

ESSEX COUNTY COUNCIL

RINGWAY JACOBS | ESSEX COUNTY COUNCIL

PROJECT DELIVERY
HIGHWAYS (STRUCTURES)

TECHNICAL APPROVAL OF THIRD PARTY
STRUCTURES

NOTES FOR GUIDANCE FOR APPLICANTS



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Notes for Guidance for Applicants

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ESSEX COUNTY COUNCIL.
RINGWAY JACOBS|ESSEX COUNTY COUNCIL, PROJECT DELIVERY,
HIGHWAYS (STRUCTURES).
TECHNICAL APPROVAL OF THIRD PARTY STRUCTURES.

TECHNICAL APPROVAL REQUIREMENTS FOR HIGHWAY STRUCTURES WHICH ARE TO BE DESIGNED AND CONSTRUCTED BY THIRD PARTIES, OVER, UNDER OR ADJACENT TO THE HIGHWAY

NOTES FOR GUIDANCE FOR APPLICANTS

Eurocode V8

1.0 Design Approval

1.1 Essex County Council is the Technical Approval Authority (TAA) for *all* structures which are to be designed and constructed over, under or adjacent to highways for which Essex County Council are, or are to become, the Highway Authority. The Council's approval to the design of structures is to be subject to the general principles and procedure laid out in the Highways Agency's Technical Memorandum BD 2/12, as amended below.

Essex County Council has employed consulting engineers, Ringway Jacobs, to administer this procedure and to make recommendations. The address of Ringway Jacobs is:

Ringway Jacobs | Essex County Council
County Hall A2 Annexe
Market Road
Chelmsford
Essex CM1 1HQ

Initial point of contact for third party structures matters:

Mr T Phillips Tel. 01245 342688

E mail. timothy.phillips@essexhighways.org

Copy e-mail to Structures.Thirdparties@essexhighways.org

It is recommended that the applicant obtains a copy of BD 2/12 which is available from:

The Stationery Office (TSO)
e-mail: book.orders@tso.co.uk
Online: www.tso.co.uk

Online viewing of BD2 and all other Highways Agency Technical Memoranda that comprise the Design Manual for Roads & Bridges (DMRB) is available at:
<http://www.standardsforhighways.co.uk/dmrb/index.htm>

1.2 A structure requiring Technical Approval is defined as being over, under, or adjacent to a highway and:

- It is a bridge (other than a footbridge), culvert, or tunnel that has a span greater than 1.2 metres.
- It is a footbridge with span greater than 8 metres on a public right of way.
- It is a retaining wall, or headwall, with a retained height from finished ground level in front of the wall of over 1.5 metres.
- It is a noise attenuation barrier exceeding 1.8 metres high (standard ECC/Dept. of Transport barriers would not require Technical Approval).
- It is a high mast for lighting/lighting systems and/or television cameras.
- It is a sign/signal gantry.
- It is a canopy or building overhanging the highway.
- It is a basement beneath or adjacent to the highway.
- It is designated by the County Council to be a highway structure because of its particular construction, and status.
- It is a modification or addition to an existing structure as defined above.
- It is a buried, water attenuation structure within or adjacent to the highway that has a span greater than 1.2 metres.

1.3 The applicant shall submit to Ringway Jacobs the name of one person, who, for the purposes of technical approval, shall be nominated as co-ordinator for the design and construction. Ringway Jacobs will expect to deal only with the nominated co-ordinator.

1.4 The applicant shall submit to Ringway Jacobs the name of the principal designer for the Design stage.

1.5 In the case of a structure to be adopted, the applicant should note that Essex County Council is the ultimate owner of the structure.

