# Webb Yates Engineers

# PHASE 2 - SITE INVESTIGATION SCOPE OF WORKS J963 ~ Erskine Rd, Camden

#### 1 SCOPE OF WORKS

#### 1.1 Introduction

The existing site is located in Primrose Hill, London and is occupied by several light industrial buildings of Victorian and 1920s heritage. The buildings are occupied by a number of businesses, including: - a video productions house; yoga studio; furniture retailer; and wine merchant. The site is located within a residential area and in public use from 8 a.m. to 10 p.m.

The proposed re-development involves both the refurbishment of the existing buildings and new-build construction; including two small single storey basements. The intention is to deliver the new-build as lightweight construction formed on shallow raft and pad foundations to complement the existing buildings. A Phase 1 study has been undertaken by AP Geotechnics and provided for reference.

#### 1.2 Boreholes

- 1. 2 No. boreholes (BH1 and BH2) to 25m depth to record strata and water strikes.
- (I.) Perform penetration tests at suitable intervals as the boreholes progress.
- III. Take a suitable number of samples to satisfy laboratory testing requirements.
- IV. Install 2 No. standpipes to boreholes with covers to enable groundwater and ground gas monitoring to be undertaken.
- V. Record borehole datum levels relative to ordnance datum.

### 1.3 Trial Pits

- 10 No. trial pits approximately 1mx1m (TP1 to TP10) to up to 2m depth to foundations, log strata, take samples as agreed and record water strikes.
- Allow for the collection of disturbed samples for contamination testing.
- III. Perform hand penetrometer tests and suitable intervals.
- IV. Trial pits located in macadam landscaped areas. Ground and hard landscaping to be reinstated with compacted excavated material and patch macadam repair.
- V. Record trial pit datum levels relative to ordnance datum.
- VI. Provide shoring and suitable temporary guarding where necessary.

#### 1.4 In-Situ Testing & Sampling

- Sampling of excavated material as necessary.
- II. In-situ testing of any cohesive soils using a Hand Shear Vane
- III. If groundwater is struck, record levels.

## 1.5 Laboratory Testing

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- 1. Laboratory tests conducted to be UKAS or MCERTS accredited as applicable
- II. Geotechnical testing including moisture content, Atterberg limits, particle size distribution, tri-axial tests and consolidation testing.
- III. Sulphate and pH testing of soil and groundwater to determine ACEC class (design sulphate class) for ground conditions to Table A.2 BS 8500-1:2006.
- IV. Testing in 4 locations (2 Boreholes & 2 Trial Pits) for the following ground contaminants:-
  - Metals and semi metals: Total arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc.
     Free cyanide and water soluble boron.
  - Organic compounds: Monohydric phenols, polyaromatic hydrocarbons, petroleum hydrocarbons, polycyclic biphenyls and soil organic matter.
  - Others: Asbestos and pH value.

## 1.6 Reporting

- Commentary on suitability of various foundation types including pad, strip footings, mini-piles and ground bearing raft slabs. Anticipated column loads are up to 750 kN (unfactored) and spread raft loads approximately 50 kN/m2.
- 11. Provide raft bearing stiffness (mm/kPa) and supporting calculations for two formation levels.
- III. Confirmation of safe bearing pressure for different foundation types.
- IV. Classification of cohesive strata (if any) with regards to shrink ability and heave potential. Note proximity, species and maturity of trees to building line and advise on any heave precautions which should be installed.
- V. Comment on groundwater / gas monitoring results.
- VI. Design parameters for the short and long term design of retaining wall structures.
- VII. Phase 2 Land Contamination Report developing the conceptual site model presented in the Phase 1 report including assessment of land contamination testing results in relation to the proposed redevelopment.
- VIII. Log existing footing types and dimensions. Provide record photographs and sketches.

#### 2 TENDER RETURNS

The returned tender is to include the following:

- Itemised break down of costs associated with scope of works described above.
- An indication of proposed date for undertaking the field works together with period required to complete the reporting portion.
- Outline method statement for undertaking the works, identifying suitable guarding and protection for the location and site use.

## 3 APPOINTMENT

The successful tenderer will be appointed to carry out the works by the client. A representative from Webb Yates Engineers will attend site to agree actual locations of the trial pits. All queries should be addressed to Webb Yates Engineers.

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# **SAMPLING LOCATIONS & SITE MAP**

Indicative locations only - exact locations to be determined on site.