

ANGUS COUNCIL**ROADS COMMITTEE****5 JUNE 1997****BRIDGE STRUCTURES IN THE ANGUS COUNCIL AREA****ASSESSMENT AND STRENGTHENING****PROGRESS REPORT AND FUTURE PROGRAMME****REPORT BY THE DIRECTOR OF ROADS****ABSTRACT**

This report outlines the current Bridge Assessment programme and associated Bridge Strengthening programme to be carried out in the 1997/98 financial year, and the future level of funding required to allow the assessment and strengthening as necessary of all remaining Council and non-Council owned bridges by 1 January 1999. It also outlines the programme for bridge repairs in the current financial year.

1 RECOMMENDATIONS

It is recommended that the Committee:-

- (i) note the programme of bridge assessments to be carried out in the current financial year (Appendices 1 & 2);
- (ii) note the programme of bridge strengthening to be carried out in the current financial year (Appendix 3);
- (iii) to refer to a meeting of the Executive Sub-committee the receipt of tenders and award of the contract for the strengthening works associated with Arbroath Harbour Bridge;

- (iv) note the programme of bridge repairs to be carried out in the current financial year (Appendix 4);
- (v) note the level of funding required in the next financial year in order to comply with the Council's statutory duty to assess and strengthen where appropriate both Council and non-Council owned bridges by 1 January 1999.

2 INTRODUCTION

This report is a follow up to Report No. 471/96 dealing with the requirement for all road bridges to be assessed and where necessary strengthened prior to 1 January 1999 to comply with EC legislation. It also deals with the continuing programme of bridge repairs for the current financial year.

3 DETAILS

(i) Assessments

Council Owned Bridges

Angus Council owns 13 No. Bridges still requiring to be assessed prior to 1 January 1999.

The programme as proposed is given in Appendix 1 showing a total of 13 bridges to be assessed in the current financial year which will be carried out by outside consultants. The estimated cost of these assessments is £45,000.

Non-Council Owned Bridges

The other bridges carrying roads in the Angus Council area which the Council has a statutory duty to assess and where necessary strengthen are in the ownership either of Railtrack (where the road crosses over a live railway line) or the British Rail Property Board (where the road crosses over a disused railway line). Dialogue is ongoing to determine precisely the population of bridges in each category.

The present understanding is that there are 19 No. bridges in the ownership of Railtrack, over live railways, and 23 No. bridges in the ownership of British Rail Property Board (BRPB) over disused railways, all of which remain to be assessed.

It has previously been reported to Committee that it is a requirement that the costs of the assessment work and any necessary strengthening work should be met by Angus Council.

The options for the assessments of Railtrack owned bridges are:-

- for the Council to do the assessment work in-house and pay to Railtrack only their safety costs in supervising the site work, and their associated overheads, or
- alternatively to pay Railtrack directly the costs of having outside consultants do the assessment work, in addition to Railtrack's cost described in the former option.

Negotiations are presently taking place with Railtrack to explore the possibility of a combination of the two options whereby a proportion of bridges will be assessed in-house by the Roads Department staff and the balance of bridges will be assessed by outside Consultants. It is intended that the 10 bridges to be

assessed this financial year will be carried out by Railtrack's outside Consultants. The other 9 Railtrack owned bridges are expected to be assessed in-house by Angus Council next financial year. A further report will be brought forward to present the results of these negotiations.

Similar negotiations are taking place with British Rail Property Board in respect of bridges in their ownership. A further report will also be brought forward to present the results of these negotiations.

Inevitably greater costs will be incurred in undertaking the assessments for Railtrack and BRPB bridges by comparison to bridges in the Council's ownership. Until negotiations have been completed with these bodies it will not be possible to quantify the costs accurately and with confidence. The details will be developed in a subsequent report by the Director of Roads.

(ii) **Strengthening**

It should be noted that the term "strengthening" is intended to cover the situation where a bridge has been assessed to be sub-standard in terms of its ability to carry a 40-tonne vehicle and consequently requires to be up-graded; as distinct from "repair" which has been taken to mean the improvements required of a bridge through deterioration brought about by ageing or other cause rather than innate lack of capacity per se. Of the 175 No. Council owned bridges assessed to date 25 No. have been found to be inadequate and required strengthening. Of these 14 No. have previously been strengthened and 6 No. are intended for strengthening this financial year (refer Appendix 3). This leaves a balance of 5 No. for strengthening in the financial year 1998/99 in addition to any Council owned or non-Council owned bridges identified as being under strength in the forthcoming assessments, and requiring strengthening.