1.6 Technical Approval for a highway structure is a certification process that follows several distinct stages:

- a. *Acceptance of the Approval in Principle (AIP) document. This document agrees the form of the proposed structure, the principle details, the traffic loadings, the technical standards to which it will be designed and the category of the design check. A General Arrangement drawing will be included in the AIP.*
- b. *Acceptance of a Design Certificate, or in certain circumstances, a combined Design and Check Certificate.*
- c. *Acceptance of a Check Certificate.*
- d. *Acceptance of a Construction Compliance Certificate including submission of as constructed drawings and a Maintenance Manual incorporating the Health and Safety File.*

The applicant should note that a review of the applicant's calculations by Essex County Council or Ringway Jacobs is not included in the Technical Approval process in the first instance. However, Ringway Jacobs may request that the designer shall submit calculations for review at any time during the Technical Approval process. Note that on completion of the Technical Approval process, submission of designer's calculations will be required for **record purposes** for all structures to be adopted by the County Council.

1.7 Initially, the applicant shall submit to Ringway Jacobs for their observations, **one** copy of a draft AIP document and associated drawings for each structure. The drawings shall include the following:

- A location plan for the structure showing the structure in relation to nearest town or village. A further larger scale location plan should also be provided to show the location of the structure within a new development if applicable.
- The structural form, including articulation and preliminary substructure proposals.
- Proposed construction materials.
- The proximity and effect of the proposals on any existing highway structure.
- If applicable, the structural elements to be eventually offered for adoption by the Highway Authority.
- The obstacle to be crossed, including clearances.
- An interpretive geotechnical report.

1.8 Ringway Jacobs will review the submission and reply accordingly to the applicant. When Ringway Jacobs consider the submission to be acceptable, the applicant will be asked to submit three complete copies of the AIP to Ringway Jacobs. Each copy of the AIP shall be signed by the designer at the appropriate place and only original signatures will be accepted. Ringway Jacobs will forward the AIP to Essex County Council with a recommendation for acceptance. The applicant should note and allow in his programme that it may take several draft submissions before Ringway Jacobs are able to recommend a submission for formal approval by Essex County Council.

1.9 The applicant should also note that unless agreed otherwise with Ringway Jacobs, Category 0 structures, as defined in BD 2/12 shall require an AIP.

An example of the layout and detail required for the AIP is shown in Appendix C to these Notes for Guidance. Each page of the AIP shall have the structure name printed at the top and all copies shall bear original signatures, not photocopies. Schedules of the standards to be used in the design of the structure shall be appended to the AIP. These schedules shall take the form given in Annex B of BD 2/12. The schedules comprise a list of bridges technical memoranda, British Standards and other design documents. The applicant should strike through those standards, which do not apply to the applicant's design.

Following formal approval by Essex County Council, one copy of the AIP, signed as accepted by the TAA, will be returned to the applicant.

1.10 During the detail design stage the designer shall continue to liaise with Ringway Jacobs and detail drawings shall be submitted as required. In general terms, the design shall be in accordance with National Standards (Eurocodes) and the documents listed in the Schedule "TAS".

1.11 Checking: The applicant should note and allow in his programme that the design and contract drawings together with bar bending schedules shall be checked as follows:

- Structure Categories 0 and 1 (as defined in BD 2/12): As a minimum, shall be checked by another Engineer within the design team.
- Structure Category 2: Shall be checked by a checking team which may be from the same office but must be independent of the design team.
- Structure Category 3: Shall be checked by a checking team from a separate organisation, proposed by the designer and agreed by the TAA, having knowledge and experience relating to the type of structure it is to examine.

1.12 Following Approval in Principle and upon completion of the design, the designer shall forward three copies of the relevant design and check certificates to Ringway Jacobs. Examples of the certificates relevant for each category of structure are shown in Appendix D to these Notes for Guidance. All certificates shall have the structure name at the top of

each page and shall bear original signatures. One copy, signed as accepted by the TAA, will be returned to the designer.

- 1.13 Proposed design changes made subsequent to Technical Approval shall be submitted to the TAA for approval.
- 1.14 The Approval in Principle is valid for three years from the date of acceptance by the TAA. If the construction has not commenced within this period, the AIP shall be reviewed by the designer against current standards and amended as necessary. The document shall be submitted to Ringway Jacobs and Essex County Council for review and acceptance as if it were a new submission. Any previously agreed Design and Check Certificates are also required to be updated and resubmitted.

