

Town and Country Planning Act 1990

Approval required by Condition of Planning Permission

Reference: H19/1141/92

Received: 27-OCT-92 Type: CONDITION COMPLIANCE

Earlier Permission: H19/1380/91

Name: North Level I.D.B.
Thorney
Peterborough
PE6 0QE

Agent: Cambridgeshire County Council
Transportation Department
Castle Court Shire Hall
Castle Hill
Cambridge CB3 0AP

Description: Details of bricks to comply with Condition No. 2 of
H19/1389/92.

Location : Cloughs Cross Bridge Carrying B1166 over North
Level Main Drain Throckenholt, Spalding

South Holland District Council hereby give notice that CONSENT HAS
BEEN GRANTED for the details submitted for the purpose of conditions
attached to the planning permission, subject to any conditions below:

The applicants are advised that the bricks should be carefully chosen to
ensure that they match the existing, as closely as possible, in terms of
size.

Director of Planning and Building Control Services
13-JAN-93 H19/1141/92

This decision refers only to that required for the purposes of the Town
and Country Planning Act and not for Building Regulations or any other
legislation. See enclosed notes relating to rights of appeal.

CONDITION COMPLIANCE APPLICATION

4 COPIES OF FORM AND PLANS REQUIRED

For office use only

Application No. H19/1141/92

Date registered

Grid reference

27 OCT 1992

1. Please complete in block letters

NAME AND ADDRESS OF APPLICANT

NORTH LEVEL INTERNAL
DRAINAGE BOARD

Tel. No.

NAME AND ADDRESS OF AGENT

(if form completed by agent)

CAMBRIDGESHIRE COUNTY COUNCIL

Tel. No.

(Contact)

Please complete in block letters

FULL POSTAL ADDRESS OF THE APPLICATION SITE

OFFICE
COPY

Please complete

EARLIER APPLICATION No.

This application cannot be considered
unless the relevant reference is stated

H19/1380/91

Please complete

I attach the necessary plans and apply for approval as described below

Signed Date

Please complete the section below.

This form is for approval of additional details. For approval of reserved matters you should not use this form — ask for Planning Application forms.

If a condition restricts activity in some way, and you wish to remove that restriction, you should not use this form — ask for Planning Application forms.

If a condition requires activity to be carried out in a certain way, you do not normally need to apply for approval, unless the condition specifically requires it.

2. The application is for approval of details required by a condition

(✓)

State which details are submitted

Details of bricks to comply
with Condition 2 of H19/1380/91

State drawing no's relating to the current submission

State condition no. under which this application is required

H19/1380/91

BRIAN SMITH Dip TP MRTPI
Director of Planning & Building Control Services
Planning & Building Control Department,
Council Offices,
Priory Road, Spalding,
Lincolnshire. PE11 2XE
Telephone: (0775) 761161
Fax: (0775) 710772



REGISTER COPY TO EARLIER PERMISSION

Previous permission: H19/1380/91

Town and Country Planning Act 1990

Approval required by Condition of Planning Permission

Reference: H19/1141/92

Received: 27-OCT-92 Type: CONDITION COMPLIANCE

Name: North Level I.D.B.
Thorney
Peterborough
PE6 0QE

Agent: Cambridgeshire County Council
Transportation Department
Castle Court Shire Hall
Castle Hill
Cambridge CB3 0AP

Description: Details of bricks to comply with Condition No. 2 of
H19/1389/92.

Location : Cloughs Cross Bridge Carrying B1166 over North
Level Main Drain Throckenholt, Spalding

South Holland District Council hereby give notice that CONSENT HAS
BEEN GRANTED for the details submitted for the purpose of conditions
attached to the planning permission, subject to any conditions below:

Notes to Applicant:

The applicants are advised that the bricks should be carefully chosen to
ensure that they match the existing, as closely as possible, in terms of
size.

sgd B SMITH
Director of Planning and Building Control Services

13-JAN-93 H19/1141/92

APPLICATION ASSESSMENT

Notes for Case Officer

Site Inspection

Accuracy

Neighbours

Boundaries

Site features

Other

Inspected by
Date

Mrs Kell on behalf of LPA
20/11

Notice posted by
Date

N/A

Resident Notices required

Sent

Delivered

Case Officer Conclusions DMG 20/12

considered acceptable subject to bricks being carefully chosen (upper range).

RECOMMENDATION

COMMITTEE

Departure from Policy

Ward Member request

Recommend approval against
material objection

Other circumstance
viz:

Change to Committee recorded

DELEGATED

Case Officer DMG

Senior Officer M
5/1

Case Officer Recommendation

Approve

Refuse

Signed DMG

~~Conditions/Reasons~~
(continue overleaf)

Notes to applicant



Disabled
Outstanding RM
Amended plans

1) The applicants are advised that the bricks should be carefully chosen to ensure that they match the existing, as closely as possible, in terms of size.