Until these assessments are undertaken it is not possible to predict accurately the likely capital expenditure requirements for the following year however initial indications show that it is likely that a figure of approximately £600K will be required in 1998/99.

Strengthening works estimated to cost in excess of £25,000 shall be carried out by contractors who will be invited to submit competitive tenders, drawn from Standing Lists.

The receipt of tenders and award of the contract for the strengthening works associated with Arbroath Harbour Bridge will take place during the Council's summer recess. Therefore the Committee is requested to refer the matter to the Executive Sub-committee.

(iii) **Repair**

In addition to the assessment programme the on-going programme of structural inspections carried out by Roads Department staff occasionally identifies problems with existing (Council owned) bridge stock which require repair works to be carried out. An allowance of £380,000 has been made in the current financial year to provide for these works and the proposed programme of repairs is listed in Appendix 4. A programme of bridge repairs will be an on-going requirement indefinitely.

4 **FINANCIAL IMPLICATIONS**

- (i) The costs for assessment, strengthening and repair of bridges in the current financial year will be contained within the corresponding block headings from

the financial plan for 1997/98, as shown in Appendices 1-4 and summarised below:

	<u>1997/98 Capital Budget</u>
	<u>£000</u>
Assessment Programme per App 1	45
Assessment Programme per App 2	85
Strengthening Programme per App 3	300
Repair Programme per App 4	<u>380</u>
Total	<u>810</u>

- (ii) In view of the statutory requirement to have all structures assessed and where necessary strengthened by 1 January 1999 and given the need for the involvement of Railtrack and BRPB it is considered that similar expenditure will be required in financial year 1998/99. A further report will be presented by the Director of Roads on this once more information is known but it is likely that capital allocations equal to those in the current financial year will be required in the next financial year to meet the statutory requirement.

5 CONSULTATION

The Chief Executive, the Director of Law and Administration and the Director of Finance have been consulted in the preparation of this Report.

Dr Bob McLellan
DIRECTOR OF ROADS

NOTE

The following background papers, as defined by Section 50D of the Local Government (Scotland) Act 1973 (and not containing confidential or exempt information) were relied on to a material extent in preparing the above Report:-

- (i) Angus Council Roads Committee 17 January 1996, Report No. 7/96. Council Roads Structures - Assessment and Strengthening - Progress Report and Future Programme.
- (ii) Angus Council Roads Committee 6 June 1996, Report No. 471/96. Council Roads Structures - Assessment and Strengthening - Progress Report and Future Programme.
- (iii) Angus Council Roads Committee 24 April 1997, Report No. 430/97. Joint Report by the Director of Property Services, the Director of Recreation Services and the Director of Roads.

CEGS/JSG
27 May 1997
REPORTS/bridge.assess

APPENDIX 1

BRIDGE ASSESSMENT PROGRAMME 1997/98

Group Three

Council Owned Bridges - Private Consultant Assessments -1997/1998

The assessments of these thirteen Council-owned bridges are to be put out to competitive tender during 1997/1998.

Ref. No.	Name	Material	Form	Grid Ref.
A92/012	Camperdown	Concrete	Slab	663497
A94/008	Eassie Mill	Concrete	Slab	355473
A94/010	Douglastown South	Concrete	Slab	413473
B951/003	Inzion	Concrete	Beam & Slab	279559
B951/005	Newton	Concrete	Beam & Slab	231598
B966/003	Blackdykes	Concrete	Slab	607462
C25/002	Balintore	Concrete	Beam & Slab Ext.	284590
C49/001	Loanhead	Concrete	Slab	623462
C532/001	Brothock	Concrete	Slab	642409
U401/001	Horniehaugh	Steel	Beam & Plate	414619
U444/003	Railway Br. Of Dun	Steel	Beam & Trough	663587
U520/001	West way Subway	Concrete	Arch	607603
MA/25	North Balmossie Street	Steel/Brick	Beam / Jack Arch	480321