2.0 Construction Stage

- 2.1 Construction shall not proceed until the design approval procedures have been completed.
THE APPLICANT SHOULD BE AWARE THAT ESSEX COUNTY COUNCIL MAY NOT ADOPT STRUCTURES THAT HAVE BEEN CONSTRUCTED BEFORE THE TECHNICAL APPROVAL PROCEDURES HAVE BEEN COMPLETED.
- 2.2 During construction, Ringway Jacobs will undertake site monitoring to ensure compliance with standards and the approved design. The applicant will be required to supply up to date drawings and information to Ringway Jacobs as construction proceeds.
- 2.3 The applicant shall submit to Ringway Jacobs a works programme.
- 2.4 The applicant shall submit to Ringway Jacobs the name of the principal designer for the Construction stage.

3.0 Information Required For Record Purposes

- 3.1 For structures intended to be adopted by Essex County Council, the applicant will be required to supply, to Ringway Jacobs, the following documentation on completion of construction:
- A certificate stating that the structure has been constructed in accordance with the approved drawings (Construction Compliance Certificate).
 - Two full sets of as constructed drawings for each structure, in accordance with Appendix A. of these notes.
 - A Structure Maintenance Manual for each structure in accordance with Appendix B of these notes. The applicant should note that information for the Health and Safety File will be required to be gathered during the construction phase
 - One complete set of calculations, separately bound for each structure, with all sections of the design separately titled and indexed with page numbers.
 - An interpretive geotechnical report (a geotechnical report already submitted with the AIP will satisfy this requirement).

THE APPLICANT SHOULD NOTE THAT RECOMMENDATION FOR ADOPTION WILL ONLY BE MADE ON RECEIPT OF ALL OF THE RELEVANT DOCUMENTATION.

The applicant should also note that the Health and Safety File (as required by the Construction (Design and Management) Regulations 2007.) shall be passed to Essex County Council at the time of adoption.

3.2 For structures, which are to remain in private ownership, the applicant will be required to supply to the Council the following documentation on completion of construction:

- A certificate stating that the structure has been constructed in accordance with the approved drawings (Construction Compliance Certificate).
- Two full sets of as constructed drawings for each structure in the format specified in Appendix A.

The applicant shall note that for structures within the highway boundary that are to remain in private ownership, a licence for the structure shall also be required from the Council. For matters concerning the licence, the applicant shall liaise directly with Essex County Council.

3.3 Examples of Construction Compliance Certificates are given in Appendix E to these Notes For Guidance

4.0 Planning Conditions

Following the agreement of structural form with Ringway Jacobs, details of the structures are to be submitted to the appropriate planning authority in accordance with planning conditions. Written confirmation of planning approval shall be supplied to Ringway Jacobs.

5.0 Provision of Statutory Undertakers Services

Generally, where possible, services shall be sited away from structures. The accommodation of services on a structure shall be subject to the approval of Ringway Jacobs. When services can be located within the fill material over a structure, without interference with expansion joints, then this approval is likely to be given.

6.0 Legally Enforceable Requirements of Other Authorities.

The requirements of all other authorities shall be notified to Ringway Jacobs and copies of those authorities' written approval to the design proposals shall be supplied to Ringway Jacobs. Details shall be provided under clause 4.4 of the Approval in Principle submission.

APPENDIX A

SPECIFICATION FOR AS CONSTRUCTED DRAWINGS FOR ECC BRIDGE RECORD SYSTEM

Two copies of each as constructed drawing for the structure are required. These drawings are required to be supplied on disc in digital format, one copy in **.jpeg** format and one copy in Autocad© **.dwg** format.

APPENDIX B

SPECIFICATION FOR STRUCTURE MAINTENANCE MANUAL

Where the bridgeworks have been undertaken as part of a roadwork's scheme and a Health and Safety File is to be produced for the scheme, the Structure Maintenance Manual shall be a separate document forming part of that Health and Safety File. The Structure Maintenance Manual shall be incorporated into the Health and Safety File by reference.

