

Mr P A Wright
Production Director
Stewarts & Lloyds Plastics
St Peters Road
HUNTINGDON
Cambs
PE18 7DF

Mr J Allan

442350

DHEH/JA/LSF/EP/F

8th November 1993

Dear Mr Wright

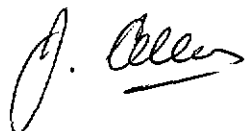
Re: **ENVIRONMENTAL PROTECTION ACT 1990, PART I**
APPLICATION FOR AUTHORISATION

I acknowledge receipt of your application for Authorisation of a prescribed metal decontamination process dated 4th November 1993.

Please find enclosed a receipt for £935 in respect of the application fee.

You may now proceed with the advertisement in two local newspapers.

Yours sincerely



JOHN ALLAN
ENVIRONMENTAL HEALTH OFFICER

Enc

ENVIRONMENTAL PROTECTION ACT 1990, Part I

The Environmental Protection (Prescribed Processes and Substances) Regulations 1991
The Environmental Protection (Applications, Appeals and Registers) Regulations 1991

See Notes on pages 3 and
4 before completing this
form.

**APPLICATION FOR AUTHORISATION to carry out prescribed process
under section 6 of the Environmental Protection Act 1990**

To⁽¹⁾ HUNTINGDONSHIRE DISTRICT Council

1 Name and address of applicant ⁽²⁾ (in the case of a registered Company, name, number and registered office)

VICTAULIC PLC
MILTON KEYNES

Tel.No.

2 Name and address of premises where process is or will be carried on (not applicable to mobile processes)

STEWARTS & LLOYDS PLASTICS PIPE
ST PETERS ROAD, HUNTINGDON,
CAMBS

Tel.No. 0480 52121

3 In the case of mobile plant, name and address of the principal place of business

N/A

Tel.No.

4 Address for correspondence relating to the application

STEWARTS & LLOYDS PLASTICS PIPE
ST PETERS ROAD, HUNTINGDON,
CAMBS PE18 7DJ

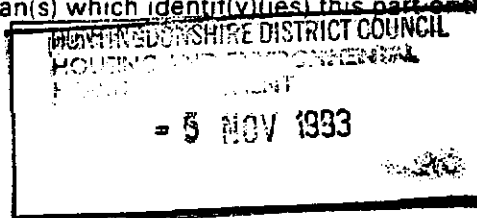
Contact name MR PETER WRIGHT

Tel.No. 0480 52121

5 List of maps or plans enclosed with the application showing the location of the premises where the process is or will be carried on.

TITLE	Reference No.
POLYTHENE PLANT	EP/145
EXHAUST OUTLET FROM FLUIDISED BATH	C- / -
LAYOUT OF FLUID CLEAN B32.16.16	TAI - 1892
TECHNICAL SPEC	APPENDIX I
ORDNANCE SURVEY MAP	REF. 1
SITE LAYOUT	REF. 2

Where the process is or will be carried on on only part of the premises whose address is given at 2 above, describe which part of the premises and list the plan(s) which identify(ies) this part of these parts.



6 Describe the prescribed process ⁽³⁾ (use a continuation sheet if necessary)

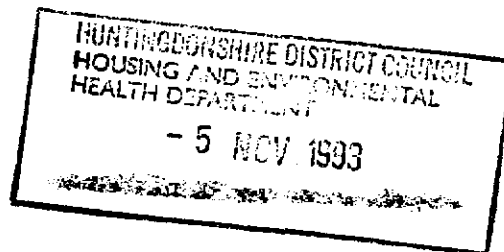
The process is one of metal decontamination. It is carried out in a purpose designed appliance known as a Dinamec fluidised bath. In the process a gas/air mixture is blown through a bed of sand from the bottom, at the surface the gas is ignited and fluidisation causes the heat to penetrate all the sand in the bath raising it to the operating temperature of 420°C. Tooling which is contaminated with plastic is lowered into the sand until it is submerged. The plastic is then carbonised and burnt off, any gases generated are ignited at the

6 (Cont'd)

surface and drawn off via the stack to the atmosphere. The process is used on average 3 times per week.

The cycle time is approx 4 hours to heat up the sand and then depending on the load the cleaning cycle can last from a further 4 to 8 hours. The appliance is shown in drawing No. TD1 - 1892 and explained in the Technical Specification - Appendix I.

27.10.93



7 When was the plant first installed? OCTOBER 1990

Please also give the details and dates of any major modifications or improvements which have been carried out.

In July 1993 the stack height was increased to allow monitoring to take place.

8 List the prescribed substances (and any other substances which might cause harm) used in connection with or which might be released into the air resulting from the prescribed process.(4)

Particulate matter, metals and their compounds oxides of carbon, oxides of sulphur. There are no chlorides or organic compounds present because the plastic compound is manufactured from oil and gas and will be destroyed upon combustion.

9 Describe the techniques to be used for preventing releases into the air of substances listed above, for reducing such substances to a minimum and for rendering harmless any such substances that are released.(5) *(use a continuation sheet if necessary and attach drawings of plant and equipment, where appropriate)*

- 1, The amount of plastic is minimised on the tooling before immersion in the bath.
2. The level of metals and sulphur is being significantly reduced by changing the formulation of the polymer (date for change late 1993 early 1994).

10 Give details of the source, nature and amount of current and/or anticipated emissions to air from the process. *(use a continuation sheet if necessary)*

See attached report from British Steel

11 Give the assessment of the likely environmental consequences of the emissions to air. *(use a continuation sheet if necessary)*

It is the opinion of the business that it will be insignificant.

12 What monitoring is or will be carried out of emissions to air?

There will be an investigation into the practicalities of continuous monitoring; but the least the company will carry out will be annual assessments.

13 What monitoring will be carried out of the environmental consequences of emissions to air?

The Business is just in the process of implementing an environmental policy along the guidelines of BS 7750 and this process will be included in this plan. The anticipated date for this to be in place is by January 1995.

14 How will you monitor the techniques described in the answer to question 9?

1. Monitoring that the BS 7750 system is working properly (Auditing).
2. Training and Supervision.
3. Q.A. certification from supplier of compounds according to (ISO 9002).

15 State how you will ensure that the objectives listed in section 7(2) of the Environmental Protection Act 1990 will be achieved and how the condition implied by section 7(4) of the Act will be complied with.(b)

The action of removing the majority of polymer before immersion in the bath ensures that emissions are kept to a minimum.

