



SoPHE Newsletter

society of public health engineers

Issue12 | Summer 2026



Water Treatment

Northern Dinner

May heralded the return of the SoPHE northern dinner. The night was a roaring success with attendance from faces old & new.

Point of Entry Filters

Scott Brannigan discusses the risks and role of point of entry filtration, with respect to the NHS estate.

PCE & YEN

The Annual Plumbing Competition returned this year, Bringing together college learners, SoPHE YEN and industry for a day of practical challenges

Ghana Trip

Hear from Saskia Verkaik and Harry Robiati about their recent trip to Ghana to support Village by Village

News

Thought Pieces

Partnered Manufacturers

Messages from the Chairs

Mike Carter SoPHE Chair

Arup



Climate change is clearly impacting our everyday lives now with record temperatures being broken regularly, along with extreme climatic events such as flash flooding. It is paramount that as Public Health

engineers we do all that we can to ensure there is a stable future for generations to come. We need to protect our planets resources and develop designs that limit the impact on our planet, ensuring both carbon impact and material use are carefully considered.

I wanted to therefore draw everyone's attention to our annual technical conference that is to be held later this year on the 1st of October. The conference will focus on applying the principles of a circular economy that can be applied to hygiene, safety, performance and resilience, with the aim of contemplating both innovation and public health risk.

The conference will equally consider how water safety planning can and must be integrated into our designs for the future, and will challenge long held Public Health design assumptions, exploring gaps between design intent, installation, commissioning and long term use. The aim of the conference is to therefore ensure delegates are able to consider all aspects of public health design to create a brighter future for all.

I do hope to see many of our readers at the conference and wish everyone a fabulous summer.

Paul Marsden Industry Working Group Chair

Grundfos



Since the last newsletter two more manufacturers have become Industrial Associate members and, on behalf of the IWG, I would like to welcome both Ideal Heating and Mixergy.



We have just held this years YEN/PCE competition, at London South Bank Technical College (LSBTC). I never cease to be amazed by the enthusiasm of the participants as they look to solve the tasks set, this year by 8 of our Industrial Associate members.

Any Industrial Associate members interested in participating at next years event please contact Sam Burgess, Sanjay Modasia at sophe@cibse.org

The winners will be announced at our annual London dinner, being held this year on Thursday 5th November.

For our newer members and those who have not attended previously the dinner is the biggest event in the SoPHE calendar, I hope you will be keen to sponsor a table this year, invitations have been e-mailed to all members, and I look forward to seeing you there.

Letter from the Editor

Amanda Haydock

Editor



We are delighted to bring you the latest issue of the SoPHE newsletter. In this edition, we focus on the vital role of water treatment and public health engineering in

protecting communities and supporting healthy, sustainable environments. Inside, you'll find updates, insights, and articles exploring current developments, best practices, and the important work being carried out across the sector. We hope you find this issue both informative and engaging. To our members and wider readership, we appreciate your input and invite you to suggest topics that you would like us to cover in future editions as well as any feedback. You can get in touch by emailing sophe@cibse.org.

I had the great privilege of serving as a judge at the SoPHE PCE/YEN Annual Plumbing Competition, which took place on Friday, 19 June 2026 at London Southbank Technical College (LSBTC). This flagship event, organised by SoPHE Vice Chair Sanjay Modasia and Industry Working Group (IWG) Members Sam Burgess, Gary Zumeris and Paul Cocks is going from strength to strength. The competition continues to grow in popularity and helps bridge the gap between domestic and commercial plumbing installations while directly supporting learners and young engineers Continuing Professional Development (CPD).

I was also delighted that Hoare Lea enabled me to attend the 14th World Plumbing Conference (WPC26), which took place from 23–25 June 2026 at the NEC Birmingham, co-location with the InstallerSHOW. The conference programme focused on governance and workforce development, cutting-edge technologies and system design, and global equity in water and sanitation. The event welcomed more than 500 international delegates from over 20 countries, alongside a programme of world-class speakers.

In the Spring edition of the SoPHE Newsletter, the Letter from the Editor included an incorrect name in relation to the Master of the Worshipful Company of Plumbers. We would like to apologise to Master Sandra Raine for this oversight. Master Sandra Raine is now correctly acknowledged in SoPHE Newsletter Issue 11.