The Structure Maintenance Manual shall be of A4 format with hard cover and as a minimum contain the following elements:

- a) Cover page, with Structure Name, ECC Number and date when completed.
- b) List of contents.
- c) Location plan and grid reference.
- d) Copy of accepted Approval in Principle form complete with TA Schedule and Appendix.
- e) Copy of accepted Design and Check Certificates.
- f) Copy of Construction Compliance Certificate.
- g) Description of structure with small general arrangement drawing.
- h) Copy of any licenses required for construction.
- i) Plan showing the highway boundary, and any agreement for access for future inspection and maintenance.
- j) Details of any plant running over or under the structure.
- k) Details of construction methods used for the structure where these may have health and safety implications for future work.
- l) Details of materials used in the construction of the structure where these may have health and safety implications for future work.
- m) Details of specific maintenance requirements and procedures for the structure.
- n) Details of access to the structure for Inspection.
- o) List of designers, principal designer, principal contractor, sub contractors and suppliers for all work and materials used in the construction of the structure, together with their addresses.
- p) List of As Constructed drawings.
- q) Copies of test results and certificates (cube results, Agrément Certificates etc.) for all materials used in the construction of the structure.
- r) Copies of proprietary products brochures and pamphlets (Annotated).

- s) If applicable. A diagram showing, minimum headroom over carriageways, footways and central reserve.
- t) Photographs showing the bridge elevations and the road scene.

APPENDIX C

GUIDANCE FOR THE PRODUCTION OF AN AIP.

Third Party Approval In Principle submissions shall take the following format. Text in italics is intended as a guide to the response required.

1. The following format shall be retyped, with the applicant answering all relevant questions, or stating “not applicable”, under the headings and sub-headings shown below.
- 2 Each page shall be numbered.
- 3 The Project Name, Structure Name, ECC Structure number shall appear at the top of pages, as shown in the following example.
- 4 A version number or letter and issue date shall be included on each page as a footer.
- 5 Add as appendices to the AIP, drawings, diagrams of the idealised structure, schedule of standards (TAS) and any supporting documents and correspondence.
- 6 Drawings shall clearly show plans, elevations and sections of the proposed highway structure in accordance with paragraph 1.7 of the Notes for Guidance. The applicant shall note that this is particularly important in the case of buildings or parts of buildings that are to uphold the highway. In this case, the drawings shall clearly show that part of the building that will uphold the highway. Extraneous details of the remainder of the building are not required unless requested. **The applicant is advised to contact Ringway Jacobs prior to preparing the submission in these cases.** The proximity of the highway shall also be clearly shown.

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TECHNICAL APPROVAL OF THIRD PARTY STRUCTURES.

APPROVAL IN PRINCIPLE

Name of Project: _____

Name of Structure: _____

ECC Structure No: _____

1.0 HIGHWAY DETAILS

1.1 Type of highway

1.2 Permitted traffic speed

Give speed over and or under bridge - depending on type

1.3 Existing Restriction

2.0 SITE DETAILS

2.1 Obstacle crossed

3.0 PROPOSED STRUCTURE

3.1 Description of structure and design working life

3.2 Structural type

3.3 Foundation type

Include reasons for choice

3.4 Span arrangements

3.5 Articulation arrangements

3.6 Classes/levels

3.6.1 Consequence class

3.6.2 Reliability class

3.6.3 Inspection Level

3.7 Road restraint system requirements

3.8 Proposed arrangements for future maintenance and inspection

3.8.1 Traffic Management

3.8.2 Arrangement for future maintenance and inspection of structures.
Access arrangements to structure.

- 3.9 Environment and Sustainability
- 3.10 Durability. Materials and Finishes
- 3.11 Risks and hazards considered for design, execution, maintenance and demolition. Consultation with and/or agreement from principal designer
- 3.12 Estimated cost of proposed structure together with other structural forms considered (including where appropriate proprietary manufactured structure) and the reasons for their rejection including comparative whole life costs with date of estimates
- 3.13 Proposed Arrangements for Execution
 - 3.13.1 Execution of Structure
 - 3.13.2 Traffic Management
 - 3.13.3 Service Diversions
 - 3.13.4 Interface with Existing Structures