Always 95% of the polymers contained within the tooling are removed.

16 If you have any proposals for improvements which might prevent or reduce emissions, please give details. (use a continuation sheet if necessary)

Action has already been taken to improve the situation by the raw material suppliers changing the formulation.

17 Give any other additional information which you would like to be taken into account by the local authority in considering your application.

Official guidance on the best available techniques not entailing excessive cost is published by the Department of the Environment in the process guidance notes for specific industries, copies of which are available from HMSO or can be ordered from certain bookshops. YOU ARE ADVISED TO CONSULT THE PROCESS GUIDANCE NOTE FOR YOUR INDUSTRY BEFORE COMPLETING THIS FORM. YOU MIGHT ALSO FIND IT USEFUL TO READ THE GENERAL GUIDANCE NOTE GG3.(7)

If you require any further information or assistance in completing this form, please contact your local Council at the address shown below.

Please complete the final section of this form on page 4 overleaf.

I enclose the fee of £ 935 (8).
Cheques should be made payable to:

I HEREBY CERTIFY that all the information contained in this application is correct to the best of my knowledge and belief (and that I am authorised to sign on behalf of the Company).

Signature R. Wright

Official title PRODUCTION DIRECTOR

Date 4th November 1993

Please complete and return this form together with FOUR copies of each of the plans listed in the reply to question 5 and the required fee to:

Tel.No.

NOTES

1 This is the local authority in whose area the prescribed process will be carried on, or in the case of mobile plant, the local authority in whose area the applicant has his principal place of business.

2 Please state the person/Company who is operating or will operate the process, not an agent who may be completing the application on the operator's behalf.

3 A list of prescribed processes for local authority control is given in Appendix A, which accompanies this form. Further advice can be obtained if necessary from the local authority.

4 A list of prescribed substances for release into the air is given in Appendix B, which accompanies this form. "Harm" includes offence to the senses or harm to property.

5 Please list fully all pollution control measures for all stages of the process, from the receipt of raw materials to the despatch of wastes and finished products, including, for example, the height and location of any stacks or vents; the abatement technology; process control and operational data; arrangements for maintenance; the extent of supervision; the relevant qualifications and experience of the workforce; staff training; and contingency plans for breakdowns and emergencies.

All calculations should be shown, particularly for the chimney height(s). Justification for the selection of a particular abatement option should be given.

6 Section 7(2) and 7(4) of the Environmental Protection Act 1990 requires every operator of a prescribed process to use the best available techniques not entailing excessive cost for -

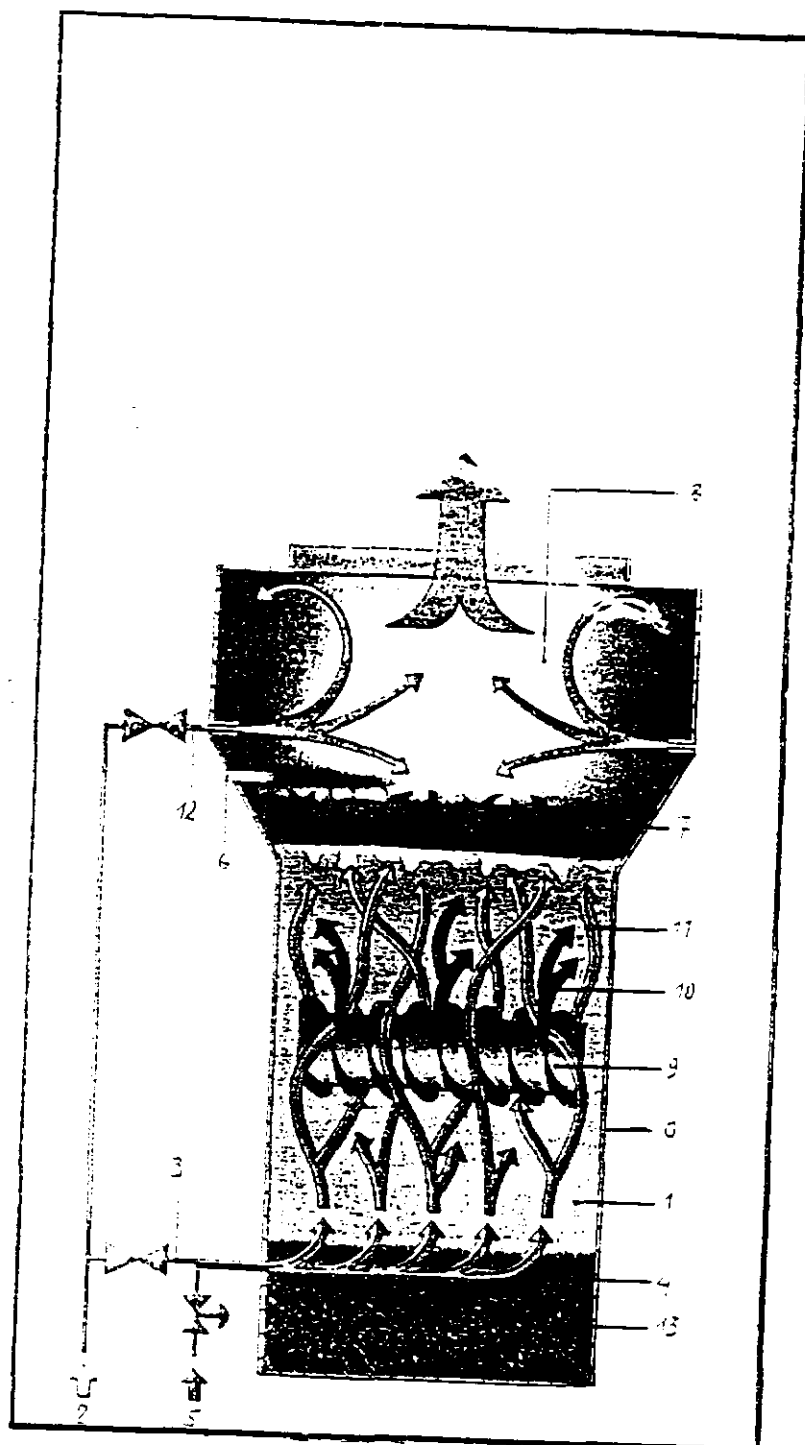
- (i) preventing the release of prescribed substances, or where that is not practicable, for reducing the release of such substances to a minimum and rendering them harmless; and
- (ii) rendering harmless any other substances which might be released.

