed to providing high quality homes for its residents.

To support this objective, MTVH has looked at the various challenges facing the housing sector and developed a Construction Plan to show how we will address these challenges.

Our new Construction Plan sets out a comprehensive platform of ambitious but realistic targets divided into four themes:





#### The Construction Plan also provides a series of goals that address key topics under each theme.

Against each goal we have set out a series of measurable targets showing how we will achieve them. The delivery timetable for achieving each goal is set out in the summary with each of the 78 topics numbered sequentially. The summary is colour coded by theme with each goal numbered to reference the specific topic in the Construction Plan.

The themes and topics are then outlined in more detail, including background and delivery objectives after the summary to ensure we understand the issues and what we as an organisation want to achieve.

MTVH has already been proactively working to develop responses to a number of these challenges by:

- Developing a Fire Safety Strategy that addresses the findings of the Hackitt Review
- Developing a Building Information Modelling (BIM) Policy that takes on board the "golden thread" principles set out in the Hackitt Review
- Creating the MTVH 'Later Living Design Guide', to address the different needs of the UKs ageing population.
- Commissioning an updated Mechanical and Electrical (MEP) specification for the new low carbon heating strategies required under The London Plan 2021
- Updating our standard Employer's Requirements to take account of handover changes proposed in the forthcoming Building Safety Bill
- Creating a lift specification to comply with The London Plan 2021 – Policy D5 and Policy D12

This Construction Plan builds on this work and identifies a range of additional initiatives that the Development Department will undertake to ensure that MTVH is well placed to address the challenges it will face over the next 10 years.

MTVH will use the Construction Plan to create muchneeded quality homes to rent and buy. We plan to deliver the homes through various procurement routes including land led development, Section 106 (S106) opportunities, joint ventures and partnerships with organisations who share our vision. MTVH recognises that certain procurement routes can place constraints on how homes are delivered. However, we also believe that there are principles and standards that must always be adhered to. We have reviewed current standards and our targets within this Construction Plan to identify mandatory requirements for all procurement routes. These include:

- Our Fire Safety Policy
- Our BIM Policy
- Our MEP specification

We aspire to provide the best homes possible with a target to achieve zero defects at handover within every new property. Due to the nature of construction, we understand that snags and defects can occur within our homes. We therefore recognise the importance of learning lessons from all of our schemes. We are in the process of adopting a new policy of carrying out the following reviews on each new scheme we deliver:

- A Post Occupancy Evaluation and initial assessment of lifecycle costs after one year, and
- A Post Occupancy Review and "Be Seen" energy monitoring assessment after two years at the end of the Rectification Period

(Each Post Occupancy Evaluation will include structured feedback from our residents.)

These will provide a continuous feedback loop to help develop and improve the homes we build and how we construct them.

MTVH also recognises the value of collecting data to assist with the performance and management of assets. Therefore, the following BIM policy has been rolled out to all construction projects:

- Blocks of any height to comply with MTVH BIM Requirements
- COBie data and 2D digital drawings to be complied for all other properties

MTVH places Health and Safety at the forefront of that we do. It is why we set up a dedicated Safer Building team within MTVH to ensure that we proactively implemented the important lessons from the Grenfell tragedy and it is why we are adopting a new overarching Health and Safety initiative within our development programme. Our aim is to promote a culture of Health and Safety excellence across all aspects of our development programme and positively influence the outcomes we achieve.

Good design is at the heart of our development programme and is central to delivering quality homes for our residents. This Construction Plan sets out a wide range of specific target areas to review our existing Design Guide to ensure that we meet the needs of our residents and value for money.

We will also be reviewing our approach to waste management across the entire development programme in line with our corporate strategy on reducing pollution, minimising climate change and committing to an effective circular economy. We hope our stakeholders will use the Construction Plan to understand the types of homes MTVH plans to build in the future.

- For contractors, this will be the standards we will require them to build to.
- For consultants, this will be the quality assurance, monitoring and aspirational goals we need them to work to.

MTVH will continue to work with companies that have a similar ethos and ambition in order to create better places to live.

MTVH is a learning organisation and embeds a culture of continuous improvement across all departments. This is a ligned with the Government's Balanced Scorecard which emphasises organisational learning and continuous improvement. To support this philosophy, the Construction Plan will be subject to a structured review programme to ensure that it continues to reflect best practice. Further details of this review programme are set out within this plan.

We are committed to working with our partners to produce great homes that are safe and affordable to live in. This Construction Plan is a key part of how we intend to achieve that goal.

Andrew Stubley
Director of Construction
SEPTEMBER 2022





#### CONSTRUCTION PLAN 2022-2032

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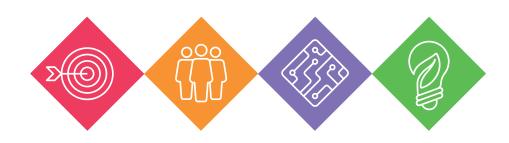
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### Delivery & People Construction Plan Summary

