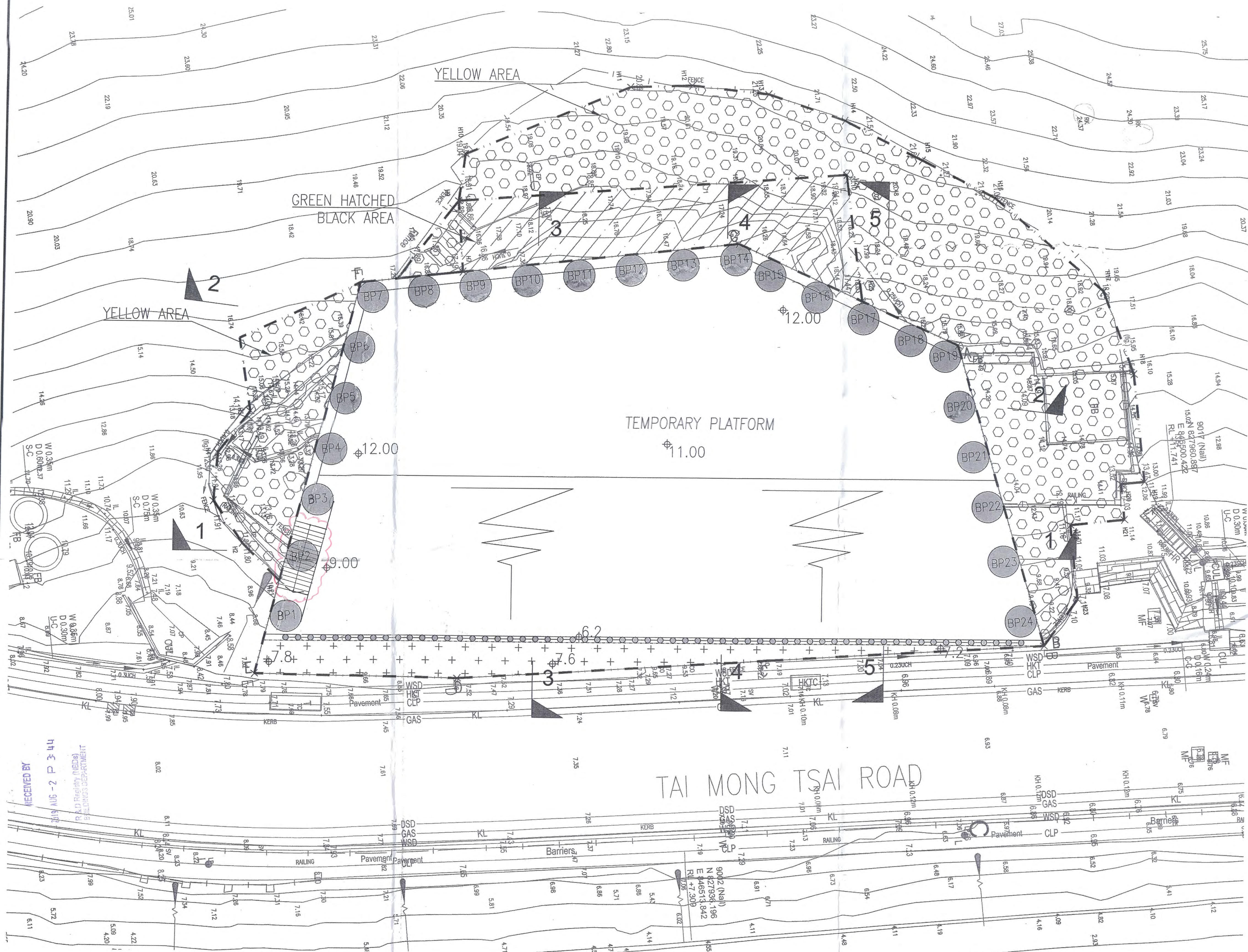




- LEGEND:**
- SITE BOUNDARY
  - 6.90 PROPOSED FORMATION LEVEL
  - 8.95 EXISTING GROUND LEVEL
  - BH3 EXISTING BORED HOLE (BH1~6)
  - NBH3 EXISTING BORED HOLE (NBH1~5)
  - TP1 TRIAL PIT (TP1~4)
  - YELLOW AREA
  - GREEN HATCHED BLACK AREA
  - PROPOSED 27° SLOPE
  - BP1 PROPOSED BORED PILE WALL
  - BP1-BP24