7 Much of the information contained in the application form will be included in a register which the local authority is required to keep for public examination in accordance with section 20 of the Environmental Protection Act 1990 and the Environmental Protection (Applications, Appeals and Registers) Regulations 1991. Sections 21 and 22 provide for certain information (affecting national security, or commercial confidentiality) to be excluded from the register. Such information should be clearly identified in this application form.

- 435
- 8 ~~£800~~ in the case of initial applications.
~~£550~~ in the case of applications for a substantial change.
~~£550~~ in the case of processes transferred from previous HMIP control.
£100 for small waste oil burners.

3.

Type A + B



WORKING PRINCIPLES OF THE FLUID CLEAN

The Fluid Clean consists of a reservoir (0) which is filled with calibrated quartz sand (1). The primary air (3) is blown in through the air intake (2) to the bottom of the bed by a distributor (4) in order to fluidize the sand. Gas (5) is mixed with the primary air in order to heat up the fluidized bed. This gas-air mixture is ignited above the surface of the bed by a pilot burner (6). Owing to the constant low air speed throughout the bed, the main flame (7) covers the total surface of the fluidized bed. This enables the fluidized bed to be quickly brought to a high temperature ($\pm 420^{\circ}\text{C}$) thanks to the contact between the flame and the fluidized particles and the exceptional transfer of heat in the bed itself. The bed temperature is adjustable by means of an automatic temperature control which regulates the gas flow.

Above the bed surface, the reservoir (0) incorporates an after-burning chamber (8) where the speed of the flue gas is reduced owing to the larger section. This enables better burning of all the outflowing gases. Owing to the process of fluidization the sand behaves like a boiling liquid. This makes it easier to introduce the parts (9). The bed temperature remains constant throughout the bed volume. This eliminates any possibility of the parts becoming deformed owing to local differences in temperature.

The vaporization of the organic impurities on the parts occurs in the sand mass. The pyrolytic gases (10) thereby released are burned off in the after-burning chamber (8) together with the gas-air mixture (11).

Complete after-burning is ensured by tangentially injecting a quantity of fresh "secondary" air (12) which mixes in with the aforementioned gases. The permanent gas flame over the bed surface ensures that this mixture ignites.

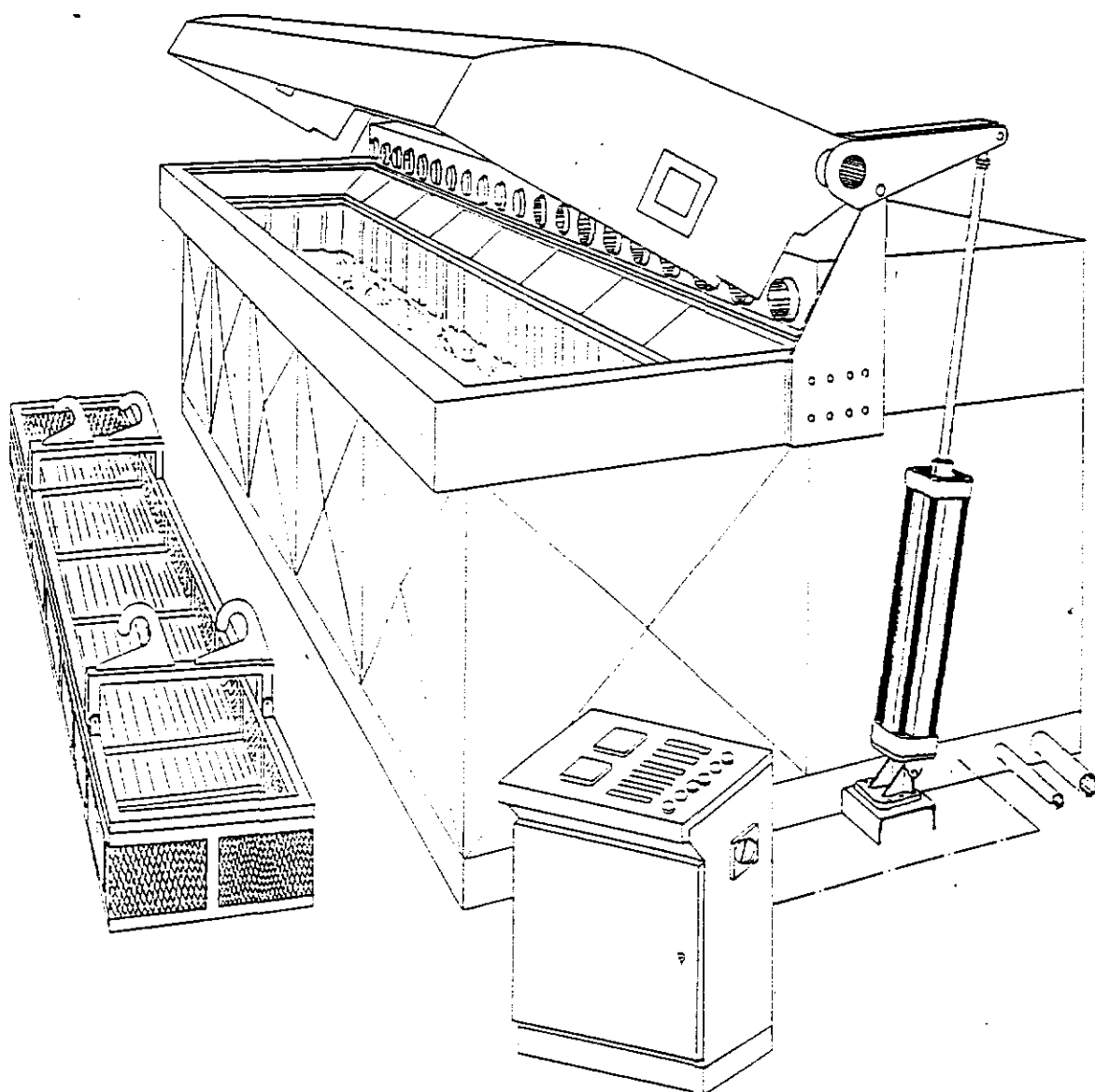
4.b.

