

# BASEMENT CONSTRUCTION METHOD STATEMENT

FOR

22 PINE GROVE, TOTTERIDGE.

---



020 4530 8000 | [info@takstructures.co.uk](mailto:info@takstructures.co.uk) | [www.takstructures.co.uk](http://www.takstructures.co.uk)

TAK Structures Ltd Suite 1 10 Kennington Park Place London SE11 4AS  
Company No: 12732402

# Table of Contents

- 1 Introduction.....
- 1.1 Appointment.....
- 1.2 Executive Summary.....
- 2 The Site.....
- 2.1 Location.....
- 3 Desk Study.....
- 3.1 Site History.....
- 3.1.1 Unexploded Ordnance.....
- 3.2 Description of Local Geology and Hydrology.....
- 3.3 Hydrology.....
- 3.4 Existing Underground Infrastructure.....
- 4 Site Investigation Findings.....
- 5 The Proposed Development.....
- 5.1 Disproportionate Collapse.....
- 5.2 Substructure.....
- 5.2.1 Heave protection.....
- 5.3 Effect on Neighbouring Structures.....
- 5.4 Underpinning Sequence.....
- 5.5 Waterproofing.....
- 5.6 Temporary Works Scheme.....
- 5.6.1 Responsibilities.....
- 5.6.2 Water control.....
- 5.6.3 Temporary propping.....
- 5.6.4 Construction sequence.....



020 4530 8000 | [info@takstructures.co.uk](mailto:info@takstructures.co.uk) | [www.takstructures.co.uk](http://www.takstructures.co.uk)

TAK Structures Ltd Suite 1 10 Kennington Park Place London SE11 4AS  
Company No: 12732402

5.7 Sewer flooding protection.....

5.8 Noise, dust and vibration.....

5.8.1 Noise.....

5.8.2 Dust.....

5.8.3 Vibration.....

6 Fire Protection.....

7 Contractor Designed Portions during Basement Construction.....

8 Post-planning Design Actions.....

9 Appendix.....

# 1 Introduction

## 1.1 Appointment

TAK Structures were appointed by the client Raj Sachdev to provide structural and geotechnical engineering services for the basement design and construction methodology to assist with the planning application of 22 Pine Grove, Totteridge.

This report has been produced for the exclusive use of Raj Sachdev and should not be used in whole or in part by any third party without the permission of TAK Structures in writing.

The report should not be relied upon exclusively for decision making purposes and should be read in conjunction with other drawings and reports by the design team.

## 1.2 Executive Summary

The proposed development at 22 Pine Grove, Totteridge will comprise a ground floor extension and the construction of a new single storey basement beneath the plan of the property.

With consideration of the existing site constraints, TAK Structures will undertake structural design of key structural elements, including establishment of load paths, design of new suspended ground floor slabs, ground bearing basement slabs and underpinning. An indicative construction sequence has also been developed to demonstrate how the basement could be built safely without significant impact or disturbance to the surrounding buildings.

This Construction Method Statement demonstrates that the proposed development will comply with London Borough of Barnet's Design Guidance No.5. The proposed structure and modifications have been designed to safeguard the structural stability of the existing building, nearby buildings, and other infrastructure.

## 2 The Site

### 2.1 Location

22 Pine Grove is in Totteridge, North London. The site is bounded by South Herts Golf Club to the rear and adjacent to two neighbouring properties either side. The site is in the London Borough of Barnet and the Totteridge Conservation Area.

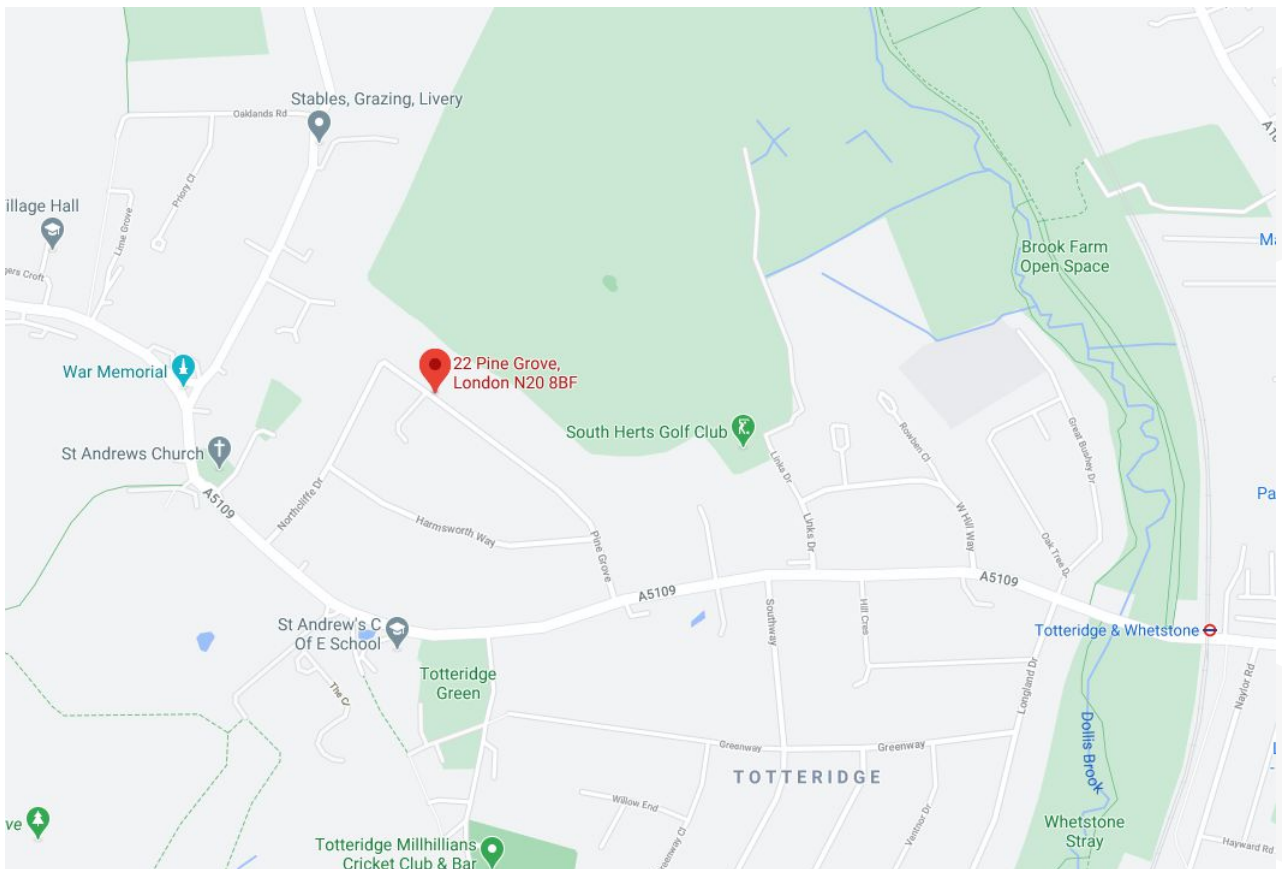


Figure 1. Site Location (Copyright© 2021 Google)



Figure 2. Front Elevation 1 (Copyright© 2021 Google)

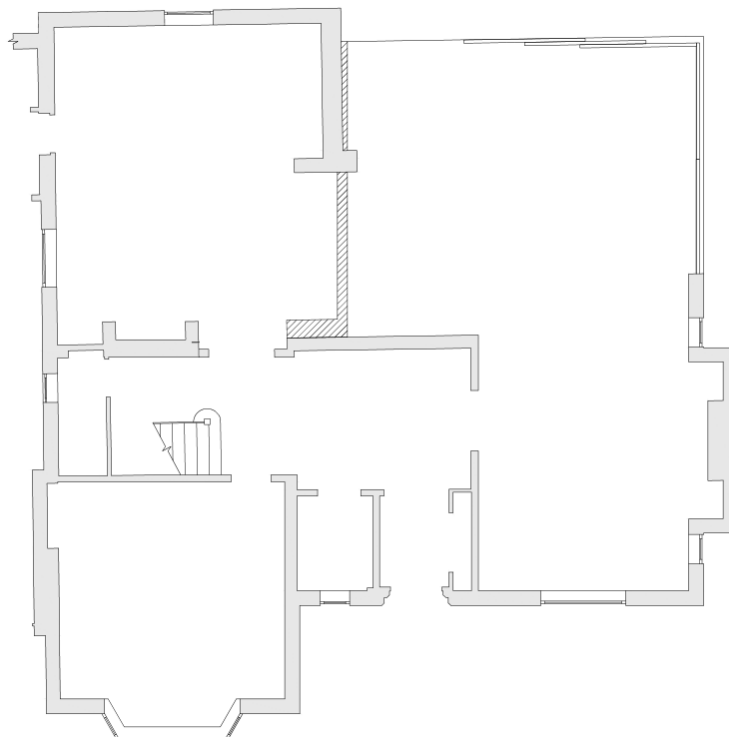


Figure 3. Front Elevation 2 (Copyright© 2021 Google)





*Figure 4. Front Elevation 3 (Copyright© 2021 Google)*



*Figure 5. Proposed Ground Floor Plan*

### 3 Desk Study

#### 3.1 Site History

The site history has been researched as part of the desk study with references made to historical Ordnance Survey maps.

The earliest map studied, dated 1868, shows Pine Grove to be undeveloped. The Ordnance Survey map from 1956 shows surrounding properties having been developed, but no property present at 22 Pine Grove, indicating that 22 Pine Grove was constructed after 1956.

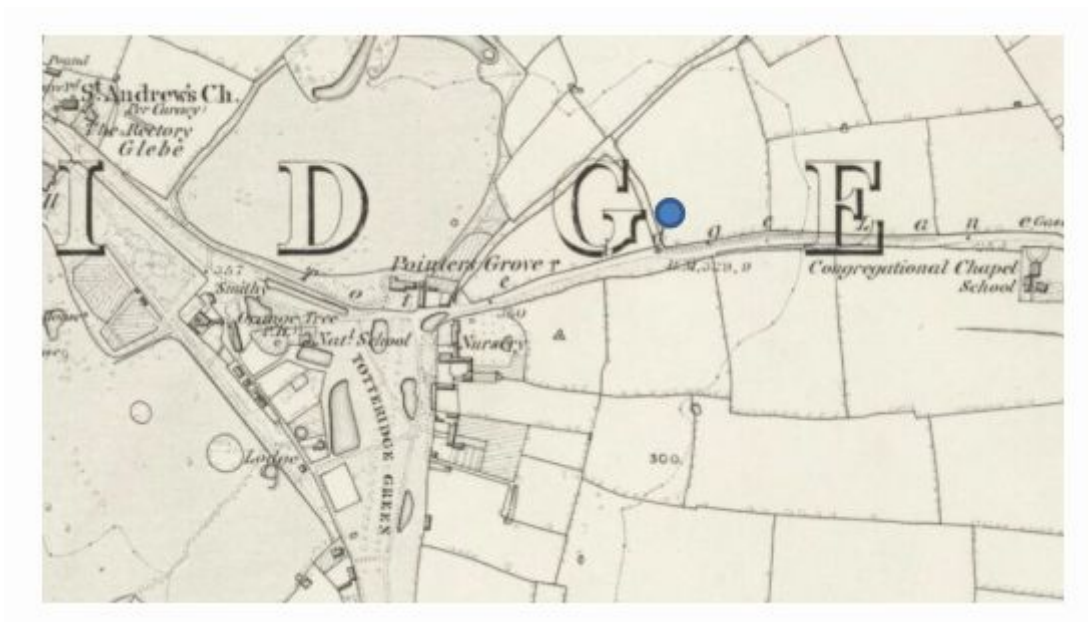


Figure 6. Extract from Ordnance Survey Map Middlesex VI published 1868





Figure 7. Extract from Ordnance Survey Map Middlesex published 1956

### 3.1.1 Unexploded Ordnance

An initial investigation has been completed to determine the likelihood of encountering and detonating unexploded ordnance (UXO). The Bomb Sight Map indicates that the nearest impact location was a bomb to the east of 22 Pine Grove. It is therefore considered unlikely to encounter an unexploded ordnance.

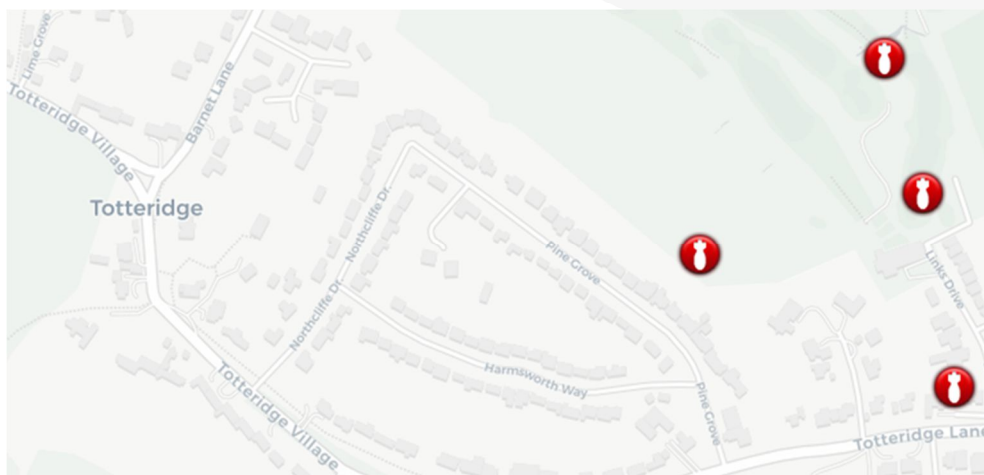


Figure 8. Extract from the Bomb Site Map

### 3.2 Description of Local Geology and Hydrology

A geo-environmental desk study has been undertaken by TAK Structures for the 22 Pine Grove site based upon publicly available borehole information in the local vicinity of the site. A summary of locations is shown below:

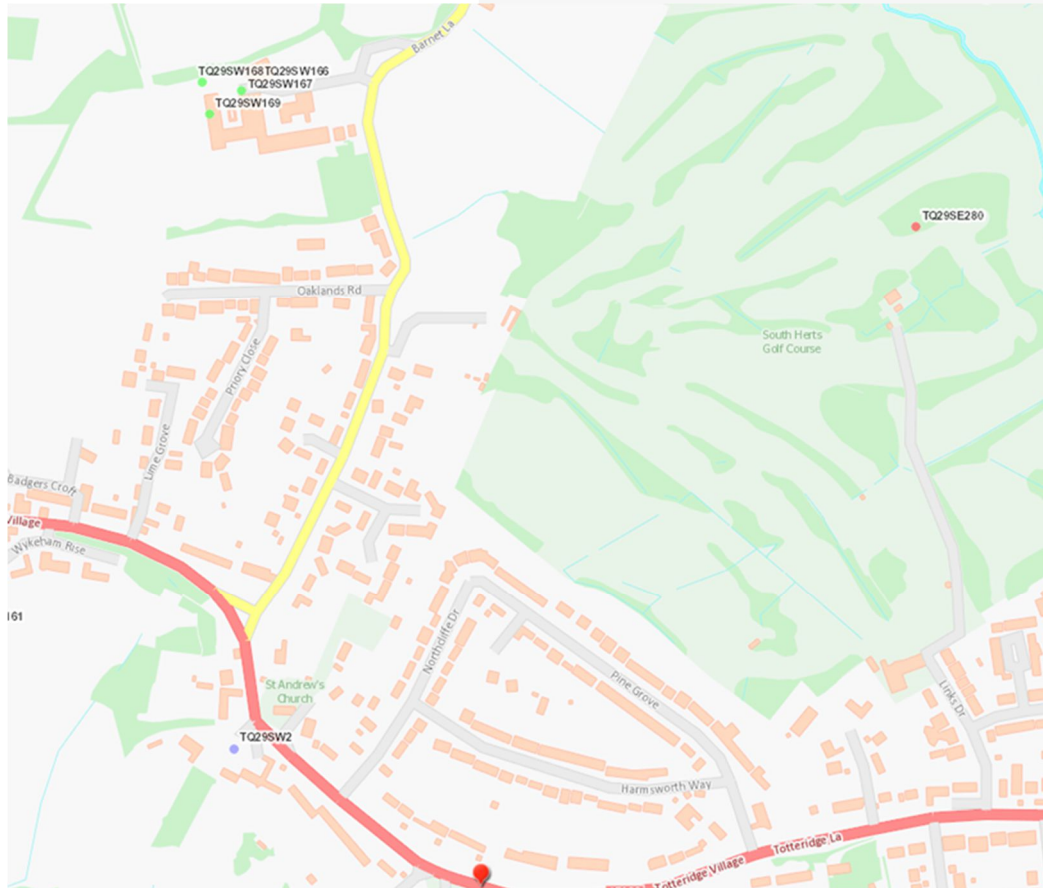


Figure 9. BGS borehole logs local to site

The boreholes, published by the British Geological Survey, show that the ground conditions are typically made ground overlaying London Clay. As the boreholes are quite far from the site, additional site investigations will be needed to ascertain the ground conditions under the property.

British Geological Survey

DESCRIPTION OF STRATA

The descriptions are given in accordance with the Civil Engineering Code of Practice No. 1 "Site Investigations." No responsibility is accepted for these descriptions and clients should examine the samples submitted.

No. **1** Boring

	Thickness		Depth Below Surface	
	Feet	Inches	Feet	Inches
Topsoil	4	0	4	0
BDGP. Sand and Gravel	3	3	7	3
Brown Mottled Clay	2	3	9	6
CLGE Blue Mottled Clay	2	6	12	0
Sandy Brown Clay	4	0	16	0
L.C. Firm Blue Clay	6	6	22	6

British Geological Survey

Figure 10. BGS borehole log TQ29SW2

EASTERN LS THAMES EA  
FINCHLEY GOLF CLUB

256

TQ29/38 TQ29 SW/160

Owner: FINCHLEY G.C. Licence No. Nat. Grid Ref. TQ 2460 9168

Occupier: " IGS Ref. No. Status

Ground Level: m OD ft. OD Aquifer: CHALK

Level of Well Top: m OD ft. OD

Rest Water Level: 68 m bwt ft. bwt Summary of Geological Section

(Date 16/3/98) m OD ft. OD

Depth bwt	Diameter	Linings (below well top)		Diameter	Type	Thickness	Depth
		From	To				
110	375					44	44
						12	56
						5	61
						49	110

Summary of Geological Section

LONDON CLAY

WRB

THAMES SANDS

UPPER CHALK

Figure 11. BGS borehole log TQ29SE280

### 3.3 Hydrology

The site is located within flood zone 1, shown in the below extract from the Environment Agency flood map. The annual risk of flooding at the site is therefore perceived by the Environment Agency to be less than 1 in a 1000.