## PHASE 2 ELS STAGE 2.1~2.3

### NOTES:

1. FOR CONSTRUCTION SEQUENCE, REFER TO DWG NO. J1166/ELS-02.
2. TEMPORARY PLANKINGS BETWEEN BORED PILE WALL AND PIPE PILE WALL NOT SHOWN FOR CLARITY

Note: This plan has been processed on a controlled check basis under the centralized processing system as promulgated in PNAP ADM-19. The duties of the authorized person, registered structural engineer and/or registered geotechnical engineer concerned as specified under section 4(3)(a) and the provision of section 14(2)(c) of the Buildings Ordinance are of particular relevance in this regard.

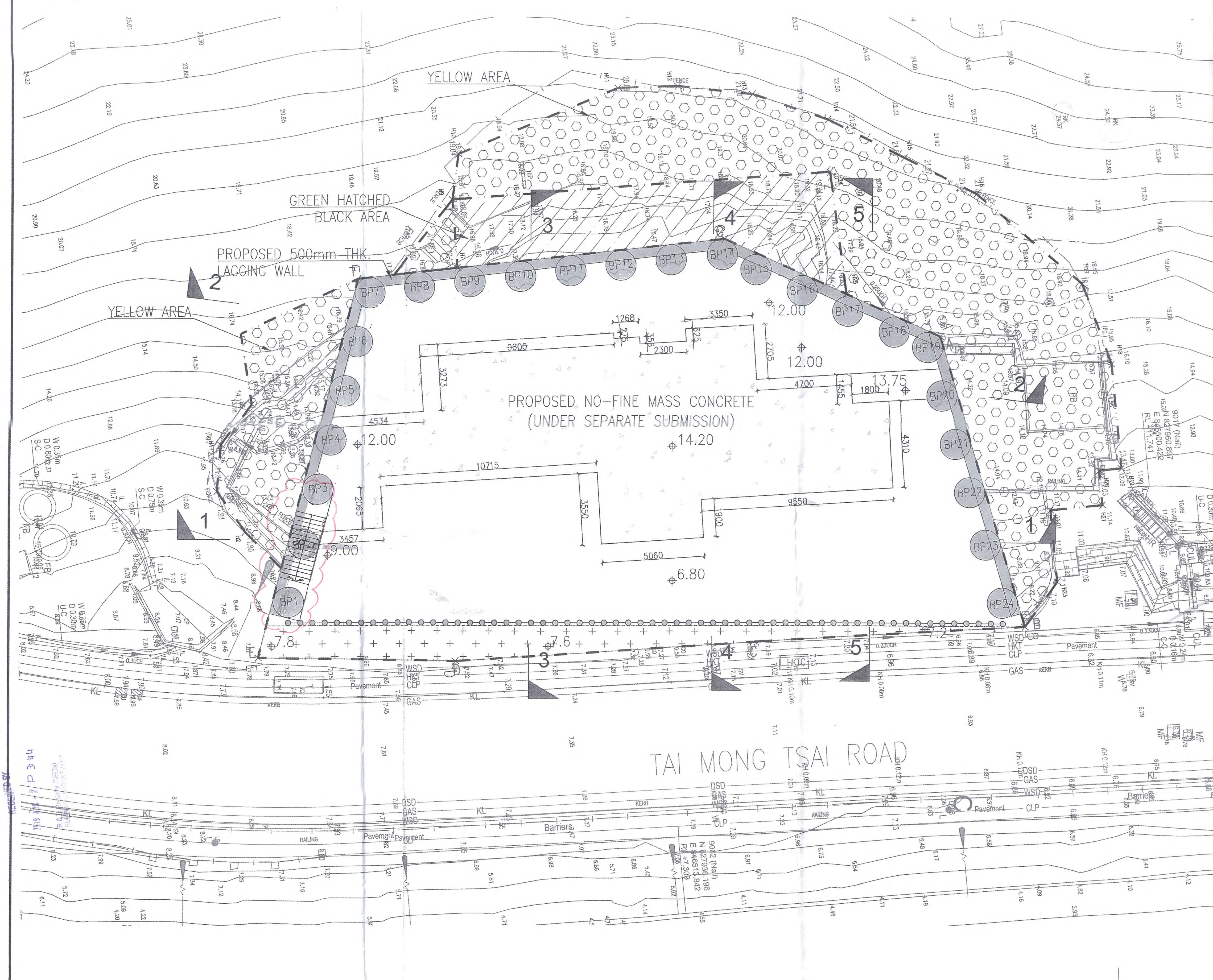
**Plan Approved**  
**LEUNG Chi-keung**  
 Senior Building Surveyor  
 for BUILDING AUTHORITY  
 30 AUG 2018