TOPICS	2022	2023	2024	2026	2028	2032
Health and Safety	Health & Safety Strategy (1)		Health & Safety Strategy review (2)			
Waste Management	Waste Management Strategy (3)		Waste Management Strategy review (4)			
Ethics	Code of Conduct (5)		Code of Conduct Review (6)			
PII Insurance	PI Insurance Review (7)					
Balcony Design	Balcony design review (8)					
Sprinklers	Sprinkler Review (9)			Sprinklered schemes serviced by MTVH (10)		
Complex Buildings	Updated MEP Performance Specification (11)	Monitoring MEP Engineers (12)				
Building Safety Bill	Completion Certificate procedure (13)	Resident Engagement Strategy (25)	Initial Completion Certificate Handovers (19)	Post Occupancy Evaluation (24)		
	Building Safety Principal Designer (14, 15)	Golden Thread / BIM (23)	Compliance Statements (20, 21, 22)			
	Updated Handover Protocol (16, 17, 18)					
Be Seen Monitoring	Be Seen Protocols (26, 27, 28)		Be Seen Monitoring (29)			
Design Guide	ESG Review (30)					
Quality Assurance	Develop Quality Assurance Framework (31)					
MMC	MMC Review (32)	MMC Pilot schemes (33)	MMC KPI Tracker (34)			
Social Value	Diversity & Inclusion Policy (35) Construction Skills Policy (37) Social Value Procurement (39)		Social Value Tracker (40)	D&I Review (36) CSP Review (38)		
Community Hubs				Community Hub pilot schemes (41)	Review Community Hubs (42)	
Downsizers		Downsizer typology (43)		Downsizer pilot schemes (44)	Review Downsizer typology (45)	
Home Working			Home Office Policy (46)	Home Office design review (47)		
Local Work Hubs				Local Work Hub Pilot schemes (48)	Local Work Hubs Review (49)	
Meanwhile Use		Meanwhile Use pilot schemes (50)	Meanwhile Uses Review (51)			

### Technology & Sustainability Construction Plan Summary

TOPICS	2022	2023	2024	2026	2028	2032
MEP Specification Review			MEPH Review (52)			
Electric Vehicles	Electric Vehicle Charging policy (53)				50% Active, 50% Passive EVC (54)	100% Active EVC (55)
Broadband	Broadband/Satellite Dish Policy (56,57)	Broadband spec (58)				
Connected Homes	Connected Homes specification (59)			First Connected Homes for sale (60)	First Connected Homes for rent (61)	
Parcel Deliveries	Parcel Delivery specification (62)					
Smart Meters	Smart Meter specification (63)			Data from Smart Meters (64)		
Big Data		Real Time Data Pilots (65)		Data Collection Policy (66)	Real Time Data Specification (67)	Real Time Data Collection (68)
Net Zero Carbon	Heating Policy (69) Net Zero Carbon Specification Review (70)		Net zero carbon onsite (71)			
Central Heating	ASHP Performance Spec (72,73)		Web based User Guides (74)			
Ventilation	Ventilation Spec (75,76)		Target Emission Rate 75% better than 2021 (77)			
Overheating	Overheating Spec (78)					

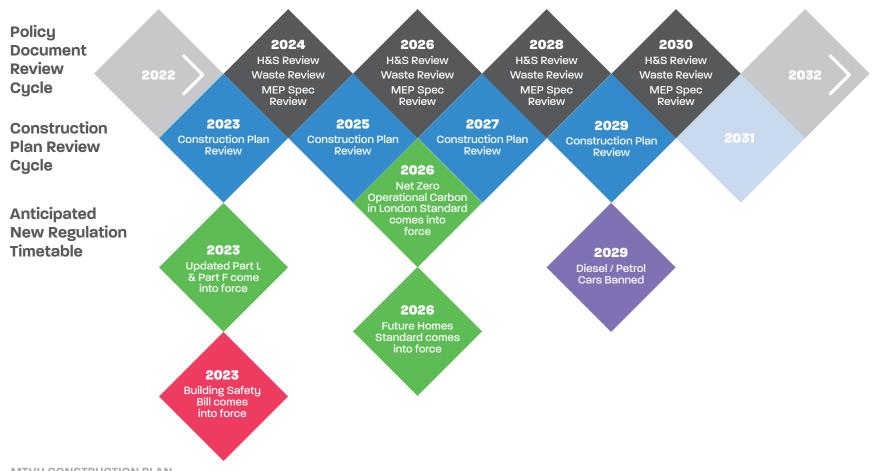


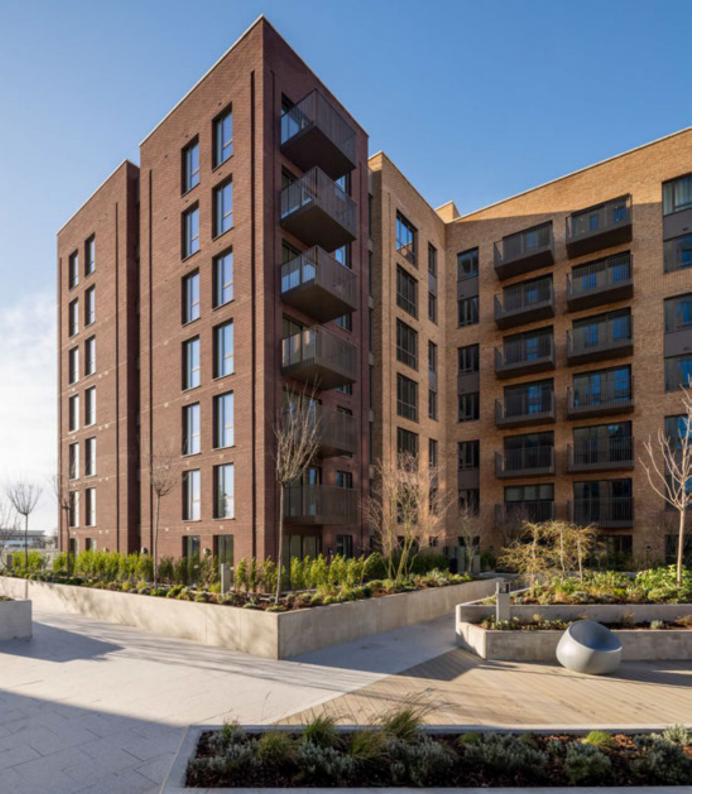
#### **Construction Plan Review Programme**