DC RECORD SHEET

APPLICATION REF:

Directions

Art 7 (Outlines)
RM checklist

Previous
Current
Required

Siting	Design	Ext app	Access	Landscape

Reg 4

Scale drawing

Highway S/W

Agric appraisal

Other

Precise details,
for non-standard
direction:

Senior Officer authorised:

Sent:

Revalidation after Direction

Information satisfactory/unsatisfactory

Signed:

Further direction:

Precise details:

Amended description:

New valid date:

Consultation/Publicity Required

Extra Publicity:

Departure

Requested

Sent

Setting of LB

Public Right of Way

Discretionary

Extra Consultations:

Dept of Transport

Environmental Serv.

LB/Cons. Area - Local

- Local & National

- English Heritage

Consultant: Name.....

Other:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Order No

.....

Case Officer

David Geaney

Recorded on board:

ADMIN RECORD SHEET

Initial

Submitted Fee £ ~~£1000~~ NIL
 Receipt Issued
 Date first Rec'd 27 OCT 1992

Registration

Reference H/9/1141/92
 Cross-Ref N/A

Date 28-OCT-92
 JAB

Validation

TYPE C. COMP.

Earliest permission

Site area

No of dwellings

Floorspace

Description

Tech

Certificate
 Site plans
 Description

Accuracy
 Incomplete form

Fees

Nil fee

Discounted fee

Correct fee NIL

Previous app
 Type

Additional
 Refund

Receipt
 Issued

Information

Newbuild/Redevelopment/Change of use/Extension/Alteration/Works

Earlier permission Ref

RM

Previous
 Current

Siting	Design	Ext app	Access	Landscaping

Index sheets

395

OS No's

Grid ref 5 3 6910 3 6913 10

Ward

Parish

TR Rural
 TR Bypass
 Level Cross
 Footpath

CA
 LB
 TPO

Inside IBD

Inside LP area

Linked to site

Ref 912

Linked to property

Ref

Planning Records:
 Earlier apps

B Reg Records:
 Already submitted - Ref
 Request
 Requested

B I SMITH Dip TP MRTPI
Director of Planning & Building Control Services
Planning & Building Control Department,
Council Offices,
Priory Road, Spalding,
Lincolnshire. PE11 2XE
Telephone: (0775) 761161
Fax: (0775) 710772



Application no: H19/1141/92

Type: CONDITION COMPLIANCE

Applicant: North Level I. D. B.
Tel:

Agent: Cambridgeshire County Council
0223 317735

Description: Details of bricks to comply
with Condition No. 2 of
H19/1389/92.

Location: Cloughs Cross Bridge
Carrying B1166 over North
Level Main Drain
Throckenholt, Spalding

Valid date: 27-OCT-92

Terminal date: 22-DEC-92

Target dates:

Target Committee: 08-DEC-92

To case officer 03-NOV-92

Report deadline: 24-NOV-92

Inspected by 06-NOV-92

Extra contacts 10-NOV-92

Case Officer:

Report if not clear by 01-DEC-92

D M GEDNEY

DEVELOPMENT/CONSTRAINTS

Size:

Category:

Listed building:

Conservation Area:

Other Constraints:

CONSULTATIONS CARRIED OUT

Sent

Expiry

LCC - No Comment *for* 5/11/92

SITE DETAILS

Grid ref: 536810 309370

OS Sheets: 398

Parcel:

My ref: DJR/JAC/J3957
Your ref: DMG/LAB/H19-1141-92

183

Transportation Department
Director: Michael Sharpe

Date: 18 December 1992

Castle Court, Shire Hall, Castle Hill,
Cambridge CB3 0AP
Fax Cambridge (0223) 317735

Please ask for: Daniel Rust
Direct Dial No: Cambridge (0223) 317705

South Holland District Council
Planning Department
Council Offices
Priory Road
Spalding
PE11 2XE



**Cambridgeshire
County Council**

Attention: Mr Midlen

Dear Sirs,

**Cloughs Cross Bridge over North Level Main Drain between Parson Drove
and Throckenholt: Refurbishment Works**

I refer to the telephone conversation between Mr Midlen of your office and David Cox of this Department's Structures Group. Please note that the brick joint is to be 'weathered' rather than 'weather struck'.

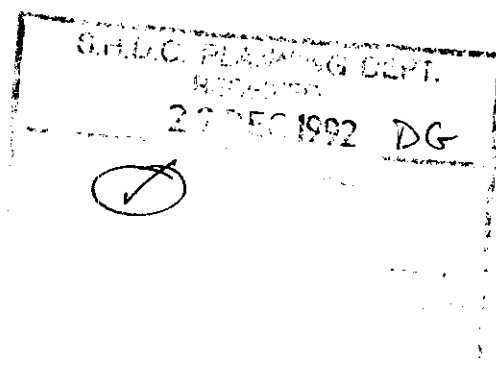
The pointing specification was recommended by English Heritage in a letter from Regional Architect Mr W Dodd dated 9 January 1991. A copy of our specification is attached (this specification was incorporated into drawing J3602/F2 notes 13-19 submitted with our planning application). The specification is based on the specification given by John Ashurst in his book Mortars, Plasters, and Renders in Conservation, again recommended by English Heritage. Relevant extract attached.

Also attached with this letter are two further sample bricks representing the upper range of the bricks manufacturing tolerance. Average dimensions of these bricks have been measured at 215 x 63 x 102mm.