The works shown on these plans are Type II works (site formation) in respect of which consent is applied for the purpose of Part 33 of the Building (Administration) Regulations.

**L. D. LO MAN CHIU, RAYMOND**  
 REGISTERED STRUCTURAL ENGINEER  
 REG. NO. 10089

**L. D. LO MAN CHIU, RAYMOND**  
 REGISTERED GEOTECHNICAL ENGINEER  
 REG. NO. 4889

|                                                                                                                                                                               |                   |             |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------------|-----------------|
| B                                                                                                                                                                             |                   | AUG 2019    | Minor Amendment |
| A                                                                                                                                                                             | DEC 2018          |             | Minor Amendment |
| Rev.                                                                                                                                                                          | Date              | Description |                 |
| Authorised person/Registered Structural Engineer/Registered Geotechnical Engineer                                                                                             |                   |             |                 |
| <div><div><div><div></div><div></div><div></div><div></div></div><div>LEADTOPS RAYMOND LTD.</div><div>INTERGRATED DESIGN AND PROJECT MANAGEMENT SPECIALISTS</div></div></div> |                   |             |                 |
| Rm88/F HOP LUNG BUILDING/NO.1 MONG LUNG STREET,<br>SHAUKEWAN,HONGKONG                                                                                                         |                   |             |                 |
| Fax: +852 3007 0787 Tel: +852 2639 0336                                                                                                                                       |                   |             |                 |
| Project                                                                                                                                                                       |                   |             |                 |
| PROPOSED RESIDENTIAL DEVELOPMENT<br>ON LOT 716 IN D.D. 216<br>(TO BE KNOWN AS LOT 859 IN D.D. 216)<br>NO. 101 TAI MONG TSAI ROAD, SAI KUNG, N.T.                              |                   |             |                 |
| Drawing Title :                                                                                                                                                               |                   |             |                 |
| ELS WORKS<br>PHASE 2 ELS STAGE 2                                                                                                                                              |                   |             |                 |
| Drawn:                                                                                                                                                                        | Scale: 1:100 (A1) |             |                 |
| Date:                                                                                                                                                                         | Checked:          |             |                 |
| Job Ref.                                                                                                                                                                      | Drawing No.       |             | Rev.            |
| J1166                                                                                                                                                                         | J1166/ELS-06      |             | B               |



- LEGEND:
- SITE BOUNDARY
  - ⊕ 5.90 PROPOSED FORMATION LEVEL
  - ⊕ 6.95 EXISTING GROUND LEVEL
  - ⊕ BH3 EXISTING BORED HOLE (BH1~6)
  - ⊕ NBH3 EXISTING BORED HOLE (NBH1~5)
  - ⊕ TP1 TRIAL PIT (TP1~4)
  - ⊕ YELLOW AREA
  - ⊕ GREEN HATCHED BLACK AREA
  - ⊕ PROPOSED 27° SLOPE
  - ⊕ BP1 PROPOSED BORED PILE WALL
  - BP1~BP24

