[redacted]

To: DMAdmin
Subject: RE: Planning re-consultation notification 24/80420/COND
Date: 23 January 2025 15:29:00
Attachments: Noaq Boxwall Mailer.pdf
Noaq Boxwall Operator Instructions LR.pdf
image005.png

I have looked at the proposed flood prevention measures, the following is taken from the NOAQ Boxwall user instructions

Important!

Floods result from a course of events controlled by forces of nature that can only be controlled to a limited degree. Furthermore, no two events are the same, which means that all protective equipment must be used not only with good knowledge of its function and limitations, but also with generally sound judgement. Those who provide the equipment, manufacturers, resellers, hirers, etc. can never accept liability for the actual use and any possible personal injury or damage to property that might arise.

There is a potential that incorrect use of the flood prevention equipment may divert flood water to other areas causing additional flooding in an area that may have potentially remained unaffected. The person setting up the measures needs to be knowledgeable in their use and the area to be protected needs to be a firm even surface, inspected prior to installation. As installation can take two people 60+ minutes to set up a 200m section there needs to be confirmation as to when this will be used, who will set this up and what flood prevention arrangements are in place if the designated people to do this are not present.

Further information is required as to where this will be sited and stored, and arrangements for installation etc need to be included in the flood plan for the development before any approval can be given.
I have attached further information and user guidance on the proposed flood prevention measures.

Regards

[redacted]

Huntingdonshire DISTRICT COUNCIL

[redacted] hning Advisor

[redacted]

Working Hours: Monday13:30 – 16:30,
Tuesday, Wednesday, Thursday 08:30 – 16:30

-----Original Message-----
From: Dmadmin@huntingdonshire.gov.uk <Dmadmin@huntingdonshire.gov.uk>
Sent: 16 January 2025 13:06
To: Emergency, Planning <Emergency.Planning@huntingdonshire.gov.uk>
Subject: Planning re-consultation notification 24/80420/COND

Dear Sir/Madam

Please find correspondence from Development Management at Huntingdonshire District Council attached to this email in relation to the following application for Discharge of planning condition(s).

Proposal: Discharge of Conditions 4 (Implementation of Approved Remediation Scheme), 10 (Bin and Cycle Storage) and 12 (Additional Flood Prevention Measures) for 20/01687/FUL

Site address: Builders Yard Rear Of 24 Elton Road Wansford

Reference: 24/80420/COND

Huntingdonshire DC Development Management

FLOOD BOXWALL

NOAQ
Flood Fighting System





FL-151-174
Straight Section
L x W x H 98 x 68 x 53cm





FL-151-175
Inward Section
L x W x H
54/21 x 68 x 53cm



FL-151-176
Outward Section
W x D x H
65/34 x 68 x 53cm

Specifications	
Height	53cm
Material	Polypropylene
Average thickness	4mm
Temperature range	-30° to +90°C
Damming ability	50cm
Installation speed	2 people can install 200metres of wall in under one hour



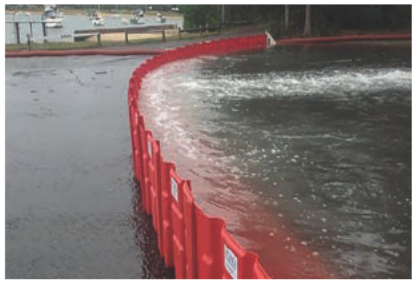
FLOOD BOXWALL

Reusable Flood Water Barrier System

FLOOD BOXWALL

NOAQ Boxwall is a freestanding, reusable temporary flood barrier system designed for a fast response to flood threats. Ideal for closing off roads, streets, pathways, carparks, river and canal banks, industrial and commercial properties to the threat of flooding as well as the control and diversion of flood water.

Suitable for use on any firm even surface including asphalt, tarmac, brickwork, concrete, paving and even on grass.