Regional & Sub-committee Updates

Giovani Tauckoor

MENA

WSP



Given the current situation across the MENA region, the safety and wellbeing of the Public Health community remain our top priority. As a result, several technical events have been postponed and rescheduled for later

this year.

Despite these challenges, SoPHE MENA continues to strengthen its commitment to growth, collaboration, and engagement with our key industry partners.

Through these partnerships, we have successfully continued delivering a range of technical workshops and webinars across the region.

In June 2026, SoPHE MENA hosted an online webinar in collaboration with Geberit, focusing on HDPE Drainage Applications, which was well received by participants across the region.

Upcoming Technical Events:

- July: Grease Management Systems – ACO. This will be an in-person event scheduled at Novotel, Dubai.
- August: Wastewater Drainage Applications – Grundfos, online Webinar.
- September: Blue / Green Infrastructure Solutions – Polypipe, venue to be confirmed.

We are also planning an exclusive factory visit to Grundfos facilities in Denmark and Hungary in October.

This initiative will provide participants with hands-on exposure and specialized technical

training on pumping systems for the built environment.

A key strategic priority for SoPHE MENA is expanding the Public Health Network into the wider Kingdom of Saudi Arabia (KSA).

To support this initiative, we are coordinating a series of face-to-face technical events in collaboration with our industry partners.

James Buckley

West Midlands

Couch Perry & Wilkes LLP



Over the next 6–7 months at SoPHE West Midlands, I will focus on strengthening engagement and expanding opportunities for our members. A key priority will be the continuation of our

lunchtime CPDs, ensuring they remain relevant, accessible, and consistently valuable, while also working to grow attendance and participation with each session.

In addition, I will be organising the first-ever manufacturers' social event in September, creating a new platform for networking, collaboration, and knowledge sharing across the region. This will help build stronger relationships within our community and encourage wider involvement.

Finally, I will be supporting and planning the Midlands TM70 official launch, helping to raise awareness and drive adoption of TM70 principles within the industry.

Overall, my aim is to build momentum, increase engagement, and deliver meaningful initiatives that add value to all SoPHE West Midlands members.

Malcolm Atherton

Northwest

Water Consultants Ltd



15th Northern Annual Dinner

Next year's Annual SoPHE Northern Dinner (15th) has been booked for Friday 7th May 2027, again at the Midland Hotel in Manchester. Further details will be provided as things progress.

Read all about
the dinner

F2F CPD's

At the time of writing this article, our last CPD held at the Rain Bar was on Wednesday 20th May 2026; it was provided by Geoff Ball from Xylem Water Solutions UK Ltd and the presentation was entitled "Variable Speed Cold Water boosting". As always, it was a great success, with an audience of 11 people attending. Thanks to everyone who attended & I hope that you'll come to more of these events in the near future. The next CPD is to take place on Wednesday 15th July 2026 (Spirax Sarco), followed by Wednesday 16th September 2026 (ProEconomy). The next available slot for a CPD is **September 2027**.

If you would like to arrange a CPD for the region then please contact either Jack Brown or John Bothma who are "in charge" of organising & running the CPD events here in the North.

IHEEM Healthcare Exhibition 2026 – "Mind the Gap : are we heading for a two-tier Estate?"

This is to take place on Tuesday 13th & Wednesday 14th October 2026. Once again, I've managed to secure a Stand for the benefit of SoPHE: CIBSE Healthcare

Specialist Group will be in attendance, as well as CIBSE NW & SLL. If there's someone willing to do a presentation at one of the "Theatres" within the Exhibition area, then please let me know. This is to fulfil our agreement with the WMSoc; as SoPHE don't pay for the Stand space, it is only right that we should do this in return - SoPHE is also committed in promoting this event when & wherever possible. Also, if you envisage being in Manchester on either of those days, I'd be grateful if you could volunteer a couple of hours of your time to help man the Stand!

SoPHE Technical Trip, Autumn 2026

At the time of writing, it is looking less likely that this will take place this year, despite the best efforts of everyone involved. Hopefully we'll have better news for 2027!

SoPHE Northern presentations to PCE Colleges & various other Universities and Colleges across the UK

I continue to provide this "service" to the various PCE colleges in London on the subject matter of Public Health Engineering. I also provide PH presentations to other Universities & Colleges across the rest of the UK (e.g. Leeds Beckett Uni, Liverpool John Moores' Uni, Leeds College of Building, Uni of Lancashire Preston, Coventry Uni) as well as promoting SoPHE at Careers Fairs (e.g. Leeds College of Building).