Please contact David Cox (Project Engineer/Resident Engineer) or Daniel Rust (Assistant Resident Engineer) on 0223 317705 should you require any further information or assistance.

Yours faithfully

for Director of Transportation



EASA _____

and themselves

and decay of
neglect, the
to every
ptoms of
ify and
s. This

Mortars, Plasters and Renders in Conservation

John Ashurst

ECCLESIASTICAL ARCHITECTS' AND SURVEYORS' ASSOCIATION

PART TWO: Maintenance and Repair

The deterioration of mortars, renderings and plasters is a common concern of all who find themselves responsible for the maintenance of an old building of whatever form of construction.

Joints weather out, cracks and loss of adhesion result from building movement, water penetration and decay of supports. There are, however, two ways in which deterioration processes are advanced; one is neglect, the other is the wrong kind of remedial treatment. Thus it is vital that proper consideration is given to every situation and that snap judgements are not made based on superficial appearances. Familiar symptoms of trouble can sometimes be treated with familiar remedies, but care must always be taken to identify and understand all the reasons for failure so that the cause will always be treated rather than the symptoms. This is good medical practice; it applies equally to sick buildings.

The following questions must always be asked and answered:

- What are the symptoms of trouble?
- What materials and construction are involved?
- What are the real causes of trouble?
- How shall the causes be treated?
- How shall the symptoms be treated?

This guide deals with the most common problems under the headings of mortar joints, external renderings and internal plaster, especially ceiling plaster.

10 MORTAR JOINTS

Pointing

If the surface of mortar joints has weathered out to the extent that the face of the stones or bricks is vulnerable to damage, that water can lodge and penetrate, and that support is inadequate, then a matching mortar must be introduced. The process of filling the joints from the face is known as pointing. In general, the original mortar joints of historic work will not have been bedded and pointed in separate operations, with notable decorative exceptions, but filled full and struck off flush as the work was raised. If the stones or bricks have retained their sharp arrises then the joints should be filled flush again, unless there is specific evidence that the joint face was profiled in some other way. Long years of weathering, however, will normally have blunted these arrises and sometimes all the original face of some stones will have spalled off. (See Figure 6.) Flush filling in such a situation will greatly increase the apparent width of the joint and, therefore, great care must be taken to keep the face of the new mortar within the original joint width, however far back that may be.

The correct procedure of cleaning out and refilling is well known but unfortunately not widely practised. As a general rule joints should be cleaned out to a minimum depth of 25 mm (1") and never to a depth less than their width but wide joints, especially those liable to exposure to extreme weathering, should be cut out to a minimum 38mm (1½") or even 50mm (2"). Sometimes the mortar has disintegrated to such an extent that the joints are largely empty, in which case they must first be deep tamped and, if necessary, hand grouted to fill the joint to the required depth for pointing. If tamped or grouted mortar comes closer to the face than 25mm-38mm it must be cut back to the proper depth and to a square face before pointing.

Raking out may be a simple operation without risk to the fabric where mortar is substantially decayed, but it is over-simplifying the situation to say that the joint does not need attention if it requires cutting out. Not infrequently the face of a lime joint has been lost early in its lifetime, before sufficient drying out and carbonation had taken place to enable it to resist the winter, but the more protected mortar has survived to become extremely hard. The empty joint at the face may be too much of a risk to leave alone, and additional cutting out may be necessary to achieve enough depth for pointing. More commonly, cutting out (as distinct from raking out with a knife blade or bent spike) is necessary to remove dense repointing of an earlier period, especially where this mortar — fortunately usually shallow in depth — is causing problems because of its high strength, impermeability and tendency to trap water behind it and accelerate the decay of stones and bricks.

Cutting out should be achieved using plugging chisels, long necked jointing chisels and toothed masonry chisels, with a 2½ lb club hammer but never with cold chisels which may tend to wedge the joints and cause spalling. Impact should be at an oblique angle to the joint face, not directly into it. Drilling with masonry drills is a useful way of creating an initial breach into a strong mortar. Exceptionally, small carborundum discs may be used in cutting out, but usually only on regularly coursed work with level beds where running rules can be fixed to the wall as guides for the power tool. The risks of over-running are obvious, and extreme caution must be used not to cut into the masonry or increase the width of the joint.

All cutting out should leave a clean, square face at the back of the joint to provide maximum contact with the new mortar. Time for cutting out, which may be considerable, must be properly programmed.

Cleaning the Joint

The prepared face should be carefully cleaned out with a soft or stiff bristle brush and flushed out with clean water, avoiding unnecessary saturation. All dust and loose material must be removed, working from top to bottom of the wall. If old, weathered out joints have been colonised with algae or lichens a biocide must be used on the dry surface as part of cleaning out.

Filling the Joint

If the joints have dried out after cleaning they must be re-wetted before placing the new mortar, to avoid undue suction taking too much water too soon from the mortar. The mortar is pushed into the joint from a board and ironed in with the maximum possible pressure. Pointing trowels are in common use, but it is regrettably unusual to see pointing irons, which can be improvised to suit the particular work in hand. These may be cranked iron or steel flat, or beaten out rod or even wood. (See Figure 7) The function of these simple tools is to push the mortar evenly into the joint for the full joint width; this they can do because they fit into the joint and do not try to achieve compaction from the surface alone. In irregular work this is particularly important.