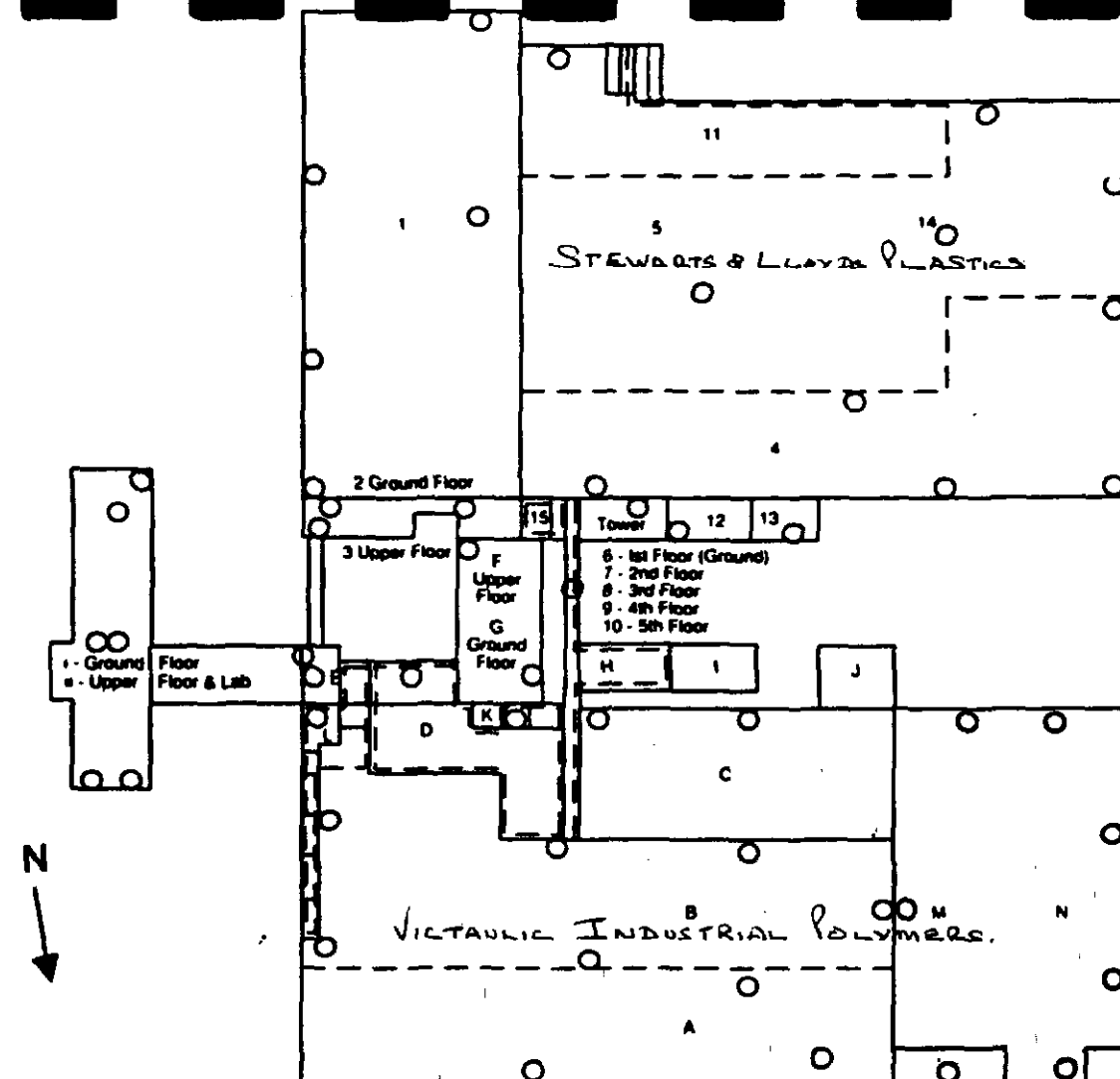
Type A + B

The slightly scouring action of the moving sand serves to remove any combustion residues from the part being treated. The result is a rapid cleaning of the parts with a minimum of finishing work required.

An insulating layer (13) guarantees the thermal insulation of the air-gas distributor (4) which is kept at a constant temperature of around 50° C. The combustion gases are eliminated via an exhaust system, which is equipped with a ventilator.

TYPE B





REF 2.

SITE LAYOUT

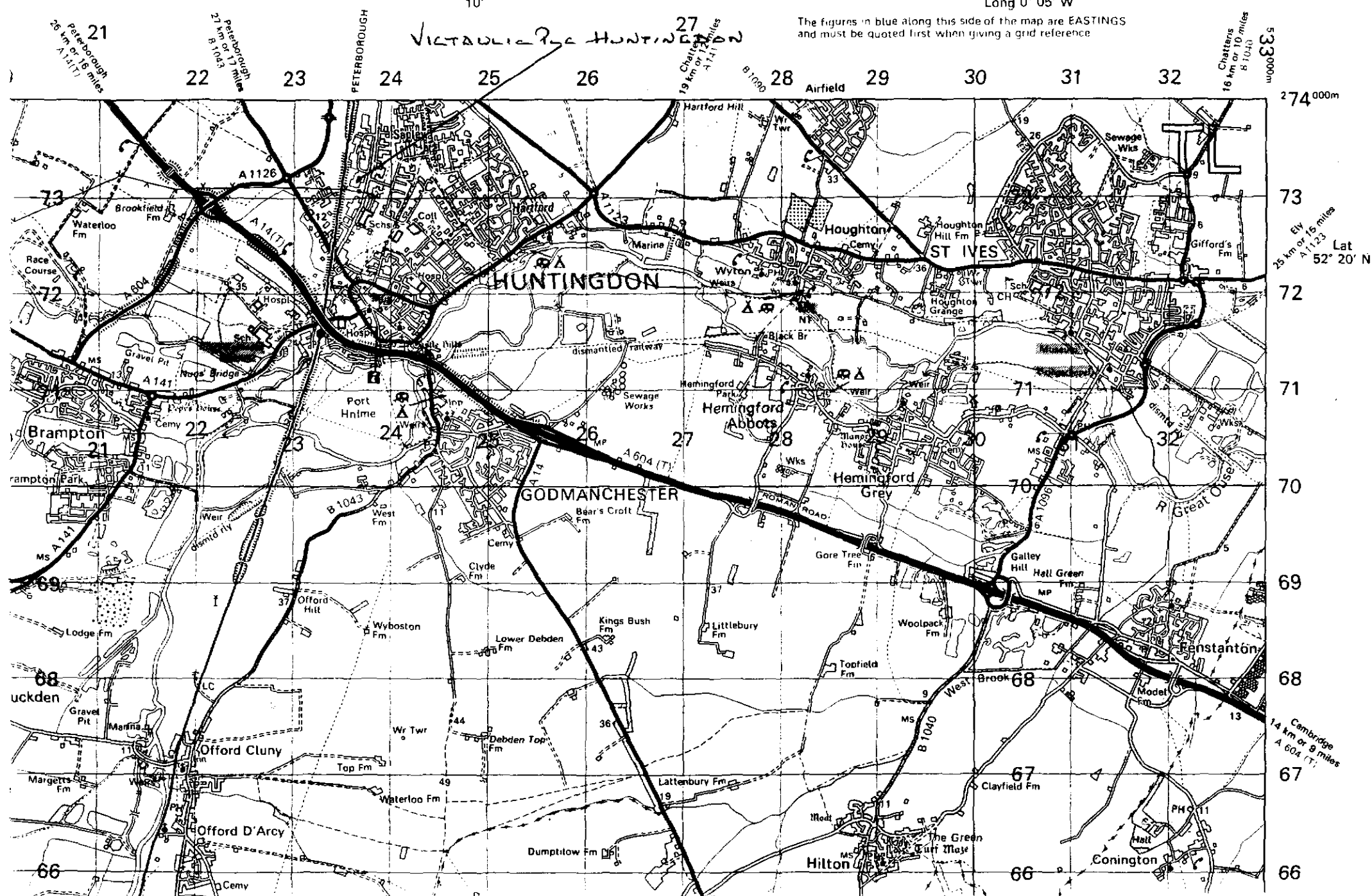
VICTAULIC PLC HUNTINGDON.