MTVH will undertake a structured Review Programme to ensure documentation, specifications, procedures and workstreams are updated on a regular basis.

The table below sets out our programme of reviews for both the overall Construction Plan and major policy documents that support the Construction Plan.

Additional reviews will also be undertaken when new regulations or changes to the sector come into force.





### Annual Review Cycle

In addition, annual reviews will be undertaken to ensure the MTVH Development Department is:

- Aligned with MTVH's Sales and Marketing Policy and that the various documents supporting the Construction Plan reflect the priorities of the Sales Team
- Adhering to the Greater London Authority (GLA) Zero Defects Charter
- Demonstrating Compliance with Development Processes and Procedures through internal and external audits
- Demonstrating compliance of construction Quality Assurance
- Achieving Customer Satisfaction
- Tracking Key Performance Indicators
- Taking on board feedback from any Post Occupancy Evaluations carried in the preceding period



### New Regulations

The immediate 2 year period preceding the start of this Construction Plan has been marked by an extraordinary number of new regulations and government papers setting out future policy directions for the Housing Sector.

A summary of the key documents that have been issued in this period is provided on the following page.

The government will continue to release draft documentation detailing new regulations and government papers setting out future policy. Updates of the Construction Plan will include information on how new policy have been adopted by MTVH.

DATE	NAME	TOPICS
October 2019	Future Homes Standard	Government White paper
May 2020	Approved Document Part B (Fire Safety)	Updated Building Regulations document. Covered reduction in sprinkler threshold down to 11m
September 2020	PPN 06/20 – Social Value	Government Procurement Policy Note
	New Housing Ombudsman Service	Updated HOS guidelines agreed
November 2020	Affordable Homes Programme 2021-2026 Funding Guidance	GLA guidance document
December 2020	PPN 09/20 - Construction Playbook	Government Procurement Policy Note
	London Plan 2021	GLA Planning guidance
	Transforming Public Procurement	Government Green Paper on public procurement regulations
January 2021	Future Homes Standard	Government publishes response to FHS consultation
April 2021	Fire Safety Act	Primary legislation
June 2021	BS9251:2021 Sprinklers	Update to British Standard on Sprinklers
July 2021	Building Safety Bill	Primary legislation
	Golden Thread Report	Building Regulations Advisory Committee policy report in support of Building Safety Bill
September 2021	"Be Seen" Energy Monitoring funding guidance	GLA guidance document
October 2021	Heat and Building Strategy 2021	Government White Paper
	Homes England Capital Funding Guide	Homes England guidance document updated to pick up Interim Repair Period for Shared Ownership
	Building (Higher-Risk Buildings) (England) Regulations 2022	Secondary regulations
	Building (Appointment of Persons, Industry Competence and Dutyholders) (England) Regulations 2021	Secondary regulations
December 2021	Approved Document Part F (Ventilation)	Updated Building Regulations document. Increased fabric performance requirements
	Approved Document Part L (Heating)	Updated Building Regulations document
	Approved Document Part O (Overheating)	New Building Regulations document on overheating
	Approved Document Part S (EVC)	New Building Regulations document on electric vehicle charging points
	Electric Vehicles (Smart Charge Points) Regulations 2021	Secondary regulations



### **Delivery**

#### The following table sets out the Procurement and Delivery topics likely to affect MTVH over the next 10 years

This list should be read in conjunction with the topics listed under the other headings

THE TOPICS	OUR GOAL	HOW WE WILL DELIVER OUR GOAL
Health and Safety	Promote a proactive approach to Health and Safety in MTVH Development Programme and positively	Develop a Health and Safety Strategy to apply across all aspects of MTVH Development Programme
	influence improvements in Health and Safety outcomes	2 Review H&S Strategy every two years thereafter
Waste Management	Ensure that MTVH Development Programme adheres to best practice for waste management	3 Develop a Waste Management Strategy to apply across all aspects of MTVH Development Programme
		4 Review Waste Strategy every two years thereafter
Ethics	Ensure MTVH works with contractors that support MTVH values	5 Develop a Contractor Code of Conduct for inclusion in all build contracts
		6 Review effectiveness of Code of Conduct every 2 years
Professional Indemnity Insurance	Ensure MTVH obtains best possible insurance coverage available in the market	7 Commission review of the PII market by MTVH Underwriters
Balcony design	Ensure that the private balconies on higher rise homes have adequate wind protection	8 Commission design review of options for balconies affected by high winds and update Design Guide
Sprinklers	Ensure that sprinkler systems are designed and installed	9 Commission MEP Engineer to prepare best practice Performance Specification
	to allow cost effective maintenance and servicing	10 Commission MEP Engineer to review maintenance regimes of Sprinklered projects coming out of DLP for servicing by MTVH
Lifts	Ensure that provision of lifts in new schemes meets best practice guidelines	MTVH have already updated their Design Guide to incorporate requirements for:  • Evacuation lift in schemes over 11m  • 2 lifts in schemes over 18m