The mortar face should be filled flush, or slightly recessed to avoid spreading the mortar over the face of the masonry, or struck and lined out as required.

If a weathered appearance is desired to match existing surviving work, a roughened texture can be produced after the initial set of the mortar has taken place by light spraying, by stiff bristle stippling or by rubbing with coarse sacking. Experience, but above all an understanding of what is required, on the part of the mason or bricklayer is essential. Of the above techniques stippling with the ends of the stiff bristles in the brush is probably the most universally successful. The bristles should not be dragged across the face but tapped against it. Timing is critical, and no specification can substitute for experience. If this technique is applied too soon mortar will be removed too easily and the bond forming between mortar and stone or brick will be disrupted; if too late, it will be difficult to make an impression and too vigorous efforts may be made with wire brushes or masons' drags to achieve the effect. As a guide the surface setting time of a range of mortars on different sites is shown below.

SITE	STONE	MORTAR			SURFACE SET Hours
		Cement	Lime	Sand	
Ewenny Priory	hard limestone	—	1	3	36
Caernarvon	limestone	—	1	2	24
Kidwelly	hard limestone	½	1	2½	18
Old Wardour	glauconitic limestone	½	1½	4	14
Okehampton	sandstone	1	—	5	12
Castell Coch	hard limestone	1	1	5	4

The times shown in the right hand column indicate when surface treatment was applied to the joint face. Apart from leaving a pleasant, weathered appearance the rough textured joint tends to assist the wall to dry out and to concentrate wetting and drying activity (provided the right mortar is used) in the joints.

There is a danger with this type of weathered finish that the joints may take on too distinctive a character. The old style of washed grit pointing which used to be carried out by the Ministry of Public Building and Works on ancient monuments was often a work of art but tended to become an end in itself.



English Heritage

Fortress House 23 Savile Row London W1X 1AB Telephone 071 973 3000 Fax 071-973 3001

Mr Helsall
Transportation
C C C

Re: 71 JAN 1991
Deal: with

9.1.91
Wm Dodd RA 323
071 973 3198

Dear Mr Helsall

Ref repair of listed country bridges

During our discussion yesterday morning you were good enough to provide me with a copy of our 'Ancient Monuments: Notes on Repair and Preservation: Sect I Masonry & Sect II Brickwork'. These notes are philosophically sound but a little inflexible in their insistence on blue lias lime and a single mix. I would suggest they be supplemented by the following:—

1. John Ashurst 'Mortar, Plaster and Render in Conservation' Ecclesiastical Architects and Surveyors Association London 1983 ISBN 0 907866 02 6 (a paperback A4 size booklet: 14.50 from The Building Centre, Store St, London)
2. John and Nicola Ashurst English Heritage Technical Handbook
 Order! Practical Building Conservation Vol 1 Stone Masonry
 Gower Technical Press Ltd " 2 Brick, Terracotta and Earth
 Gower House, Goff Rd, Alderhot " 3 Plaster, Mortar and Render
 Hants GU11 3HR " 4 Metals
 (5 hardback volumes now out basic reference) " 5 Wood, Glass and Resin: Bibliography
3. Excellent leaflets published by The Society for Protection of Ancient Building,
 37 Spital Square, London, E1 6DY (01 377 1644)
 Good Practice leaflets

I trust these references will be helpful. Please contact me if I can be of any further help.

Wm Dodd
Area Advisory Architect
Historic Buildings Division.

071 973 - 3239 - Room 315.

ADDITIONAL CLAUSES, TABLES AND FIGURES

2470AR Lime Mortar Type M1

1. The lime mortar shall be prepared by mixing lime and sand in the proportions of two parts lime to five parts of sand in a dry state.
2. The lime shall be Blue Lias or other good hydraulic lime from a reliable manufacturer or hydrolised hydraulic or dehydrated lime.
3. If Blue Lias is used the sand/lime mixture shall be left to stand until cool (minimum 24 hours) before use but hydrolised Blue Lias may be used at once.
4. The sand/lime mixture shall be mixed immediately before use with Ordinary Portland cement in the proportion 12 parts of sand/lime to one part of OPC.
5. The minimum quantity of water necessary shall be used in the mortar.

2471AR Repointing of Brickwork

1. Joints shall be raked out to depth of 25mm or until sound mortar is encountered whichever is the greater and then washed out.
2. All superficial mortar patching shall be removed.
3. The new mortar shall be pressed well in with a narrow tool to leave no voids and ensure it adheres well to the sides of the bricks.
4. The surface of the pointing shall be slightly recessed so that the mortar does not encroach upon the arrises or spread over any worn or rounded edges of the bricks.
5. As soon as the mortar has taken its initial set it shall be stippled with a stiff bristle hand brush producing a slightly rough surface to resemble a weathered joint.
6. The pointing shall be kept damp and protected from the effects of the weather for at least three days.