4.0 DESIGN CRITERIA

- 4.1 Actions
 - 4.1.1 Permanent Actions
 - 4.1.2 Snow, wind and thermal actions
 - 4.1.3 Actions relating to normal traffic under AW regulations and C&U regulations
 - 4.1.4 Actions relating to General Order Traffic under STGO regulations.
 - 4.1.5 Footway or footbridge variable actions
 - 4.1.6 Actions relating to Special order Traffic, provision for exceptional abnormal indivisible loads including location of vehicle track on deck cross-section.
 - 4.1.7 Accidental actions.
 - 4.1.8 Actions during execution.
 - 4.1.9 Any special action not covered above
- 4.2 Heavy or high load route requirements and arrangements being made to preserve the route including any provision for future heavier loads or future widening
- 4.3 Minimum headroom provided (including allowance for vertical sag compensation and maximum deflection of structure)
- 4.4 Authorities consulted and any special conditions requirements.

- 4.5 Standards and documents
 - 4.5.1 List of relevant documents from the TAS
See attached schedule in Appendix A
 - 4.5.2 Additional relevant standards and publications
- 4.6 Proposed departures from Standards and documents given in 4.5
- 4.7 Proposed methods of dealing with aspects not covered by Standards and documents in 4.5

5.0 STRUCTURAL ANALYSIS

- 5.1 Methods of analysis proposed for superstructure, substructure and foundations.
 - 5.1.1 Method of analysis for ultimate limit states (excluding fatigue)
 - 5.1.2 Method of analysis for fatigue
 - 5.1.3 Method of Analysis for serviceability limit states
- 5.2 Description and diagram of idealised structure to be used for analysis.
Include a diagram of the idealised structure or model used for computer analysis. The diagram may be included as an Appendix.
- 5.3 Assumptions intended for calculation of structural element stiffness.
- 5.4 Proposed range of soil parameters to be used in the design of earth retaining elements

6.0 GEOTECHNICAL CONDITIONS

- 6.1 Acceptance of recommendations of the Geotechnical Report to be used in the design and reasons for any proposed changes.
- 6.2 Geotechnical Design Report Summary Information.
- 6.3 Differential settlement to be allowed for in the design of the structure.
- 6.4 If the Geotechnical Design Report is not yet available, state when the results are expected and list the sources of information used to justify the preliminary choice of foundations.

7.0 CHECKING

- 7.1 Proposed category of checking and Design Supervision level.
- 7.2 If category 3, name of proposed independent checker.
- 7.3 Erection proposals or temporary works for which Types S and P proposals will be required, listing structural parts of the permanent structure affected with reasons.

8.0 DRAWINGS AND DOCUMENTS

8.1 List of Drawings (incl. drawing numbers and revision) and documents accompanying the submission.

9.0 THE ABOVE IS SUBMITTED FOR ACCEPTANCE

We confirm that details of the temporary works design will be/have been passed to the permanent works designer for review

Signed:

Name:

Design Team Leader

Engineering Qualifications:

Name of Organisation:

.....

.....

Date:

10.0 THE ABOVE IS AGREED AND SUBMITTED FOR ACCEPTANCE

Signed:

Name:
Principal Engineer - Structures
Ringway Jacobs | Essex County Council

Engineering Qualifications:

Date:

**11.0 THE ABOVE IS ACCEPTED SUBJECT TO THE AMENDMENTS AND CONDITIONS
SHOWN BELOW:**

Signed:

Name:
For Essex County Council
Ringway Jacobs | Essex County Council, Project Delivery, Highways

Date:

Amendments and conditions, if any

APPENDIX D

GUIDANCE FOR THE PRODUCTION OF DESIGN & CHECK CERTIFICATES.

Design and Check Certificates shall take the following format. Text in italics is intended as a guide to the response required.

- 1, The following format shall be retyped.
- 2 Each page shall be numbered.
- 3 The Project Name, Structure Name, ECC Structure number shall appear at the top of pages, as shown in the following examples.
- 4 A version number or letter and issue date shall be included on each page as a footer

ESSEX COUNTY COUNCIL.
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TECHNICAL APPROVAL OF THIRD PARTY STRUCTURES.