Zone	Area	No. Break Glasses
1	Small bore lines and test lab.	4 B.G.
2	Small bore extension	2 B.G.

REF. 1.

Long 0° 05' W

The figures in blue along this side of the map are EASTINGS and must be quoted first when giving a grid reference



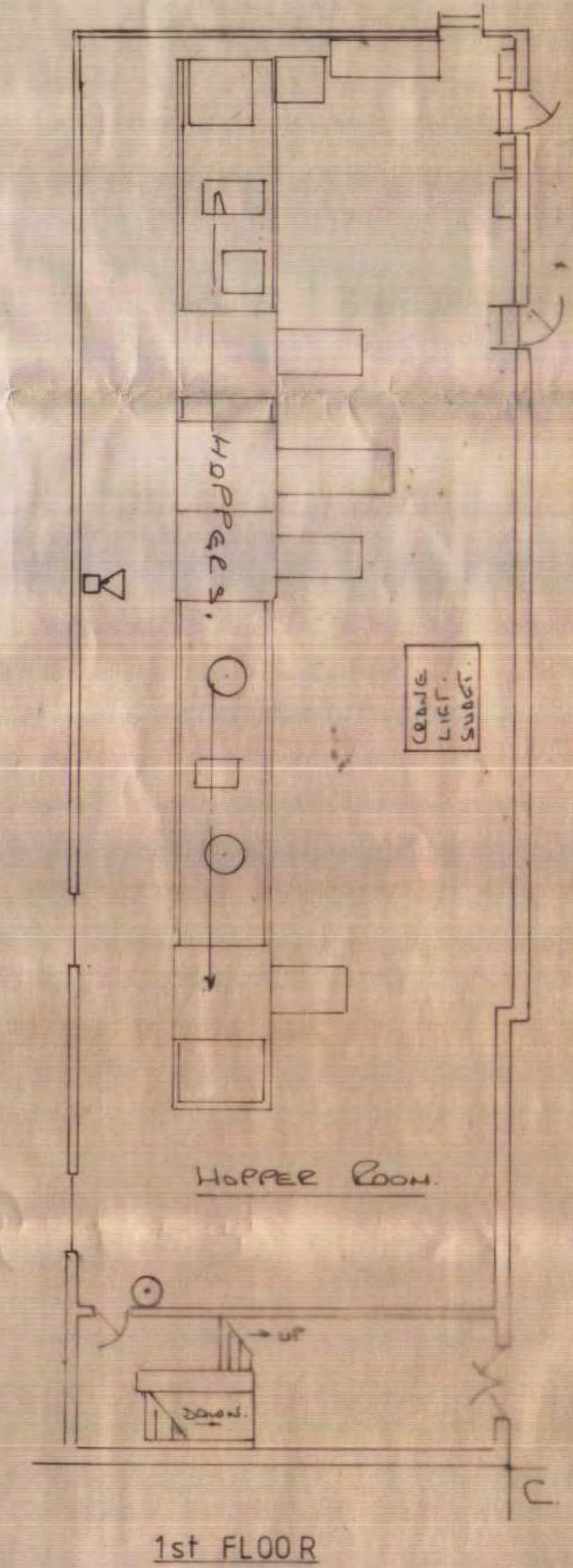
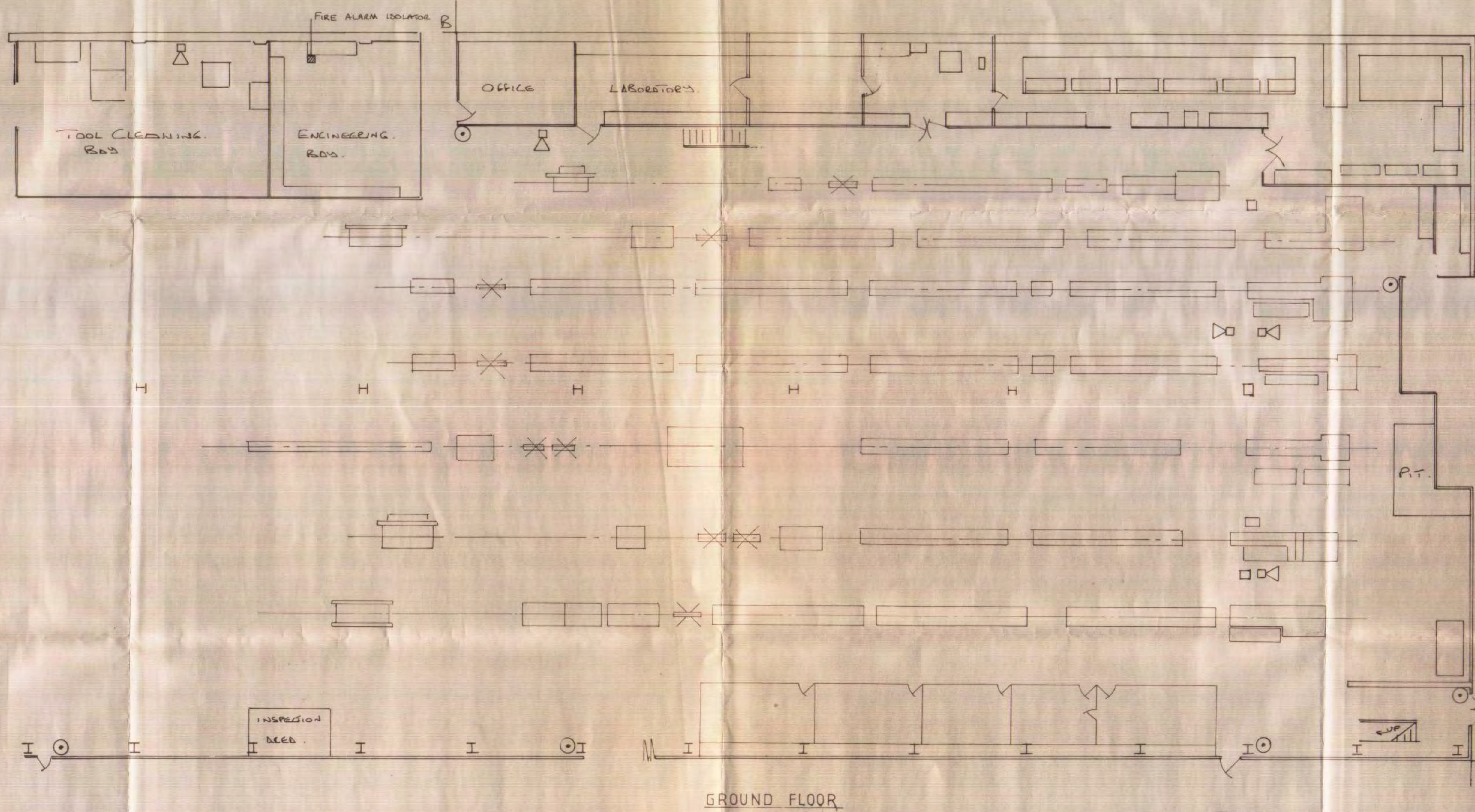
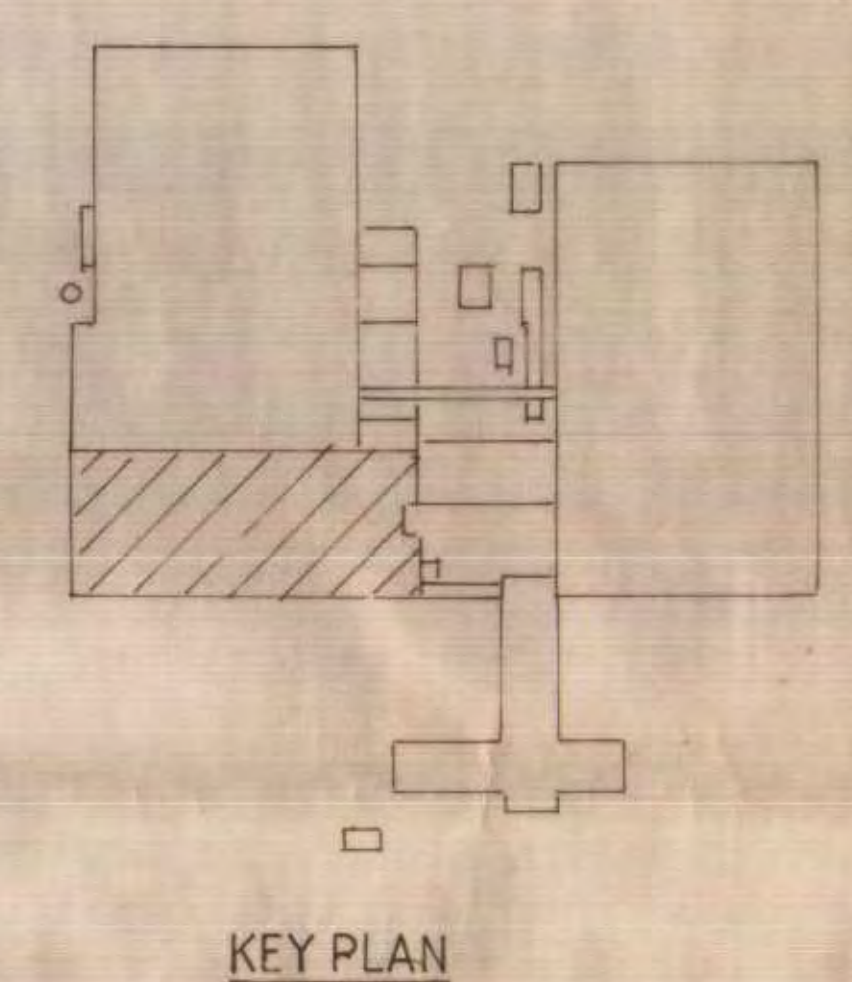
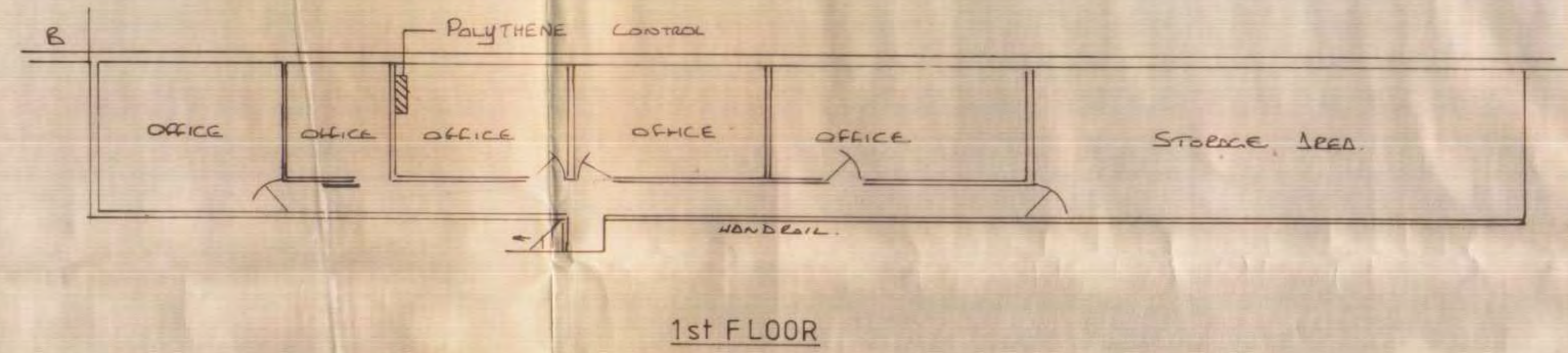
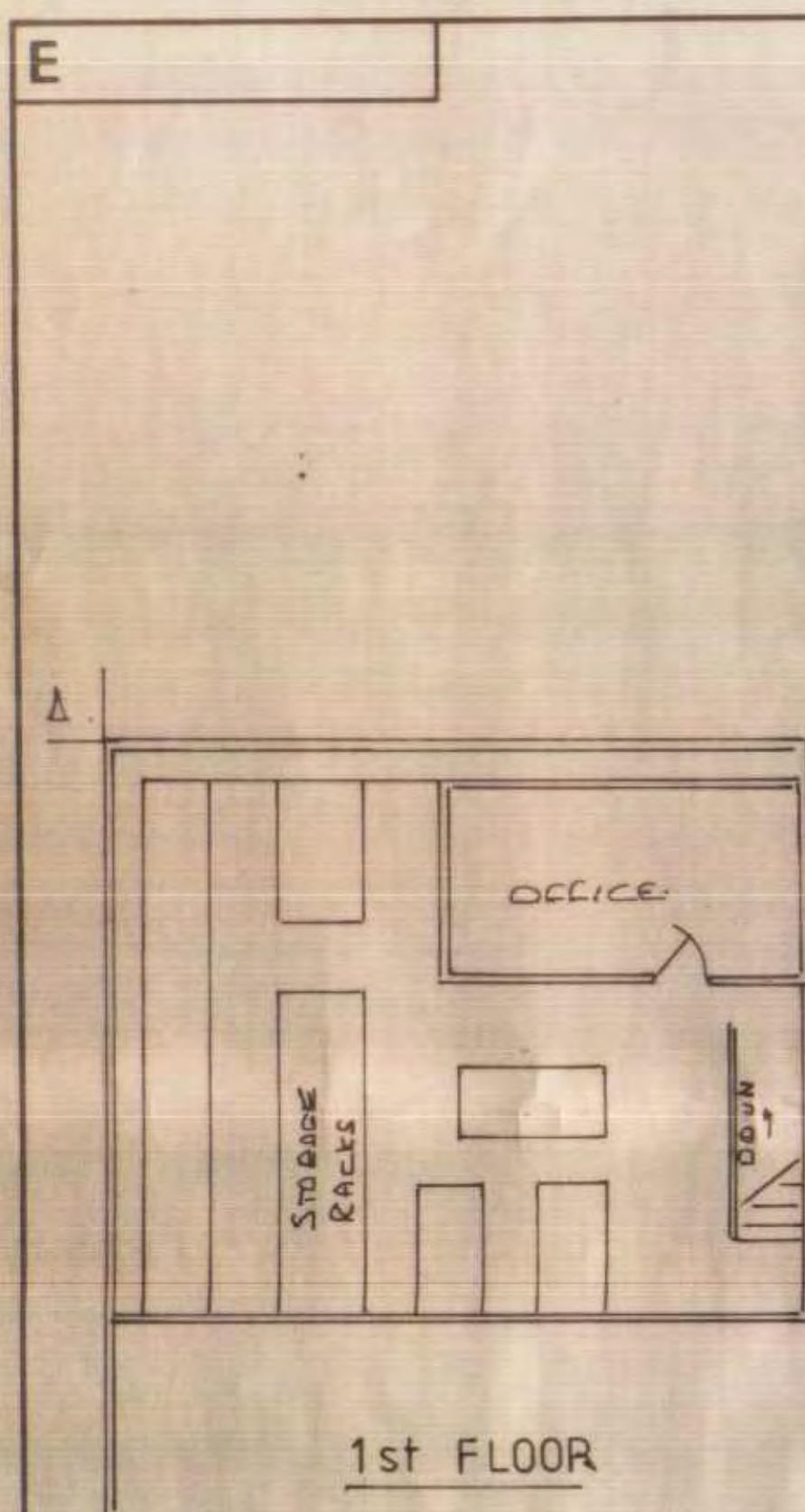
STEWARTS & LLOYDS PLASTICS PIPE

