



BASEMENT PLAN – PHASES 2 TO 5
SCALE 1:50

INDICATIVE CONSTRUCTION SEQUENCE:

- INSERT NEW STEELS AT GROUND LEVEL TO PROVIDE SUPPORT TO WALLS ABOVE
- SPREAD LOAD OF BEAMS ONTO TEMPORARY PROPS (TO BE DEVELOPED BY THE CONTRACTOR)
- COMMENCE UNDERPIN SEQUENCE TO WALLS
- CREATE BASEMENT SLAB
- REMOVE STEEL BEAM TEMPORARY SUPPORT
- CONSTRUCTION OF REAR BUILDING WORKS

NOTE:
CONSTRUCTION SEQUENCE AND DETAILS OF TEMPORARY PROPPING THROUGHOUT TO SUPPORT BUILDING ABOVE IS TO BE DEVELOPED BY CONTRACTOR IN THE TEMPORARY WORKS DESIGN, FOR COMMENT BY DDA DURING THE WORK PLANNING PROCESS, WELL BEFORE CONSTRUCTION COMMENCES

NOTE:
CONTRACTOR TO CHECK UNDERGROUND OBSTRUCTIONS USING APPROPRIATE METHODS PRIOR TO EXCAVATION TAKING PLACE.

NEW UNDERPINNING TO EXISTING WALLS TO ACCOMMODATE NEW LOW LEVEL BASEMENT.

① DENOTES SEQUENCE – REFER TO SPECIFICATION.

THICKENINGS MAY BE REQUIRED IN BASEMENT WALLS TO ACCOMMODATE BUTTRESS PIERS / POSTS ALL TO BE CONFIRMED

COLUMN SCHEDULE

| MARK | DESCRIPTION |
|------|---------------|
| C1 | 80x80x5.0 SHS |

⊗ = INDICATES MOVEMENT MONITORING POINTS TO BE SET UP BY CONTRACTOR AND PARTY WALL SURVEYOR. SEE UNDERPINNING NOTES FOR DETAIL

—: KEY :—

- NEW L-B WALL NEW LOAD BEARING MASONRY WALL
- L-B WALL EXISTING LOAD BEARING MASONRY WALL
- ⑦ SEQUENCE OF INSTALLATION OF UNDERPINNING / BASEMENT – SEE ENVISAGED SEQUENCE OF WORKS PHASES 2,3,4 & 5
- PPP TEMPORARY STEEL PUSH PULL PROP – MAYBEY OR RMD OR SIMILAR
- ⊗ PC TEMPORARY STEEL PLUNGE COLUMN LOCATED WITHIN CFA MINI-PILE – ALL TO BE BROKEN DOWN / OUT ON COMPLETION OF PERMANENT WORKS
- TB TEMPORARY STEEL NEEDLE TO SUPPORT WALLS / PERMANENT BEAMS OR TEMPORARY STEEL TIE BEAM TO PLUNGE COLUMNS
- BM G-1A PERMANENT WORKS STRUCTURAL BEAM
- NEW STEEL & RC COLUMN A NEW PERMANENT WORKS REINFORCED CONCRETE COLUMN INCORPORATING CASE STEEL STANCHION WHICH IN CONJUNCTION WITH BEAM G-1A ABOVE WILL FORM A STABILITY FRAME TO PROVIDE SUPPORT TO THE WALL ABOVE, BASEMENT LEVEL AND LATERALLY SUPPORT THE BUILDING
- NEW STEEL & RC COLUMN B

PHASE 2 ENVISAGED SEQUENCE

- 2/1. ONCE WALL IS SECURELY SUPPORTED ON TEMPORARY NEEDLE BEAMS AND PLUNGE COLUMN FRAME, EXCAVATE AND CONSTRUCT UNDERPIN SECTION BENEATH SIDE WALL TO FRONT WAY WINDOW (ON SIDE ADJACENT TO No. 39 HOWITT ROAD. DURING EXCAVATION PROGRESSIVELY INSTALL STEEL TRENCH SHEETS WHICH ARE TO BE STRUTTED AND SHORED OFF TRENCH SUPPORT SHEETS/BOARDS RESTING ON EARTH FACE ON OPPOSITE SIDE OF EXCAVATION. ENSURE ANY LOOSE MASONRY IS REMOVED. CAST UNDERPINNING BAY AND LEAVE PROPS IN PLACE.
- 2/2. REPEAT STAGE 2/1 FOR ALL BAYS MARKED 2 TO 5 TO COMPLETE UNDERPINNING TO FRONT WALL AND CONSTRUCT NEW LIGHT WELL WALLS. ALL UNDERPINNING IS TO BE DOWELED TOGETHER. PROVIDE REINFORCED CONCRETE DOWNSTAND TOE TO UNDERPIN SECTIONS TO PREVENT LATERAL MOVEMENT OR SLIDING OF THE LIGHT WELL RETAINING WALL SECTIONS . PROVIDE CELLCORE VOID FORMER AGAINST THE EARTH FACE OF THE FRONT WALL UNDERPINS AND TO THE LIGHT WELL WALL SECTIONS. INSTALL DIAGONAL PUSH PULL PROPS TO PROP WALLS
- 2/3. REPEAT STAGE 2/1 FOR THE PARTY WALL UNDERPIN BAYS MARKED 6 TO 12 WITH ALL UNDERPIN BAYS DOWELED TOGETHER AND WITH PROPS & SHORES IN PLACE.
- 2/4. COMMENCE PROGRESSIVE EXCAVATION OF CENTRAL BAYS NUMBERED 12 TO 18. ENSURE THAT TOE OF WALLS IS ALWAYS PROPPED TO PREVENT SLIDING OR PROVIDE RC TOE DOWNSTAND/KEY. ALSO PROVIDE HORIZONTAL AND DIAGONAL PROPS TO LATERALLY SUPPORT THE UNDERPIN RETAINING WALL STEM SECTIONS. AS CONSTRUCTION OF CENTRAL BASEMENT BAYS CONTINUES PROGRESSIVELY INTRODUCE ADDITIONAL TEMPORARY STEEL PROPPING TOP SUPPORT CONSTRUCTION ABOVE. UPON EXCAVATION OF CENTRAL BAYS NUMBERED 15 & 17 INSTALL DIAGONAL STEEL BRACING WELDED TO THE PLUNGE COLUMN SECTIONS IN ALL DIRECTIONS – ALL CENTRAL BASEMENT SLAB SECTIONS TO BE CONNECTED TO EDGE WALL UNDERPINS USING CONTINUATION REINFORCEMENT STARTERS / BAR STARTER SYSTEM. ALL CENTRAL SLAB SECTIONS TO BE DOWELED TO SIMILAR SECTIONS/BAYS ADJACENT.