*[Signature]*  
 LEUNG MAN CHIU, RAYMOND  
 AUTHORIZED PERSON  
 AP/13/48/89

*[Signature]*  
 LEUNG MAN CHIU, RAYMOND  
 REGISTERED GEOTECHNICAL ENGINEER  
 REG. NO. 48/89

*[Signature]*  
 LEUNG MAN CHIU, RAYMOND  
 REGISTERED GEOTECHNICAL ENGINEER  
 REG. NO. 48/89

Note: This plan has been processed on a detailed check basis under the controlled processing system as promulgated in FIAP ADM-19. The duties of the authorized person, registered structural engineer and/or registered geotechnical engineer concerned as specified under section 4(3)(b) and the provision of section 14(2)(c) of the Buildings Ordinance are of particular relevance in this regard.

Plan Approved  
 LEUNG Chi-keung  
 Senior Building Surveyor  
 for BUILDING AUTHORITY  
 30 AUG 2019

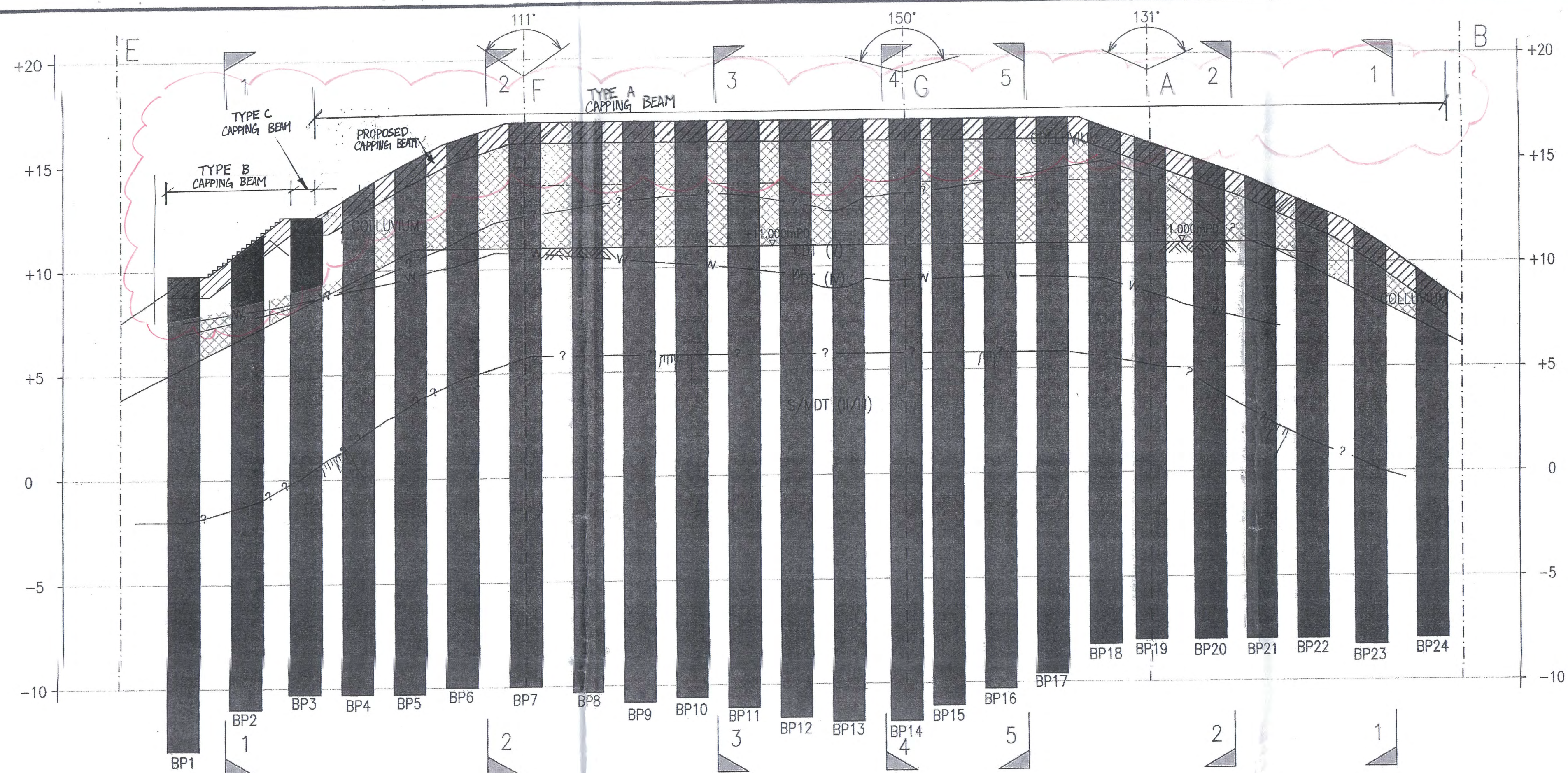
The works shown on these plans are Type II works (cf. Form 1) in respect of which consent is applied for the purpose of Fast Track consent application under regulation 33 of the Building (Administration) Regulations.