It is however, the deviation from the work size which is of concern to the user. The overall measurement of 24 bricks is based on the prediction that individual brick dimensions should not differ from the work size by more than 6.4 mm on length and 4 mm on width and height. This is a compromise between the requirements of the manufacturer and the user. Batches with less than 1 % of individual brick dimensions outside these tolerances have a chance of rejection of approximately 1 in 1000 whilst batches containing more than 12 % of individual brick dimensions outside these tolerances have a chance of acceptance of approximately 1 in 200.

It was apparent from the evidence of control charts made available to the committee responsible for drafting BS 3921 : 1974 that some types of brick (e.g. handmade and stock bricks) had some difficulty in meeting the dimensional requirement. Other types of brick could meet a more stringent requirement, although not consistently; manufacturers have sometimes supplied these bricks with smaller tolerances by special arrangement with the user. The committee has therefore felt it desirable to retain tolerances similar to those in BS 657*, and to suggest that smaller tolerances should be agreed between the manufacturer and the user.

1 Scope

This British Standard specifies requirements for dimensions, compressive strength, water absorption, soluble salt content, efflorescence and sampling for bricks manufactured from clay for use in walling. It also gives methods of classification. The bricks are intended to be laid on a bed of mortar, following the recommendations in BS 5628 : Part 3.

Sizes and tolerances given in this standard apply only to the 225 mm x 125 mm x 75 mm format (see 0.3). Requirements for a 200 mm x 100 mm x 75 mm format are given in BS 6649 and requirements for special bricks are given in BS 4729.

NOTE 1. In view of the wide variety of bricks available, there are no requirements for appearance, but general guidance is given in appendix F as well as a guide to the assessment of the visual acceptability of consignments of facing bricks using a reference panel.

NOTE 2. Some types of bricks may also be suitable for use in paving.

NOTE 3. A check-list for ordering bricks is given in appendix G. A suction rate test is given in appendix H.

NOTE 4. The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this British Standard the definitions given in BS 6100 : Part 5 : Section 5.3 apply, together with the following.

2.1 compressive strength. The average value of the crushing strengths of ten bricks sampled in accordance with clause 9 and tested in accordance with appendix D.

2.2 water absorption. The average value of the water absorptions of ten bricks sampled in accordance with clause 9 and tested in accordance with appendix E.

2.3 coordinating size. The size of a coordinating space allocated to a brick, including allowances for joints and tolerances.

2.4 work size. The size of a brick specified for its manufacture, to which its actual size should conform within specified permissible deviations.

3 Sizes

3.1 External sizes

Bricks shall be designated in terms of their coordinating sizes. The coordinating sizes and work sizes for bricks shall be as given in table 1.

Table 1. Sizes					
Coordinating size			Work size		
Length	Width	Height	Length	Width	Height
mm	mm	mm	mm	mm	mm
225	112.5	75	215	102.5	65
NOTE. The work sizes are derived from the corresponding coordinating sizes by the subtraction of a nominal thickness of 10 mm for the mortar joint.					

3.2 Sizes of voids

Solid bricks shall not have holes, cavities† or depressions.

Cellular bricks shall not have holes, but may have frogs or cavities† exceeding 20 % of the gross volume of the brick.

* BS 657 : 1950 'Dimensions of common clay building bricks' was withdrawn in 1974 when the previous edition of BS 3921 superseded it.

† A cavity is a hole closed at one end.

Perforated bricks shall have holes not exceeding 25 % of the gross volume of the brick. The holes shall be so disposed that the aggregate thickness of solid material, measured horizontally across the width of the unit at right angles to the face, is nowhere less than 30 % of the overall width of the brick. The area of any one hole shall not exceed 10 % of the gross area of the brick.

Frogged bricks shall have depressions in one or more bed faces but their total volume shall not exceed 20 % of the gross volume of the brick.

4 Dimensional deviations

The overall measurements of 24 bricks sampled in accordance with clause 9 and measured as described in appendix A shall not fall outside the limits given in table 2. In addition, the size of any individual brick in the sample shall not exceed the coordinating size given in table 1.

Table 2. Limits of size		
Work size (see table 1)	Overall measurement of 24 bricks	
	Maximum	Minimum
mm	mm	mm
215	5235	5085
102.5	2505	2415
65	1605	1515
NOTE. Where for special reasons closer limits of size are required, this can best be achieved by agreement between the specifier and the supplier.		

5 Durability

NOTE. The classification of bricks by frost resistance (see 5.1) and by soluble salt content (see 5.2) may be used to distinguish different designations of durability as given in table 3.

The word 'designation' has been used rather than 'level' to avoid any implication that bricks of one particular frost resistance and soluble salt content are of better quality than bricks of any other frost resistance and/or soluble salt content.

5.1 Frost resistance

The bricks shall be classified into one of the following categories.

Frost resistant (F). Bricks durable in all building situations including those where they are in a saturated condition and subjected to repeated freezing and thawing.

Moderately frost resistant (M). Bricks durable except when in a saturated condition and subjected to repeated freezing and thawing.

Not frost resistant (O). Bricks liable to be damaged by freezing and thawing if not protected as recommended in BS 5628 : Part 3 during construction and afterwards, e.g. by an impermeable cladding. Such units may be suitable for internal use.

5.2 Soluble salt content

The bricks shall be classified into one of the following categories.

