

**APPROVAL IN PRINCIPLE
(Bridge and other Highway Structures), Non-Eurocodes**

Name of Project
Name of Bridge or Structure
Structure Ref No

Name of Project 3 Trinity Willoughby Road Hampstead NW3
1SA

Name of Bridge or Structure Basement Retaining wall
Structure Ref No No reference

1. HIGHWAY DETAILS

- 1.1 Type of highway **Unclassified**
- 1.2 Permitted traffic speed ² **30 miles per hour**
- 1.3 Existing restrictions ³ **none**

2. SITE DETAILS

- 2.1 Obstacles crossed **none**

3. PROPOSED STRUCTURE

- 3.1 Description of structure and design working life - **basement retaining wall with a life of 50 years**
- 3.2 Structural type **Reinforced concrete retaining wall and basement slab**
- 3.3 Foundation type **Reinforced ground bearing slab**
- 3.4 Span arrangements **3000 Cantilevered wall and 5.0 m span of basement slab**

- 3.5 Articulation arrangements **none**
- 3.6 Road restraint systems requirements **none**
- 3.7 Proposed arrangements for future maintenance and inspection/Inspection for Assessment¹ **none**
- 3.7.1 Traffic management **none required**
- 3.7.2 Arrangements for future maintenance and inspection of structure. **Access arrangements to structure. none**
- 3.7.3^a Intrusive or further investigations proposed **Side of property**
- 3.8 Environment and sustainability **Not Applicable**
- 3.9 Durability. Materials and finishes/Materials strengths assumed and basis of assumptions^{1 4} **Concrete strength of 35 N/mm² High Tensile reinforcement.**

- 3.10 Risks and hazards considered for design, execution, maintenance and demolition. Consultation with and/or agreement from CDM co-ordinator **Colapse of temporary propping.**
- 3.11^b 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 dates of estimates) **Not Available**
- 3.12^b Proposed arrangements for construction **Contractor to comply with method statement attached**
- 3.12.1 Construction of structure **refer to attached drawings**
- 3.12.2 Traffic management **none required**
- 3.12.3 Service diversions **none required**
- 3.12.4 Interface with existing structures **Dry pack to existing walls**

3. 13_A Year of construction 2018
3. 14_A Reason for assessment Highways support
3. 15_A Part of structure to be assessed Basement Retaining walls
- 4. DESIGN/ASSESSME NT₁ CRITERIA**
4. 1 Actions None Taken
4. 1.1 Permanent actions None Taken
4. 1.2 Snow, Wind and Thermal actions Not Applicable
4. 1.3 Actions relating to normal traffic under AW regulations and C&U regulations
6 Not Applicable
4. 1.4 Actions relating to General Order traffic under STGO regulations None Taken
4. 1.5 Footway or footbridge variable actions Not Applicable
4. 1.6 Actions relating to Special Order traffic, provision for exceptional abnormal indivisible loads including location of vehicle track on deck cross-section Not Applicable
4. 1.7 Accidental actions. None
4. 1.8 Actions during construction, Temporary Propping of retaining walls and regular monitoring of building movement
4. 1.9 Any special action not covered above 9 none
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 10
Not Applicable
4. 3 Minimum headroom provided Not Applicable
4. 4 Authorities consulted and any special conditions required None consulted
4. 5 Standards and documents listed in the Technical Approval Schedule
Refer to Attached drawings
4. 6 Proposed Departures relating to departures from standards given in 4.5 None
4. 7 Proposed Departures relating to methods for dealing with aspects not covered by standards in 4.5 Not Applicable
- 5. STRUCTURAL ANALYSIS**
5. 1 Methods of analysis proposed for superstructure, substructure and foundations Elastic Analysis based on assessment of loadings from existing building, ground pressure, surcharge and highway loading.
5. 2 Description and diagram of idealised structure to be used for analysis refer to attached drawings
5. 3 Assumptions intended for calculation of structural element stiffness, Lateral support for ground conditions and surcharge from highway loading and support to existing structure
5. 4 Proposed range of soil parameters to be used in the design/assessment of earth retaining elements Natural London Clay and risk of ground water
- 6. GEO TECHNICAL CONDITIONS**
6. 1 Acceptance of recommendations of the Geotechnical Design Report to be used in the design/assessment, and reasons for any proposed changes. Ground type and ground bearing pressure
6. 2 Summary of design for highway structure in Geotechnical Design Report
No Report made
6. 3 Differential settlement to be allowed for in the design/assessment, of the structure. 2mm

6. 4b 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 **Refer to Soil Investigated report attached**

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7. CHECK

7. 1 Proposed Category **Category 1**
7. 2 If Category 3, name of proposed independent Checker **not applicable**
7. 3b 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 **Refer to Method statement and drawings attached**

8. DRAWINGS AND DOCUME NTS

8. 1 List of drawings (including numbers) and documents accompanying the submission. **Drawings 01, 02d, 04b, 08, 09a & 10a. Method Statement, Soil Investigation, Specification.**
8. 2a List of construction and record drawings (including numbers) to be used in the assessment **Drawings 01, 02d, 04b, 08, 09a & 10a. Method Statement, Soil Investigation, Specification.**
8. 3a List of pile driving or other construction records ¹⁹ **Not Applicable**
8. 4a List of previous inspection and assessment reports **None**

9. 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.¹⁶

Signed  _____

Name **A S Buckley** _____

Design/Assessment Team Leader

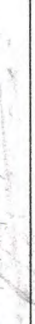
Engineering Qualifications **Graduate of Institute of Structural Engineers with**

50 years experience _____ ¹⁷

Name of Organisation **Build Design** _____

Date **19/02/2018** _____

**10. THE ABOVE IS REJECTED/AGREE D₁ SUBJECT TO THE AME NDME NTS AND
CONDITIONS SHOWN BELO W¹⁸**

Signed  _____

Name **A Buckley** _____

Position held _____

Engineering Qualifications _____ ¹⁷

TAA _____

Date _____