SoPHE winners highlight water and education in Ghana

Two young public health engineers have put their skills into practice in Ghana after winning the SoPHE Plumbing Centre of Excellence Annual Plumbing Competition.



Winner Saskia Verkaik (Arup) and runner-up Harry Robbiati (Hoare Lea) travelled with SoPHE charity partner Village by Village, helping deliver projects that improve access to clean water, sanitation and education in rural communities.

Working alongside local volunteers, they supported the construction of handwashing facilities, water infrastructure and a new toilet block at a school that had operated for more than 50 years without dedicated sanitation. They also contributed to the development of a new junior high school, helping expand educational opportunities for local children.

The visit also gave the engineers first-hand insight into the challenges of delivering essential public health infrastructure in remote communities. Collaborating closely with local residents helped ensure the projects met community needs while promoting long-term sustainability.

The annual competition is designed to encourage early-career engineers to develop their technical knowledge while demonstrating how public health engineering can make a tangible difference to people's lives.

The Ghana visit forms part of the prize, allowing winners to apply their skills beyond a traditional design environment.

Reflecting on the experience, both participants described the trip as professionally rewarding and personally inspiring. By combining engineering expertise with community engagement, the initiative highlights the lasting impact that well-designed water and sanitation systems can have on health, education and quality of life.

On 16 September 2026, Saskia and Harry will present about their experience at a YEN takeover hosted at CIBSE HQ along side CIBSE Ken Dale Travel Bursary winner Klaudia Rudzionic of Arup.



Future-Proofing Water Safety in the NHS Estate: Rethinking Risk & the Role of point-of-entry filtration

Scott Brannigan Hydrotec



NHS Estates Technical Bulletin (NETB) 2024/3 introduces a major shift in NHS water safety, positioning engineered controls, particularly sterilising-grade point-of-entry filtration (POEF), as key

safeguards in high-risk environments. While formally focused on highly immunocompromised settings, modern patient pathways and estate complexity highlight a wider need to reconsider how risk is defined and managed.

This article examines how POEF, when integrated into new builds or major refurbishments, can future-proof assets, improve resilience, and provide a consistent upstream barrier against waterborne pathogens.

A Landscape of Evolving Risk

Traditional control strategies, temperature, flow, and flushing, remain important but are increasingly challenged by organisms such as nontuberculous mycobacteria (NTM),

which resist standard disinfection and thrive in complex plumbing systems.

NETB 2024/3 formalises a proactive, design-led approach aligned with HTM 04-01, requiring early integration into project planning and delivery. Although it defines specific “high-risk” patient groups, vulnerable



Mycobacterium abscessus

individuals are not confined to specialist units. Patients at risk are routinely treated across outpatient, community, and diagnostic environments.

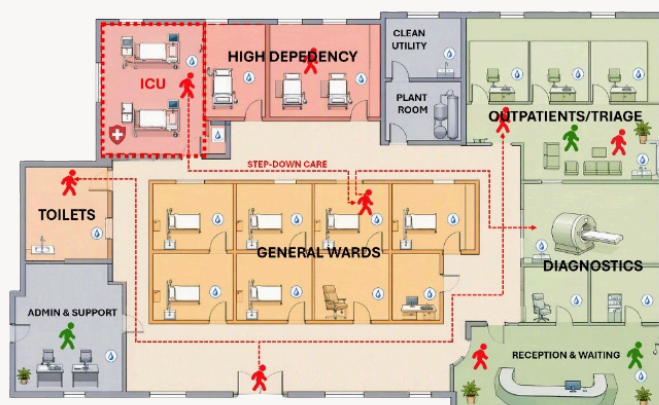
This gap between defined risk categories and real-world clinical pathways supports the case for broader adoption of upstream engineered barriers.

Rethinking “High-Risk”

Historically, “high-risk” has been linked to invasive interventions such as central venous access. However, many vulnerable groups fall outside this definition, including:

- Chemotherapy patients in outpatient settings
- Frail elderly patients with multimorbidity
- Individuals with chronic respiratory or immune conditions
- Renal, rehabilitation, and day-case patients
- Those with temporary or undiagnosed immune suppression

Outbreak evidence shows risk follows patient vulnerability, not departmental boundaries, reinforcing the need for system-level controls.