Low (L). The percentage by mass of soluble ions, measured as described in appendix B, shall not exceed the following.

calcium	0.300 %
magnesium	0.030 %
potassium	0.030 %
sodium	0.030 %
sulphate	0.500 %

Normal (N). No limit on soluble salt content.

NOTE. Most manufacturers are able to give guidance on the soluble salt content of their bricks. It should be noted that the requirements in clause 6 ensure that bricks with high concentrations of water-soluble salts are effectively excluded.

Table 3. Durability designations		
Designation	Frost resistance (see 5.1)	Soluble salt content (see 5.2)
FL	Frost resistant (F)	Low (L)
FN	Frost resistant (F)	Normal (N)
ML	Moderately frost resistant (M)	Low (L)
MN	Moderately frost resistant (M)	Normal (N)
OL	Not frost resistant (O)	Low (L)
ON	Not frost resistant (O)	Normal (N)
NOTE. Guidance on the selection of bricks and mortars for use in a variety of environments, particularly where brickwork might be subjected to frequent freezing and thawing when saturated, is given in BS 5628 : Part 3. For a particular exposure category, a frost resistant facing brick with a low soluble salt content may be specified, whilst for rendered brickwork in the same exposure category, a not frost resistant brick with a normal soluble salt content may be satisfactory.		

My ref: DJR/JAC/J3957-29
Your ref: DMG/LAB/H19-1141-92

Date: 3 December 1992

Please ask for: Daniel Rust
Direct Dial No: Cambridge (0223) 317705

S.H.D.C. PLANNING DEPT.	
RECEIVED	
09 DEC 1992 DG	
Attention of	File Nos.
DPO ☒ MEM	
DOPD BS	
JC ACP	
Action by	Authorise YES/NO
Discuss with	by
Copy to	date

262
Transportation Department
Director: Michael Sharpe

Castle Court, Shire Hall, Castle Hill,
Cambridge CB3 0AP
Fax Cambridge (0223) 317735

South Holland District Council
Planning Department
Council Offices
Priory Road
Spalding
PE11 2XE



Cambridgeshire
County Council

Attention: Mr D Gedney

Dear Sirs,

Cloughs Cross Bridge over North Level Main Drain between Parson Drove and Throckenholt: Refurbishment Works

This Department acknowledges receipt of your letter of 1 December 1992 and confirms the telephone conversation between Richard Halsall, this Department's Group Engineer (Structures) and Mr Gedney of your Development Control Group of 3 December 1992.

This Department confirms that it is willing to select bricks on site to ensure that those bricks at the larger end of the tolerances are used for facing works. The brick sizes given by your Consultant Architect are in fact within the tolerances given in BS 3921:1985 The British Standard Specification for clay bricks. The 'Olde Melford' bricks proposed by this Department will be manufactured to this specification so it is not envisaged that a problem will be encountered in obtaining bricks of that size. Any bricks reclaimed during the works will also be incorporated into facing works.

The pointing specification dictated by English Heritage is for a weathered joint and it is considered that this will help to mask any variation in size. *

This Department has let the contract in the belief that the materials, submitted by you on 23 October 1992 were approved by your notice of 29 * October 1992. It has been subsequently found that this approval for materials to be used at Cloughs Cross Bridge referred to an application that had not been submitted by this office. Due to the fact that the contractors are now on site and have got to work to an extremely tight schedule it would have a serious effect on the completion time for the contract with severe financial implication should a delay regarding the choice of materials be further extended. In such a case this Department would have little choice but to enter an appeal.

17/12
Spec to the loc - Big Stamp.
Will send new sample brick
& recommend correct spec. will
check pointing spec. & come back
+ on MM

2

3 December 1992

This Department appreciates and respects the views of both your Planning Department and your Consultant Architect but considers the brick sample offered to be a close match to the bricks encountered on site. The lichens which cover the existing bridge will not be totally removed and it is anticipated that the repairs will be colonised over a period of years and will therefore help the repairs to blend in.

In view of the above comments this Department requests that you review your direction contained in your letter of 1 December 1992. Should you wish for further information please contact Richard Halsall on 0223 317712 or David Cox/Daniel Rust on 0223 317705.

Yours faithfully

A handwritten signature in black ink, appearing to read 'RHS Halsall', written in a cursive style.

for Director of Transportation

The Director of Transportation
Cambridgeshire County Council
Castle Court
Shire Hall
Castle Hill
Cambridge CB3 0AP

Mr D M Gedney
DMG/JP/H19/1141/92
DJR/JAC/J3957-29
1 December, 1992

F.A.O. Mr D Rust

Dear Sir

Planning Application H19/1141/92 - Details of Bricks to Comply with
Condition No. 2 of H19/1389/92, Cloughs Cross Bridge Carrying
B1166 over North Level Main Drain, Throckenholt, Spalding

I refer to your letter dated 24 November, 1992, in respect of the above.

Although the comments therein are noted, the Council's Consultant Architect has nevertheless carried out measurements on site which reveal that there appears to be a discrepancy in terms of size between the existing bricks and the brick samples submitted. As stressed in my previous letter, this would no doubt give rise to unduly wide mortar joints which would be wholly inappropriate, especially given that the bridge is a Grade II Listed "Building".