FEATURES & BENEFITS

- Manufactured in hardwearing polypropylene
- Quick and easy to deploy when required in an emergency
- Self-anchoring, no additional fixings required
- The higher the water rises the harder the barrier is pressed firm against the ground utilising the weight of the water
- Two people can assemble 200 metres of Boxwall in under 60 minutes
- Temperature resistance -30° to +90°C
- Stackable for easy transportation and storage when not in use
- Easily washed down after use for deployment in future floods
- Corner sections are available to create 90-degree bends



INSTRUCTIONS FOR

- A Boxwall is built by snapping sections one at a time onto the previous one, we recommend working from left to right
- The coupling between the individual boxes has a built-in flexibility of +/-3°, which means a Boxwall can be drawn in curves

Inward & Outer Sections

- For abrupt changes in direction corner sections are available, these have an angle of 30° and are available for both inward and outward corners. 3 x corner sections will produce a 90-degree bend

Maintenance

- Dismantle the wall by tilting the right-hand section (the one with the pin) against the left hand one. Wash the sections clean using a jet wash or garden hose and stand them on their side to dry

Storage

- The sections can be stacked to take up as little space as possible during transport and storage









NOAQ
Flood Protection AB

User instructions

NOAQ Boxvall BW52 (and BW50)

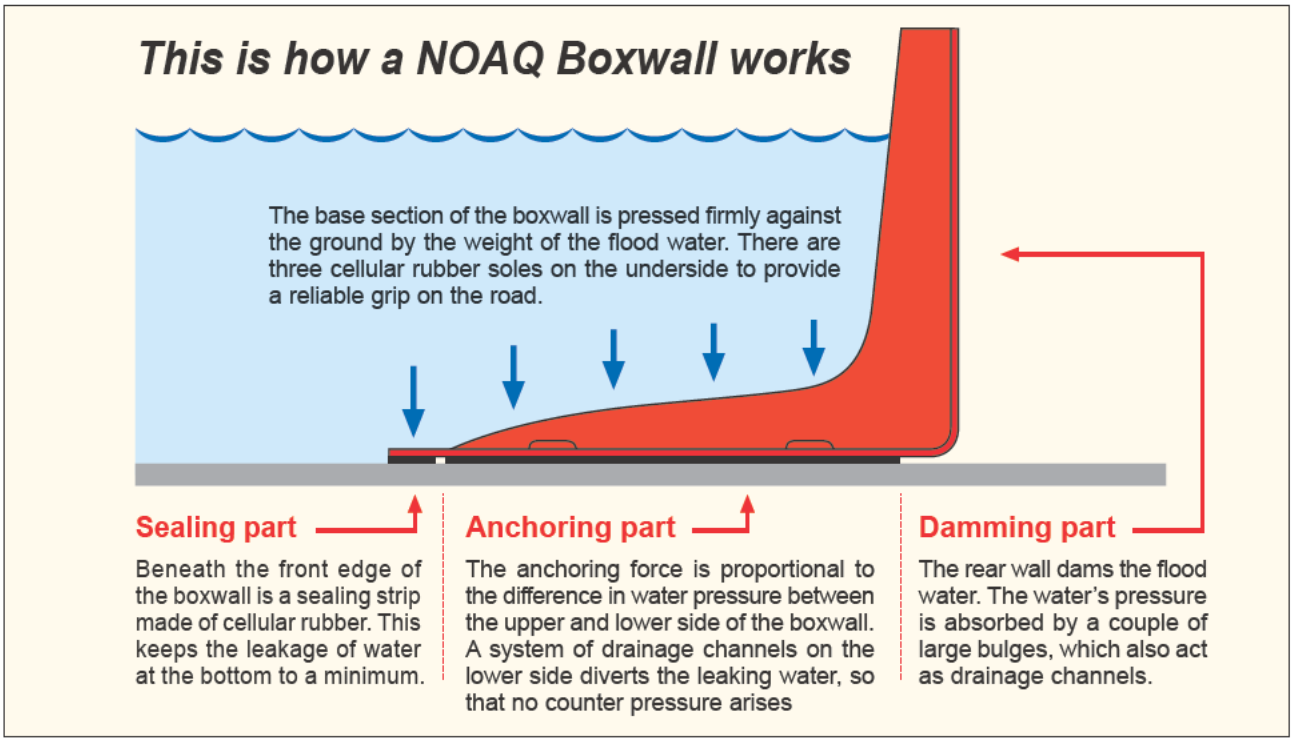
For instructions in other languages, see www.noaq.com



A NOAQ Boxwall is a mobile self-anchoring flood barrier. The NOAQ Boxwall BW52 creates a dam for water up to a height of 50 cm. The boxwall is so light that it can quickly be set up to protect buildings and other property against water damage, and also to keep roads open. A boxwall is designed for use on a relatively even surface, such as a paved street, a concrete floor or a lawn. The boxwall is patented in a large number of countries.