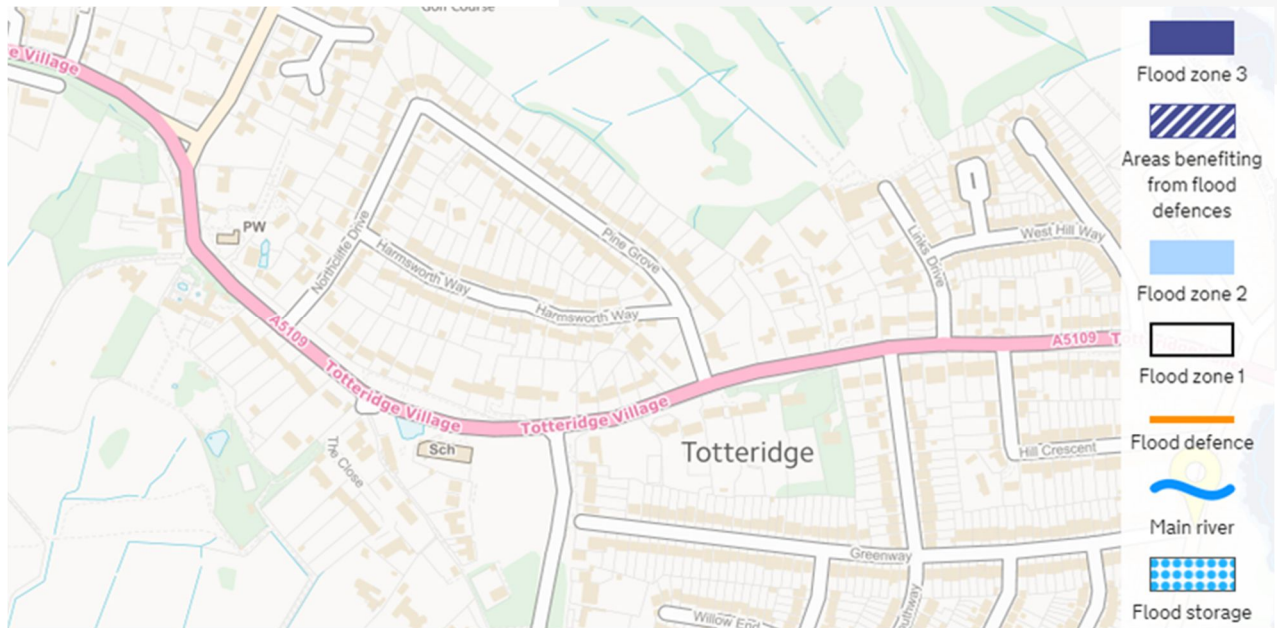


Figure 12. Extract from Flood map for Planning

### 3.4 Existing Underground Infrastructure

The nearest London underground station is Totteridge and Whetstone. The overground rail runs north to south-east 1200m to the east of the site.

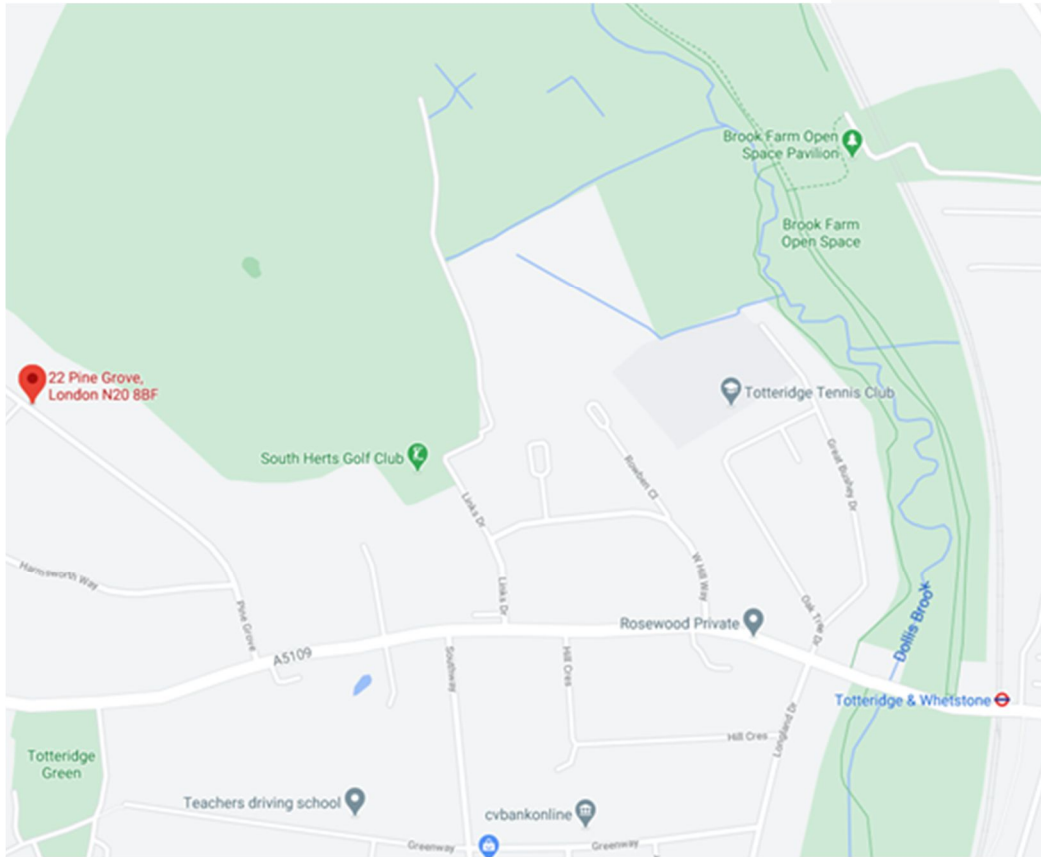


Figure 13. Tube Station Location (Copyright© 2021 Google)



## 4 Site Investigation

A site-specific ground investigation will be undertaken, with a borehole to be dug on the property. This will enable TAK Structures to confirm ground conditions and the height of the water table.

Trial pits will be dug to determine the depth, width, and condition of the existing footings.

A survey of existing nearby trees will be conducted to determine what influence, if any, the trees will have on the proposed works, and vice versa.

## 5 The Proposed Development

### 5.1 Disproportionate Collapse

In accordance with NHBC Technical Guidance Note: The Building Regulations 2004 Edition (England and Wales): Requirement A3 – Disproportionate Collapse, the Class of the building after the work will be Class 1, as existing. As the proposed works will be designed and constructed in accordance with building regulations Approved Document A, no additional measures are likely to be necessary regarding disproportionate collapse.

### 5.2 Substructure

The proposed development consists of the construction of a single-storey basement below the footprint of the existing building. The basement will be extended with reinforced concrete retaining walls tied into a new reinforced concrete basement slab at the base and propped at the head with a new suspended ground floor.

Results from the borehole test will indicate whether a high-water table is present, resulting in the requirement for permanent shutters to retain soil and water during the excavation.

### 5.2.1 Heave protection

Construction of the basement will result in a significant amount of load removed from the assumed underlying clay layer (to be confirmed following site investigation). This could lead to heave or upward movement of the clay following this load removal. A heave protection mat of Cordek Cellcore or similar is required to achieve an isolation between the underside of the new basement slab and the clay below to absorb this movement without affecting the structure above.

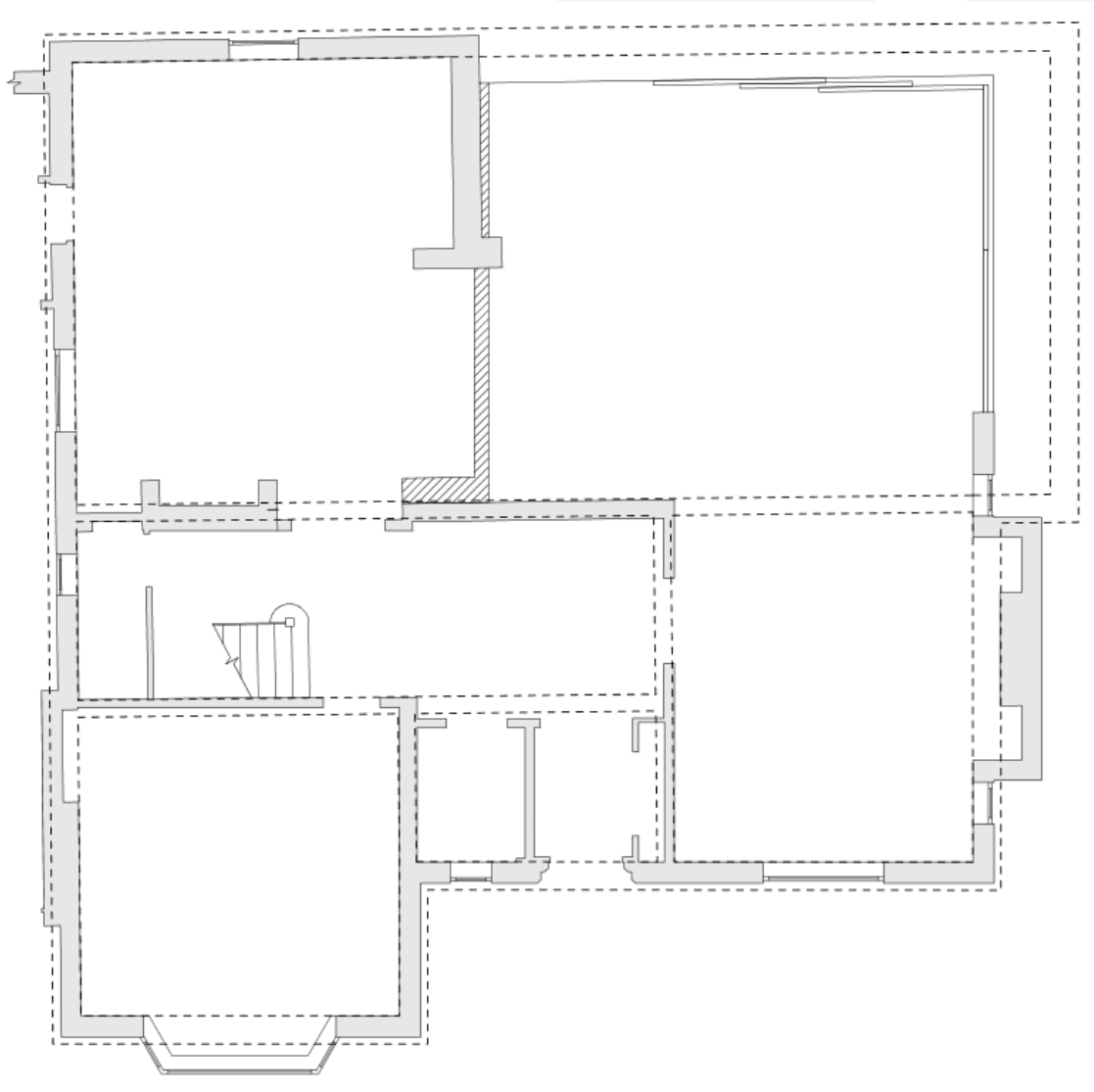
### 5.3 Effect on Neighbouring Structures

22 Pine Grove is a detached house with neighbouring properties a few metres away either side. The method of construction of the basement will be designed to ensure that there will be no significant structural effect to the adjacent properties.

An engineer is to supervise construction on site, in liaison with the contractor to ensure safe practices are used throughout. The superstructure and neighbouring properties will also be monitored during construction, to guarantee that any adverse movement is caught at the earliest opportunity.

### 5.4 Underpinning Sequence

The existing ground floor will be removed to enable excavation, whilst props will retain the existing structure. The existing foundations will be underpinned in max. 1m segments with reinforced concrete. The controlled sequence will be provided at a later date and will mitigate the risk of undermining the existing foundations during the works.



*Figure 14. Proposed Ground Floor (Dashed lines indicate extent of underpinning)*

## 5.5 Waterproofing

Tanking and waterproofing details are to be provided by the architect.

## 5.6 Temporary Works Scheme

### 5.6.1 Responsibilities

The appointed contractor has full design responsibility for the temporary works. For tender purposes we would expect to define the project expectations in terms of permitted movements, approvals and general design criteria. This would be supported with an outline scheme which defines the minimum expectations.

### 5.6.2 Water control

Special provisions may be needed due to ground water, requiring a temporary waterproofing solution to be developed to prevent excessive water flow into the excavation. This provision would likely be sheeting and water pumping. The results of the borehole test will determine whether this is necessary.

### 5.6.3 Temporary propping

A system of props will be required to complete the works. They will be designed to ensure that the works can be completed efficiently and safely. The phasing of the works and sizing of members will also be designed to keep lateral deflection of the foundations within the limits defined at the start of the project.

### 5.6.4 Construction Sequence

For the Construction Sequence, please refer to **Appendix A**.

## 5.7 Sewer flooding protection

To protect the proposed basement structure from potential sewerage surcharge and flooding, all drainage provisions located at this level will be fully segregated and collected by a pumped system with duplicate pumps provided within a wet well sump.

These systems will include non-return/ backflow prevention valves to the rising main and outfall systems to fully segregate the basement from the gravity sewerage systems serving the property. The pumping collection and disposal systems will be in accordance with Building Regulation Part H - 2.9 requirements.

## 5.8 Noise, dust and vibration

Construction works generally are a source of noise and nuisance which can affect both operatives within the work site as well as neighbours and passing members of the public. Demolition and excavation works are sources of this potential harm, so it will be necessary during the works at 22 Pine Grove for the contractor to mitigate the extent and impact of noise, dust, traffic, and vibration.

### 5.8.1 Noise

Disruption: Noise which will be generated by the mechanical equipment used to demolish existing construction and excavate for the new extension.

Control Measure: Mitigated by undertaking demolition of the existing structure in a controlled and considered deconstruction sequence. By using saw cutting methods rather than pneumatic breakers to reduce noise. By working only within agreed and designated hours. By using machinery equipped with baffles and noise attenuation systems. By performing a noise monitoring regime to ensure acceptable noise levels are not routinely breached.

### 5.8.2 Dust

Disruption: Generated by excavation works and transfer of arisings from the work area to the disposal skip or wagon.



Control Measure: Mitigated by damping conveyors when in operation, damping ground before clearing sites, by washing down vehicle wheels before leaving site. Using machinery with dust suppression systems fitted.

### 5.8.3 Vibration

Disruption: Generated by use of heavy machinery for sustained periods and by heavy vehicles.

Control measure: Mitigated by using concrete saws and crushers using demolition of the existing building which eliminate vibration. By undertaking disruptive works during agreed and designated hours. By using non-vibration alternative methods where possible.

The final methods of noise, dust and vibration control are the responsibility of the contractor. Once appointed, the contractor will issue detailed plans for the control of noise, dust, and vibration in the form of a project contractor's method statement for the review and comment of the design team.

## 6 Fire Protection

Fire protection requirements are to be determined by the architect.

## 7 Contractor Designed Portions during Basement Construction

This section outlines the elements to be designed by others:

- Temporary works during demolition and construction.
- Temporary groundwater management.
- Permanent formwork to in-situ concrete.

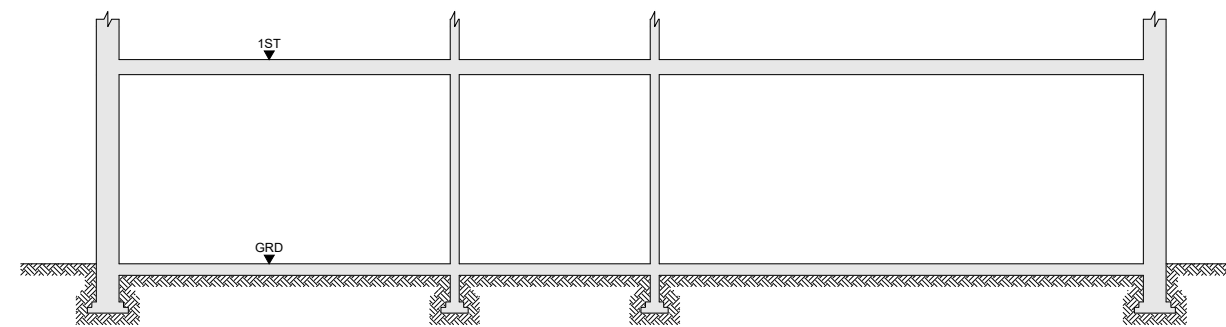
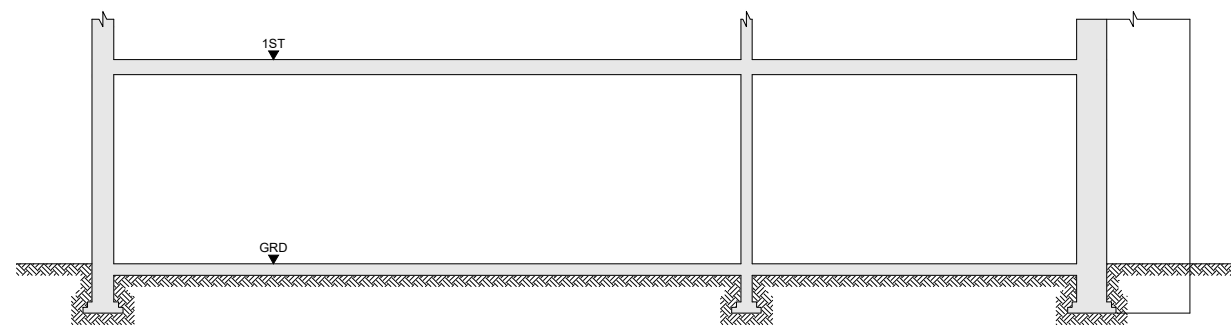
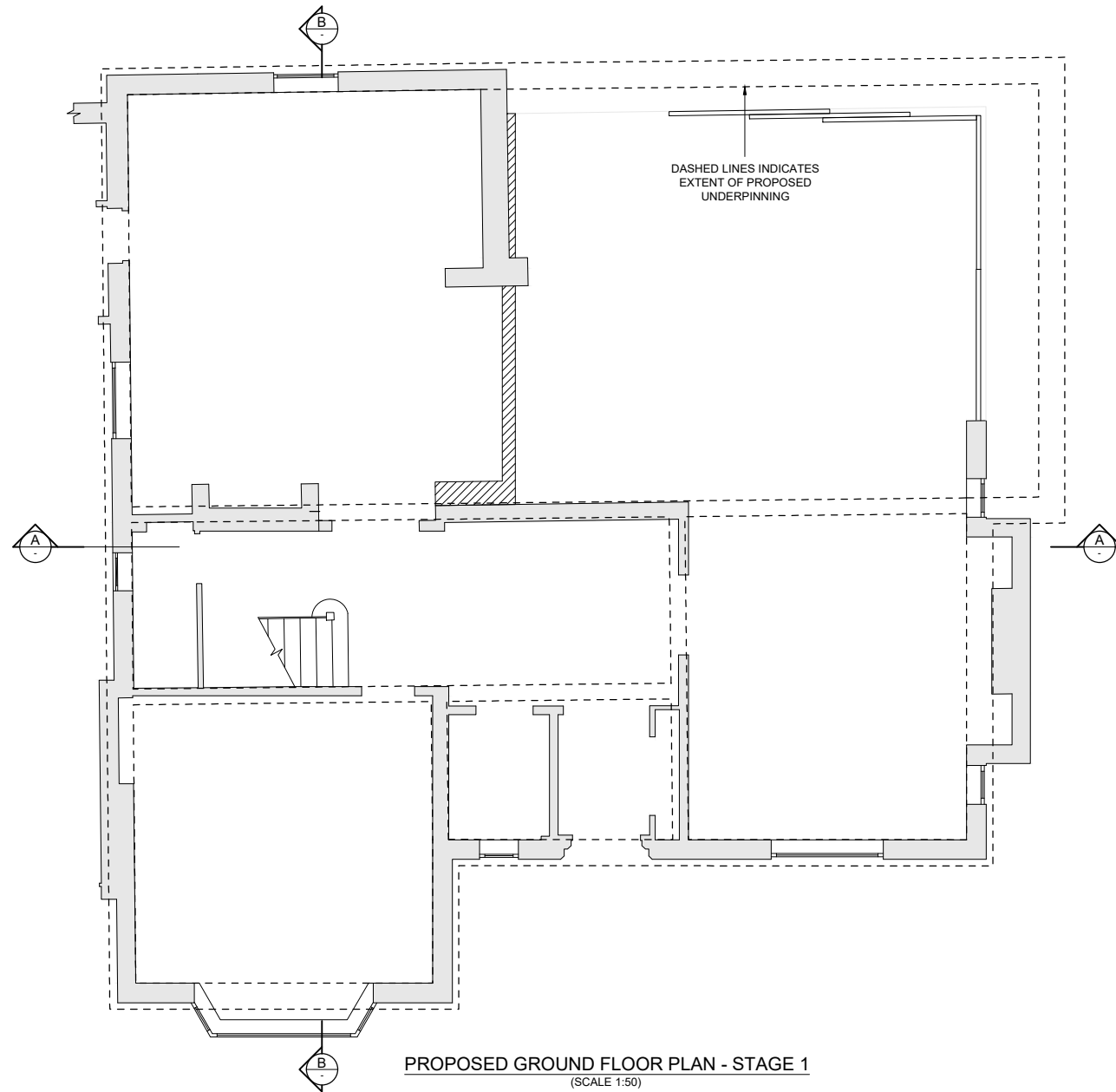
## 8 Post-planning Design Actions