PHASE 3 ENVISAGED SEQUENCE

- 3/1. CAREFULLY REMOVE WALLS TO EXISTING BASEMENT (WITH THE EXCEPTION OF THE EXISTING PARTY WALL WITHIN THE EXISTING BASEMENT.
- 3/3. REPEAT STAGE 2/4 FOR ALL BAYS MARKED 19 TO 22 ENSURING TOE AND STEM OF RETAINING WALL UNDERPINS AND THOSE ADJACENT ARE CONTINUOUSLY PROPPED AND SHORED TO PREVENT SLIDING, LATERAL MOVEMENT AND OVERTURNING.
- 3/4. REPEAT STEP 2/4 FOR THE CENTRAL BAYS MARKED 23 & 24

PHASE 4 ENVISAGED SEQUENCE

- 4/1. REPEAT STAGE 2/4 FOR ALL BAYS MARKED 25 TO 28 PROGRESSIVELY INSTALL DIAGONAL BRACING WELDED TO PLUNGE COLUMNS AS EXCAVATION PROCEEDS. ALSO PROGRESSIVELY INSTALL TEMPORARY HORIZONTAL PUSH PULL PROPS TO STRUT THE PLUNGE COLUMN FRAME OFF THE RETAINING WALL SECTIONS EACH SIDE TO PROVIDE ADDITIONAL LATERAL SUPPORT TO THE REAR OF THE BUILDING AS THE CONSTRUCTION PROCEEDS UNTIL COMPLETE.
- 4/2. INSTALL CONCRETE CASED STEEL / RC COLUMNS A & B WITH RIGID MOMENT CONNECTIONS TO BEAM G-1A ABOVE TO PROVIDE A STABILITY FRAME THAT WILL PROVIDE PERMANENT SUPPORT THE WALL ABOVE AND LATERAL SUPPORT TO THE REAR OF THE BUILDING OVER.
- 4/3. INSTALL BAYS MARKED 29–31 USING TEMPORARY STEEL TRENCH SUPPORT SHEETS AND PROPS TO RETAIN EARTH – ALL TO BE SHORED OF EXISTING BASEMENT SLAB SECTIONS THAT HAVE ALREADY BEEN CAST.
- 4/4. INSTALL REINFORCED CONCRETE WALLS TO BAYS 29–31

PHASE 5 ENVISAGED SEQUENCE

- 5/1. CONSTRUCT ALL NEW INTERNAL MASONRY LOAD BEARING WALLS AND PIERS WITHIN THE BASEMENT INCORPORATING ALL NECESSARY PADSTONES REQUIRED TO SUPPORT THE GROUND FLOOR BEAMS AND FLOOR ABOVE

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS, SERVICE ENGINEERS AND ENGINEERS' DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE FROM THIS DRAWING WORK ONLY TO FIGURED DIMENSIONS.
3. FOR STANDARD NOTES REFER TO DRAWING 1343-000.
4. BASEMENT UNDERPINNING CONSTRUCTION METHOD TO BE PROPOSED BY THE CONTRACTOR AND APPROVED BY DDA

THIS DRAWING IS PRELIMINARY FOR PLANNING PURPOSES ONLY TO ILLUSTRATE THE ENVISAGED SEQUENCE OF WORKS IN THE PERMANENT WORKS DESIGN INTENT - ALL IS PRELIMINARY AND INDICATIVE ONLY - THE FINAL SEQUENCE OF WORKS, METHODOLOGY AND TEMPORARY WORKS SCHEME AND DESIGN IS TO BE PRODUCED BY THE CONTRACTOR ONCE TENDER HAS BEEN AWARDED

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| P1 | FOR PLANNING | 03/07/17 | |
| ISSUE | REVISION | DATE | INITIAL |
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| Project 41 HOWITT ROAD | | | |
| Client MR JAMES YOUNGMAN | | | |
| Title NEW BASEMENT ENVISAGED CONSTRUCTION METHODOLOGY & SEQUENCE PHASES 2 TO 5 | | | |
| STRUCTURAL DRAWING | | | |
| Designed RC | Approved | | |
| Drawn MC | Project Engineer/Director | Date | |
| Scale AS SHOWN | North | Drawing No: | Issue |
| Date SEPT 14 | | 1343-CS-02 | P1 |