Unless it can be demonstrated that the above is not the case, therefore, it is suggested that an alternative brick be found which more closely resembles the existing in terms of size and also texture (since the Consultant Architect also considered that the texture was rather soft).

I look forward to your response in respect of the above as soon as possible, so that I am in a position to proceed with the application.

Yours faithfully


N R MIDLEN
Principal Planning Officer
(Development Control)

My ref: DJR/JAC/J3957-29
Your ref: DMG/LAB/H19-1141-92

Date: 24 November 1992

Please ask for: Daniel Rust
Direct Dial No: Cambridge (0223) 317705

485
Transportation Department
Director: Michael Sharpe

Castle Court, Shire Hall, Castle Hill,
Cambridge CB3 0AP
Fax Cambridge (0223) 317735

South Holland District Council
Planning Department
Council Offices
Priory Road
Spalding
PE11 2XE



Cambridgeshire
County Council

Dear Sirs,

**Cloughs Cross Bridge over North Level Main Drain between Parson Drove
and Throckenholt: Refurbishment Works**

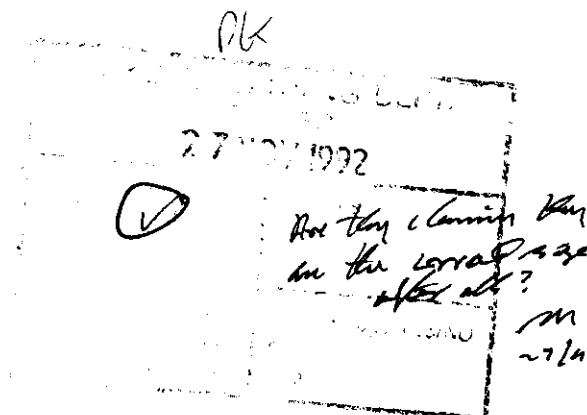
This Department confirms receipt of your letter of 17 November 1992 and subsequent telephone conversation of 23 November between Messrs Gedney and Rust.

Please note that the installation of sluice gates is being dealt with by North Level Internal Drainage Board direct and not by this Authority as Agents for the Board. The gates installation contract is independent of the bridge refurbishment works.

This Department notes the comments of the consultant architect advising your Department regarding the choice of brick size for the repair works. The bricks appear to closely match the originals kept in this office and Fenland District Council have already approved them for use. David Cox or Daniel Rust of this Department's Structures Group will be happy to meet your representatives on site to resolve this matter should this prove necessary.

Yours faithfully

for Director of Transportation



BRIAN SMITH Dip TP MRTPI
Director of Planning & Building Control Services
Planning & Building Control Department.
Council Offices.
Priory Road, Spalding.
Lincolnshire. PE11 2XE
Telephone: (0775) 761161
Fax: (0775) 710772



Destination Name: CAMBRIDGESHIRE COUNTY COUNCIL

Fax No: (0223) 317735

Your Ref/Contact: MR. D. RUST.

No. of Pages

Our Ref/Contact: MR. D.M. GEDNEY

Date: 25/11/92

Subject: PLANNING APPLICATION H19/114/92 - DETAILS OF BRICKS, CLOWNS
CROSS BRIDGE, THROCKENHOUT.

FAX MESSAGE

COPY OF CONSULTANT ARCHITECTS LETTER
AS REQUIRED.

Mary E. Kerr BA., BSc., RIBA
Architect & Historic Buildings Consultant

Tel: Sleaford (0529) 240713
Fax: (0529) 240415

The Manor House,
Spanby,
Sleaford,
Lincolnshire.
NG34 OBB

YOUR Ref H19/0932/92 and H19/1141/92
OUR Ref SHDC

21st November 1992

B. Smith MRTPI
District Planning Officer,
Council Offices,
Priory Road,
SPALDING,
Lincolnshire PE11 2XE

Dear Mr Smith,

CLOUGH'S CROSS BRIDGE,

I have taken the brick sample submitted for this project to the bridge, to compare it with the existing bricks. I found that although the brick colour was a reasonable match with the existing, the texture was too soft and the size of the brick was overall too small. The brick measured 210 by 60 by 95mm. The bricks in the bridge are 215 by 65 by 105mm.

A number of brick companies will manufacture new bricks to match existing samples and sizes, and I would have thought that in this case where a number of bricks are required that would be worth considering. Certainly the major companies of Butterley and Ibstock can produce this service. Of smaller companies, the following (if they are still in business) make special hand made - Aldershaw, Kent Street, Battle, East Sussex, 0424 754192
- Ashpark Hand Made Bricks Ltd., Plaistow, Sussex 040388 220
- Salvesen Brick, Cheadle, Cheshire, 061-485-8211.

The details provided of the sluice gates are very clear, and show that these are to be fixed into the existing channels. This will allow the bridge to operate as a sluice as originally intended and I would be very happy to see the type of structure indicated to allow this use to be restored. I would hope that generally steel items will be painted black, or a dark colour, rather than left as galvanised steel. Apart from that I have no further comments.

Yours Sincerely,

Mary E. Kerr

MARY E. KERR BA BSc RIBA

SB.