051193 20001908

MISC CHQ 6154 11 001 @PAID 935.00

MISC

USED ON
DRG. No.



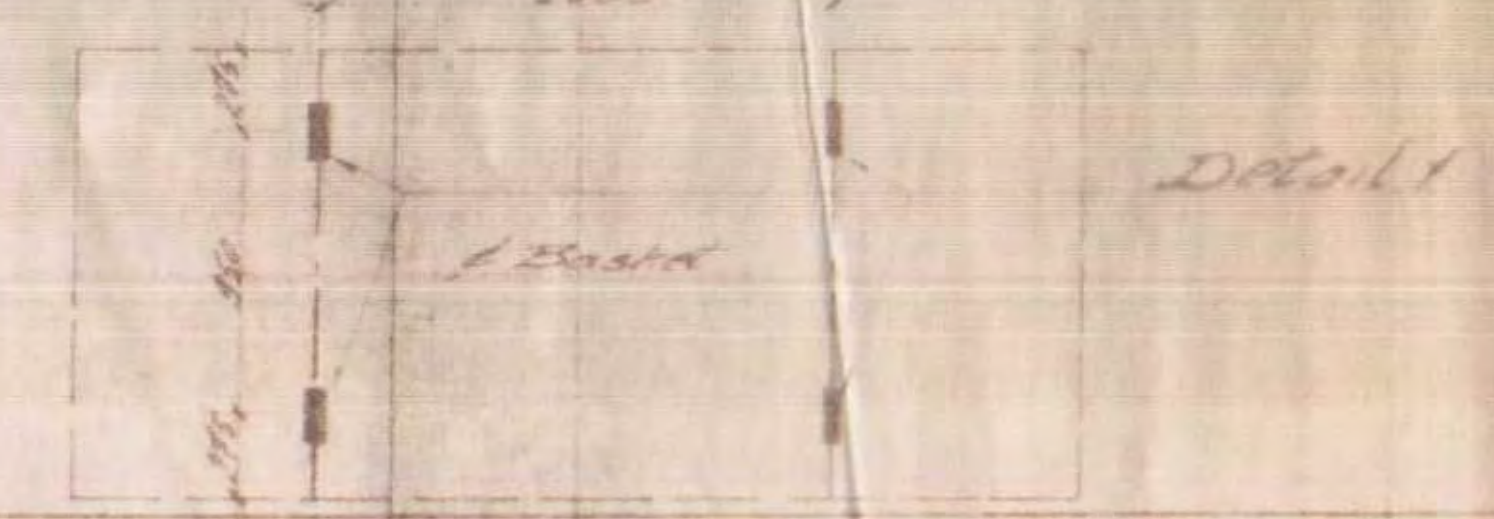
ISSUE	DATE	MODIFICATION
B	9588	LINE 1 INSTALLED & OFFICES (EAST SIDE)
C	11-0-83	SCAFFOLD REMOVED, TOOL CLEANING ADDED