[Read the rest of the article online](#)

SoPHE PCE/YEN Annual Plumbing Competition 2026

Jack Batley
CIBSE

The SoPHE Plumbing Centre of Excellence (PCE) Annual Plumbing Competition returned this year, bringing together college learners, SoPHE YEN and industry for a day of practical challenges at London South Bank Technical College's (LSBTC) Nine Elms Campus.

The competition gives students and early-career professionals the opportunity to test their skills in a hands-on environment. This year's competitors took on a series of practical tasks covering hand skills, fault-finding and problem-solving, designed to reflect challenges they may encounter in the workplace.

By pairing YEN members with college learners, the competition encourages teamwork and knowledge sharing, while giving participants the chance to learn from one another in a supportive setting.

The event is an important part of the Plumbing Centre of Excellence's work to support the development of future plumbing and public health engineering professionals. It helps learners apply what they have been taught in the classroom to practical situations, while bridging the gap between domestic to commercial plumbing.



The competition would not be possible without the support of SoPHE's Industrial Associates, who once again created a range of engaging tasks for the competitors: Viega, Geberit, Polypipe Building Services, BLÜCHER, Aalberts Integrated Piping Systems, OVENTROP UK Ltd, New Haden Pumps Ltd, Lochinvar and J A Brooks Mechanical Services. Thanks also go to our judges: Paul Marsden, Amanda Haydock, Steve Vaughan and Malcolm Atherton who put competitors through their paces throughout the day. The PCE also relies on the hard work of all our organisers: Sanjay Modasia, Sam Burgess, Gary Zumeris, James Crowley, Rennie Llewellyn and Vito Martino.



Now involving more than ten partner colleges, the PCE continues to show what can be achieved when education and industry work together. The initiative brings together manufacturers, contractors, consulting engineers and educational institutions to give learners and young engineers meaningful opportunities to develop the skills and experience that employers value.

The winners of the 2026 competition will be announced at the SoPHE London Dinner on 5 November at the Royal Lancaster London. The winning YEN competitor will also receive a special prize in collaboration with Village by Village.

Congratulations to everyone who took part and helped make this year's competition another success.

SoPHE Technical Conference 2026

ENGINEERING EXCELLENCE – SAFETY AND
RESILIENCE OF PUBLIC HEALTH SYSTEMS

1 October 2026, One Birdcage Walk SW1H 9JJ

SESSION 1 | 'Circular Economy, Water Circularity & Public Health Engineering'

To define safe application of circular economy and water circularity principles in Public Health Engineering while protecting public health and system performance.



SESSION 2 | Public health Engineering and Water Safety Planning'

To demonstrate how Water Safety Planning embeds hygiene and risk management into building design from concept through operation.



SESSION 3 | 'Engineering Under Examination'

To challenge Public Health Engineering assumptions through real-world evidence, strengthening professional judgement beyond compliance.



SESSION 4 | 'Mind the Gap'

To identify how gaps between design, installation, and operation affect system performance and how designers can improve long-term outcomes.



Learn



Connect



Develop



How Airport Buildings Can Save Water Without Grounding Growth

John Bothma

Hoare Lea



Airports are symbols of modern mobility vast, complex buildings that move millions of people every year. Yet behind the sleek façades and glassy terminals lies a truth

that rarely makes the departure boards, airports are among the most water-hungry public buildings we operate. Every flush, every cooling tower cycle, every landscaped forecourt contributes to a daily demand that is only set to rise as passenger numbers climb.

Climate change may be tightening water supplies across the UK and beyond, but airports don't have the luxury of slowing down. The question is no longer whether airports should reduce water use, but how they can do so without compromising operations or passenger experience.

The encouraging news? Airport terminals are unusually well placed to lead by example.

Drawing on my experience delivering major infrastructure projects globally, four strategies consistently offer the most meaningful reductions, and none require sacrificing the efficiency or amenity that passengers expect.

Low flow water fixtures

Inside the terminal, smarter fixtures remain one of the lowest-cost, highest-impact interventions available. Low-flow taps, dual-flush toilets, waterless urinals, and efficient shower fittings can slash restroom

consumption by more than 50%, and no one walking through the airport will notice the difference except perhaps when they see the water-saving signage.

Given the enormous footfall, even fractional reductions per person quickly multiply into millions of litres of water saved each year. When paired with smart sensors and real-time leak detection, terminals can eliminate one of the biggest sources of hidden waste: the slow, silent losses that are inevitable in any building of this scale.