APPENDIX 2

Angus Council, Roads Department - Consultancy Unit
Railtrack Bridges - Outstanding Assessments

Programme for 1997/98

10 no. bridges (Provisional)

ELR	Railtrack Reference			Angus Council Reference				Grid Reference	Assessment Financial Year
	Bridge Number	Local Name	Reference Zone	Reference Number	Name	Material	Form		
ECN3	237	Arbroath	RTSC	A933/001	High Road Rly	Concrete	Slab	639415	1997/98
ECN4	279	Montrose	RTSC	A935/001	Brechin Road	Masonry	Arch	710591	1997/98
ECN3	234	Arbroath	RTSC	B9095/001	Keptle Street Rly	Steel	Truss	639405	1997/98
ECN4	274	Craig	RTSC	C45/001	Barns of Craig Rly	Concrete	Beam/Slab	708564	1997/98
ECN4	263	Lunan Bay	RTSC	C45/002	Braehead Rly	Masonry	Arch	689523	1997/98
ECN4	251	Inverkeilor	RTSC	C46/001	Inverkeilor Rly	Masonry	Arch	667491	1997/98
ECN4	247	Letham Grange	RTSC	C48/001	Letham Grange	Masonry	Arch	634454	1997/98
ECN5	269	Craig	RTSC	U437/001	Craig Rly	Masonry	Arch	689643	1997/98
ECN4	268	Boddin	RTSC	U478/002	Boddin Rly	Masonry	Arch	707536	1997/98
ECN3	222	Carnoustie	RTSC	MA/016	West Haven	Concrete	Beam/Slab	572348	1997/98

APPENDIX 3

LIST OF STRUCTURES REQUIRING STRENGTHENING

1997/98

NAME	NUMBER	GRID REF.	DESCRIPTION OF WORKS	ESTIMATE (£k)
CASTLETON OF EASSIE	A94/006	332 465	REPLACEMENT	60
EASSIE RAILWAY BRIDGE	A94/007	350 472	CRASH BARRIERS ON FOOTPATH	7.5
PITMUJES MILL FARM	A933/004	587 497	STRENGTHEN PENDING ROAD IMPROVEMENTS	20
NEWTONMILL	B966/002	607 642	CRASH BARRIERS ON FOOTPATH	7.5
ARBROATH HARBOUR	MA/001	644 405	REPLACEMENT	145
NEWMILL	U352/001	327 461	REPLACEMENT	50
DUNLAPPIE	U428/001	592 679	LAND ACQUISITION, LISTED CONSENT ADMIN., SITE INVESTIGATION AND TESTING	10
ESTIMATED TOTAL				300

APPENDIX 4

LIST OF STRUCTURES REQUIRING REPAIR (1997/98)

NAME	NUMBER	GRID REF.	DESCRIPTION OF WORKS	ESTIMATE (£k)
JUSTINIHAUGH	B957/003	462 571	FREE BEARINGS, RESURFACE WITH BITUMASTIC WEARING COURSE, REPAINT.	100
OLD BRECHIN	A933/010	604 593	REBUILD PARAPETS, REPLACE WEATHERED STONE IN PIERS AND SPANDRELS.	10
VICTORIA PARK FOOTBRIDGE	U490/001/002	658 414	CONCRETE REPAIRS	20
BRIDGE OF LETINOT	C34/003	537 684	REPAIR STEEL, WATERPROOF	(see * below)
BELLIES BRAE	A926/001	386 537	WATERPROOFING, TREAT REINF. IN DECK	60
THE GRANGE	U474/001	655 495	CONCRETE SADDLE, STONE REPLACEMENT REPOINTING.	25
WESTWATER	B966/004	606 660	SCOUR PROTECTION TO PIERS. NEW MASONRY BUTTRESSES, POSITIVE DRAINAGE.	25
BURNFOOT	C34/004	538 674	REBUILD PARAPETS, WATERPROOF, CONCRETE SADDLE	40
SPOTT FARM	C28/001	330 653	WATERPROOFING, STONE REPLACEMENT, CONCRETE SADDLE	40
ESTIMATED TOTAL				380

* Angus Council Committee Report No. 430/97 (Joint report by the Director of Property Services and the Director of Recreation Services and the Director of Roads) refers.

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