MATERIALS:-
FINISH:-

TOLERANCES:-
UNLESS OTHERWISE STATED:-
DECIMAL DIMENSIONS $\pm .002$ "
FRACTIONAL DIMENSIONS $\pm .010$ "

DR'N
TR'D
CH'D
AP'D
DATE
SCALE

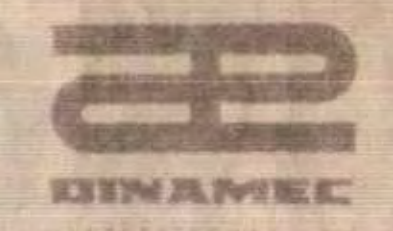
THE VICTAULIC CO. PLC ST. PETER'S ROAD, HUNTINGDON.
POLYTHENE PLANT
EPI1145



Detail 1

DETAIL 1

A
B
C
D
E
F



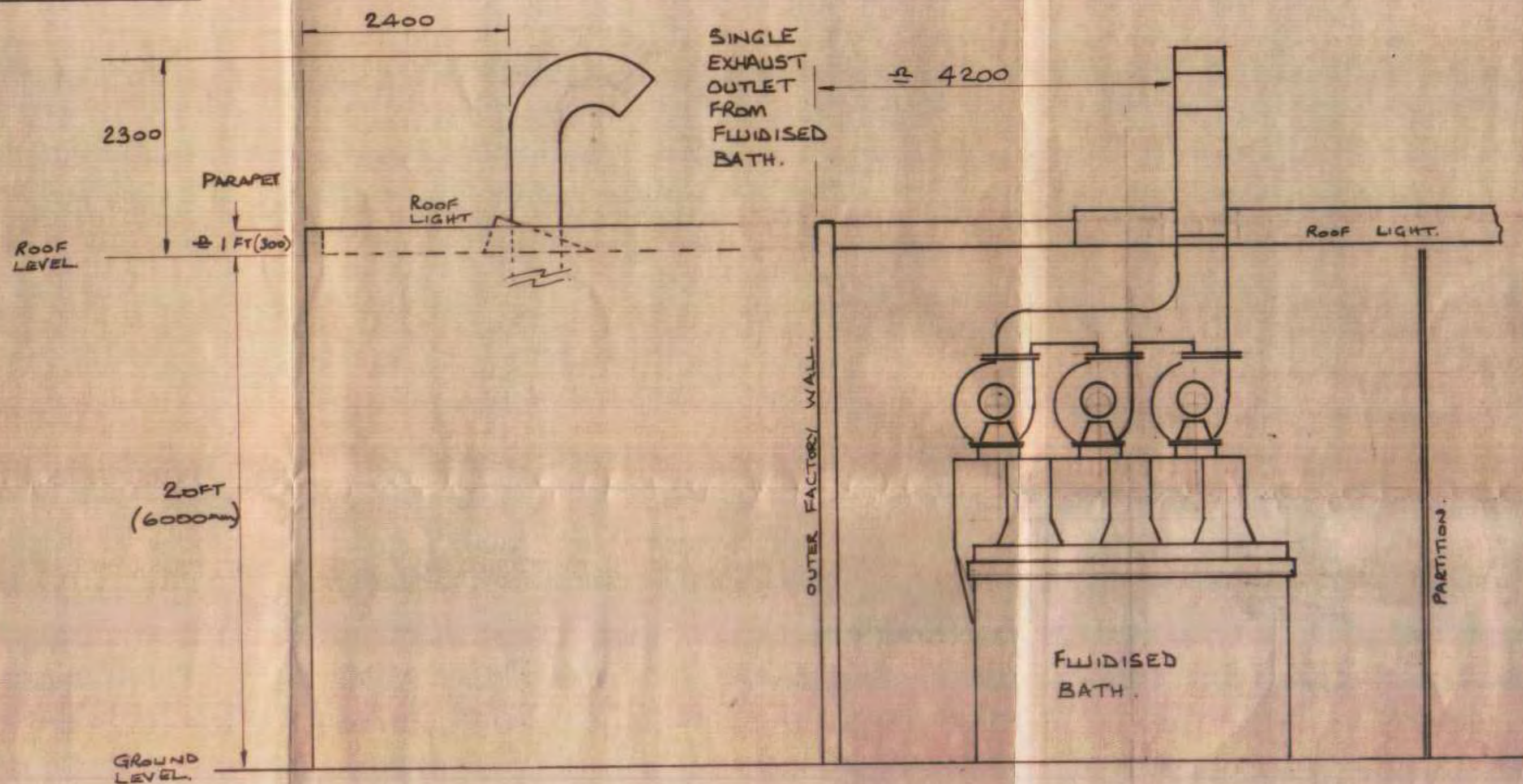
STEWARTS & LLOYDS
LAY-OUT FLUID CLEAN
B321616

Case *FB 9280*
Drawing A
TA1-1892

C

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING - IF IN DOUBT - ASK

USED ON
DRG. No.

ISSUE	DATE	MODIFICATION	BY	THIS DRAWING IS THE EXCLUSIVE PROPERTY OF "STEWARTS & LLOYDS PLASTICS" - IS CONFIDENTIAL AND MUST NOT BE REPRODUCED OR DISCLOSED TO A THIRD PARTY, WITHOUT WRITTEN CONSENT FROM "STEWARTS & LLOYDS PLASTICS"	TOLERANCES:- (unless otherwise stated)	DECIMAL DIMENSIONS ±	DR'N A.L.T.	Stewarts & Lloyds Plastics 50 Peter Road, Huntingdon, Cambridgeshire, PE18 7DJ	SSS
1	11-10-93	INITIAL ISSUE	ALT.				TR'D		
							CH'D		
							AP'D		
							DATE 11-10-93	EXHAUST OUTLET FROM FLUIDISED BATH	C /
							SCALE 1:50		SHEET OF