This section outlines actions to be undertaken by the Contractor and design team to close out assumptions made prior to planning submission:

- Local structural opening-up to confirm structural load paths, spans of structure, wall widths, etc.
- Site investigation report.
- Survey of local trees.

## 9 Appendix

A.)



**BASEMENT TANKING AND  
WATERPROOFING TO BE  
DESIGNED BY OTHERS.**

**DRAWING ISSUED FOR INFORMATION ONLY.  
DRAWING NOT TO BE USED FOR CONSTRUCTION.**

**CONCRETE**

1. MASS CONCRETE FOUNDATION TO BE A MINIMUM OF GEN1/ST2 MIX OR AS NOTED ON DRAWING.
2. REINFORCED CONCRETE FOUNDATIONS OR SLABS TO BE A MINIMUM OF OR RC32/40 OR AS NOTED ON DRAWING.
3. PADSTONES TO BE MASS CONCRETE ST5 PRESCRIBED MIX.
4. MINIMUM COVER TO REINFORCEMENT IN BURIED CONCRETE TO BE 50mm UNLESS OTHERWISE NOTED ON DRAWINGS.

**TIMBER**

1. ALL TIMBER EXCEPT WHERE NOTED OTHERWISE SHALL BE MINIMUM GRADE C24 TO BS 5268 WITH SERVICE MOISTURE CONTENT NOT EXCEEDING 18%.
2. ALL TIMBER SHALL BE TREATED WITH AN ORGANIC SOLVENT PRESERVATIVE BY DOUBLE VACUUM OR PRESSURE INJECTION PROCESS.
3. ALL TIMBER IN CONTACT WITH MASONRY EXTERNAL WALLS SHALL BE TREATED AS IN NOTE 2 ABOVE.
4. JOIST HANGERS FIXED TO NEW TIMBER PLATE BOLTED TO EXISTING BRICKWORK SHALL BE 'EXPAMET' OR SIMILAR TYPE HANGERS.
5. ALL DOUBLED UP JOISTS SHALL BE BOLTED TOGETHER WITH M12 Ø BOLTS IN 13mm Ø HOLES WITH 5mm SQUARE DOUBLE SIDED TOOTH PLATE CONNECTORS AND 50x50x5 THK M.S. WASHERS TO ALL BOLT HEADS AND NUTS. BOLTS TO BE AT 450mm CENTRES STAGGERED TOP AND BOTTOM. PROVIDE 50 EDGE DISTANCE.
6. ANY IN-SITU TIMBER USED IN EXCESS OF 2.5m SPAN ARE TO HAVE SOLID STRUTTING PROVIDED AT MID SPAN.
7. ALL NAILS, SCREWS AND FASTENERS TO BE GALVANISED.
8. ALL CAVITY WALL TIES TO BE GALVANISED AND TO ARCHITECTS SPECIFICATION.
9. GALVANISED RESTRAINT STRAPS TO BE A MINIMUM OF 1200mm LONG AND SCREWED TO JOISTS AND EXTERNAL WALLS AT 1500mm CENTRE TO CENTRE AS SET OUT ON DRAWINGS.

**BEAM & BLOCK FLOOR**

1. ALL BEAM AND BLOCK SECTIONS OF FLOOR AT GROUND FLOOR LEVEL ARE TO BE BUILT INTO EXTERNAL WALLS AROUND PERIMETER OF BUILDING.
2. REPRESENTS SPAN DIRECTION OF 155mm DEEP PRECAST CONCRETE BEAM & BLOCK UNITS, 'MILLBANK' OR SIMILAR.
3. BEAM AND BLOCK TO BE DESIGNED AND DIMENSIONED BY SPECIALIST SUB-CONTRACTOR.

**GENERAL NOTES**

1. DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS, AND ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DESIGN TEAM DETAILS AND SPECIFICATIONS.
4. THE FIRE PROTECTION SPECIFICATION OF STRUCTURAL ELEMENTS TO BE TO ARCHITECTS DETAILS AND BUILDING CONTROL APPROVAL.
5. ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL.
6. ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBOURING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD. METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES.
7. DEPTH OF ALL FOUNDATIONS TO BE APPROVED BY BUILDING CONTROL BEFORE ANY CONCRETING IS UNDERTAKEN

**STEELWORK**

1. ALL STRUCTURAL STEEL WORK TO BE A MINIMUM OF GRADE S275 UNLESS OTHERWISE NOTED.
2. ALL STEELWORK TO BE PAINTED IS TO BE PREPARED BY GRIT OR SHOT BLASTING IN ACCORDANCE WITH BS 4232 THE STANDARD OF SURFACE CLEANLINESS IS TO BE SECOND QUALITY OR SWEDISH STANDARD S.A. 2.5 PAINT SPECIFICATION TO BE IN ACCORDANCE WITH BS 5405 IN SHOP APPLY HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD, 75mm. ON SITE DEGREASE AND TOUCH UP AS NECESSARY USING HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD TO 60mm (THICKNESSES ARE DRY FILM THICKNESS).
3. ALL EXPOSED STEELWORK OR STEELWORK BUILT INTO EXTERNAL WALLS TO BE GALVANISED.
4. THE DESIGN OF CONNECTION AND SPLICES FOR STEELWORK TO BE DESIGNED BY THE FABRICATOR WITH LOADS NOTED ON THE RELEVANT **TAK STRUCTURES LTD** DRAWINGS.
5. CONTRACTOR TO WORK TO FIGURED DIMENSIONS ONLY OR TO TAKE SITE DIMENSIONS IF REQUIRED.
6. ALL WELDS TO BE 6MM FULL PROFILE CONTINUOUS FILLET WELDS UNLESS OTHERWISE NOTED.
7. GAP BETWEEN STEEL BEAMS AND UNDERSIDE OF MASONRY TO BE SOLIDLY PACKED WITH SEMI-DRY CEMENT-SAND MIX WITH SUITABLE TOOL LEAVE FOR 24 HOURS PRIOR TO REMOVING TEMPORARY PROPS.
8. ALL BELOW GROUND STEELWORK TO BE ENCASED IN MIN. 75mm CONCRETE, REINFORCED WITH WRAPPED D49 MESH U.N.O.

- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING
- ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS
- ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DESIGN TEAM DETAILS & SPECIFICATIONS
- FIRE PROTECTION SPECIFICATION TO STRUCTURAL ELEMENTS TO ARCHITECT DETAIL & BUILDING CONTROL APPROVAL
- ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL
- ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBOURING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD
- METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES

REV	BY	CHKD	DATE	NOTES

REV	BY	CHKD	DATE	NOTES
P1	RH	MS	18/02/2021	PRELIMINARY ISSUE

BY	RH	DRAWING TITLE	GROUND FLOOR PLAN - STAGE 1
CHKD	MS	DRAWING No.	
SCALE @ A1	AS SHOWN	DRAWING STATUS	PRELIMINARY
DATE	18/02/2021	REV.	P1

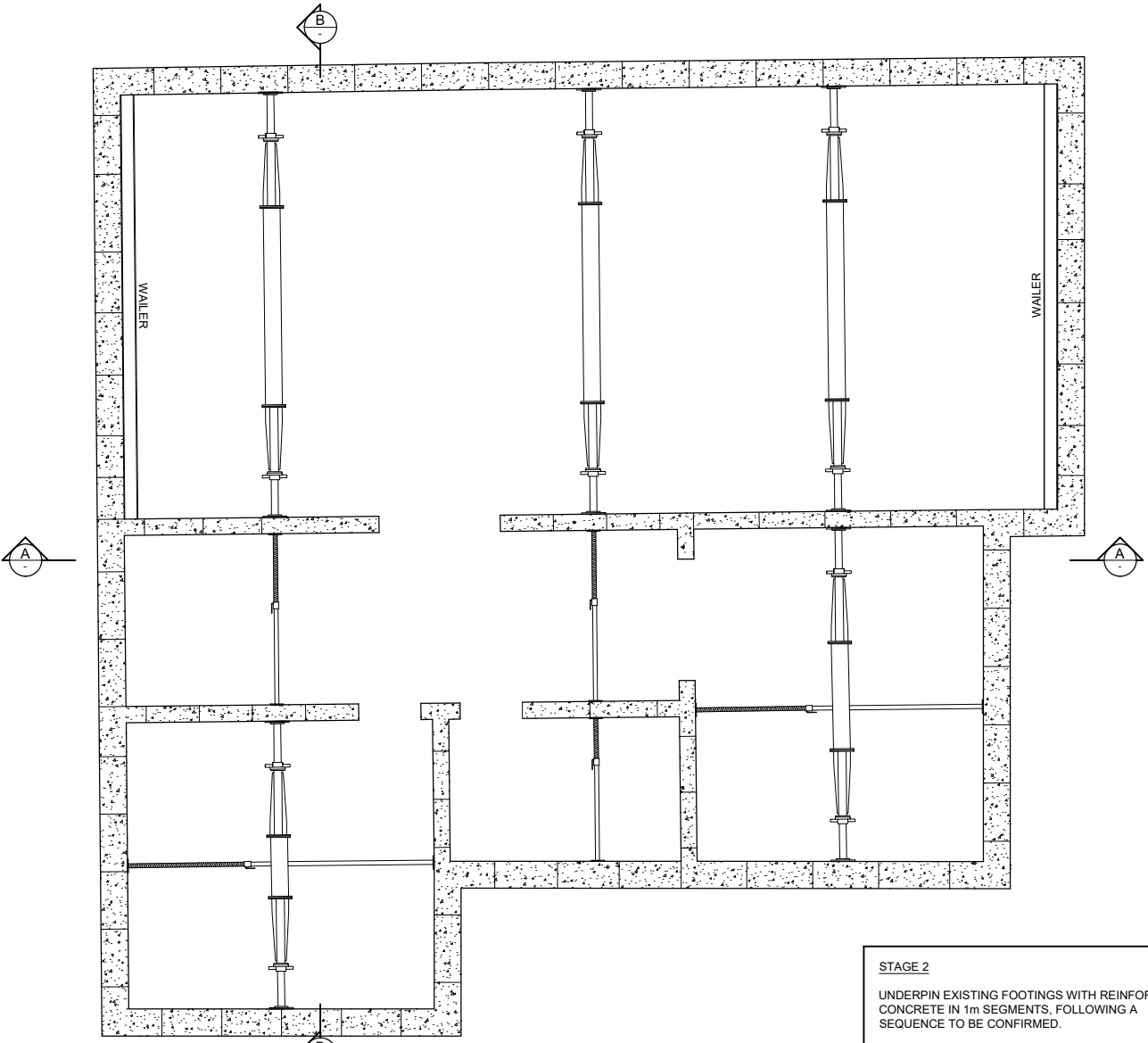
CLIENT	RAJ SACHDEV
PROJECT	22 PINE GROVE, TOTTERIDGE

**TAK**  
STRUCTURES

SUIE 1, 10 KENNINGTON PARK PLACE LONDON SE11 4AS  
www.takstructures.co.uk  
T: 020 4530 8000

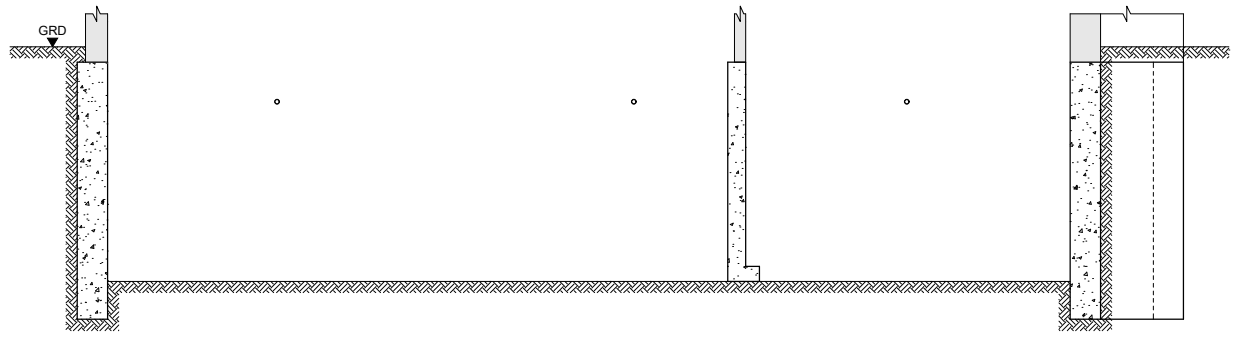
**BASEMENT TANKING AND WATERPROOFING TO BE DESIGNED BY OTHERS.**

**DRAWING ISSUED FOR INFORMATION ONLY.  
DRAWING NOT TO BE USED FOR CONSTRUCTION.**

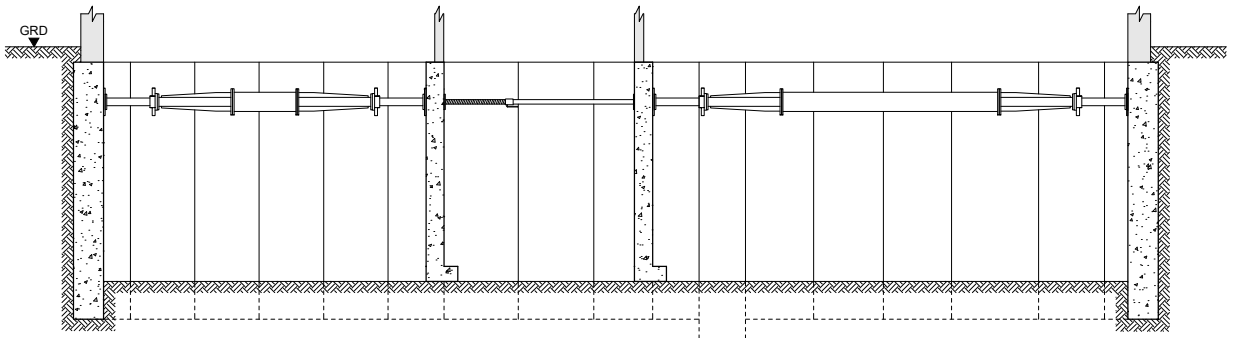


**BASEMENT PLAN - STAGE 2**  
(SCALE 1:50)

**STAGE 2**  
UNDERPIN EXISTING FOOTINGS WITH REINFORCED CONCRETE IN 1m SEGMENTS, FOLLOWING A SEQUENCE TO BE CONFIRMED.  
PROP TOPS OF UNDERPINNING TO RESIST EARTH PRESSURES.



**SECTION A**  
(SCALE 1:50)



**SECTION B**  
(SCALE 1:50)

**CONCRETE**

1. MASS CONCRETE FOUNDATION TO BE A MINIMUM OF GEN1/ST2 MIX OR AS NOTED ON DRAWING.
2. REINFORCED CONCRETE FOUNDATIONS OR SLABS TO BE A MINIMUM OF OR RC32/40 OR AS NOTED ON DRAWING.
3. PADSTONES TO BE MASS CONCRETE ST5 PRESCRIBED MIX.
4. MINIMUM COVER TO REINFORCEMENT IN BURIED CONCRETE TO BE 50mm UNLESS OTHERWISE NOTED ON DRAWINGS.