A boxwall consists of sections (boxes) that are linked together by means of a simple manual operation. No tools are needed. For bends and corners there are certain corner boxes. There are also gable units (BW52-GL and BW52-GR) for the finishing of a Boxwall.

A new straight model BW52 replaces an older model BW50, but the two models are fully compatible. However, the corner boxes that were developed for the previous model (BW50-IC and BW50-OC) have not been replaced by new ones.



Each box consists of a damming part (the rear wall), an anchoring part (the horizontal section that rests on the ground) and a sealing part (the front edge of the horizontal section). Sealing strips of cellular plastic are fitted under the front and side edges. Each box is also fitted with three cellular rubber soles to create a good grip on the road.

A boxwall is built up by snapping boxes one at a time onto the previous one. The easiest way is to work from left to right (viewed from the dry side). You should avoid working from two directions, as it is difficult to make the two wall sections meet at exactly the same point.

As with all mobile flood barriers you need to count on a certain leakage. This can be minimized by covering the barrier with a plastic liner. But water is also leaking through the ground under the barrier. Water may also come to the protected area as rain and through brooks which have been cut off by the barrier itself. **Therefore one or more pumps must always be put on the intended dry side of the barrier.**

The Boxwall components can also be used to create temporary basins of various sizes, so-called Boxpools. For the Boxpool there is a separate user instructions.



BW52-GR, BW50-OC, BW50-IC, BW52, BW50, BW52-GL

Follow these instructions:

1. Inspect the area where the boxwall is to be constructed

The boxwall has been specially designed for firm, even surfaces such as asphalt, concrete, lawns etc. It is therefore ideal for setting up on streets and paths, across car parks, in industrial areas, around shopping malls, in harbours and at airports. It must not be used on surfaces that are very uneven or on ground that is prone to erosion. Inclinations of the ground of up to 1:10 is no problem, but abrupt transitions from a surface with one inclination to an other need to be done perpendicularly. Holes or bumps should be avoided. The straight boxes are 980 mm long but overlap one another, which means each box adds 900 mm to the total barrier length (for the BW50 the corresponding numbers are 705 and 625 mm resp). A boxwall requires a free width of 680 mm.

Loose sand and gravel must be brushed away from where the wall is to be erected. The soles attached beneath each box have just as good a grip as the rubber soles on your shoes. If there is sand on the road you run the risk of slipping, and the same applies for the boxwall.

The coupling between the individual boxes has a built-in flexibility of +/-3°, which means a boxwall can be drawn in curves. For abrupt changes in direction there are certain corner boxes. These have an angle of 30° and are available for both inward and outward corners.

The boxwall can be placed on land that is already flooded, but if the ground surface is difficult to see through the water, you must take particular care to make sure that the boxes are not placed on uneven surfaces, on the wrong side of surface water drains, etc

The boxes are easy to handle and move, and you can also adjust the setting of a constructed boxwall as long as the water has not started to press firmly against the base. But you must avoid dragging the boxes on the ground, as the sealing strips on the underside are vulnerable to wear and may become damaged.







2. Lay out the boxes and connect them one by one

Start from the left (seen from the dry side) and connect the boxes one at a time to the previous one. The boxes have a **coupling mechanism** (at the front) and a **locking mechanism** (at the top). Tip the box slightly forwards and connect it with the previous box by inserting the protruding ”tongue” (on the far left) beneath the ”bridge” (on the right-hand side of the previous box).

Now tilt the box a little to the side, press down its rear edge and insert the pin of the locking mechanism into the groove in the previous box. A good idea is to use your right foot to keep the box tilted (see photo above) to be able to use both hands for the connection operation. Turn the box so that the pin ends up in the middle of the groove. This is the normal position. Straight boxes are now connected in line and corner boxes in a 30° angle. However, the locking mechanism has a certain flexibility allowing the boxes to be turned +/-3° against one another (see photos on next page).