## PHASE 2 ELS STAGE 4 (FINAL STAGE)

### NOTES:

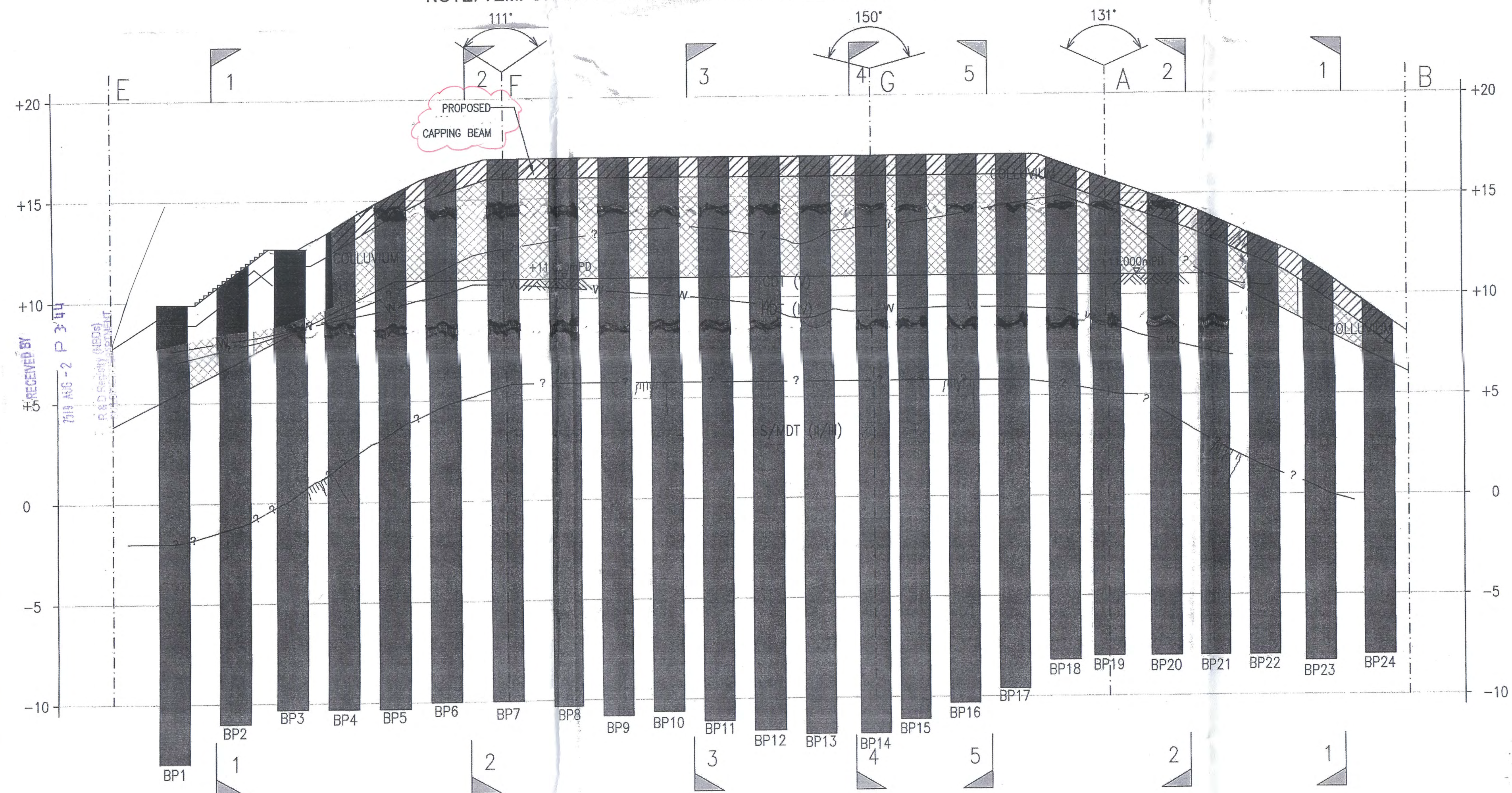
- FOR CONSTRUCTION SEQUENCE, REFER TO DWG NO. J1166/ELS-02.