**TIMBER**

1. ALL TIMBER EXCEPT WHERE NOTED OTHERWISE SHALL BE MINIMUM GRADE C24 TO BS 5268 WITH SERVICE MOISTURE CONTENT NOT EXCEEDING 18%.
2. ALL TIMBER SHALL BE TREATED WITH AN ORGANIC SOLVENT PRESERVATIVE BY DOUBLE VACUUM OR PRESSURE INJECTION PROCESS.
3. ALL TIMBER IN CONTACT WITH MASONRY EXTERNAL WALLS SHALL BE TREATED AS IN NOTE 2 ABOVE.
4. JOIST HANGERS FIXED TO NEW TIMBER PLATE BOLTED TO EXISTING BRICKWORK SHALL BE 'EXPAMET' OR SIMILAR TYPE HANGERS.
5. ALL DOUBLED UP JOISTS SHALL BE BOLTED TOGETHER WITH M12 Ø BOLTS IN 13mm Ø HOLES WITH 5mm SQUARE DOUBLE SIDED TOOTH PLATE CONNECTORS AND 50x50x5 THK M.S. WASHERS TO ALL BOLT HEADS AND NUTS. BOLTS TO BE AT 450mm CENTRES STAGGERED TOP AND BOTTOM. PROVIDE 50 EDGE DISTANCE.
6. ANY IN-SITU TIMBER USED IN EXCESS OF 2.5m SPAN ARE TO HAVE SOLID STRUTTING PROVIDED AT MID SPAN.
7. ALL NAILS, SCREWS AND FASTENERS TO BE GALVANISED.
8. ALL CAVITY WALL TIES TO BE GALVANISED AND TO ARCHITECTS SPECIFICATION.
9. GALVANISED RESTRAINT STRAPS TO BE A MINIMUM OF 1200mm LONG AND SCREWED TO JOISTS AND EXTERNAL WALLS AT 1500mm CENTRE TO CENTRE AS SET OUT ON DRAWINGS.

**BEAM & BLOCK FLOOR**

1. ALL BEAM AND BLOCK SECTIONS OF FLOOR AT GROUND FLOOR LEVEL ARE TO BE BUILT INTO EXTERNAL WALLS AROUND PERIMETER OF BUILDING.
2. REPRESENTS SPAN DIRECTION OF 155mm DEEP PRECAST CONCRETE BEAM & BLOCK UNITS, 'MILBANK' OR SIMILAR.
3. BEAM AND BLOCK TO BE DESIGNED AND DIMENSIONED BY SPECIALIST SUB-CONTRACTOR.

**GENERAL NOTES**

1. DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS, AND ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DESIGN TEAM DETAILS AND SPECIFICATIONS.
4. THE FIRE PROTECTION SPECIFICATION OF STRUCTURAL ELEMENTS TO BE TO ARCHITECTS DETAILS AND BUILDING CONTROL APPROVAL.
5. ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL.
6. ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBOURING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD. METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES.
7. DEPTH OF ALL FOUNDATIONS TO BE APPROVED BY BUILDING CONTROL BEFORE ANY CONCRETING IS UNDERTAKEN

**STEELWORK**

1. ALL STRUCTURAL STEEL WORK TO BE A MINIMUM OF GRADE S275 UNLESS OTHERWISE NOTED.
2. ALL STEELWORK TO BE PAINTED IS TO BE PREPARED BY GRIT OR SHOT BLASTING IN ACCORDANCE WITH BS 4232 THE STANDARD OF SURFACE CLEANLINESS IS TO BE SECOND QUALITY OR SWEDISH STANDARD S.A. 2.5 PAINT SPECIFICATION TO BE IN ACCORDANCE WITH BS 5405 IN SHOP APPLY HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD, 75µm. ON SITE DEGREASE AND TOUCH UP AS NECESSARY USING HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD TO 60µm (THICKNESSES ARE DRY FILM THICKNESS).
3. ALL EXPOSED STEELWORK OR STEELWORK BUILT INTO EXTERNAL WALLS TO BE GALVANISED.
4. THE DESIGN OF CONNECTION AND SPLICES FOR STEELWORK TO BE DESIGNED BY THE FABRICATOR WITH LOADS NOTED ON THE RELEVANT **TAK STRUCTURES LTD** DRAWINGS.
5. CONTRACTOR TO WORK TO FIGURED DIMENSIONS ONLY OR TO TAKE SITE DIMENSIONS IF REQUIRED.
6. ALL WELDS TO BE 6MM FULL PROFILE CONTINUOUS FILLET WELDS UNLESS OTHERWISE NOTED.
7. GAP BETWEEN STEEL BEAMS AND UNDERSIDE OF MASONRY TO BE SOLIDLY PACKED WITH SEMI-DRY CEMENT-SAND MIX WITH SUITABLE TOOL LEAVE FOR 24 HOURS PRIOR TO REMOVING TEMPORARY PROPS.
8. ALL BELOW GROUND STEELWORK TO BE ENCASED IN MIN. 75mm CONCRETE, REINFORCED WITH WRAPPED D49 MESH U.N.O.

- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING
- ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS
- ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DESIGN TEAM DETAILS & SPECIFICATIONS
- FIRE PROTECTION SPECIFICATION TO STRUCTURAL ELEMENTS TO ARCHITECT DETAIL & BUILDING CONTROL APPROVAL
- ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL
- ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBORING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD
- METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES

REV	BY	CHKD	DATE	NOTES

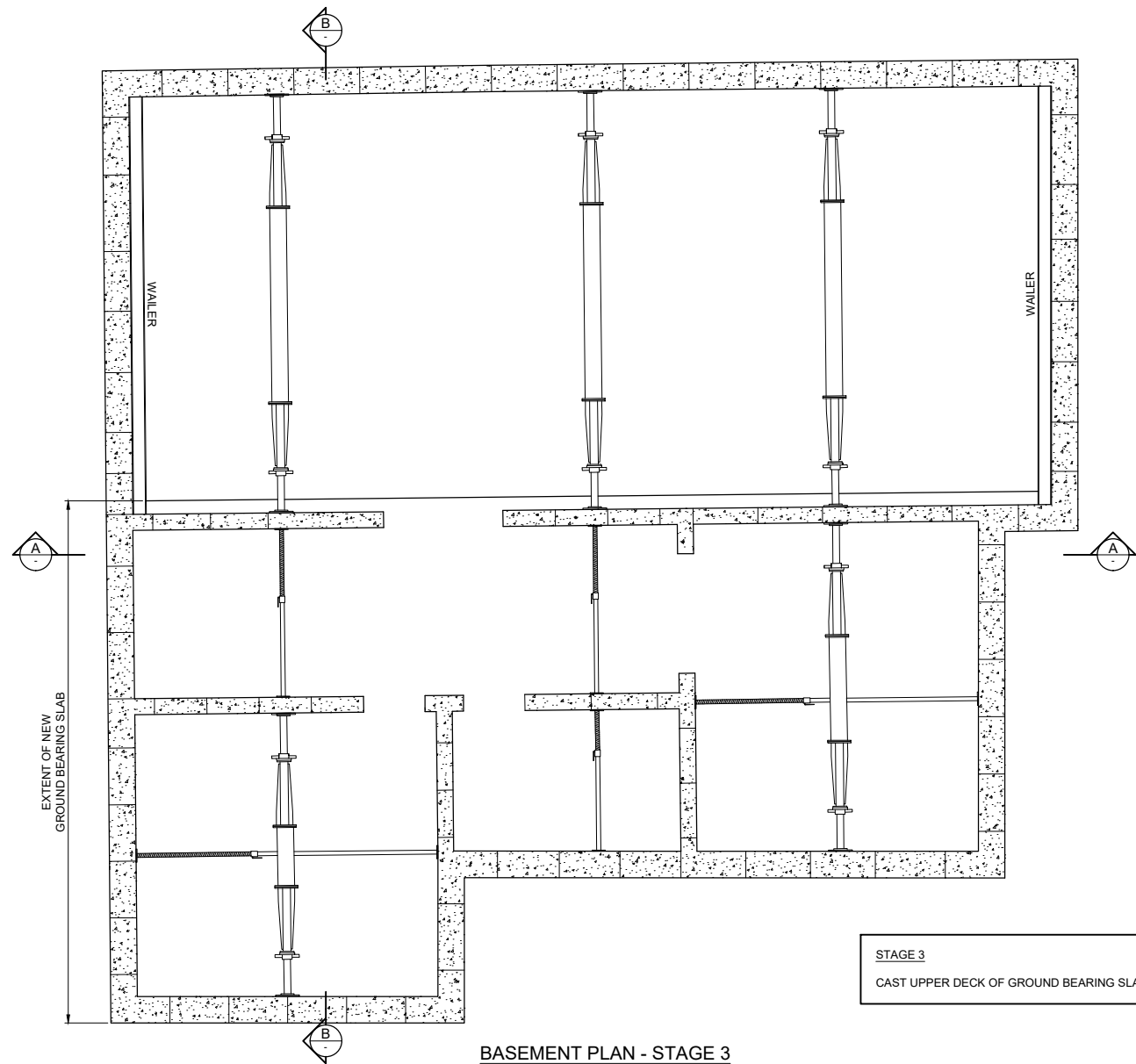
REV	BY	CHKD	DATE	NOTES
P1	RH	MS	18/02/2021	PRELIMINARY ISSUE

BY	RH	DRAWING TITLE	BASEMENT PLAN - STAGE 2
CHKD	MS	DRAWING No.	20125_TAK_GA-02
SCALE @ A1	AS SHOWN	DRAWING STATUS	PRELIMINARY
DATE	18/02/2021	REV.	P1

CLIENT	RAJ SACHDEV
PROJECT	22 PINE GROVE, TOTTERIDGE

**TAK STRUCTURES**

SUITE 1, 10 KENNINGTON PARK PLACE LONDON SE11 4AS  
www.takstructures.co.uk  
T: 020 4530 8000



**BASEMENT PLAN - STAGE 3**  
(SCALE 1:50)

**BASEMENT TANKING AND WATERPROOFING TO BE DESIGNED BY OTHERS.**

**DRAWING ISSUED FOR INFORMATION ONLY.**  
**DRAWING NOT TO BE USED FOR CONSTRUCTION.**

**CONCRETE**

1. MASS CONCRETE FOUNDATION TO BE A MINIMUM OF GEN1/ST2 MIX OR AS NOTED ON DRAWING.
2. REINFORCED CONCRETE FOUNDATIONS OR SLABS TO BE A MINIMUM OF OR RC32/40 OR AS NOTED ON DRAWING.
3. PADSTONES TO BE MASS CONCRETE ST5 PRESCRIBED MIX.
4. MINIMUM COVER TO REINFORCEMENT IN BURIED CONCRETE TO BE 50mm UNLESS OTHERWISE NOTED ON DRAWINGS.

**TIMBER**

1. ALL TIMBER EXCEPT WHERE NOTED OTHERWISE SHALL BE MINIMUM GRADE C24 TO BS 5268 WITH SERVICE MOISTURE CONTENT NOT EXCEEDING 18%.
2. ALL TIMBER SHALL BE TREATED WITH AN ORGANIC SOLVENT PRESERVATIVE BY DOUBLE VACUUM OR PRESSURE INJECTION PROCESS.
3. ALL TIMBER IN CONTACT WITH MASONRY EXTERNAL WALLS SHALL BE TREATED AS IN NOTE 2 ABOVE.
4. JOIST HANGERS FIXED TO NEW TIMBER PLATE BOLTED TO EXISTING BRICKWORK SHALL BE 'EXPAMET' OR SIMILAR TYPE HANGERS.
5. ALL DOUBLED UP JOISTS SHALL BE BOLTED TOGETHER WITH M12 Ø BOLTS IN 13mm Ø HOLES WITH 5mm SQUARE DOUBLE SIDED TOOTH PLATE CONNECTORS AND 50x50x5 THK M.S. WASHERS TO ALL BOLT HEADS AND NUTS. BOLTS TO BE AT 450mm CENTRES STAGGERED TOP AND BOTTOM. PROVIDE 50 EDGE DISTANCE.
6. ANY IN-SITU TIMBER USED IN EXCESS OF 2.5m SPAN ARE TO HAVE SOLID STRUTTING PROVIDED AT MID SPAN.
7. ALL NAILS, SCREWS AND FASTENERS TO BE GALVANISED.
8. ALL CAVITY WALL TIES TO BE GALVANISED AND TO ARCHITECTS SPECIFICATION.
9. GALVANISED RESTRAINT STRAPS TO BE A MINIMUM OF 1200mm LONG AND SCREWED TO JOISTS AND EXTERNAL WALLS AT 1500mm CENTRE TO CENTRE AS SET OUT ON DRAWINGS.

**BEAM & BLOCK FLOOR**

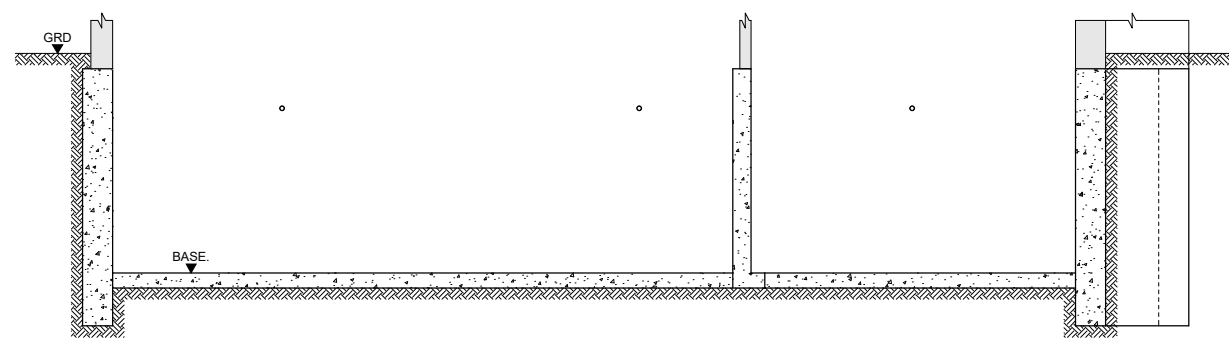
1. ALL BEAM AND BLOCK SECTIONS OF FLOOR AT GROUND FLOOR LEVEL ARE TO BE BUILT INTO EXTERNAL WALLS AROUND PERIMETER OF BUILDING.
2. REPRESENTS SPAN DIRECTION OF 155mm DEEP PRECAST CONCRETE BEAM & BLOCK UNITS, 'MILLBANK' OR SIMILAR.
3. BEAM AND BLOCK TO BE DESIGNED AND DIMENSIONED BY SPECIALIST SUB-CONTRACTOR.

**GENERAL NOTES**

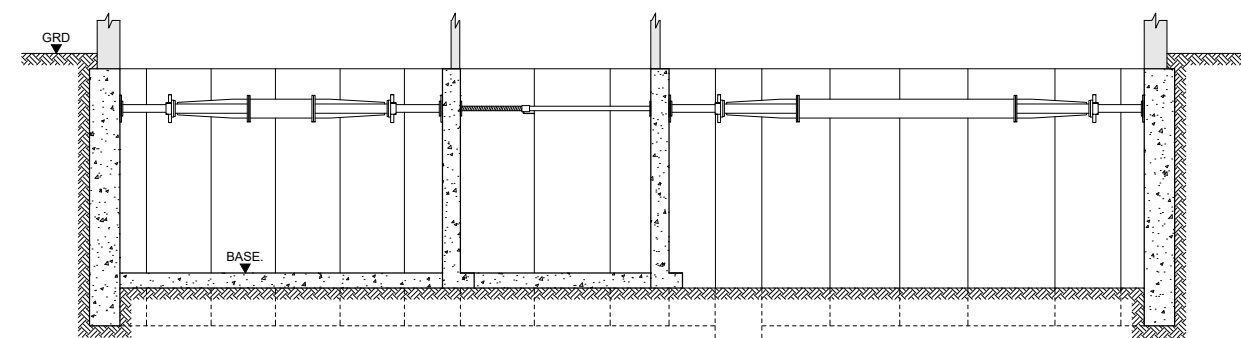
1. DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS, AND ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DESIGN TEAM DETAILS AND SPECIFICATIONS.
4. THE FIRE PROTECTION SPECIFICATION OF STRUCTURAL ELEMENTS TO BE TO ARCHITECTS DETAILS AND BUILDING CONTROL APPROVAL.
5. ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL.
6. ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBOURING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD. METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES.
7. DEPTH OF ALL FOUNDATIONS TO BE APPROVED BY BUILDING CONTROL BEFORE ANY CONCRETING IS UNDERTAKEN

**STEELWORK**

1. ALL STRUCTURAL STEEL WORK TO BE A MINIMUM OF GRADE S275 UNLESS OTHERWISE NOTED.
2. ALL STEELWORK TO BE PAINTED IS TO BE PREPARED BY GRIT OR SHOT BLASTING IN ACCORDANCE WITH BS 4232 THE STANDARD OF SURFACE CLEANLINESS IS TO BE SECOND QUALITY OR SWEDISH STANDARD S.A. 2.5 PAINT SPECIFICATION TO BE IN ACCORDANCE WITH BS 5403 IN SHOP APPLY HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD, 75µm. ON SITE DEGREASE AND TOUCH UP AS NECESSARY USING HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD TO 60µm. (THICKNESSES ARE DRY FILM THICKNESS).
3. ALL EXPOSED STEELWORK OR STEELWORK BUILT INTO EXTERNAL WALLS TO BE GALVANISED.
4. THE DESIGN OF CONNECTION AND SPLICES FOR STEELWORK TO BE DESIGNED BY THE FABRICATOR WITH LOADS NOTED ON THE RELEVANT **TAK STRUCTURES LTD** DRAWINGS.
5. CONTRACTOR TO WORK TO FIGURED DIMENSIONS ONLY OR TO TAKE SITE DIMENSIONS IF REQUIRED.
6. ALL WELDS TO BE 6MM FULL PROFILE CONTINUOUS FILLET WELDS UNLESS OTHERWISE NOTED.
7. GAP BETWEEN STEEL BEAMS AND UNDERSIDE OF MASONRY TO BE SOLIDLY PACKED WITH SEMI-DRY CEMENT-SAND MIX WITH SUITABLE TOOL LEAVE FOR 24 HOURS PRIOR TO REMOVING TEMPORARY PROPS.
8. ALL BELOW GROUND STEELWORK TO BE ENCASED IN MIN. 75mm CONCRETE, REINFORCED WITH WRAPPED D49 MESH U.N.O.