THE TOPICS	OUR GOAL	HOW WE WILL DELIVER OUR GOAL
Complex building services	Ensure that the complex systems are designed and delivered to best practice	<ul> <li>MTVH have already commissioned a MEPH Performance Specification. In addition to updates to MEPH Performance Specification noted elsewhere, update specification to cover: <ul> <li>servicing of sprinkler installations,</li> <li>future proofing for installation of cooling loops in MVHR</li> <li>electricity demand loads for future Electric Vehicle Charging</li> <li>future installation of remote diagnostic capability to smart meters</li> <li>internet enabled home security</li> </ul> </li> <li>12 Amend MTVH development procedures to require Monitoring MEP Engineers to be appointed on complex schemes to check that the Contractor's Proposals meet the performance specification and assess workmanship</li> </ul>
Building Safety Bill (BSB)	Ensure that MTVH manages the new approval Gateways effectively	13 Amend ERs to clarify responsibility for Building Control Approval submission and Completion Certificate Approval submission
Building Safety Bill (BSB)	Ensure that MTVH has access to competent advice to discharge client duties under the Building Safety Bill	14 Develop scope of service and competency assessment for use when MTVH appoint the Building Safety Principal Designer
		15 Develop guidance when Principal Contractor appoints Building Safety Principal Designer under a D&B procurement route including appointing an independent H&S Advisor where necessary.
Building Safety	Ensure standard MTVH Handover Protocol is updated to align with Building Safety Bill	16 Update ERs to align criteria for Handover Notices with Completion Certificate Approval requirements
Bill (BSB)		17 Amend ERs to clarify the Completion Certificate Approval from Building Safety Regulator (BSR) is a defined Handover Document that is required 2 weeks before Handover
		18 Update template for Amendments to Contract Conditions to clarify receipt of Completion Certificate Approval from BSR is condition precedent for Practical Completion
		19 First handovers under Completion Certificate approval regime
Building Safety Bill (BSB)	Ensure MTVH has access to suitable information to support co-signing a Compliance Statement for a Completion Certificate approval application under the BSB	MTVH already require an independent Fire Engineer to be appointed under the Fire Safety Policy to audit the installation of fire safety elements
		20 Take advice from legal partners and Underwriters about the liabilities involved with co-signing a Compliance Statement and Professional Indemnity Insurance for such liabilities
		21 Develop an enhanced scope of service for Site Inspector role on high risk buildings to coordinate with Fire Engineer and provide photographic audit of construction compliance
		22 Identify panel of approved Fire Engineers and develop stronger commercial relationship where possible to secure resource availability commitment

THE TOPICS	OUR GOAL	HOW WE WILL DELIVER OUR GOAL
Building Safety Bill (BSB)	Ensure handover information on new schemes satisfies "Golden Thread" regulatory requirements	MTVH already has developed a BIM Policy and supporting templates that satisfies the UK BIM Framework  Review existing MTVH BIM Policy documents once Golden Thread secondary regulations and Guidance documents are published and update where necessary
Building Safety Bill (BSB)	Develop Resident Engagement Strategy to improve communication with residents and drive service improvements	<ul> <li>24 Implement programme of post occupancy evaluation</li> <li>25 Develop enhanced Resident Engagement strategy to integrate: <ul> <li>Social Media strategy</li> <li>Web based community forums</li> <li>YouTube Home User Guides</li> <li>Building Safety strategy under Building Safety Bill</li> <li>Post Occupancy Evaluation feedback</li> <li>Real time feedback from anonymised Smart Meter data</li> </ul> </li> </ul>
"Be Seen" energy monitoring	London only policy Adapt development policies to ensure compliance with London Plan Policy S2	<ul> <li>26 Amend MTVH's development procedures - Within 8 weeks of planning consent issue Be Seen energy performance indicators</li> <li>27 Amend Handover documents policy - Prior to occupation Contractor to update Be Seen energy performance indicators</li> <li>28 Amend defects protocol to require contractor to issue in use energy performance data and make compliance part of certificate of making good defects</li> <li>29 Amend MTVH's development procedures – Submit in use performance data annually for 4 years after defects liability period</li> </ul>
Design Guide	Ensure the Design Guide is aligned to incorporate environmental, social and governance requirements	30 Undertake a further review of the MTVH Design Guide to ensure that factors relating to Placemaking, Biodiversity and Sustainability and Value for Money are included and update where necessary
Quality Assurance	Ensure that MTVH Development Department adhere to Quality Assurance	<ul> <li>MTVH is developing a revised Quality Assurance Framework to establish best practice in processes utilised during the construction period.</li> <li>31 Complete the review of standardised processes and procedures that are required to achieve best practice in construction projects. Review the post occupancy evaluation processes to ensure homes are adhering to Key Performance Indicators</li> </ul>
Modern Methods of Construction (MMC)	Establish pilot projects to develop design and procurement protocols	<ul> <li>32 Commission review of existing MTVH projects with MMC to calculate pre manufactured value (PMV) achieved on historic schemes</li> <li>33 Identify "pilot" projects to trial feasibility of achieving 55% PMV</li> <li>34 Establish Departmental tracker to monitor extent of 21-26 AHP schemes delivering 55% PMV</li> </ul>