DESIGN AND CHECK CERTIFICATE
(Category 0 Structures that have not required an AIP)

Name of Project: _____

Name of Structure: _____

ECC Structure No: _____

Form of Certificate to be used by the Design Office for structures in Categories 0 where it has been agreed with Ringway Jacobs that a formal Approval in Principle submission is not required.

One certificate may be used for more than one identical structure.

1. We certify that reasonable professional skill and care has been used in the design of
.....(Name of Structure)* with a view to securing that:-

i. It has been designed in accordance with the following standards:

List relevant standards from the following:

Eurocodes

British Standards

The Manual of Contract Documents for Highway Works (MCDHW)

The Design Manual for Roads and Bridges (DMRB)

(Bridges Technical Memoranda BA and BD Series)

Traffic Engineering Standards TD Series

Highways Advice Notes HA series

ii. It has been checked for compliance with the relevant standards in i.

iii. It has been accurately translated into Contract Drawings and Bar Bending Schedules (all of which have been checked). The unique numbers of these Drawings and Schedules are:

List numbers and revisions of drawings and schedules

Signed.....

Name:.....

Team Leader - Design Office

Engineering Qualifications.....

Signed.....
Partner/Director (Consulting Engineer)

Name.....

Name of Organisation.....
.....

Date.....

2. THE CERTIFICATE IS AGREED AND SUBMITTED FOR ACCEPTANCE

Signed.....

Name.....
Principal Engineer - Structures
Ringway Jacobs | Essex County Council

Engineering Qualifications.....

Date.....

3 THE CERTIFICATE IS ACCEPTED BY THE TECHNICAL APPROVAL AUTHORITY

Signed:.....

Name:.....
For Essex County Council
Ringway Jacobs | Essex County Council, Project Delivery, Highways

Date:.....

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TECHNICAL APPROVAL OF THIRD PARTY STRUCTURES.

DESIGN AND CHECK CERTIFICATE
(Category 0 and 1 Structures)

Name of Project: _____

Name of Structure: _____

ECC Structure No: _____

Form of Certificate to be used by the Design Office for structures in Categories 0 and 1 which have been given Approval in Principle by Essex County Council.

1. We certify that reasonable professional skill and care has been used in the preparation of the design of.....(*Name of Structure*) with a view to securing that:-

i. It has been designed in accordance with the Approval in Principle dated.....* including the following:

* *Insert the date of agreement of the AIP by the TAA*
List any addenda to the AIP with dates

ii It has been checked for compliance with the relevant standards in i.

iii. The design has been accurately translated into Contract Drawings and Bar Bending Schedules The unique numbers of these Drawings and Schedules are:

List numbers and revisions of drawings and schedules

Signed.....

Name:.....

Team Leader - Design Office

Engineering Qualifications.....

Signed.....

Partner/Director (Consulting Engineer)

Name:.....

Name of Organisation.....

Date.....

2. THE CERTIFICATE IS AGREED AND SUBMITTED FOR ACCEPTANCE

Signed.....

Name.....
Principal Engineer - Structures
Ringway Jacobs | Essex County Council

Engineering Qualifications.....

Date.....

3 THE CERTIFICATE IS ACCEPTED BY THE TECHNICAL APPROVAL AUTHORITY

Signed:.....

Name:.....
For Essex County Council
Ringway Jacobs | Essex County Council, Project Delivery, Highways

Date:.....

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TECHNICAL APPROVAL OF THIRD PARTY STRUCTURES.

DESIGN AND CHECK CERTIFICATE
(Category 2 Structures)

Name of Project: _____

Name of Structure: _____

ECC Structure No: _____

Form of Certificate to be used by the Design Team and Checking Team for structures in Category 2 which have been given Approval in Principle by Essex County Council.

1. We certify that reasonable professional skill and care has been used in the preparation of the design of.....(*Name of Structure*) with a view to securing that:-

i. It has been designed in accordance with the Approval in Principle dated.....* including the following:

** Insert the date of agreement of the AIP by the TAA
List any addenda to the AIP with dates
List any Departures and additional methods or criteria.*

ii It has been checked for compliance with the relevant standards in i.

iii. The design has been accurately translated into Contract Drawings and Bar Bending Schedules The unique numbers of these Drawings and Schedules are:

List numbers and revisions of drawings and schedules

Signed.....

