NT02- Manchester - Water Damage Mitigation Plan

Version	Person	Company	Date of Issue (REV 1)
Issue 1	Simon Wilson	HG Construction	18/09/2026

1. Purpose of the Plan

The purpose of the plan is to provide a clear and logical approach to the management and mitigation of the risk of 'escape of water' (and consequent damage) for the duration of the project. The plan references the guidance given in the 'Managing Escape of Water Risks on Construction Sites, Published by the Construction Insurance Risk Engineers Group 5th Edition September 2019'.

The plan is to be used as a guide for all contractors involved in the design, installation and commissioning of water systems and those responsible for emergency response in the event that an escape of water occurs whilst using a temporary water system for the construction,

The plan will also provide evidence that suitable and sufficient measures are in place to manage the risk of water damage throughout the construction period and as such is likely to audited by the Contractors All Risks (CAR) Insurer. It is therefore essential that it is complete and routinely reviewed and updated.

2. Nominated Duty holders

Position	Name	Responsibilities
Responsible Persons	Steven Ramsey Martin Grisman	Responsible for ensuring procedures are in place for the management of the risk, that competent people are appointed and Ensuring that duties are carried out for the temporary water supplies to the working areas,
Services Manager	James Hickey	Overall responsibility for design, commissioning and installation of all wet services. Responsible for implementation of the "temporary Water Management Plan"
Commissioning Manager	James Hickey	Physical testing, commissioning and Documentation and records will be kept on site,
Quality Assurance Manager	Martin Grisman	Implementation, monitoring and recording of a system of quality control will again be kept to hand on site if required,
Duty Engineer	James Hickey	Development and implementation of emergency response procedures which will be identified in the methods of installation and commissioning

3. Summary of Systems Installed

	System	Installer	Start date	Anticipated Commissioning
1	cold-water builders supply	Norther site Electrics	TBC	TBC

4. Management of Water Systems

System 1	Temporary Cold-Water mains
	Management and Mitigation
Overview of System	1 no. x 25mm Barrier pipe for temporary mains water metered supply for building construction running through a dedicated riser, this then is connected to a booster pump that pumps water up the building to specifically located shut off bib taps, these booster pumps/tanks are generally at every 10th floor allowing correct pressure, Booster pumps are allocated to; gf – level 10 – level 20 – level 30 or where necessary, rising to roof level these are allocated in the hoist room areas on the main tower, The riser dedicated will have a sump and drain to the bottom of the pit allowing access water to flow away to surface water drainage, this isolated main prevents any contamination to external drains, The system will incorporate a combine shut off valve that is set and will close on a flood, burst pipe or over usage of mater, this incorporates a limiter, it also has a timed shut off valve for end of the start and end of the working day along with a manual shut off valve easily accessible, This system prevents any stuck or over running taps, and leaks or bursts due to weather,

Design Features	Temporary rising main throughout a dedicated riser, Pump and shut off valve system as Water guard, Bib taps at each required level, Metered system at source,  Waterguard Series 7 - Technical Specificati

System selection	Water Guard system,  Waterguard Series 7 - Technical Specificati
Quality Assurance	A Services Manager has been appointed to oversee the installation of all internal wet services. The primary mechanical contractor is skilled and experienced in the installation of these systems, having spent over 20 years operating in the market. Trade Contractors have been selected from a preferred list, these trade contractors having worked on a number of our successful projects in the past. Before final selection further checks have been carried out by the Services Manager to ensure installation, quality, health & safety and environmental standards are maintained. Installation will be carried out by suitably experienced and fully trained operatives with appropriate CSCS cards to their particular trade or discipline. Copies and checks will be taken prior to commencement of the works or at pre-start meetings. Full initial and refresher training will be provided to the operatives using the manufacturer's recommended methods for all pipework installations. Quality audits of each operative's work shall be carried out by the operative's supervisor on a random basis and the results will be formally recorded for review at progress meetings. Non- destructive visual checking shall be undertaken on approximately 10% of all joints. Non- destructive checking shall be evenly distributed over the whole of the works and shall be evenly split between all operatives/trades employed on the works where appropriate and applicable.