**SECTION A**  
(SCALE 1:50)



**SECTION B**  
(SCALE 1:50)

- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING
- ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS
- ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DESIGN TEAM DETAILS & SPECIFICATIONS
- FIRE PROTECTION SPECIFICATION TO STRUCTURAL ELEMENTS TO ARCHITECT DETAIL & BUILDING CONTROL APPROVAL
- ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL
- ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBORING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD
- METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES

REV	BY	CHKD	DATE	NOTES

REV	BY	CHKD	DATE	NOTES
P1	RH	MS	18/02/2021	PRELIMINARY ISSUE

BY	RH	DRAWING TITLE	BASEMENT PLAN - STAGE 3
CHKD	MS	DRAWING No.	20125_TAK_GA-03
SCALE @ A1	AS SHOWN	DRAWING STATUS	PRELIMINARY
DATE	18/02/2021	REV.	P1

CLIENT	RAJ SACHDEV
PROJECT	22 PINE GROVE, TOTTERIDGE

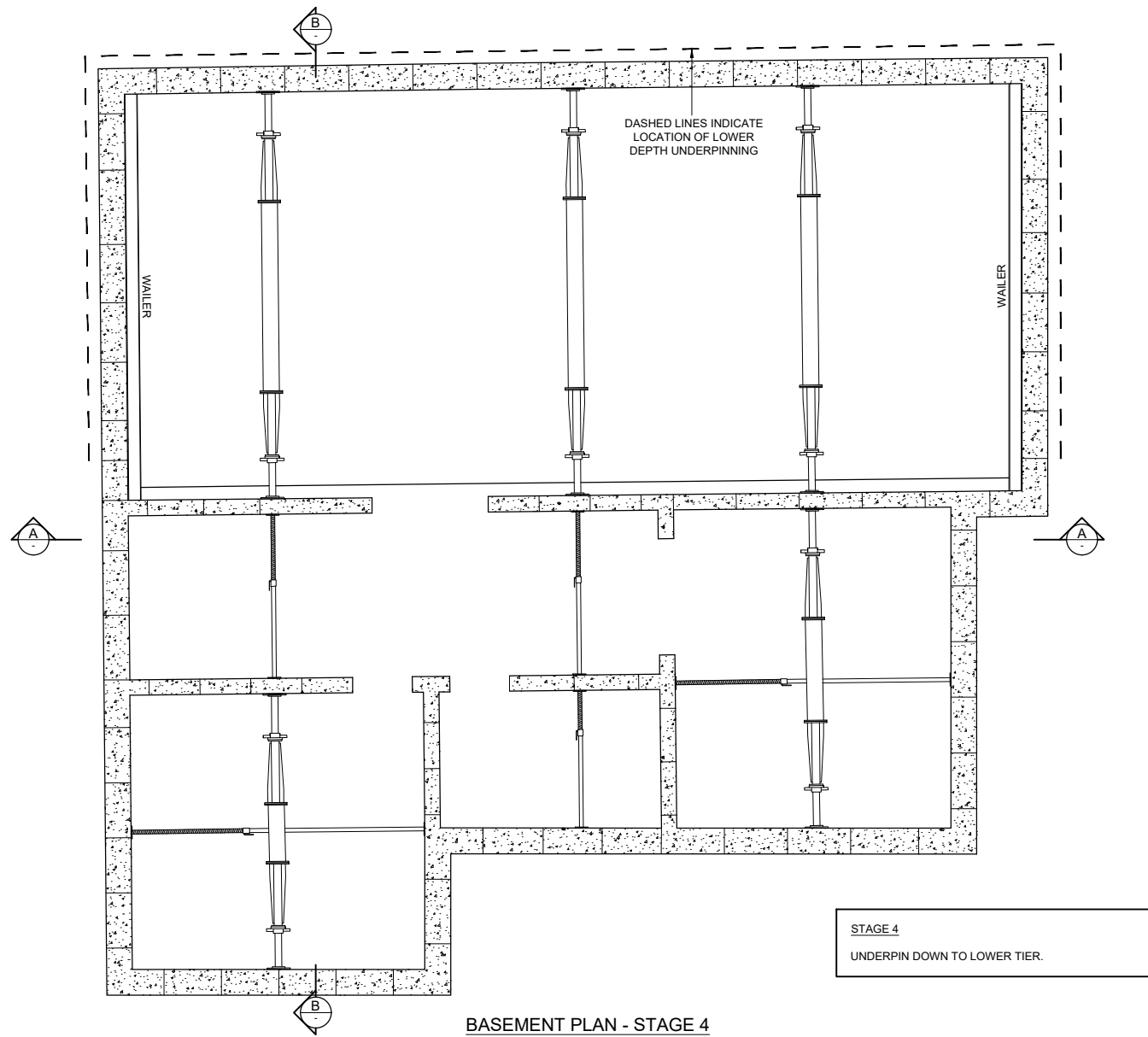
**TAK STRUCTURES**

SUITE 1, 10 KENNINGTON PARK PLACE LONDON SE11 4AS  
www.takstructures.co.uk  
T: 020 4530 8000

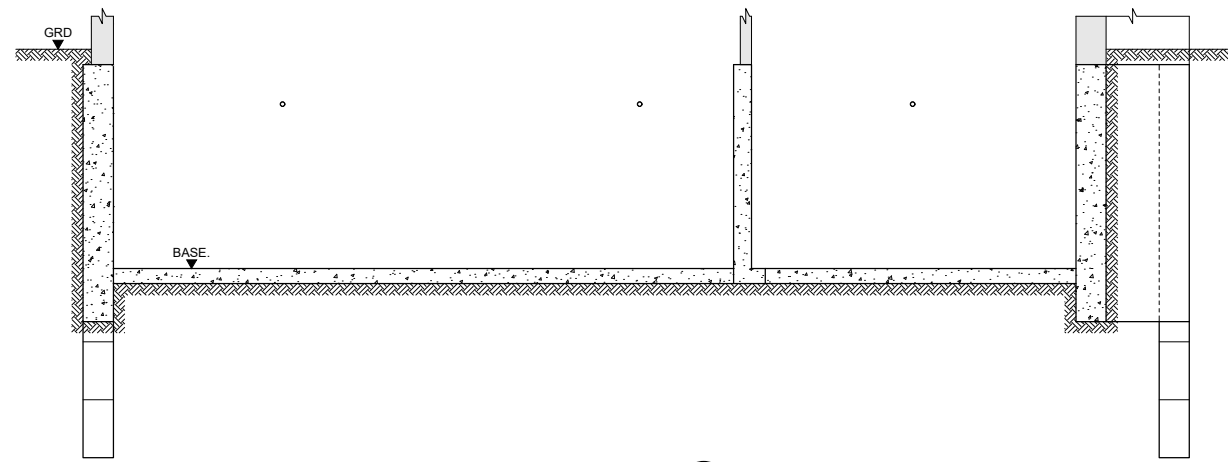


**BASEMENT TANKING AND WATERPROOFING TO BE DESIGNED BY OTHERS.**

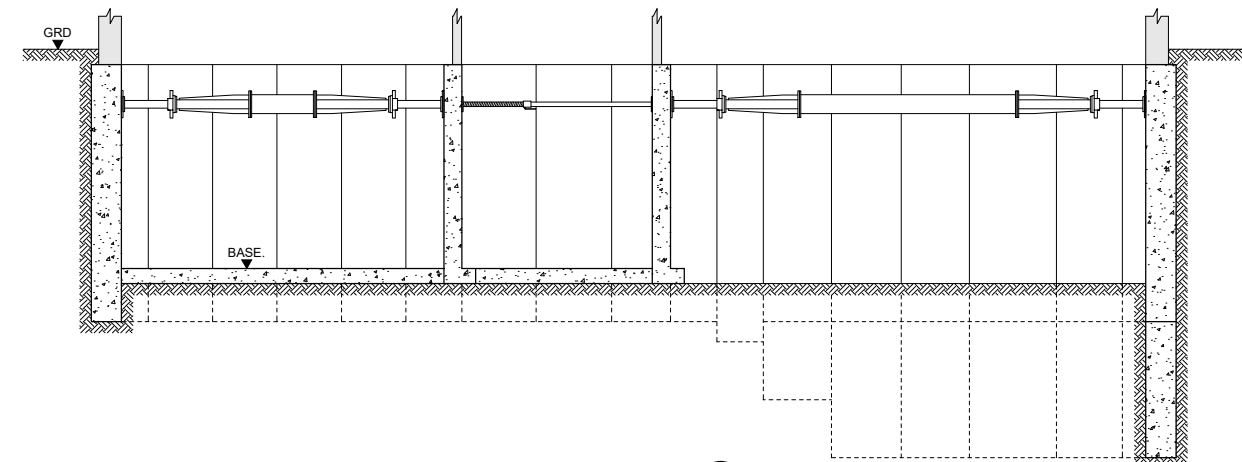
**DRAWING ISSUED FOR INFORMATION ONLY.  
DRAWING NOT TO BE USED FOR CONSTRUCTION.**



**BASEMENT PLAN - STAGE 4**  
(SCALE 1:50)



**SECTION A**  
(SCALE 1:50)



**SECTION B**  
(SCALE 1:50)

**CONCRETE**

1. MASS CONCRETE FOUNDATION TO BE A MINIMUM OF GEN1/ST2 MIX OR AS NOTED ON DRAWING.
2. REINFORCED CONCRETE FOUNDATIONS OR SLABS TO BE A MINIMUM OF OR RC32/40 OR AS NOTED ON DRAWING.
3. PADSTONES TO BE MASS CONCRETE ST5 PRESCRIBED MIX.
4. MINIMUM COVER TO REINFORCEMENT IN BURIED CONCRETE TO BE 50mm UNLESS OTHERWISE NOTED ON DRAWINGS.

**TIMBER**

1. ALL TIMBER EXCEPT WHERE NOTED OTHERWISE SHALL BE MINIMUM GRADE C24 TO BS 5268 WITH SERVICE MOISTURE CONTENT NOT EXCEEDING 18%.
2. ALL TIMBER SHALL BE TREATED WITH AN ORGANIC SOLVENT PRESERVATIVE BY DOUBLE VACUUM OR PRESSURE INJECTION PROCESS.
3. ALL TIMBER IN CONTACT WITH MASONRY EXTERNAL WALLS SHALL BE TREATED AS IN NOTE 2 ABOVE.
4. JOIST HANGERS FIXED TO NEW TIMBER PLATE BOLTED TO EXISTING BRICKWORK SHALL BE 'EXPAMET' OR SIMILAR TYPE HANGERS.
5. ALL DOUBLED UP JOISTS SHALL BE BOLTED TOGETHER WITH M12 Ø BOLTS IN 13mm Ø HOLES WITH 51mm SQUARE DOUBLE SIDED TOOTH PLATE CONNECTORS AND 50x50x5 THK M.S. WASHERS TO ALL BOLT HEADS AND NUTS. BOLTS TO BE AT 450mm CENTRES STAGGERED TOP AND BOTTOM. PROVIDE 50 EDGE DISTANCE.
6. ANY IN-SITU TIMBER USED IN EXCESS OF 2.5m SPAN ARE TO HAVE SOLID STRUTTING PROVIDED AT MID SPAN.
7. ALL NAILS, SCREWS AND FASTENERS TO BE GALVANISED.
8. ALL CAVITY WALL TIES TO BE GALVANISED AND TO ARCHITECTS SPECIFICATION.
9. GALVANISED RESTRAINT STRAPS TO BE A MINIMUM OF 1200mm LONG AND SCREWED TO JOISTS AND EXTERNAL WALLS AT 1500mm CENTRE TO CENTRE AS SET OUT ON DRAWINGS.

**BEAM & BLOCK FLOOR**

1. ALL BEAM AND BLOCK SECTIONS OF FLOOR AT GROUND FLOOR LEVEL ARE TO BE BUILT INTO EXTERNAL WALLS AROUND PERIMETER OF BUILDING.
2. REPRESENTS SPAN DIRECTION OF 155mm DEEP PRECAST CONCRETE BEAM & BLOCK UNITS. 'MILLBANK' OR SIMILAR.
3. BEAM AND BLOCK TO BE DESIGNED AND DIMENSIONED BY SPECIALIST SUB-CONTRACTOR.

**GENERAL NOTES**

1. DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS, AND ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DESIGN TEAM DETAILS AND SPECIFICATIONS.
4. THE FIRE PROTECTION SPECIFICATION OF STRUCTURAL ELEMENTS TO BE TO ARCHITECTS DETAILS AND BUILDING CONTROL APPROVAL.
5. ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL.
6. ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBOURING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD. METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES.
7. DEPTH OF ALL FOUNDATIONS TO BE APPROVED BY BUILDING CONTROL BEFORE ANY CONCRETING IS UNDERTAKEN

**STEELWORK**

1. ALL STRUCTURAL STEEL WORK TO BE A MINIMUM OF GRADE S275 UNLESS OTHERWISE NOTED.
2. ALL STEELWORK TO BE PAINTED IS TO BE PREPARED BY GRIT OR SHOT BLASTING IN ACCORDANCE WITH BS 4232 THE STANDARD OF SURFACE CLEANLINESS IS TO BE SECOND QUALITY OR SWEDISH STANDARD S.A. 2.5 PAINT SPECIFICATION TO BE IN ACCORDANCE WITH BS 5403 IN SHOP APPLY HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD, 75µm. ON SITE DEGREASE AND TOUCH UP AS NECESSARY USING HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD TO 60µm. (THICKNESSES ARE DRY FILM THICKNESS).
3. ALL EXPOSED STEELWORK OR STEELWORK BUILT INTO EXTERNAL WALLS TO BE GALVANISED.
4. THE DESIGN OF CONNECTION AND SPLICES FOR STEELWORK TO BE DESIGNED BY THE FABRICATOR WITH LOADS NOTED ON THE RELEVANT **TAK STRUCTURES LTD** DRAWINGS.
5. CONTRACTOR TO WORK TO FIGURED DIMENSIONS ONLY OR TO TAKE SITE DIMENSIONS IF REQUIRED.
6. ALL WELDS TO BE 6MM FULL PROFILE CONTINUOUS FILLET WELDS UNLESS OTHERWISE NOTED.
7. GAP BETWEEN STEEL BEAMS AND UNDERSIDE OF MASONRY TO BE SOLIDLY PACKED WITH SEMI-DRY CEMENT-SAND MIX WITH SUITABLE TOOL LEAVE FOR 24 HOURS PRIOR TO REMOVING TEMPORARY PROPS.
8. ALL BELOW GROUND STEELWORK TO BE ENCASED IN MIN. 75mm CONCRETE, REINFORCED WITH WRAPPED D49 MESH U.N.O.

- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING
- ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS
- ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DESIGN TEAM DETAILS & SPECIFICATIONS
- FIRE PROTECTION SPECIFICATION TO STRUCTURAL ELEMENTS TO ARCHITECT DETAIL & BUILDING CONTROL APPROVAL
- ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL
- ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBORING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD
- METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES

REV	BY	CHKD	DATE	NOTES

REV	BY	CHKD	DATE	NOTES
P1	RH	MS	18/02/2021	PRELIMINARY ISSUE

BY	RH	DRAWING TITLE	BASEMENT PLAN - STAGE 4
CHKD	MS	DRAWING No.	
SCALE @ A1	AS SHOWN	DRAWING STATUS	PRELIMINARY
DATE	18/02/2021	REV.	P1

CLIENT	RAJ SACHDEV
PROJECT	22 PINE GROVE, TOTTERIDGE

**TAK STRUCTURES**

SUITE 1, 10 KENNINGTON PARK PLACE LONDON SE11 4AS  
www.takstructures.co.uk  
T: 020 4530 8000

**BASEMENT TANKING AND  
WATERPROOFING TO BE  
DESIGNED BY OTHERS.**

**DRAWING ISSUED FOR INFORMATION ONLY.  
DRAWING NOT TO BE USED FOR CONSTRUCTION.**


**CONCRETE**

1. MASS CONCRETE FOUNDATION TO BE A MINIMUM OF GEN1/ST2 MIX OR AS NOTED ON DRAWING.
2. REINFORCED CONCRETE FOUNDATIONS OR SLABS TO BE A MINIMUM OF OR RC32/40 OR AS NOTED ON DRAWING.
3. PADSTONES TO BE MASS CONCRETE ST5 PRESCRIBED MIX.
4. MINIMUM COVER TO REINFORCEMENT IN BURIED CONCRETE TO BE 50mm UNLESS OTHERWISE NOTED ON DRAWINGS.

**TIMBER**

1. ALL TIMBER EXCEPT WHERE NOTED OTHERWISE SHALL BE MINIMUM GRADE C24 TO BS 5268 WITH SERVICE MOISTURE CONTENT NOT EXCEEDING 18%.
2. ALL TIMBER SHALL BE TREATED WITH AN ORGANIC SOLVENT PRESERVATIVE BY DOUBLE VACUUM OR PRESSURE INJECTION PROCESS.
3. ALL TIMBER IN CONTACT WITH MASONRY EXTERNAL WALLS SHALL BE TREATED AS IN NOTE 2 ABOVE.
4. JOIST HANGERS FIXED TO NEW TIMBER PLATE BOLTED TO EXISTING BRICKWORK SHALL BE 'EXPAMET' OR SIMILAR TYPE HANGERS.
5. ALL DOUBLED UP JOISTS SHALL BE BOLTED TOGETHER WITH M12 Ø BOLTS IN 13mm Ø HOLES WITH 51mm SQUARE DOUBLE SIDED TOOTH PLATE CONNECTORS AND 50x50x5 THK M.S. WASHERS TO ALL BOLT HEADS AND NUTS. BOLTS TO BE AT 450mm CENTRES STAGGERED TOP AND BOTTOM. PROVIDE 50 EDGE DISTANCE.
6. ANY IN-SITU TIMBER USED IN EXCESS OF 2.5m SPAN ARE TO HAVE SOLID STRUTTING PROVIDED AT MID SPAN.
7. ALL NAILS, SCREWS AND FASTENERS TO BE GALVANISED.
8. ALL CAVITY WALL TIES TO BE GALVANISED AND TO ARCHITECTS SPECIFICATION.
9. GALVANISED RESTRAINT STRAPS TO BE A MINIMUM OF 1200mm LONG AND SCREWED TO JOISTS AND EXTERNAL WALLS AT 1500mm CENTRE TO CENTRE AS SET OUT ON DRAWINGS.