# **Delivery** BACKGROUND TO THE TOPICS



This table sets out the background to the key topics

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TOPICS	BACKGROUND TO KEY TOPICS
Ethics	<ul> <li>Government's Procurement Policy Note 09/20 Social Value (SV) encourages HAs to take account of Social Value when appointing contractors.         Some of the themes that the Government is promoting under Social Value inform a Code of Conduct – Equal Opportunity (Theme 4) and Well Being (Theme 5). The Government encourages public bodies to monitor delivery of Social Value commitments during construction using KPIs.</li> <li>MTVH values its reputation and is committed to maintaining the highest possible ethical standards in all its business activities.</li> </ul>
Professional Indemnity Insurance	<ul> <li>Difficult to obtain fire safety advice that is covered by adequate Professional Indemnity Insurance because insurance market is reluctant to offer cover for consultants providing fire safety advice.</li> <li>The insurance market has responded to the spate of claims arising from defective cladding with a significant hike in premiums and a significant reduction in the cover available for consultants.¹</li> </ul>
Balcony Design	<ul> <li>Amendments to Approved Document Part B in December 2018 effectively banned the use of laminated glass balustrades over 18m because the interlayer could not meet the non-combustibility criteria.         A number of suppliers have now created laminated glass balconies that are non-combustible.     </li> <li>Fire Safety Act 2021 confirmed that the requirement for non-combustible construction in balconies applied to balconies irrespective of height.</li> <li>The ban on laminated glass creates design difficulties mitigating wind loads on balconies subject to high winds.</li> </ul>
Sprinklers	<ul> <li>Approved Document B (Fire Safety) has been amended to reduce the height of buildings needing sprinklers from 30m to 11m from 26 November 2020 (clause 7.4 AD B).</li> <li>British Standard on sprinklers BS9251 amended to BS9251:2021 on 30 June 2021. Introduced new category of sprinklers for buildings over 18m.2;3 Sprinklers require mandatory annual inspections.<sup>4</sup></li> </ul>
Lifts	<ul> <li>The Inclusive Design policy in the new London Plan (Policy D5) requires at least one lift to be an Evacuation lift.</li> <li>In addition, 2 lifts should be provided where Part M4(3) wheelchair homes are accessed only a lift.<sup>5</sup></li> </ul>
Complex Building Services	<ul> <li>Introduction of sprinklers/ ASHP's and MVHR systems with cooling loops creates increasingly more complex MEP engineering solutions. This raises two issues:</li> <li>The importance of future proofing the MEP Performance Specification.</li> <li>Increases the importance of appointing a Monitoring MEP Engineer to critically review contractor's technical proposals, monitor workmanship and oversee testing and commissioning.</li> </ul>

# Delivery BACKGROUND TO THE TOPICS



TOPICS	BACKGROUND TO KEY TOPICS
Building Safety Bill (BSB)	Approval Gateway     Introduction of Building Control Approval gateway and Completion Certificate Approval gateway in draft secondary regulations issued in October 2021 (Building (Higher-Risk Buildings) (England) Regulations 2022).
	<ul> <li>Building Safety Principal Designer</li> <li>The Building Safety Bill creates new role of Building Safety Principal Designer (BSPD). The Government has issued regulations setting out an updated competency regime for BSPD appointments (The Building (Appointment of Persons, Industry Competence and Dutyholders) (England) Regulations [2021]).</li> <li>The BSPD role will also overlap with the role of auditing Fire Safety elements set out in MTVH's Fire Safety Policy and any appointment by MTVH will need to coordinate these two obligations.</li> <li>The role of photographic audit information collected during construction prior to elements being covered up (which includes both MEP installations and fire safety installations) will need to be coordinated by the BSPD when appointed by MTVH.</li> </ul>
	Handover Protocol  Requirement for Completion Certificate approval process is set out in Part 6 of the draft Building (Higher-Risk Buildings) (England) Regulations 2022 issued in October 2021.
	<ul> <li>Compliance Statement</li> <li>Requirement for MTVH where a client, to sign a Compliance Statement, is set out under Clause 31.1 e) of the draft Building (Higher-Risk Buildings) (England) Regulations 2022 issued in October 2021.</li> <li>MTVH will require photographic audit information records obtained by independent competent consultants with a direct Duty of Care to MTVH backed by suitable PII cover to support signing a Compliance Statement.</li> <li>Knowingly or recklessly submitting a false or misleading Statement will become a criminal offence under clause 23 of the BSB subject to imprisonment or a fine.</li> </ul>
	<ul> <li>Golden Thread &amp; BIM</li> <li>The overarching requirement to provide Golden Thread information at handover is defined in Clause 21 of the draft Building (Higher-Risk Buildings) (England) Regulations 2022 issued in October 2021.</li> <li>The Building Regulations Advisory Committee issued a Golden Thread Report in July 2021. This Report confirmed that the Government plans to issue secondary regulations and guidance documents to support the overarching obligation to provide Golden Thread information noted above.</li> <li>Although the BSB and the Golden Thread Report noted above does not mandate the use of 3D digital models and a BIM methodology for the Golden Thread information, the Golden Thread Report does note that the Construction Playbook issued by the Cabinet Office in December 2020 does require that all buildings which are publicly procured to adhere to the UK BIM Framework.</li> </ul>