On the previous model BW50 a clamp was put on each connection. This is not needed for the BW52, nor for the corner boxes BW50-IC and BW50-OC.

To help the sealing strip underneath create a tight seal against an uneven surface, you can place a weight on the front edge of each box, for example a stone or a sandbag. It can also be necessary to ballast the boxes in this way if there is a strong wind, before the water arrives. The boxwall is not very susceptible to winds coming from the front, but winds from behind will try to lift it.

Also when deploying a boxwall in deep water the boxes need to be ballasted from start to prevent them from floating. A difference in levels between the water in front of the boxwall and behind it is necessary to achieve the pressure difference that keeps the barrier in place.

If you want to improve the seal, you can cover the boxwall and its connections with a specific thin plastic sheeting, a liner. The sheeting is 2.0 m wide and can be fixed with clamps along the upper edge and with a line of gravel or sandbags on the ground in front of the front edge. By covering the boxwall with a plastic liner it can also be used on a much more uneven ground, as the liner is more flexible.



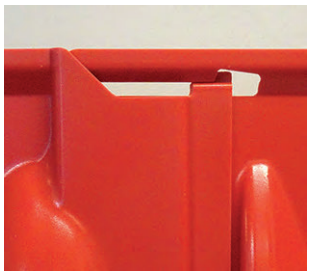
Assembly position



3° in one direction



Normal position



3° in the other direction

3. Corners

To create corners there are a couple of corner elements, one for outward corners and one for inward ones. Both have an angle of 30°, so three connected boxes make a 90° angle. Corner boxes can easily be connected to straight boxes, and with one another, as they all share the same coupling mechanism.

Outward corner boxes may be used to protect a single object, like a detached building. To surround a rectangular area, 4 x 3 outward corner boxes for the corners can be combined with an appropriate number of straight boxes for the sides.

Inserting corner boxes at appropriate positions in a boxwall makes it possible to let it pass around different kinds of obstacles, turn in an intersection etc.

Inward corner boxes can also be used to build up temporary basins. 12 boxes are enough to build a circular pool, a ”NOAQ Boxpool” (se separate user instructions). By combining the corner boxes with a number of straight boxes a basin of any desired size can be deployed.









Connection using corner boxes..



Connection using a gable..



Using a piece of liner for sealing

4. Connect to wall or facade

When a boxwall needs to end in deep water, like against a wall or a facade, the outermost box may need to be supported. If the boxwall is connected alongside a wall or at an oblique angle to it, it is provided with support by the wall itself.

If the boxwall approaches the wall in a right angle or in a sharp angle, one or more inward corner boxes can be used to let the boxwall make a turn up along the wall. See photo above.

An other possibility for connections in a right angle is to use a gable, a boxwall element that has a vertical side. The gables come in two versions, a left hand gable and a right hand gable. The coupling mechanism is the same as for the other boxvall elements.

The connection between the boxwall and the facade may need to be sealed, and this is preferrably done by using a plastic liner. A such can be ordered as an accessory to the boxwall. The plastic sheet is attached up against the facade, and to the boxwall. Make sure that the liner protrudes somewhat in front of the boxwall and fix it to the ground. If the liner is thin enough it will adapt to irregularities in the ground and in the facade as the water rises and the water pressure increases.

5. Kerb stones

Kerb stones or stairs can be passed using a couple of gables. The passage must be done perpendicularly. When climbing upwards a right hand gable is connected to the end of the boxwall and is abutted against the kerb stone, A new boxwall section, with a left hand gable in the end, is deployed on the higher level. The two gables, now vertically offset, are screwed together through the vertical slot that all gables have. Also when descending from a higher to a lower level a right hand gable is used to end the first boxwall part, and is connected to its twin on the lower level.

To reduce leakage sealing may need to be improved between between the gables and the kerb stone. Also in this case a piece of liner can be used.