**BEAM & BLOCK FLOOR**

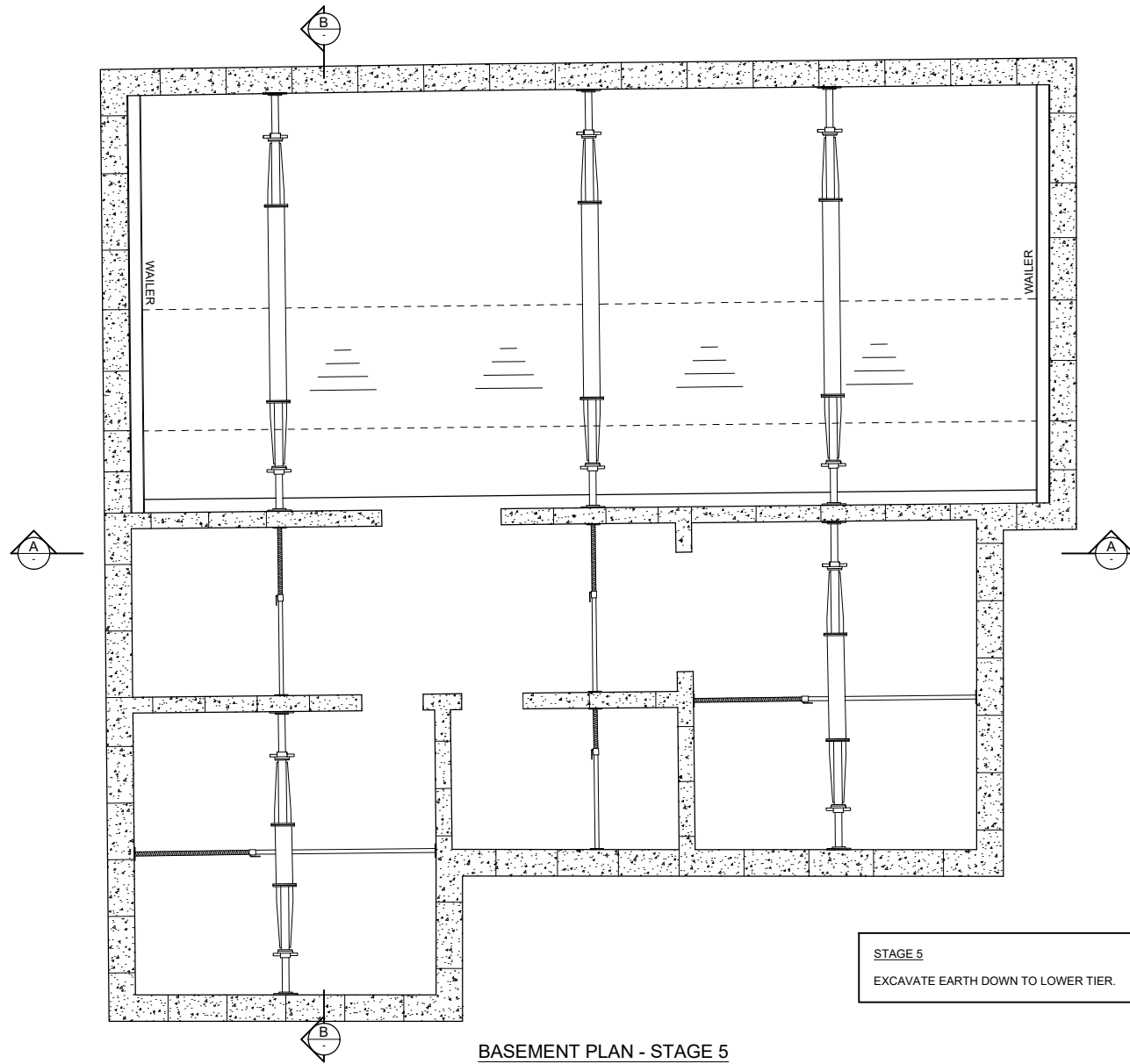
1. ALL BEAM AND BLOCK SECTIONS OF FLOOR AT GROUND FLOOR LEVEL ARE TO BE BUILT INTO EXTERNAL WALLS AROUND PERIMETER OF BUILDING.
2.  REPRESENTS SPAN DIRECTION OF 155mm DEEP PRECAST CONCRETE BEAM & BLOCK UNITS, 'MILBANK' OR SIMILAR.
3. BEAM AND BLOCK TO BE DESIGNED AND DIMENSIONED BY SPECIALIST SUB-CONTRACTOR.

**GENERAL NOTES**

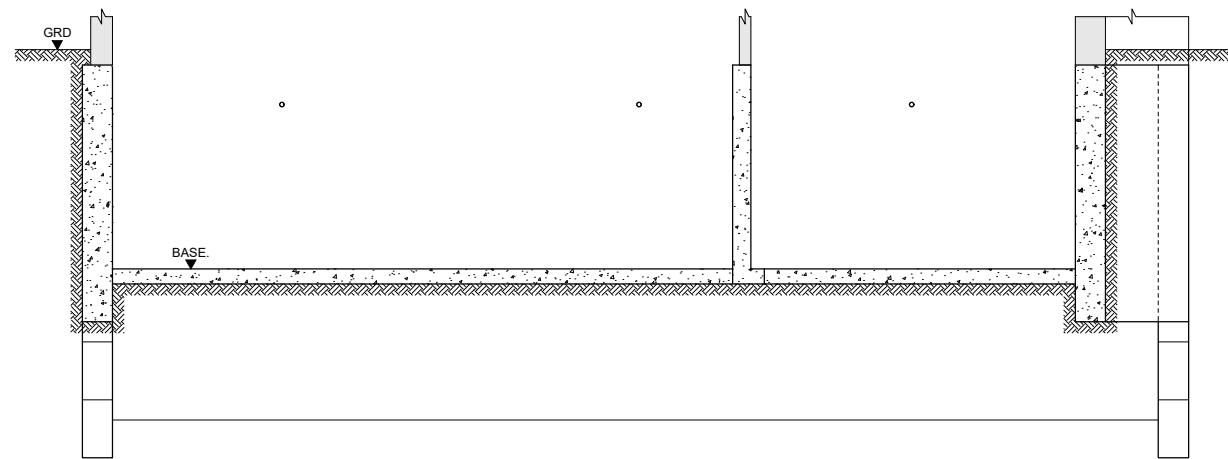
1. DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS, AND ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DESIGN TEAM DETAILS AND SPECIFICATIONS.
4. THE FIRE PROTECTION SPECIFICATION OF STRUCTURAL ELEMENTS TO BE TO ARCHITECTS DETAILS AND BUILDING CONTROL APPROVAL.
5. ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL.
6. ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBOURING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD. METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES.
7. DEPTH OF ALL FOUNDATIONS TO BE APPROVED BY BUILDING CONTROL BEFORE ANY CONCRETING IS UNDERTAKEN

**STEELWORK**

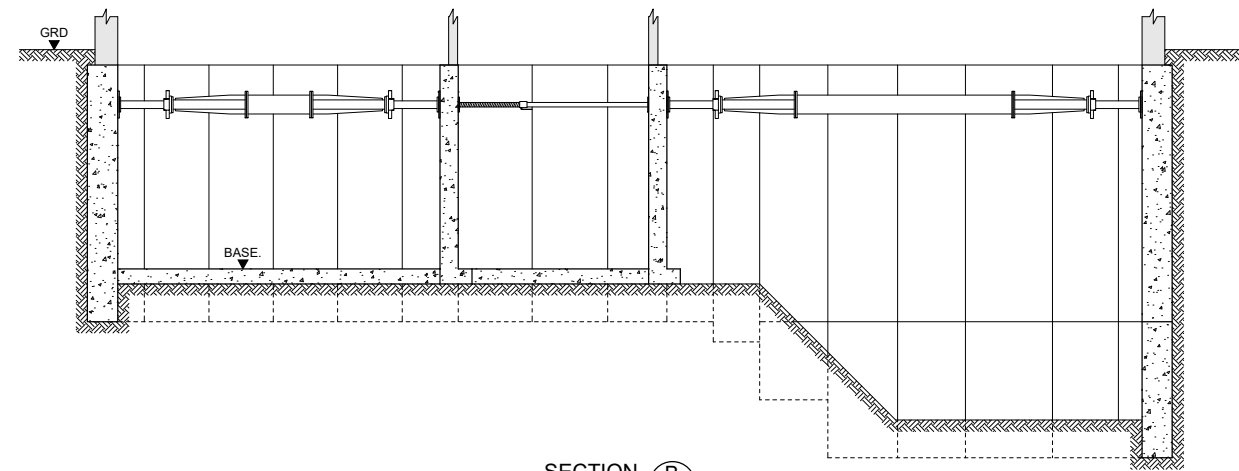
1. ALL STRUCTURAL STEEL WORK TO BE A MINIMUM OF GRADE S275 UNLESS OTHERWISE NOTED.
2. ALL STEELWORK TO BE PAINTED IS TO BE PREPARED BY GRIT OR SHOT BLASTING IN ACCORDANCE WITH BS 4232 THE STANDARD OF SURFACE CLEANLINESS IS TO BE SECOND QUALITY OR SWEDISH STANDARD S.A. 2.5 PAINT SPECIFICATION TO BE IN ACCORDANCE WITH BS 5405 IN SHOP APPLY HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD, 75µm. ON SITE DEGREASE AND TOUCH UP AS NECESSARY USING HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD TO 60µm. (THICKNESSES ARE DRY FILM THICKNESS).
3. ALL EXPOSED STEELWORK OR STEELWORK BUILT INTO EXTERNAL WALLS TO BE GALVANISED.
4. THE DESIGN OF CONNECTION AND SPLICES FOR STEELWORK TO BE DESIGNED BY THE FABRICATOR WITH LOADS NOTED ON THE RELEVANT **TAK STRUCTURES LTD** DRAWINGS.
5. CONTRACTOR TO WORK TO FIGURED DIMENSIONS ONLY OR TO TAKE SITE DIMENSIONS IF REQUIRED.
6. ALL WELDS TO BE 6MM FULL PROFILE CONTINUOUS FILLET WELDS UNLESS OTHERWISE NOTED.
7. GAP BETWEEN STEEL BEAMS AND UNDERSIDE OF MASONRY TO BE SOLIDLY PACKED WITH SEMI-DRY CEMENT-SAND MIX WITH SUITABLE TOOL LEAVE FOR 24 HOURS PRIOR TO REMOVING TEMPORARY PROPS.
8. ALL BELOW GROUND STEELWORK TO BE ENCASED IN MIN. 75mm CONCRETE, REINFORCED WITH WRAPPED D49 MESH U.N.O.



**BASEMENT PLAN - STAGE 5**  
(SCALE 1:50)



**SECTION A**  
(SCALE 1:50)



**SECTION B**  
(SCALE 1:50)

- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING
- ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS
- ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DESIGN TEAM DETAILS & SPECIFICATIONS
- FIRE PROTECTION SPECIFICATION TO STRUCTURAL ELEMENTS TO ARCHITECT DETAIL & BUILDING CONTROL APPROVAL
- ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL
- ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBORING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD
- METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES

REV	BY	CHKD	DATE	NOTES

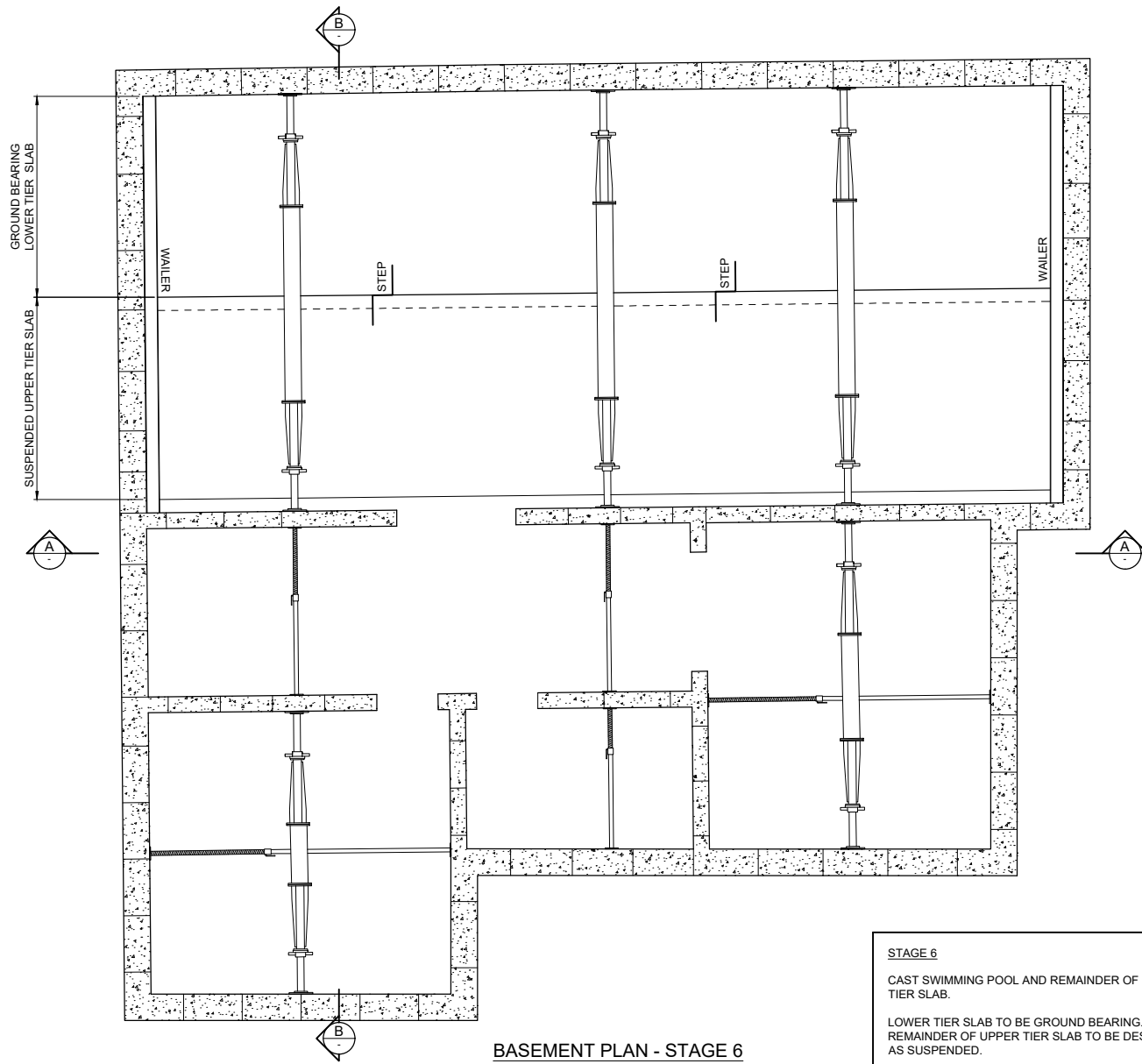
REV	BY	CHKD	DATE	NOTES
P1	RH	MS	18/02/2021	PRELIMINARY ISSUE

BY	RH	DRAWING TITLE	BASEMENT PLAN - STAGE 5
CHKD	MS	DRAWING No.	20125_TAK_GA-05
SCALE @ A1	AS SHOWN	DRAWING STATUS	PRELIMINARY
DATE	18/02/2021	REV.	P1

CLIENT	RAJ SACHDEV
PROJECT	22 PINE GROVE, TOTTERIDGE

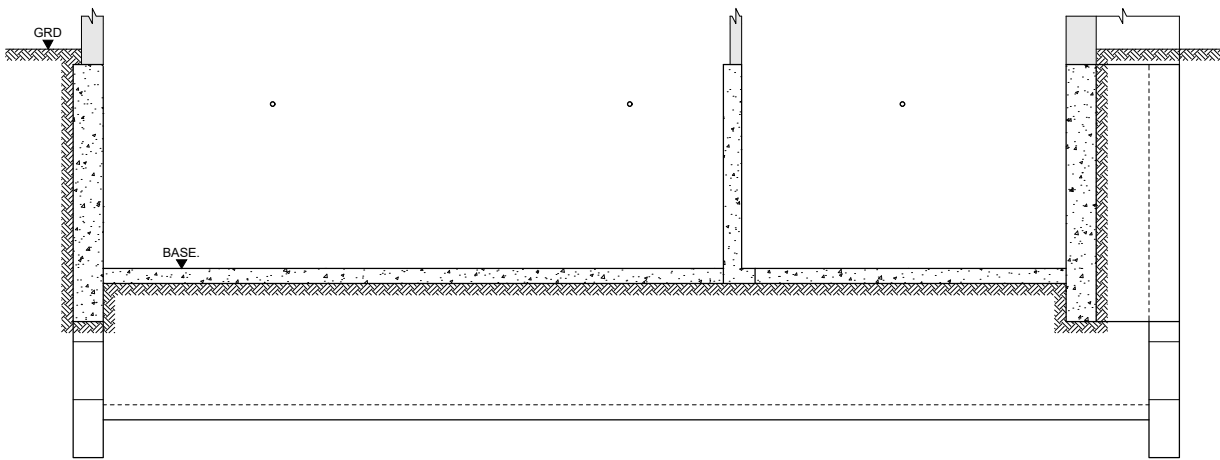
**TAK STRUCTURES**

SUITE 1, 10 KENNINGTON PARK PLACE LONDON SE11 4AS  
www.takstructures.co.uk  
T: 020 4530 8000

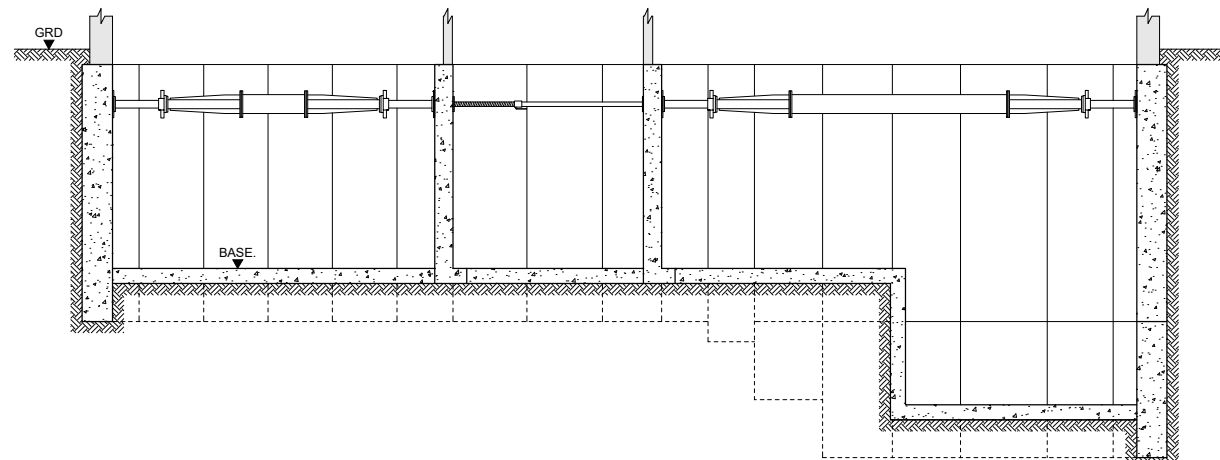


**BASEMENT PLAN - STAGE 6**  
(SCALE 1:50)

**STAGE 6**  
CAST SWIMMING POOL AND REMAINDER OF UPPER TIER SLAB.  
LOWER TIER SLAB TO BE GROUND BEARING.  
REMAINDER OF UPPER TIER SLAB TO BE DESIGNED AS SUSPENDED.