# Delivery BACKGROUND TO THE TOPICS



TOPICS	BACKGROUND TO KEY TOPICS
Building Safety Bill (BSB)	<ul> <li>Resident Engagement Strategy</li> <li>The Building Safety Bill also now requires that MTVH prepare a Resident Engagement Strategy for each high rise residential building. The Strategy will normally be presented to the Regulator as part of the Building Assessment Certificate application and must promote the participation of residents in the making of any "building safety decisions" made by MTVH.<sup>6</sup></li> <li>The GLA is looking to introduce mandatory post occupancy evaluation as part of the funding criteria for the 2021-26 Affordable Housing Programme.<sup>7</sup></li> <li>Research shows the benefit of giving residents information visually and shows that 70% of people would rather use a company website to get help than phone or email. Research also shows that people actually absorb visual information faster and perform tasks better when instructions are provided with visual or video content.<sup>8</sup></li> <li>Local authorities and other public bodies have realised the importance of using social media to enhance their engagement with the communities they serve.<sup>9</sup></li> <li>A wide range of Housing Associations are using social media platforms to enhance their engagement with residents.<sup>10</sup></li> </ul>
"Be Seen" energy monitoring	"Be Seen" Energy Monitoring funding guidance issued by GLA in Sep 2021.10      Draft wording for legal agreements issued by GLA in Oct 2021. 11
Design Guide	<ul> <li>Environmental, Social and Governance</li> <li>MTVH want to work with banks, pension / insurance companies and other investors who share our commitment to sustainability whilst achieving value for money.</li> </ul>
Quality Assurance	MTVH is required to adhere to a Quality Assurance Framework that demonstrates best practice during construction projects as well as demonstrating how data relating to our homes is collected and stored.
ММС	<ul> <li>Modern methods of construction and, in particular, volumetric manufactured housing, has long been touted as providing significant benefits including an ability to build faster and better. Mark Farmer and Mike De'Ath published a detailed review in September 2020 that argued MMC could provide an additional 75,000 homes per year. <sup>11</sup></li> <li>Homes England AHP 2021-26 now has requirement that 25% of programme must be MMC that achieves min 55% PMV (Homes England Capital Funding Guide section 9 clause 3.5.5).</li> <li>The GLA now expects investment partners in their 2021-2026 Affordable Housing Programme to demonstrate how they are maximising the use of MMC. <sup>12</sup></li> </ul>





# **People**

#### The following table sets out the People topics likely to affect MTVH over the next 10 years.

This list should be read in conjunction with the topics listed under the other headings.

THE TOPICS	OUR GOAL	HOW WE WILL DELIVER OUR GOAL
Social Value	Ensure MTVH promotes a more diverse inclusive workforce and improved	35 Develop Diversity and Inclusion (D&I) Policy that is integrated with MTVH's Social Value Strategy. Include measurable targets for contractors and consultants
	construction training to help counter potential labour shortages and promote	36 Review our D&I targets and adjust to ensure targets remain challenging
	under-represented groups within the communities in which we work	37 Develop Construction Skills Policy (CSP) that is integrated with MTVH's Social Value Strategy. Include with measurable targets for contractors and consultants
	We believe the diversity of our talent underpins the strength of our organisation	38 Review our CSP targets and adjust to ensure targets remain challenging
	under pins the strength of our organisation	39 Amend ER Template to incorporate D&I and CSP targets as Social Value pledges
		40 Establish Departmental tracker to monitor the delivery of social value pledges on 21-26 AHP schemes
Community Hubs	Increase the range and type of facilities	41 Deliver initial Community Hub pilot schemes to test benefits for older residents
	provided for older residents	42 Review success of Community Hubs
Downsizers	Broaden MTVH's range of housing types to increase housing choice	43 Update the MTVH 'Later Living Design Guide'. Develop an aspirational and distinctive housing typology aimed at active older residents looking to downsize
	and encourage residents to move out of existing family homes	44 Deliver initial "Downsizer" pilot schemes
	cat of oxidening failing from the	45 Review "Downsizer" typology
Home working	Ensure that new homes have facilities for home working	46 Create a home office policy to incorporate a designated 'work space' into homes within our development pipeline
	Develop design strategy to provide the maximum flexibility for our residents	47 Commission user research to review whether the home office policy meets current needs for home working and update Design Guide guidance for home working in light of research findings
Local Work Hubs	Ensure new homes maximise opportunity for local working where home working is	48 Deliver initial Local Work Hub pilot schemes to measure the potential benefits for residents
	impractical because of space constraints	49 Review Local Work Hub pilot schemes
Meanwhile Use	Ensure maximum benefit is made of non-	50 Deliver initial Meanwhile Use pilot schemes to test benefits for residents
	residential space within residential schemes by adopting a Meanwhile Use policy	51 Review Meanwhile Use pilot schemes