Name:.....

Team Leader - Design Team

Engineering Qualifications.....

Signed.....

Name:.....

Team Leader - Checking Team

Engineering Qualifications.....

Signed.....
Partner/Director (Consulting Engineer)

Name:.....

Name of Organisation.....

Date.....

2. THE CERTIFICATE IS AGREED AND SUBMITTED FOR ACCEPTANCE

Signed.....

Name.....
Principal Engineer - Structures
Ringway Jacobs | Essex County Council

Engineering Qualifications.....

Date.....

3 THE CERTIFICATE IS ACCEPTED BY THE TECHNICAL APPROVAL AUTHORITY

Signed:.....

Name:.....
For Essex County Council
Ringway Jacobs | Essex County Council, Project Delivery, Highways

Date:.....

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DESIGN CERTIFICATE
(Category 3 Structures)

Name of Project: _____

Name of Structure: _____

ECC Structure No: _____

Form of Certificate to be used by the Design Office for structures in Category 3 , which have been given Approval in Principle by Essex County Council.

1. We certify that reasonable professional skill and care has been used in the preparation of the design of(*Name of Structure*) with a view to securing that:-

i. It has been designed in accordance with the Approval in Principle dated.....* including the following:

* *Insert the date of agreement of the AIP by the TAA*
List any addenda to the AIP with dates
List any Departures and additional methods or criteria.

ii. The design has been accurately translated into Contract Drawings and Bar Bending Schedules The unique numbers of these Drawings and Schedules are:

List numbers and revisions of drawings and schedules

Signed.....

Name:.....

Team Leader - Design Office

Engineering Qualifications:.....

Signed.....

Partner/Director (Consulting Engineer)

Name of Organisation.....

Date.....

2. THE CERTIFICATE IS AGREED AND SUBMITTED FOR ACCEPTANCE

Signed.....

Name.....
Principal Engineer - Structures
Ringway Jacobs | Essex County Council

Engineering Qualifications.....

Date.....

3 THE CERTIFICATE IS ACCEPTED BY THE TECHNICAL APPROVAL AUTHORITY

Signed:.....

Name:.....
For Essex County Council
Ringway Jacobs | Essex County Council, Project Delivery, Highways

Date:.....

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TECHNICAL APPROVAL OF THIRD PARTY STRUCTURES.
CHECK CERTIFICATE
(Category 3 Structures)

Name of Project: _____

Name of Structure: _____

ECC Structure No: _____

Form of Certificate to be used by the independent Checking Office for structures in Category 3, which have been given Approval in Principle by Essex County Council.

1. We certify that reasonable professional skill and care has been used in the checking of the design of (*Name of Structure*) with a view to securing that:-

i. It complies with the Approval in Principle dated.....* including the following:

** Insert the date of agreement of the AIP by the TAA
List any addenda to the AIP with dates.
List any Departures and additional methods or criteria.*

ii. The design has been accurately translated into Contract Drawings and Bar Bending Schedules (all of which have been checked). The unique numbers of these Drawings and Schedules are:

List numbers and revisions of drawings and schedules

Signed.....

Name:.....

Team Leader – Checking Office

Engineering Qualifications:.....

Signed.....

Partner/Director (Consulting Engineer)

Name of Organisation.....

Date.....

2. THE CERTIFICATE IS AGREED AND SUBMITTED FOR ACCEPTANCE

Signed.....

Name.....
Principal Engineer - Structures
Ringway Jacobs | Essex County Council

Engineering Qualifications.....

Date.....

3 THE CERTIFICATE IS ACCEPTED BY THE TECHNICAL APPROVAL AUTHORITY

Signed:.....

Name:.....
For Essex County Council
Ringway Jacobs | Essex County Council, Project Delivery, Highways

Date:.....

APPENDIX E

GUIDANCE FOR THE PRODUCTION OF CONSTRUCTION COMPLIANCE CERTIFICATES.

Construction Compliance Certificates shall take the following format. Text in italics is intended as a guide to the response required.