**SECTION A**  
(SCALE 1:50)



**SECTION B**  
(SCALE 1:50)

**BASEMENT TANKING AND WATERPROOFING TO BE DESIGNED BY OTHERS.**

**DRAWING ISSUED FOR INFORMATION ONLY.**  
**DRAWING NOT TO BE USED FOR CONSTRUCTION.**

**CONCRETE**

1. MASS CONCRETE FOUNDATION TO BE A MINIMUM OF GEN1/ST2 MIX OR AS NOTED ON DRAWING.
2. REINFORCED CONCRETE FOUNDATIONS OR SLABS TO BE A MINIMUM OF OR RC32/40 OR AS NOTED ON DRAWING.
3. PADSTONES TO BE MASS CONCRETE ST5 PRESCRIBED MIX.
4. MINIMUM COVER TO REINFORCEMENT IN BURIED CONCRETE TO BE 50mm UNLESS OTHERWISE NOTED ON DRAWINGS.

**TIMBER**

1. ALL TIMBER EXCEPT WHERE NOTED OTHERWISE SHALL BE MINIMUM GRADE C24 TO BS 5268 WITH SERVICE MOISTURE CONTENT NOT EXCEEDING 18%.
2. ALL TIMBER SHALL BE TREATED WITH AN ORGANIC SOLVENT PRESERVATIVE BY DOUBLE VACUUM OR PRESSURE INJECTION PROCESS.
3. ALL TIMBER IN CONTACT WITH MASONRY EXTERNAL WALLS SHALL BE TREATED AS IN NOTE 2 ABOVE.
4. JOIST HANGERS FIXED TO NEW TIMBER PLATE BOLTED TO EXISTING BRICKWORK SHALL BE 'EXPAMET' OR SIMILAR TYPE HANGERS.
5. ALL DOUBLED UP JOISTS SHALL BE BOLTED TOGETHER WITH M12 Ø BOLTS IN 13mm Ø HOLES WITH 5mm SQUARE DOUBLE SIDED TOOTH PLATE CONNECTORS AND 50x50x5 THK M.S. WASHERS TO ALL BOLT HEADS AND NUTS. BOLTS TO BE AT 450mm CENTRES STAGGERED TOP AND BOTTOM. PROVIDE 50 EDGE DISTANCE.
6. ANY IN-SITU TIMBER USED IN EXCESS OF 2.5m SPAN ARE TO HAVE SOLID STRUTTING PROVIDED AT MID SPAN.
7. ALL NAILS, SCREWS AND FASTENERS TO BE GALVANISED.
8. ALL CAVITY WALL TIES TO BE GALVANISED AND TO ARCHITECTS SPECIFICATION.
9. GALVANISED RESTRAINT STRAPS TO BE A MINIMUM OF 1200mm LONG AND SCREWED TO JOISTS AND EXTERNAL WALLS AT 1500mm CENTRE TO CENTRE AS SET OUT ON DRAWINGS.

**BEAM & BLOCK FLOOR**

1. ALL BEAM AND BLOCK SECTIONS OF FLOOR AT GROUND FLOOR LEVEL ARE TO BE BUILT INTO EXTERNAL WALLS AROUND PERIMETER OF BUILDING.
2. REPRESENTS SPAN DIRECTION OF 155mm DEEP PRECAST CONCRETE BEAM & BLOCK UNITS. 'MILLBANK' OR SIMILAR.
3. BEAM AND BLOCK TO BE DESIGNED AND DIMENSIONED BY SPECIALIST SUB-CONTRACTOR.

**GENERAL NOTES**

1. DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS, AND ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DESIGN TEAM DETAILS AND SPECIFICATIONS.
4. THE FIRE PROTECTION SPECIFICATION OF STRUCTURAL ELEMENTS TO BE TO ARCHITECTS DETAILS AND BUILDING CONTROL APPROVAL.
5. ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL.
6. ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBOURING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD. METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES.
7. DEPTH OF ALL FOUNDATIONS TO BE APPROVED BY BUILDING CONTROL BEFORE ANY CONCRETING IS UNDERTAKEN

**STEELWORK**

1. ALL STRUCTURAL STEEL WORK TO BE A MINIMUM OF GRADE S275 UNLESS OTHERWISE NOTED.
2. ALL STEELWORK TO BE PAINTED IS TO BE PREPARED BY GRIT OR SHOT BLASTING IN ACCORDANCE WITH BS 4232 THE STANDARD OF SURFACE CLEANLINESS IS TO BE SECOND QUALITY OR SWEDISH STANDARD S.A. 2.5 PAINT SPECIFICATION TO BE IN ACCORDANCE WITH BS 5403 IN SHOP APPLY HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD, 75µm. ON SITE DEGREASE AND TOUCH UP AS NECESSARY USING HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD TO 60µm. (THICKNESSES ARE DRY FILM THICKNESS).
3. ALL EXPOSED STEELWORK OR STEELWORK BUILT INTO EXTERNAL WALLS TO BE GALVANISED.
4. THE DESIGN OF CONNECTION AND SPLICES FOR STEELWORK TO BE DESIGNED BY THE FABRICATOR WITH LOADS NOTED ON THE RELEVANT **TAK STRUCTURES LTD** DRAWINGS.
5. CONTRACTOR TO WORK TO FIGURED DIMENSIONS ONLY OR TO TAKE SITE DIMENSIONS IF REQUIRED.
6. ALL WELDS TO BE 6MM FULL PROFILE CONTINUOUS FILLET WELDS UNLESS OTHERWISE NOTED.
7. GAP BETWEEN STEEL BEAMS AND UNDERSIDE OF MASONRY TO BE SOLIDLY PACKED WITH SEMI-DRY CEMENT-SAND MIX WITH SUITABLE TOOL LEAVE FOR 24 HOURS PRIOR TO REMOVING TEMPORARY PROPS.
8. ALL BELOW GROUND STEELWORK TO BE ENCASED IN MIN. 75mm CONCRETE, REINFORCED WITH WRAPPED D49 MESH U.N.O.

- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING
- ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS
- ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DESIGN TEAM DETAILS & SPECIFICATIONS
- FIRE PROTECTION SPECIFICATION TO STRUCTURAL ELEMENTS TO ARCHITECT DETAIL & BUILDING CONTROL APPROVAL
- ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL
- ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBOURING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD
- METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES

REV	BY	CHKD	DATE	NOTES

REV	BY	CHKD	DATE	NOTES
P1	RH	MS	18/02/2021	PRELIMINARY ISSUE

BY	RH	DRAWING TITLE	BASEMENT PLAN - STAGE 6
CHKD	MS	DRAWING No.	
SCALE @ A1	AS SHOWN	DRAWING STATUS	PRELIMINARY
DATE	18/02/2021	REV.	P1

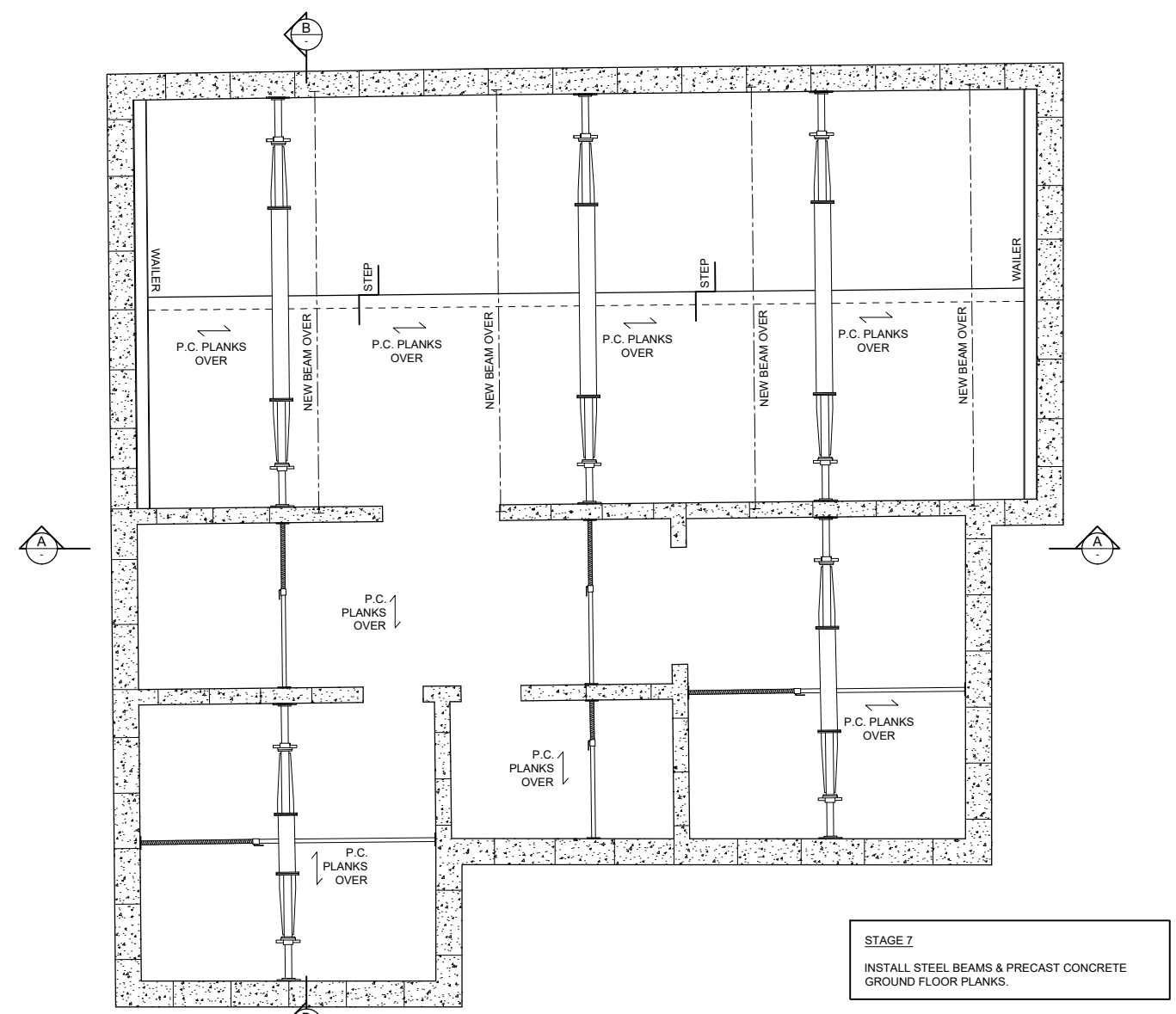
CLIENT	RAJ SACHDEV
PROJECT	22 PINE GROVE, TOTTERIDGE

**TAK STRUCTURES**

SUITE 1, 10 KENNINGTON PARK PLACE LONDON SE11 4AS  
www.takstructures.co.uk  
T: 020 4530 8000

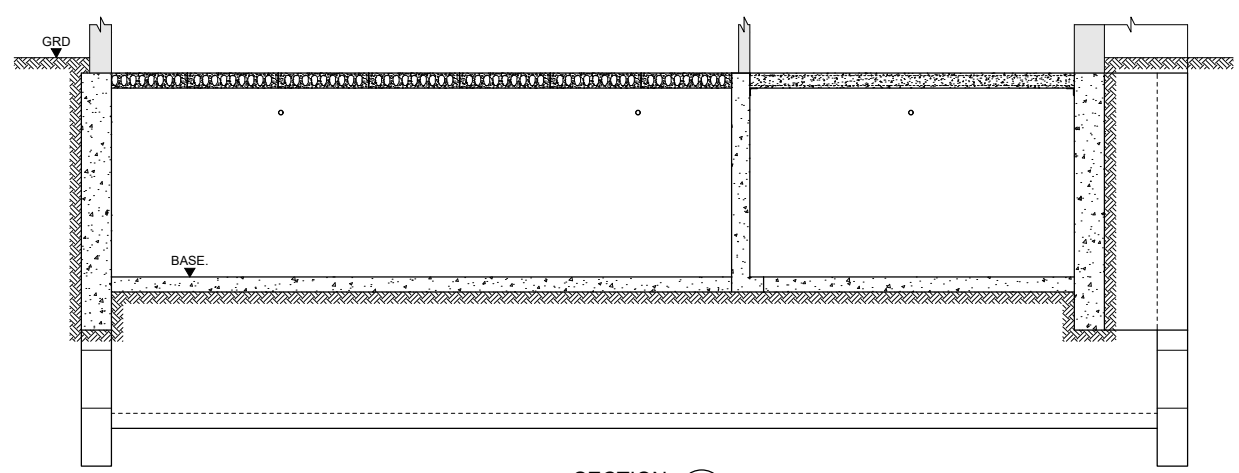
**BASEMENT TANKING AND WATERPROOFING TO BE DESIGNED BY OTHERS.**

**DRAWING ISSUED FOR INFORMATION ONLY.**  
**DRAWING NOT TO BE USED FOR CONSTRUCTION.**

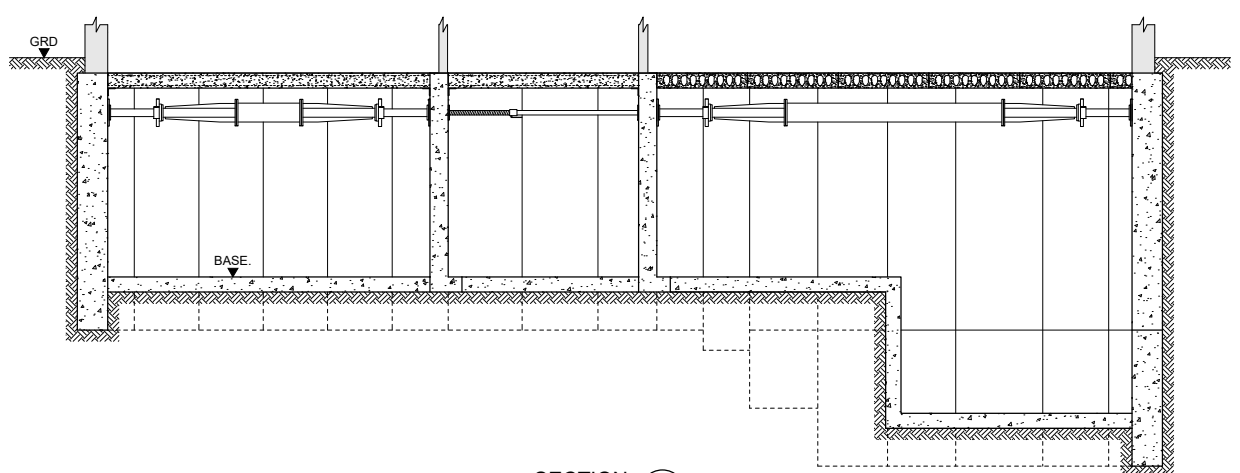


**BASEMENT PLAN - STAGE 7**  
(SCALE 1:50)

**STAGE 7**  
INSTALL STEEL BEAMS & PRECAST CONCRETE GROUND FLOOR PLANKS.



**SECTION A**  
(SCALE 1:50)



**SECTION B**  
(SCALE 1:50)

**CONCRETE**

1. MASS CONCRETE FOUNDATION TO BE A MINIMUM OF GEN1/ST2 MIX OR AS NOTED ON DRAWING.
2. REINFORCED CONCRETE FOUNDATIONS OR SLABS TO BE A MINIMUM OF OR RC3240 OR AS NOTED ON DRAWING.
3. PADSTONES TO BE MASS CONCRETE ST5 PRESCRIBED MIX.
4. MINIMUM COVER TO REINFORCEMENT IN BURIED CONCRETE TO BE 50mm UNLESS OTHERWISE NOTED ON DRAWINGS.

**TIMBER**

1. ALL TIMBER EXCEPT WHERE NOTED OTHERWISE SHALL BE MINIMUM GRADE C24 TO BS 5268 WITH SERVICE MOISTURE CONTENT NOT EXCEEDING 18%.
2. ALL TIMBER SHALL BE TREATED WITH AN ORGANIC SOLVENT PRESERVATIVE BY DOUBLE VACUUM OR PRESSURE INJECTION PROCESS.
3. ALL TIMBER IN CONTACT WITH MASONRY EXTERNAL WALLS SHALL BE TREATED AS IN NOTE 2 ABOVE.
4. JOIST HANGERS FIXED TO NEW TIMBER PLATE BOLTED TO EXISTING BRICKWORK SHALL BE 'EXPAMET' OR SIMILAR TYPE HANGERS.
5. ALL DOUBLED UP JOISTS SHALL BE BOLTED TOGETHER WITH M12 Ø BOLTS IN 13mm Ø HOLES WITH 51mm SQUARE DOUBLE SIDED TOOTH PLATE CONNECTORS AND 50x50x5 THK M.S. WASHERS TO ALL BOLT HEADS AND NUTS. BOLTS TO BE AT 450mm CENTRES STAGGERED TOP AND BOTTOM. PROVIDE 50 EDGE DISTANCE.
6. ANY IN-SITU TIMBER USED IN EXCESS OF 2.5m SPAN ARE TO HAVE SOLID STRUTTING PROVIDED AT MID SPAN.
7. ALL NAILS, SCREWS AND FASTENERS TO BE GALVANISED.
8. ALL CAVITY WALL TIES TO BE GALVANISED AND TO ARCHITECTS SPECIFICATION.
9. GALVANISED RESTRAINT STRAPS TO BE A MINIMUM OF 1200mm LONG AND SCREWED TO JOISTS AND EXTERNAL WALLS AT 1500mm CENTRE TO CENTRE AS SET OUT ON DRAWINGS.

**BEAM & BLOCK FLOOR**

1. ALL BEAM AND BLOCK SECTIONS OF FLOOR AT GROUND FLOOR LEVEL ARE TO BE BUILT INTO EXTERNAL WALLS AROUND PERIMETER OF BUILDING.
2. ← REPRESENTS SPAN DIRECTION OF 155mm DEEP PRECAST CONCRETE BEAM & BLOCK UNITS, 'MILBANK' OR SIMILAR.
3. BEAM AND BLOCK TO BE DESIGNED AND DIMENSIONED BY SPECIALIST SUB-CONTRACTOR.