| Rev.                                                                                                                                                                                                                                                                                | Date                     | Description     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------|
| B                                                                                                                                                                                                                                                                                   | AUG 2019                 | Minor Amendment |
| A                                                                                                                                                                                                                                                                                   | DEC 2018                 | Minor Amendment |
| Rev.                                                                                                                                                                                                                                                                                | Date                     | Description     |
| AUTHORIZED PERSON/REGISTERED STRUCTURAL ENGINEER/REGISTERED GEOTECHNICAL ENGINEER<br>LEADTOPS RAYMOND LTD.<br>INTEGRATED DESIGN AND PROJECT MANAGEMENT SPECIALISTS<br>RmB/8/F HSP LUNG BUILDING/NO.1 MONG LUNG STREET, SHAUKWAN HONGKONG<br>Fax: +852 3007 0787 Tel: +852 2639 0358 |                          |                 |
| Project:<br>PROPOSED RESIDENTIAL DEVELOPMENT ON LOT 716 IN D.D. 216 (TO BE KNOWN AS LOT 859 IN D.D. 216) NO. 101 TAI MONG TSAI ROAD, SHAI KUNG, N.T.                                                                                                                                |                          |                 |
| Drawing Title:<br>ELS WORKS<br>PHASE 2 ELS STAGE 4 (FINAL STAGE)                                                                                                                                                                                                                    |                          |                 |
| Drawn:                                                                                                                                                                                                                                                                              | Scale: 1:100 (A1)        |                 |
| Date: AUG 2019                                                                                                                                                                                                                                                                      | Checked:                 |                 |
| Job Ref. J1166                                                                                                                                                                                                                                                                      | Drawing No. J1166/ELS-08 | Rev. B          |



### PHASE 2 ELS STAGE 2.1 (ELEVATION)

NOTE: TEMPORARY PLANKING FOR BORED PILE WALL NOT SHOWN FOR CLARITY.