Left hand and right hand gables



Gables to cope with kerb stones



Drag the boxwall behind gullies

6. Length adjustments

If a boxwall needs to have an exact length, for example between two buildings, there are different options for adjusting this. As the boxes can be coupled in angles of up to +/-3° a straight boxwall can be shortened by deploying it in a slight arch between the end points. An other option is to insert some corner boxes, either in the middle of the boxwall, or towards the end of it. A third way to span a gap of exact width is to put a straight boxwall a little obliquely.

7. Pump away leaking water

When using mobile flood barriers you always need one or more pumps to pump away the water that will collect on the intended dry side of the barrier. A certain leakage will always occur, through the barrier, under the barrier and also through the ground itself. Upon this comes rain water that runs down towards the barrier but cannot reach the river or the lake as the barrier itself blocks the way. If the ground is level or if it slopes towards the flood, this water must be pumped clear with a pump. If the ground slopes away from the flood (e.g. on the crown of permanent embankments), the water will run away without the need for pumps.

Water leaking through or under a mobile flood barrier is no problem as long as the pumping capacity is sufficient. When needed the leakage rate can be reduced by covering the barrier with a liner. NOAQ is supplying a suitable liner that is 2 meters wide liner and 75 meters long.

Be aware of any surface water drains or manholes and try to lay the boxwall behind such. If there is a risk that culverts might lead flood water under the barrier and into the protected area, these channels must be plugged or blocked.

8. Combine boxwall and tubewall

A NOAQ Boxwall can be combined with a NOAQ Tubewall. The walls are laid so that they overlap by a metre or so, ideally with the tubewall closest to the flood and the boxwall beneath and behind the tubewall. One or a pair of the tubewall's joint covers are used to form a seal between the two wall sections.





9. Flash flooding

The boxwall can also be used in flash flooding, when water is running fast over the streets. When this happens the most obvious measure is to protect low entrances and vulnerable objects by redirecting the water flow toward areas where flooding will cause less damage. A similar situation can occur when snow is melting, and the water tries to take unacceptable routes. As for the use in calm water, the boxwall should only be used on firm and even surfaces.

If water is already running fast at the place of the intended action, a first measure may be to place a number of boxes in the water flow, to break down the speed of it and reduce its power. Put the boxes close to each other, facing upstream, but do not try to connect them. They will be anchored directly by the weight of the water entering upon them.

Behind this protective row of boxes a continuous boxwall is then assembled. When the boxwall is completed, the front row of boxes can be removed.

This way the boxwall can be used to lead away watermasses in a controlled manner down the streets, hereby reducing water levels and flood problems upstream. To divert the water off the street the boxwall may be deployed diagonally. The angle chosen, in relation to the direction of the current, depends on the amount of water and the speed of it.

10. After use

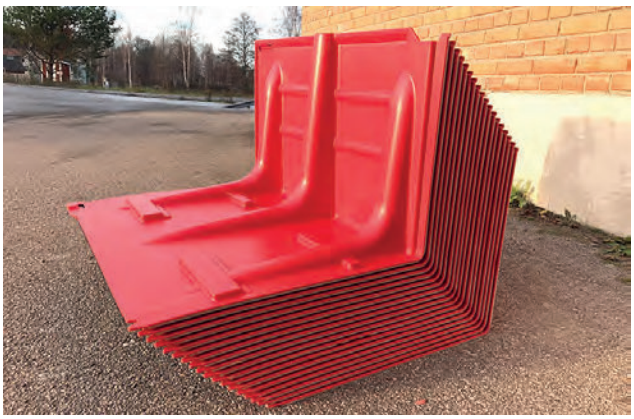
Disconnect the boxes. By tilting the right hand box (the one with the pin) against the left hand one, they are easily disconnected.

Rinse the boxes clean using a garden hose or by rinsing them in water, and stand them on their side to dry (when they are placed on the side the water runs off more quickly from the pores in the sealing strip). If there is a risk of temperatures falling below zero, the boxes must be taken indoors and stored in a heated area until all “soft parts” (soles and sealing strips) have dried out properly.

Inspect all soft parts. Damaged or worn sealing strips can be replaced, but if the soles have suffered big damage, the entire box should instead be replaced.

The boxes can be stacked to take up as little space as possible during transport and storage.





26 boxes (straight or corner ones) fit on standard pallets 800 x 1200 mm. Gables are delivered in cardboard boxes.

Important!

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