# People BACKGROUND TO THE TOPICS

This table sets out the background to the key topics

TOPICS	BACKGROUND TO TOPICS
Social Value	<ul> <li>Changing work patterns, long term lack of investment in training and broader government immigration policy are set to create significant labour shortages in the construction section.11</li> <li>Procurement Policy Note 06/20 – Social value should be explicitly evaluated. Applies to MTVH.</li> <li>Procurement for projects over £10m should use the priority themes and outcomes from Balanced Scorecard for Growth (PPN 09/16). Themes included in PPN 09/16 include:</li> <li>Attracting a more diverse supplier base (ST3 Supply Chain)</li> <li>Upskilling of new workers (ST4 Employment)</li> </ul>
Community Hubs	<ul> <li>The population is growing older with the number of people aged 65 and over expected to increase by more than 40% within 20 years.12</li> <li>Community Hubs provide additional services to residents of Supported Housing schemes and provide an opportunity to integrate supported housing schemes more effectively into the existing community.13</li> </ul>
Downsizers	<ul> <li>"Downsizers" represent a distinct and significant segment of the housing market. 54% of over 55's are now considering downsizing following the pandemic.14 There is a significant opportunity to develop new housing typologies for active 55+ as a new sector with distinct housing needs. "Downsizers" need more storage than a younger couple; a larger dining table for entertaining and a larger balcony. Security and location are also very high on their agendas.15</li> </ul>
Home working	<ul> <li>The move to agile working with staff working from home on a regular basis is expected to continue post pandemic. Research suggests the number of people working from home will rise from 9% to 22% as result of the pandemic.16</li> </ul>
Local Work Hubs	Working from home is frequently less successful for junior staff who typically live in smaller apartments or shared accommodation with limited or inappropriate space to work. Potential for developing local work hubs and coworking hubs as alternative for non-residential spaces in mixed use schemes. 17 18
Meanwhile Use	There are opportunities to use non-residential spaces in residential schemes for Meanwhile Use spaces.19     These could be for temporary Local Work Hubs, start-up enterprises or pop up retail ventures.





# **Technology**

#### The following table sets out the Technological topics likely to affect MTVH over the next 10 years This list should be read in conjunction with the topics listed under the other headings.

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THE TOPICS	OUR GOAL	HOW WE WILL DELIVER OUR GOAL		
MEPH Specification Review	Ensure our MEPH Performance Specification reflects best practice	52 Review MEPH Performance Specification every two years		
Electric Vehicles	Ensure new developments provide adequate Electric Vehicle Charging points	53 Create policy to ensure all new homes are EVC ready		
		54 Target 50% of all parking bays handed over after 2028 to be fitted with active EVCs		
		55 All parking bays handed over after 2032 to be fitted with active EVCs		
Broadband	Provide a high quality reliable internet connection for all new residents	56 Commission review of options to increase broadband connectivity to new schemes		
		57 Review demand for satellite dishes in light of growth in broadband use		
		58 Update MEP Performance Specification on broadband & satellite dishes/ aerials		
Connected Homes	Ensure residents can take full advantage of internet connected devices to improve the liveability and functionality of new homes	59 Develop a "Connected Homes" specification		
		60 Homes for sale meeting the "Connected Homes" specification		
		61 Homes for rent handed over after 2028 to incorporate Connected Homes specification		
Parcel Deliveries	Ensure residents can manage parcel deliveries securely and remotely if necessary and avoid parcel deliveries becoming a fire hazard	62 Carry out review of communal area design criteria and update Design Guide. Include review of digital parcel boxes in ground floor lobbies. Coordinate provision with Secure By Design advice and door entry systems to provide 24 hour access for delivery drivers		
Smart Meters	Help residents manage their energy consumption more easily and effectively Improve responsive repair service provided to residents	63 Update MEPH Performance Specification to specify Smart Meters on all developments. All Smart Meters to have remote diagnostic capability		
		64 Collect data from smart meters to improve depreciation calculations and timeliness of cyclical maintenance		
Big Data	Use anonymised data from resident's homes to improve asset management performance by reducing costs and improving reliability	65 Establish pilot schemes to test feasibility of collecting real time data		
		66 Develop data collection policy		
		67 Implement data collection specification by 2028		
		68 Implement real time data collection by 2032		