**GENERAL NOTES**

1. DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS, AND ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DESIGN TEAM DETAILS AND SPECIFICATIONS.
4. THE FIRE PROTECTION SPECIFICATION OF STRUCTURAL ELEMENTS TO BE TO ARCHITECTS DETAILS AND BUILDING CONTROL APPROVAL.
5. ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL.
6. ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBOURING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD. METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES.
7. DEPTH OF ALL FOUNDATIONS TO BE APPROVED BY BUILDING CONTROL BEFORE ANY CONCRETING IS UNDERTAKEN

**STEELWORK**

1. ALL STRUCTURAL STEEL WORK TO BE A MINIMUM OF GRADE S275 UNLESS OTHERWISE NOTED.
2. ALL STEELWORK TO BE PAINTED IS TO BE PREPARED BY GRIT OR SHOT BLASTING IN ACCORDANCE WITH BS 4232 THE STANDARD OF SURFACE CLEANLINESS IS TO BE SECOND QUALITY OR SWEDISH STANDARD S.A. 2.5 PAINT SPECIFICATION TO BE IN ACCORDANCE WITH BS 5403 IN SHOP APPLY HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD, 75µm. ON SITE DEGREASE AND TOUCH UP AS NECESSARY USING HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD TO 60µm. (THICKNESSES ARE DRY FILM THICKNESS).
3. ALL EXPOSED STEELWORK OR STEELWORK BUILT INTO EXTERNAL WALLS TO BE GALVANISED.
4. THE DESIGN OF CONNECTION AND SPLICES FOR STEELWORK TO BE DESIGNED BY THE FABRICATOR WITH LOADS NOTED ON THE RELEVANT **TAK STRUCTURES LTD** DRAWINGS.
5. CONTRACTOR TO WORK TO FIGURED DIMENSIONS ONLY OR TO TAKE SITE DIMENSIONS IF REQUIRED.
6. ALL WELDS TO BE 6MM FULL PROFILE CONTINUOUS FILLET WELDS UNLESS OTHERWISE NOTED.
7. GAP BETWEEN STEEL BEAMS AND UNDERSIDE OF MASONRY TO BE SOLIDLY PACKED WITH SEMI-DRY CEMENT-SAND MIX WITH SUITABLE TOOL LEAVE FOR 24 HOURS PRIOR TO REMOVING TEMPORARY PROPS.
8. ALL BELOW GROUND STEELWORK TO BE ENCASED IN MIN. 75mm CONCRETE, REINFORCED WITH WRAPPED D49 MESH U.N.O.

- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING
- ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS
- ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DESIGN TEAM DETAILS & SPECIFICATIONS
- FIRE PROTECTION SPECIFICATION TO STRUCTURAL ELEMENTS TO ARCHITECT DETAIL & BUILDING CONTROL APPROVAL
- ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL
- ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBORING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD
- METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES

REV	BY	CHKD	DATE	NOTES

REV	BY	CHKD	DATE	NOTES
P1	RH	MS	18/02/2021	PRELIMINARY ISSUE

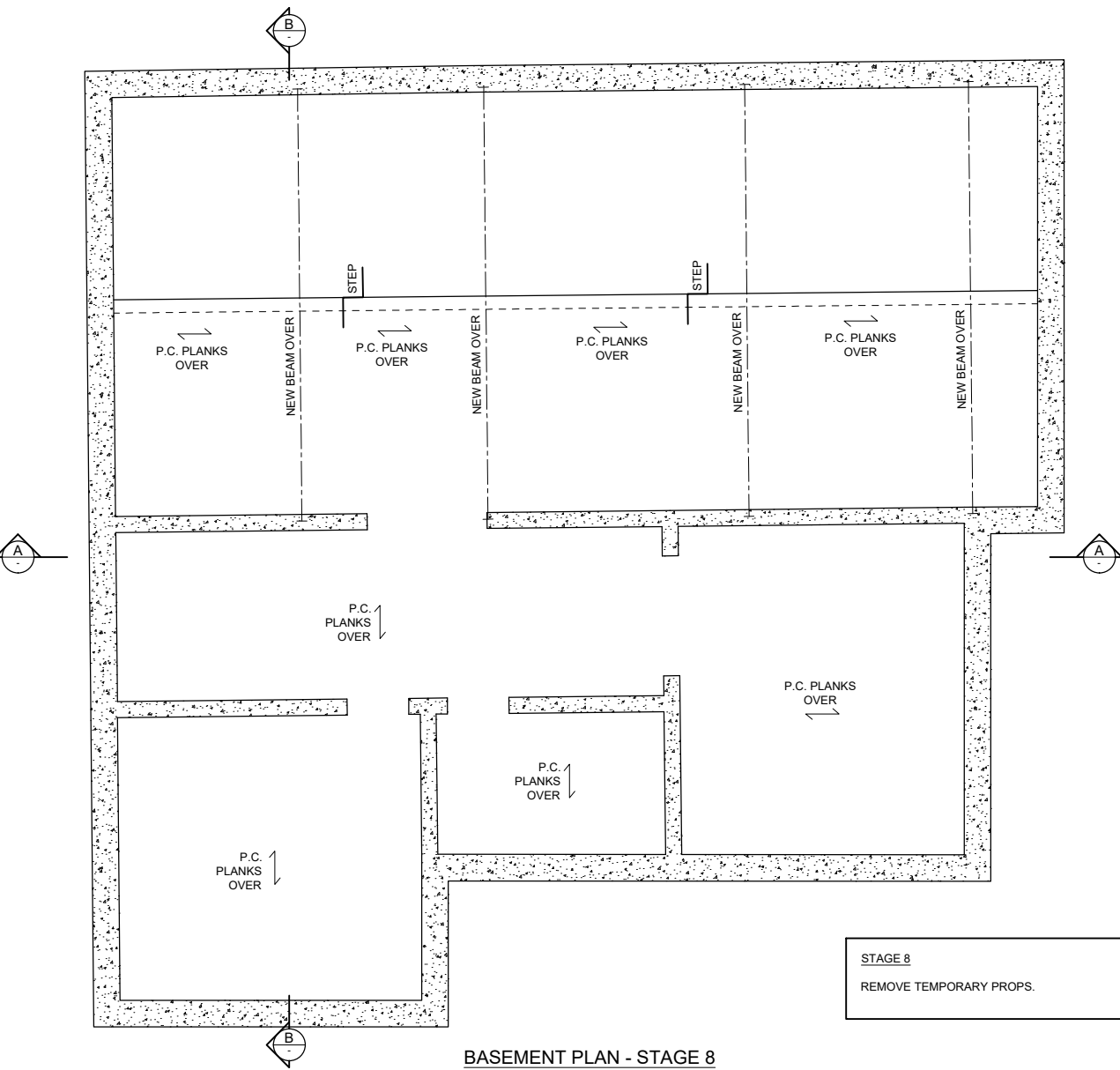
BY	RH	DRAWING TITLE	BASEMENT PLAN - STAGE 7
CHKD	MS	DRAWING No.	20125_TAK_GA-07
SCALE @ A1	AS SHOWN	DRAWING STATUS	PRELIMINARY
DATE	18/02/2021	REV.	P1

CLIENT	RAJ SACHDEV
PROJECT	22 PINE GROVE, TOTTERIDGE

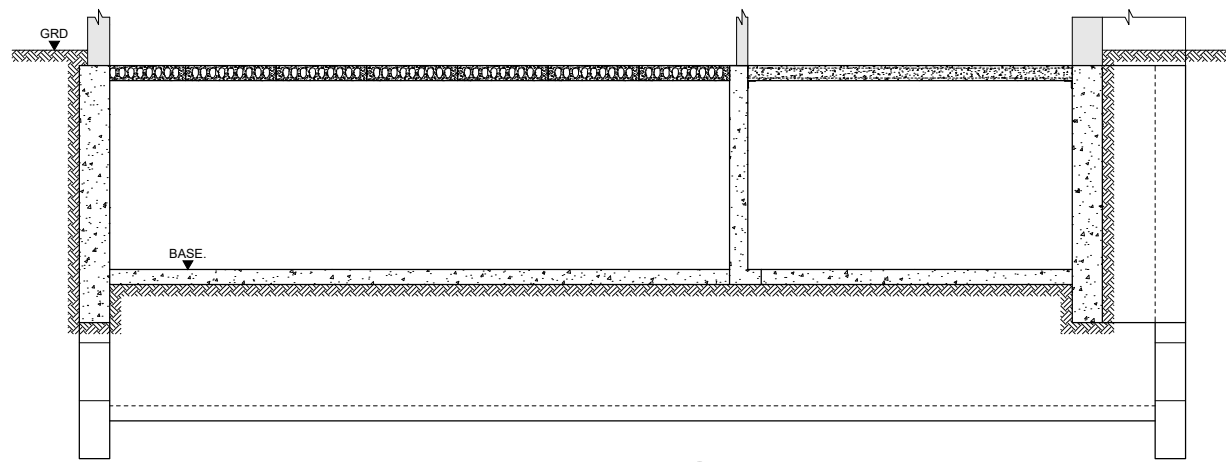
**TAK STRUCTURES**

SUITE 1, 10 KENNINGTON PARK PLACE LONDON SE11 4AS  
 www.takstructures.co.uk  
 T: 020 4530 8000

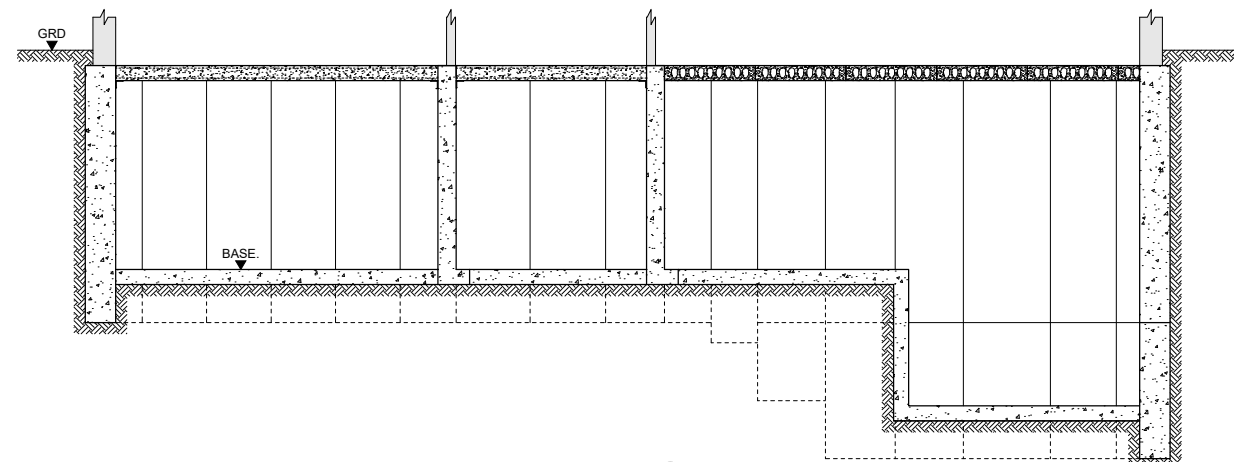




**BASEMENT PLAN - STAGE 8**  
(SCALE 1:50)



**SECTION A**  
(SCALE 1:50)



**SECTION B**  
(SCALE 1:50)

**BASEMENT TANKING AND WATERPROOFING TO BE DESIGNED BY OTHERS.**

**DRAWING ISSUED FOR INFORMATION ONLY.**  
**DRAWING NOT TO BE USED FOR CONSTRUCTION.**

**CONCRETE**

1. MASS CONCRETE FOUNDATION TO BE A MINIMUM OF GEN1/ST2 MIX OR AS NOTED ON DRAWING.
2. REINFORCED CONCRETE FOUNDATIONS OR SLABS TO BE A MINIMUM OF OR RC32/40 OR AS NOTED ON DRAWING.
3. PADSTONES TO BE MASS CONCRETE ST5 PRESCRIBED MIX.
4. MINIMUM COVER TO REINFORCEMENT IN BURIED CONCRETE TO BE 50mm UNLESS OTHERWISE NOTED ON DRAWINGS.

**TIMBER**

1. ALL TIMBER EXCEPT WHERE NOTED OTHERWISE SHALL BE MINIMUM GRADE C24 TO BS 5268 WITH SERVICE MOISTURE CONTENT NOT EXCEEDING 18%.
2. ALL TIMBER SHALL BE TREATED WITH AN ORGANIC SOLVENT PRESERVATIVE BY DOUBLE VACUUM OR PRESSURE INJECTION PROCESS.
3. ALL TIMBER IN CONTACT WITH MASONRY EXTERNAL WALLS SHALL BE TREATED AS IN NOTE 2 ABOVE.
4. JOIST HANGERS FIXED TO NEW TIMBER PLATE BOLTED TO EXISTING BRICKWORK SHALL BE 'EXPAMET' OR SIMILAR TYPE HANGERS.
5. ALL DOUBLED UP JOISTS SHALL BE BOLTED TOGETHER WITH M12 Ø BOLTS IN 13mm Ø HOLES WITH 51mm SQUARE DOUBLE SIDED TOOTH PLATE CONNECTORS AND 50x50x5 THK M.S. WASHERS TO ALL BOLT HEADS AND NUTS. BOLTS TO BE AT 450mm CENTRES STAGGERED TOP AND BOTTOM. PROVIDE 50 EDGE DISTANCE.
6. ANY IN-SITU TIMBER USED IN EXCESS OF 2.5m SPAN ARE TO HAVE SOLID STRUTTING PROVIDED AT MID SPAN.
7. ALL NAILS, SCREWS AND FASTENERS TO BE GALVANISED.
8. ALL CAVITY WALL TIES TO BE GALVANISED AND TO ARCHITECTS SPECIFICATION.
9. GALVANISED RESTRAINT STRAPS TO BE A MINIMUM OF 1200mm LONG AND SCREWED TO JOISTS AND EXTERNAL WALLS AT 1500mm CENTRE TO CENTRE AS SET OUT ON DRAWINGS.

**BEAM & BLOCK FLOOR**

1. ALL BEAM AND BLOCK SECTIONS OF FLOOR AT GROUND FLOOR LEVEL ARE TO BE BUILT INTO EXTERNAL WALLS AROUND PERIMETER OF BUILDING.
2. REPRESENTS SPAN DIRECTION OF 155mm DEEP PRECAST CONCRETE BEAM & BLOCK UNITS. 'MILBANK' OR SIMILAR.
3. BEAM AND BLOCK TO BE DESIGNED AND DIMENSIONED BY SPECIALIST SUB-CONTRACTOR.

**GENERAL NOTES**

1. DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING.
2. ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS, AND ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER.
3. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DESIGN TEAM DETAILS AND SPECIFICATIONS.
4. THE FIRE PROTECTION SPECIFICATION OF STRUCTURAL ELEMENTS TO BE TO ARCHITECTS DETAILS AND BUILDING CONTROL APPROVAL.
5. ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL.
6. ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBOURING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD. METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES.
7. DEPTH OF ALL FOUNDATIONS TO BE APPROVED BY BUILDING CONTROL BEFORE ANY CONCRETING IS UNDERTAKEN

**STEELWORK**

1. ALL STRUCTURAL STEEL WORK TO BE A MINIMUM OF GRADE S275 UNLESS OTHERWISE NOTED.
2. ALL STEELWORK TO BE PAINTED IS TO BE PREPARED BY GRIT OR SHOT BLASTING IN ACCORDANCE WITH BS 4232 THE STANDARD OF SURFACE CLEANLINESS IS TO BE SECOND QUALITY OR SWEDISH STANDARD S.A. 2.5 PAINT SPECIFICATION TO BE IN ACCORDANCE WITH BS 5403 IN SHOP APPLY HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD, 75µm. ON SITE DEGREASE AND TOUCH UP AS NECESSARY USING HIGH BUILD ZINC PHOSPHATE MODIFIED ALKYD TO 60µm. (THICKNESSES ARE DRY FILM THICKNESS).
3. ALL EXPOSED STEELWORK OR STEELWORK BUILT INTO EXTERNAL WALLS TO BE GALVANISED.
4. THE DESIGN OF CONNECTION AND SPLICES FOR STEELWORK TO BE DESIGNED BY THE FABRICATOR WITH LOADS NOTED ON THE RELEVANT **TAK STRUCTURES LTD** DRAWINGS.
5. CONTRACTOR TO WORK TO FIGURED DIMENSIONS ONLY OR TO TAKE SITE DIMENSIONS IF REQUIRED.
6. ALL WELDS TO BE 6MM FULL PROFILE CONTINUOUS FILLET WELDS UNLESS OTHERWISE NOTED.
7. GAP BETWEEN STEEL BEAMS AND UNDERSIDE OF MASONRY TO BE SOLIDLY PACKED WITH SEMI-DRY CEMENT-SAND MIX WITH SUITABLE TOOL LEAVE FOR 24 HOURS PRIOR TO REMOVING TEMPORARY PROPS.
8. ALL BELOW GROUND STEELWORK TO BE ENCASED IN MIN. 75mm CONCRETE, REINFORCED WITH WRAPPED D49 MESH U.N.O.

- DIMENSIONS ARE NOT TO BE SCALED FROM THIS DRAWING
- ALL DIMENSIONS ARE TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF ANY WORKS
- ANY DISCREPANCIES REPORTED IMMEDIATELY TO THE ENGINEER
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL DESIGN TEAM DETAILS & SPECIFICATIONS
- FIRE PROTECTION SPECIFICATION TO STRUCTURAL ELEMENTS TO ARCHITECT DETAIL & BUILDING CONTROL APPROVAL
- ALL STRUCTURAL WORKS TO BE COMPLETED TO THE APPROVAL OF BUILDING CONTROL
- ALL TEMPORARY WORKS AND STABILITY OF THE BUILDING AND NEIGHBORING BUILDINGS TO BE THE RESPONSIBILITY OF THE CONTRACTOR FOR THE DURATION OF THE CONSTRUCTION PERIOD
- METHOD STATEMENTS AND SEQUENCE OF WORKS MAY BE REQUIRED BEFORE WORK COMMENCES

REV	BY	CHKD	DATE	NOTES

REV	BY	CHKD	DATE	NOTES
P1	RH	MS	18/02/2021	PRELIMINARY ISSUE

BY	RH	DRAWING TITLE	BASEMENT PLAN - STAGE 8
CHKD	MS	DRAWING No.	
SCALE @ A1	AS SHOWN	DRAWING STATUS	PRELIMINARY
DATE	18/02/2021	REV.	P1

CLIENT	RAJ SACHDEV
PROJECT	22 PINE GROVE, TOTTERIDGE

**TAK STRUCTURES**

SUITE 1, 10 KENNINGTON PARK PLACE LONDON SE11 4AS  
www.takstructures.co.uk  
T: 020 4530 8000