1. The following format shall be retyped.
2. Each page shall be numbered.
3. The Project Name, Structure Name, ECC Structure number shall appear at the top of pages, as shown in the following examples.
4. A version number or letter and issue date shall be included on each page as a footer

ESSEX COUNTY COUNCIL,
RINGWAY JACOBS|ESSEX COUNTY COUNCIL, PROJECT DELIVERY,
HIGHWAYS (STRUCTURES).
TECHNICAL APPROVAL OF THIRD PARTY STRUCTURES.

CONSTRUCTION COMPLIANCE CERTIFICATE
(Structures to be adopted by Essex County Council)

Name of Project: _____

Name of Structure: _____

ECC Structure No: _____

Form of Certificate to be used by the applicant to verify that structures to be adopted by Essex County Council, have been constructed in accordance with the approved drawings.

1. We certify that(*Name of Structure*)

i. Has been constructed in accordance with:

- a. The Approval in Principle dated(*Insert Date*)
- b. The Design/Check Certificates dated
..... (*Insert Dates*)
- c. The Specification for Highway Works
State edition, version and date.

ii. The construction of the works has been accurately translated into As Constructed Drawings.
The unique numbers of these drawings and schedules are:

List drawing & schedule numbers.

2. We confirm that the following have been forwarded to Ringway Jacobs for record purposes:

- i. Two full sets of as-constructed drawings for each structure. Format in accordance with Notes for Guidance Appendix A
- ii. One complete set of calculations, separately bound for each structure, with all sections of the design separately titled and indexed with page numbers.
- iii. One copy of geotechnical report.

3. We understand that acceptance of this Certificate by the Technical Approval Authority is conditional upon the subsequent receipt of the following:
- i. A Maintenance Manual for each structure in accordance with the Notes for Guidance Appendix B.

Signed.....

Name.....

Position Held.....

For and on behalf of

Name of Organisation.....

Date.....

4. THE CERTIFICATE IS AGREED AND SUBMITTED FOR ACCEPTANCE

Signed.....

Name.....

Principal Engineer - Structures
Ringway Jacobs | Essex County Council

Date.....

5. THE CERTIFICATE IS ACCEPTED BY THE TECHNICAL APPROVAL AUTHORITY

Signed:.....

Name:.....

For Essex County Council
Ringway Jacobs | Essex County Council, Project Delivery, Highways

Date:.....

ESSEX COUNTY COUNCIL,
RINGWAY JACOBS|ESSEX COUNTY COUNCIL, PROJECT DELIVERY,
HIGHWAYS (STRUCTURES).
TECHNICAL APPROVAL OF THIRD PARTY STRUCTURES.

CONSTRUCTION COMPLIANCE CERTIFICATE
(Structures Remaining in Private Ownership)

Name of Project: _____

Name of Structure: _____

ECC Structure No: _____

Form of Certificate to be used by the applicant to verify that structures that are to remain in private ownership, have been constructed in accordance with the approved drawings.

1. We certify that(*Name of Structure*)

i. Has been constructed in accordance with:

a. The Approval in Principle dated(*Insert Date*)

b. The Design/Check Certificates dated

..... (*Insert Dates*)

c. The Specification for Highway Works
State edition, version and date.

ii. The construction of the works has been accurately translated into As Constructed Drawings.
The unique numbers of these drawings and schedules are:

List drawing & schedule numbers.

2. We confirm that the following has been forwarded to Ringway Jacobs:

i. Two full sets of as-constructed drawings for each structure. Format in accordance with Notes for Guidance Appendix A

Signed.....

Name.....

Position Held.....

For and on behalf of

Name of Organisation.....

Date.....

3. THE CERTIFICATE IS AGREED AND SUBMITTED FOR ACCEPTANCE

Signed.....

Name.....
Principal Engineer - Structures
Ringway Jacobs | Essex County Council

Date.....

4. THE CERTIFICATE IS ACCEPTED BY THE TECHNICAL APPROVAL AUTHORITY

Signed:.....

Name:.....
For Essex County Council
Ringway Jacobs | Essex County Council, Project Delivery, Highways

Date:.....