Installation standards	The installation will be undertaken in accordance with the specification provided along with all relevant guidelines, regulations, laws and good practice. It will be installed by accredited sub-contractor who take responsibility of all maintenance and servicing throughout the project.

Mitigation / Detection	Booster pumps to be isolated whenever the building is not attended. Main isolation valves will be turned off at the end of each working day to ensure the building is fully isolated when not occupied. Any high-risk areas will be physically checked prior to operatives leaving site at the end of each working day. Any pipe work that may be exposed to weather or bursts will be drained to its localised booster tank for storage,
Isolation of water supply (in the event of a leak)	Isolation and drain valves are clearly indicated on the drawing and unhindered access provided to the same on site. The valves have a trifoliate label giving valve ID and service to which it relates to enable speedy identification in case of emergency. Staff know the position of isolation valves in plant rooms and floors and have marked up drawings so that in the event a leak is discovered within the pipework they can act accordingly and isolate the section to stop and minimise damage to the building. Mechanical Drawings of water systems are kept on site at all times. Duty Engineer to be contacted following any incident (see emergency call-out list)

Removing water from the building	Permanent drainage pipe installations will be completed prior to filing systems with water. Before any system is filled and prior to testing, drainage provision (a drain hose) will be fitted and run to an established live building drain and fixed in such a manner that it cannot become detached from the system drain points. Wet vac and emergency equipment to deal with any spillage is available at the Pinnacle MEP site office within the building. Emergency equipment to be deployed to the risk area by the testing trade contractor for the duration of any test.
Testing Regime	The Commissioning Manager will manage a formal 'permit to test' system on all wet testing and enlivening of wet systems, ensuring that all elements noted on method statement are provided and in place. Before permits are to be issued, the Commissioning Manager will ensure that air/dry tests have been satisfactorily completed and that correct documentation is in place. A marked-up drawing of the services being tested and clearly indicating the full extent of the filled services, the pressure contained and whether left live on completion and at what pressure, will be produced and attached to the permit and prominently displayed at all the access points to the area containing the test. Initial air testing to be completed at 6 bar before water is filled into the system in order to minimise any potential leaks once it is filled. Testing will be offered to the client's agent for witnessing. Thames Water will also be invited to witness the domestic and drain installation. Testing and filling of the pipe system will be delayed if possible and will be filled just before commissioning is due to commence. Each section of pipework will be tested at 1.5 times the working pressure for a period of 2 hours. Testing will be evidenced by using pictures and suitable sign off sheets witnessed by the client. Once testing has been completed and the system is live, test pressure will be removed, signage changed to indicate a live system and the permit signed off. The system under test will be clearly signed at regular intervals to indicate that a wet system is under test.

Emergency Procedures	Having isolated the leaking supply, the persons on the emergency contact list will be contacted (in the order listed) Wet vacs are stored in the MEP Risers and site office, keys are held by the Main Contractor and security, Personnel on site should commence the clear up as soon as the installation has been isolated.

System selection	A material matrix has been produced for the procurement of pipe materials in accordance with the relevant BS standards, code of practice, HTMs, HBMs and good working practice. Steel screwed, welded or grooved pipework selected due to familiarity with system, product supplier training and well-practiced installation and quality assurance standards. No incidents experienced on previous five contracts.
Quality Assurance	A Services Manager has been appointed to oversee the installation of all internal wet services. The primary mechanical contractor is skilled and experienced in the installation of these systems, having spent over 20 years operating in the market. Trade Contractors have been selected from a preferred list, these trade contractors having worked on a number of our successful projects in the past. Before final selection further checks have been carried out by the Services Manager to ensure installation, quality, health & safety and environmental standards are maintained. Installation will be carried out by suitably experienced and fully trained operatives with appropriate CSCS cards to their particular trade or discipline. Copies and checks will be taken prior to commencement of the works or at pre-start meetings. Full initial and refresher training will be provided to the operatives using the manufacturer's recommended methods for all pipework installations. Quality audits of each operative's work shall be carried out by the operative's supervisor on a random basis and the results will be formally recorded for review at progress meetings. Non- destructive visual checking shall be undertaken on approximately 10% of all joints. Non- destructive checking shall be evenly distributed over the whole of the works and shall be evenly split between all operatives/trades employed on the works where appropriate and applicable.