### PHASE 2 ELS STAGE 2.2~2.3 (ELEVATION)

*[Signature]*  
E.D. LO MAN CHIU, RAYMOND  
AUTHORIZED PERSON  
AP(E) 48/89

*[Signature]*  
E.D. LO MAN CHIU, RAYMOND  
REGISTERED STRUCTURAL ENGINEER  
RSE 48/89

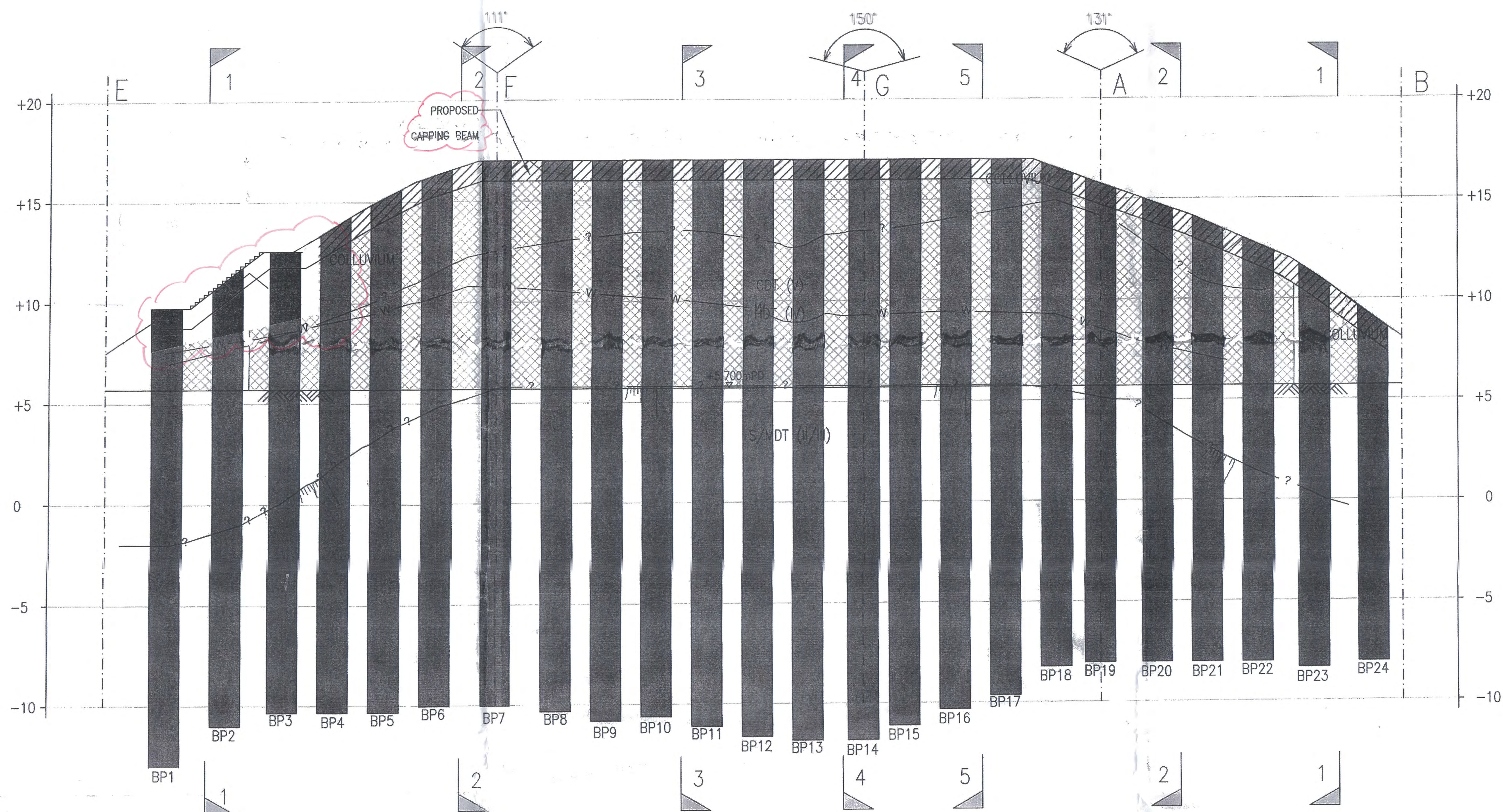
*[Signature]*  
E.D. LO MAN CHIU, RAYMOND  
REGISTERED GEOTECHNICAL ENGINEER  
RSE 48/89

Note: This plan has been processed on a computerized check-back under the centralized processing system as promulgated in PNAP ADM-19. The duties of the authorized person, registered structural engineer and/or registered geotechnical engineer concerned as specified under section 4(3)(b) and the provision of section 14(2)(c) of the Buildings Ordinance are of particular relevance in this regard.