Rainwater harvesting

If any building type is perfectly shaped for rainwater collection, it's the airport terminal. With expansive roofscapes, airports naturally capture significant volumes that can be repurposed for toilet flushing, irrigation, or cleaning operations.

But the practical challenges are becoming harder to ignore. As dry spells lengthen, the gap between water harvested and water needed widens. Meanwhile, the reality of airport design, packed with underground services, ducts, cables, and utilities leaves limited room for the vast storage tanks required to make a system worthwhile.

Rainwater harvesting remains a valuable tool, but it must be applied thoughtfully, with clear-eyed realism about yield and available space.

[Read the rest of the article online](#)

SoPHE Northern Dinner

Malcolm Atherton Northwest Water Consultants Ltd

Our 14th Northern Dinner took place, once again at the Midland Hotel Manchester, on Friday 8th May 2026.

It started with pre-dinner drinks where colleagues & guests alike could mingle and meet-up with both "old" and new friends.

This year, we named the tables based "loosely" on whoever was the guest speaker! We welcomed Tom Houghton, comedian, who spent part of his youth living in the Tower of London!! Therefore, the table names & the questions for the table quiz (organised once again by Natalie Harrison – thank you!) were about this famous London landmark. I think everyone enjoyed themselves, especially Tom, as I believe that he went "clubbing" around Manchester with some of the guests afterwards!!!!



Our Chair, Mike Carter, started the proceedings by giving his opening Dinner speech, reflecting on the Public Health Industry as a whole & how PH designers have to "overcome" many issues!!

During the evening, the table quiz took place; a tie-break question between the top 3 tables involved guessing the number of individual gemstones that are set in the Imperial State Crown [2,868]. The closest guess fell to the "The Bloody Tower" table (Polypipe); congratulations to the winners & I hope you've had great fun with your prize!!!!

In addition, a collection was made to The Christie Hospital who do a fantastic job regarding the fight against cancer, something which I believe affects every single one of us in some way or another (for those of you that know me, it's certainly been a factor in my family). After all the monies were counted, we managed to raise a magnificent amount of £800.00; thank you to everyone who contributed.

Paul Marsden, SoPHE Industrial Associate Chair, concluded the evening by thanking everyone present & especially the respective table sponsors for their continuing support.

SoPHE Northern would like to take this opportunity to thank everyone involved for their support in this Dinner; the next one will be held on Friday 7th May 2027; hope to see you there.



Profile of a Fellow: Linda Dulieu

Linda Dulieu



I was very fortunate to secure a four year plumbing apprenticeship (technical) with Haden Young back in the day when it was still very unusual to be female! This was in 1978! Luckily I did manage to get a

Technical Drawing 'O' Level under my belt – so I thank my dear TD teacher – Mr Morsen for pushing me!

It was many years later that I was told that my boss, Joe Arnell at Haden's had put his job on the line to employ me! How times have changed!

I suppose being a stubborn red-head made me even more determined to prove the doubters wrong – but it was a hard slog at first.

After Haden's I followed my mentor to a consultancy practice – and then took the plunge to become a Technical Officer with the City of London Health Department. (This department was the forerunner of Building Control). This change from design consulting to plumbing on-site inspections was the step I needed to get the much needed site experience which I was sadly lacking.

After about four and a half years I headed back into design consultancy just before the 1990's building bubble burst – and there was I with my first redundancy!

At this time the only employment I could find was with a small City consultancy practice who landed a large contract with LUL, working with their pumps and drainage team. And because of the uncertain times – I was forced to become a contractor.

This was a 'light bulb' moment for me – and I stayed as a Contract Design Engineer for the rest of my career. It was flexible – it suited my time management (!), and it took me off to Hong Kong and onto other large projects along the way.

I bailed out a bit early from the PH world, after nearly 40 years – finishing my last contract at the end of 2017.

But along the way I've met some great people; the best ever peer group from my college days, and hopefully helped steer SoPHE along when I become the Honorary Secretary for a number of years before my retirement.

Best wishes to you all at SoPHE, and may you have a long and varied career in the PH world.



Water Conditioning, Water Treatment, Temperature Control and Material Selection

Amanda Stanley
Editor



The water industry is moving quickly, and the need for technical specialists is becoming increasingly important. However, one area where terminology can often

become blurred is the difference between water conditioning and water treatment. These terms are frequently used together, particularly where biological growth, chemical reactions, scaling, corrosion and temperature control are involved.