Installation standards	The installation will be undertaken in accordance with the specification provided along with all relevant guidelines, regulations, laws and good practice.

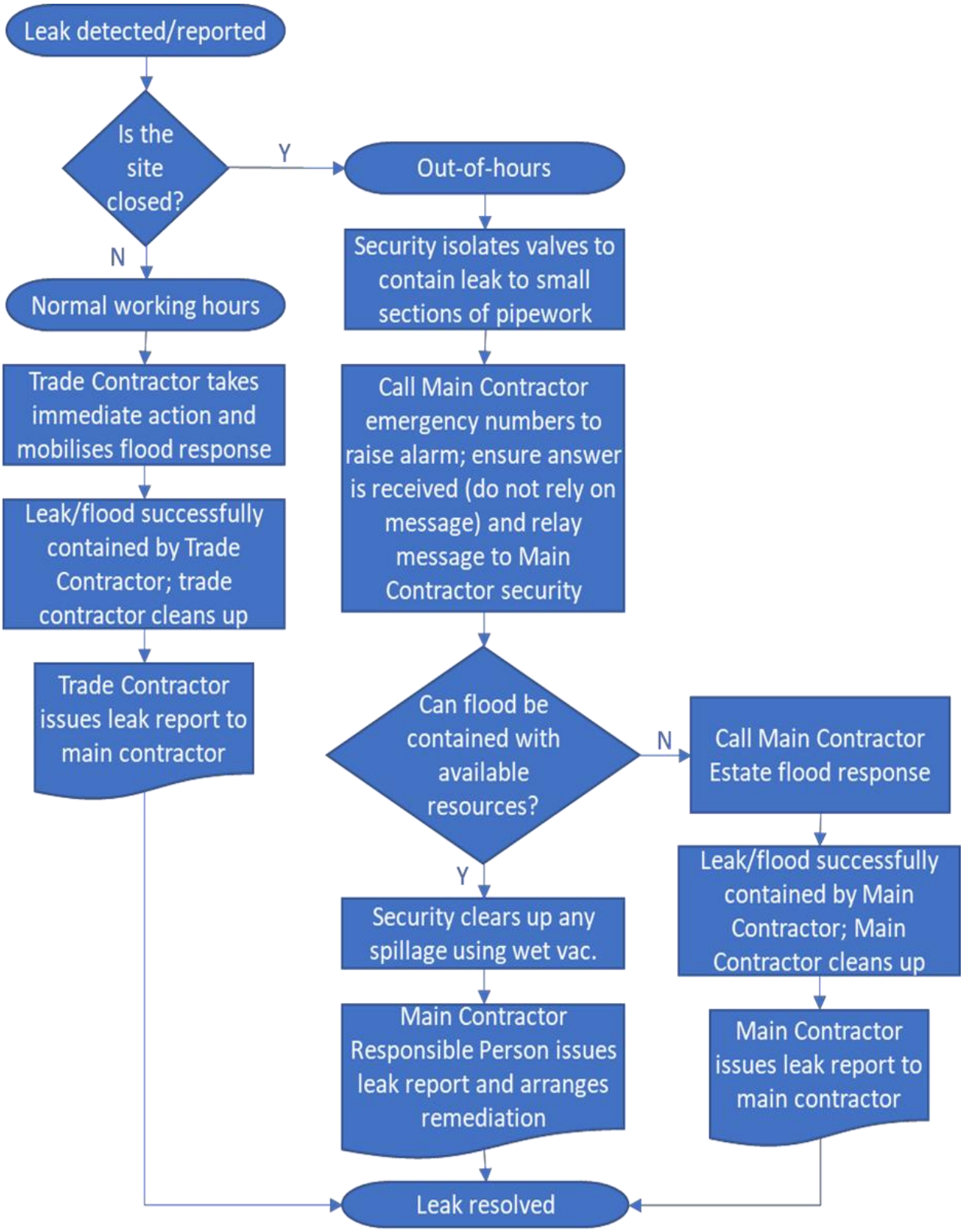
Mitigation / Detection by water guard systems	All temporary pumps & plant will be turned off at the end of every working day at source preventing any floods in malfunctions occur. A physical inspection will be undertaken of any high-risk areas at the end of every working day and where any suspect valves or taps will be isolated immediately,
Isolation of water supply (in the event of a leak)	Isolation and drain valves are clearly indicated on the drawing and unhindered access provided to the same on site. The valves have a trifoliate label giving valve ID and service to which it relates to enable speedy identification in case of emergency. Staff know the position of isolation valves in plant rooms and floors and have marked up drawings so that in the event a leak is discovered within the pipework they can act accordingly and isolate the section to stop and minimise damage to the building. Mechanical Drawings of water systems are always kept on site. Duty Engineer to be contacted following any incident (see emergency call-out list)