S.H.D.C. PLANNING DEPT. RECEIVED 23 NOV 1992	
Attention of CPO <u>NSM</u> DOPO <u>BS</u> JC <u>ACP</u> Action by Discuss with Copy to	File Nos. Acknowledged YES/NO BY DATE

Top range of brick
planned 217mm

existing range,
225 - 211mm

D M Gedney

DMG/SAH H19/1141/92

J3957

23 November 1992

Cambridgeshire County Council
Transportation Department
Castle Court
Shire Hall
Castle Hill
Cambridge CB3 0AP

For the attention of Mr D Rust

Dear Sirs

Planning Application H19/1141/92 - Details of Bricks to Comply
with Condition No. 2 of H19/1389/92, Cloughs Cross Bridge
Carrying B1166 Over North Level Main Drain, Throckenholt,
Spalding, Lincs

I refer to the above planning application recently submitted by yourselves on behalf of the North Level Internal Drainage Board.

Further to my letter dated 17 November 1992, I can now confirm that the Council's Consultant Architect has carried out a site visit to assess the suitability of the brick proposed ("Old Melford Red" manufactured by the Brick and Stone Company).

Although she considers the brick an acceptable match, on balance, in terms of colour and texture, it nevertheless appears significantly smaller than those existing. Consequently, there would be an unsatisfactory correlation unless the mortar was made unduly thick, which would also be unacceptable on the grounds of visual amenity.

Pursuant to the above, therefore, it is considered that an alternative brick should be used which is perhaps similar in colour and texture to the "Old Melford Red", but which is larger.

Cont/....

Qst/....

I look forward to your response in respect to the above as soon as possible, therefore, so that I am in a position to proceed with the application.

Yours faithfully

N R Midlen

Principal Planning Officer (Development Control)

Rang Dale Barker of Fenland District Council 17/11.
(0354) 54321 Extn 309

He stated that they were reasonably happy with the proposed back. Although it was not a perfect match he considered that it looked "vernacular" and would blend in with the existing.

DMG . 17/11

Cambridgeshire County Council
Transportation Department
Castle Court
Shire Hall
Castle Hill
Cambridge
CB3 0AP

Mr D M Gedney

DMG/LAB
H19/1141/92
J3957

17 November 1992

F.A.O. Mr D Rust.

Dear Sirs

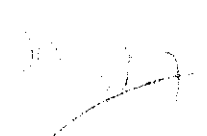
Planning Application H19/1141/92 - Details Of Bricks To
Comply With Condition No 2 of H19/1389/92, Cloughs Cross
Bridge Carrying B1166 Over North Level Main Drain,
Throckenholt, Spalding, Lincs.

I refer to the above planning application recently submitted by yourselves on behalf of the North Level Internal Drainage Board.

It is noted that the brick proposed to be used for the repair work is an "Olde Melford Red" manufactured by the Brick & Stone Company. It is my opinion that this brick may not be entirely suitable, although I have not presently carried out a site visit to examine it in detail. A site visit will be carried out by the Council's Consultant Architect on Friday 20 November 1992 and I will accordingly advise you of the outcome.

Finally, I remind you that work should not be commenced on the bridge until details of the brick (and also Sluice Gates) have been approved, since this would constitute an offence.

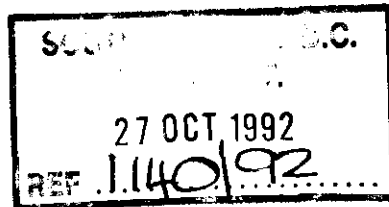
Yours faithfully


N R Midlen
Principal Planning Officer
Development Control

My ref: J3957
Your ref:

Date: 23 October 1992

Please ask for: Daniel Rust
Direct Dial No: Cambridge (0223) 317705



Transportation Department
Director: Michael Sharpe

Castle Court, Shire Hall, Castle Hill,
Cambridge CB3 0AP
Fax Cambridge (0223) 317735

South Holland District Council
Planning Department
Council Offices
Priory Road
SPALDING
PE11 2XE



Cambridgeshire
County Council

Dear Sirs,

CLOUGHS CROSS BRIDGE OVER NORTH LEVEL MAIN DRAIN BETWEEN PARSON DROVE
AND THROCKENHOLT : REFURBISHMENT WORKS.

Further to this Authorities application for consent to carry out repair
works to the above structure, South Holland District Council granted Planning
Permission on 27 February 1992, reference H19/1379/91 and granted Listed
Building Consent on 5 March 1992, reference H19/1380/91. Note 1379/91 PD

This letter is to inform you that works are due to commence on 2
November 1992 with completion in Spring 1993.

The brick proposed to be used for the repair works is an 'Olde Melford
Red' manufactured by the Brick & Stone Company. It closely matches the
existing brick in size and texture. It also satisfies this offices
requirement for water absorption, strength, frost resistance and soluble
salt content. It also closely matches cleaned samples of existing
bricks in terms of colour although on site the external uncleaned colour
of the brickwork varies from red to grey due to the presence of lichens
and the application of cement washing as a form of waterproofing.
A sample brick is sent with this letter for your consideration in
accordance with your conditions under which consent was granted.

Please contact David Cox or Daniel Rust should you require further information
or assistance.

Yours faithfully,

for Director of Transportation