# Technology BACKGROUND TO THE TOPICS

This table sets out the background to the key topics

TOPICS	BACKGROUND TO TOPICS
Electric Vehicle	<ul> <li>Sale of petrol &amp; diesel cars banned from 2030. The numbers of electric cars is currently growing rapidly.<sup>20</sup></li> <li>Electric Vehicles (Smart Charge Points) Regulations 2021 have now been enacted.<sup>21</sup> London Plan 2021 requires 20% active and 20% passive EVC.</li> </ul>
Broadband	<ul> <li>Fast broadband (fibre to home) has become increasingly important to allow household to operate the increasing number of internet connected devices. It is now one of the key differentiators and amenity requests in Build to Rent properties and the introduction of the new WiFi 6 protocol and the roll of 5G will strengthen this prominence.<sup>22</sup></li> <li>Residents increasingly using broadband rather than satellite subscriptions to stream non terrestrial TV.</li> </ul>
Connected Homes	<ul> <li>We are now in the age of the "Connected Home". <sup>23</sup>, <sup>24</sup> Internet enabled devices are creating ability to remotely control many aspects of new homes - Nest/ Hive/ Ring/ Alexa/ BringMe digital parcel boxes.</li> <li>Internet connected appliances and home management devices are currently a differentiator for market sale properties. <sup>25</sup></li> </ul>
Parcel Deliveries	<ul> <li>Growth of parcel deliveries and the number of uncollected parcels being left in entrance lobbies is creating fire hazards.</li> <li>Digital delivery boxes provide an efficient way for residents to manage deliveries.</li> <li>Digital parcel boxes need to be accessed by delivery drivers 24/7. The number of different delivery drivers means it is not feasible to give drivers fob access to protected lobbies.</li> <li>Digital parcel boxes are frequently treated as a potential fire hazard in protected lobbies.</li> </ul>
Smart Meters	<ul> <li>New "smart meters" provide real time feedback on energy usage to allow residents to monitor and reduce energy consumption.</li> <li>"Smart Meters" can now be internet enabled to allow remote monitoring and control of various heating functions.</li> <li>"Smart meters" can provide remote diagnostic capability to improve fault diagnosis, reduce call outs and improve accuracy of depreciation calculations.<sup>26</sup>;<sup>27</sup></li> </ul>
Big Data	<ul> <li>Anonymised analysis of data from sensors in homes has potential to provide valuable information on trends and improve customer service.<sup>28</sup></li> <li>Some Housing Associations are already exploring data mining to develop insights.<sup>29</sup></li> </ul>



### Sustainability

#### The following table sets out the Sustainability topics likely to affect MTVH over the next 10 years

This list should be read in conjunction with the topics listed under the other headings

THE TOPICS	OUR GOAL	HOW WE WILL DELIVER OUR GOAL
Net Zero Carbon	To reduce carbon emissions on all new schemes as quickly as is practical and feasible	MTVH have already published a corporate Sustainability Strategy
		69 Update Design Guide to align Out of London schemes with Government's Heat and Building Strategy 2021 and new London schemes with London Plan
		70 Update the Technical Specification to:
		Adopt GLA 2020 standard of Net Zero Carbon
		Set clear performance standards
		Target fabric first approach where possible
		71 Adopt GLA target of Net Zero Operational Carbon for all schemes delivered after 2025
Central	To ensure that heating provided via ASHP provides: - affordable warmth - appropriate comfort levels - warmth that can be controlled easily and effectively	72 Update Design Guide to have different criteria for London and Out of London schemes.
Heating		Out of London schemes to be based updated Approved Document Part L (Heating)
		73 Update MEP Performance Specification for ASHP's
		74 Develop improved web based user guides on ASHPs
Ventilation	To ensure that new homes are well ventilated using energy efficient ventilation systems	75 Update Design Guide to have different criteria for London and Out of London schemes.
		Out of London schemes to be based on updated Approved Document Part F (Ventilation).
		London schemes to comply with both London Plan and updated AD Part F
		76 Update MEP Performance Specification on ventilation
		77 Adopt Target Emission Rate that is 75% better than 2021 standards for all schemes
		submitted for Planning after 2025 in line with Government targets
Overheating	To future-proof new homes against	78 Amend Employer's Requirements, Design Guide and Technical Specification
	overheating using passive design principles where possible	to align with new Approved Document O - Overheating

### Sustainability BACKGROUND TO THE TOPICS

This table sets out the background to the key topics

TOPICS	BACKGROUND TO TOPICS
Net Zero Carbon	<ul> <li>Government's Heat and Building Strategy (Oct 2021) - now delayed the banning of gas boilers until 2035.</li> <li>London Plan 2021 - Net Zero Carbon policy (Policy SI 2) states that all new developments must be built to the 2020 GLA standard of net zero carbon.</li> <li>By 2025, all new buildings in London should target zero carbon on site, with a maximum carbon offset payment of 30%. A new building with net zero operational carbon does not burn fossil fuels, is 100% powered by renewable energy and achieves a level of in-use energy performance in line with national climate change.</li> </ul>
Central Heating	<ul> <li>Updated Approved Document Part L (heating) coming into force June 2022 with transitional arrangements ending June 2023. This update is an interim arrangement until the new Future Homes Standard comes into force in 2025.</li> <li>London Plan 2021 now requires homes not heated from a district heating system to be heated using zero-emission or local secondary heat sources. This effectively means the use of Air Source Heat Pumps.<sup>30</sup></li> </ul>
Ventilation	<ul> <li>Updated Approved Document Part F (ventilation) coming into force June 2022</li> <li>The Government's Heat and Building Strategy announced that the Target Emission Rate will be 31% tougher than today and from 2025 the target will be 75% tougher than 2021.</li> </ul>
Overheating	New Approved Document Part O (Overheating) coming into force June 2022.



#### **Endnotes**

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- 7 GLA (2020) Homes for Londoners: Affordable Homes Programme 2021-2026 Funding Guidance para 45 p17
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- 30 GLA (2020) London Plan 2021 Policy SI3.1 D 1) b)

The Construction Plan was developed in consultation with CPC Project Services. A literature review was carried out between July 2021 and August 2021 to inform the contents of the Construction Plan. The document has been updated and reviewed by the MTVH Development Department following consultation with key stakeholders across the organisation.



# CONSTRUCTION PLAN SEPTEMBER 2022

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