Removing water from the building	Permanent drainage pipe installations will be completed prior to filing systems with water. Before any system is filled and prior to testing, drainage provision (a drain hose) will be fitted and run to an established live building drain and fixed in such a manner that it cannot become detached from the system drain points. Wet vac and emergency equipment to deal with any spillage is available at the Pinnacle MEP site office within the building. Emergency equipment to be deployed to the risk area by the testing trade contractor for the duration of any test.
Testing Regime	The Commissioning Manager will manage a formal 'permit to test' system on all wet testing and enlivening of wet systems, ensuring that all elements noted on method statement are provided and in place. Before permits are to be issued, the Commissioning Manager will ensure that air/dry tests have been satisfactorily completed and that correct documentation is in place. A marked-up drawing of the services being tested and clearly indicating the full extent of the filled services, the pressure contained and whether left live on completion and at what pressure, will be produced and attached to the permit and also prominently displayed at all the access points to the area containing the test. Initial air testing to be completed at 6 bar before water is filled into the system in order to minimise any potential leaks once it is filled. Testing will be offered to the client's agent for witnessing. Thames Water will also be invited to witness the domestic and drain installation. Testing and filling of the pipe system will be delayed as long as possible and will be filled just before commissioning is due to commence. Each section of pipework will be tested at 1.5 times the working pressure for a period of 2 hours. Testing will be evidenced by using pictures and suitable sign off sheets witnessed by the client . Once testing has been completed and the system is live, test pressure will be removed, signage changed to indicate a live system and the permit signed off. The system under test will be clearly signed at regular intervals to indicate that a wet system is under test.

Emergency Procedures	Having isolated the leaking supply, the persons on the emergency contact list will be contacted (in the order listed) Wet vacs are stored in the on-site store for easy access, keys are held by the Main Contractor, Personnel on site should commence the clear up as soon as the installation has been isolated.

5. Emergency Procedures

First Response:



Emergency Call Out List

Persons shall be contacted in the order they are listed

Name	Position	Company	[redacted]
Steve Ramsey	Project Manager	HGC	
Martin Grisman	Senior Site Manager	HGC	
Steve Ramsey	Senior Site Manager	HGC	

M&E Contact Li

Service	Name	Company	[redacted]
Temp Water supply	James Hickey	NSE	