So, what is the fundamental difference?

Water treatment refers to the broad process of improving water quality by removing, reducing, inactivating or controlling contaminants, impurities and undesirable components to make water suitable for a specific end use. This may include potable water, healthcare use, industrial processes, closed systems, medical applications, or process water.

Water treatment can include processes such as:

- Filtration
- Sedimentation
- Coagulation and flocculation
- Chemical disinfection
- Non-chemical disinfection
- Chlorine dioxide
- Sodium hypochlorite
- Hypochlorous acid
- Ozone
- Copper-silver ionisation
- UV disinfection

- Advanced Oxidation Processes
- Reverse osmosis
- Activated carbon filtration
- Media filtration

The purpose of these processes is generally to improve water quality by removing, reducing or controlling substances or organisms that may present operational, aesthetic or health-related risks. This may include bacteria, viruses, organic matter, suspended solids, dissolved minerals, metals, disinfectant by-products, taste, odour or other unwanted contaminants.

Water conditioning, by contrast, is best understood as a subset of water treatment. It is focused primarily on modifying the characteristics or behaviour of water, rather than necessarily removing all contaminants. Water conditioning is commonly associated with:

- Hardness control
- Scale prevention
- Corrosion control
- pH adjustment
- Softening through ion exchange
- Chemical dosing to alter water stability
- Physical or electronic devices intended to influence mineral behaviour
- Protection of plumbing, calorifiers, boilers, heat exchangers and plant

The aim of water conditioning is usually to make the water more compatible with the system it serves. For example, reducing scale formation in hot water systems, improving heat transfer efficiency, protecting assets, reducing corrosion risk, or improving operational reliability.

[Read the rest of the article online](#)

2026 Society Calendar

August

SoPHE YEN KGN Pillinger factory tour
06/08/2026

September

SoPHE Technical Evening (Manchester) :
details to be confirmed
The Rain Bar, Manchester, 16/09/26

SoPHE Technical Evening (London)
YEN Take over
Saffron Hill, 16/09/26

October

Sophe Technical Conference
1 Birdcage Walk, 01/10/26

YEN Graduate Networking Event
Details to be released

Aquality Site Walk & CPD
Kings Cross, Details to be released

IHEEM Healthcare Exhibition
Manchester Central Convention, 13/10/26

November

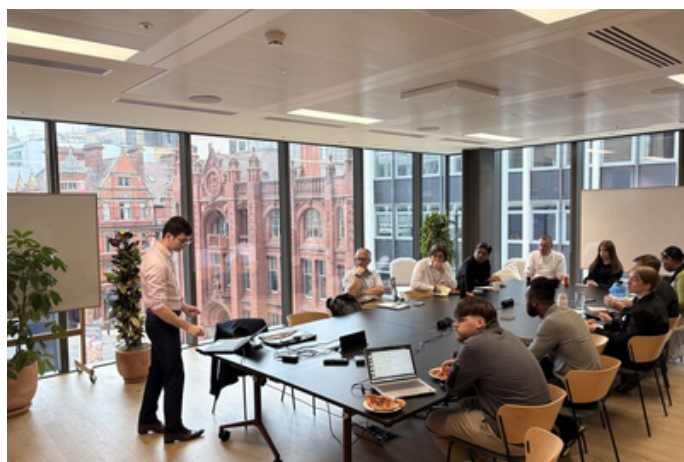
22nd Annual Awards Dinner
Royal Lancaster Hotel, 05/11/26

SoPHE Technical Evening (Manchester) :
details to be confirmed - The Rain Bar,
Manchester, 18/11/26

Elemental Built Environment Event London
Excel Centre, 25/11/26-26/11/26

December

SoPHE Technical Evening (London)
Health & Safety
Saffron Hill, 03/12/26



Local events and CPDs will be running throughout the year. Make sure you're signed up to the SoPHE mailing list as part of your CIBSE membership to stay informed. We also advertise events on our LinkedIn & Eventbrite.

Go to our eventbrite to find more

SoPHE would like to hear from you!

Our Autumn Issue will be covering **Rainwater Drainage**.

If you have a thought piece that you would like to add to the newsletter or an advertisement that you'd like to place, please email sophe@cibse.org

Submission deadline for the Autumn Issue will be **30.09.26**.