Plan Approved  
LEUNG Chi-keung  
Senior Building Surveyor  
for BUILDING AUTHORITY  
30 AUG 2019

The works shown on these plans are Type II works (site formation) in respect of which consent is applied for the purpose of Fast Track consent application under regulation 53 of the Building (Administration) Regulations.

| Rev.                                                                                                                                                                                                | Date              | Description           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------|
| B                                                                                                                                                                                                   | AUG 2019          | Minor Amendment       |
| A                                                                                                                                                                                                   | DEC 2018          | Minor Amendment       |
| Rev.                                                                                                                                                                                                | Date              | Description           |
| Authorized person/Registered Structural Engineer/Registered Geotechnical Engineer                                                                                                                   |                   |                       |
| <div> <div> <div></div> <div></div> <div></div> </div> <div> <div></div> <div></div> <div></div> </div> </div> <b>LEADTOPS RAYMOND LTD.</b><br>INTEGRATED DESIGN AND PROJECT MANAGEMENT SPECIALISTS |                   |                       |
| Rm 22/F HOP LUNG BUILDING/NO.1 MONG LUNG STREET, SHAUKEWAN/HONGKONG<br>Fax: +852 3007 0787 Tel: +852 2839 0336                                                                                      |                   |                       |
| <b>Project</b><br>PROPOSED RESIDENTIAL DEVELOPMENT ON LOT 716 IN D.D. 218 (TO BE KNOWN AS LOT 859 IN D.D. 216) NO. 101 TAI MONG TSI ROAD, SAI KUNG, N.T.                                            |                   |                       |
| <b>Drawing Title:</b><br>ELS WORKS ELEVATION (3/4)                                                                                                                                                  |                   |                       |
| Drawn:                                                                                                                                                                                              | Scale: 1:150 (A1) |                       |
| Date:                                                                                                                                                                                               | AUG 2019          |                       |
| Job Ref.                                                                                                                                                                                            | J1166             | Checked: J1166/ELS-11 |
|                                                                                                                                                                                                     |                   | Rev. 8                |



## PHASE 2 ELS STAGE 3.1 (ELEVATION)

NOTE: ELS STAGE 3.2~3.3 AND ELS FINAL STAGE SIMILAR.

### LEGEND:

- SITE BOUNDARY
- ? - EXISTING SOIL PROFILE
- W - DESIGN WATER TABLE
- ? - TENTATIVE ROCKHEAD
- ▨ R.C. LAGGING WALL
- ▨ NO-FINE MASS CONCRETE FILL
- +14.25 PROPOSED FORMATION LEVEL

RECEIVED BY  
2019 AUG -2 P 3-44  
R&D Policy (NID)  
BUILDING DEPARTMENT

Note: This plan has been processed on a  
certified check basis under the centralized  
processing system as promulgated in FNAP  
ADM-19. The duties of the authorized person,  
registered structural engineer and/or registered  
geotechnical engineer concerned as specified  
under section 4(3)(b) and the provision of  
section 14(2)(c) of the Buildings Ordinance are  
of particular relevance in this regard.

Plan Approved  
LEUNG Chi-keung  
Senior Building Surveyor  
for BUILDING AUTHORITY.  
30 AUG 2019

The works shown on these plans are Type II  
works (site formation) in respect of  
which consent is applied for the purpose of Fast  
Track consent application under regulation 33 of  
the Building (Administration) Regulations.

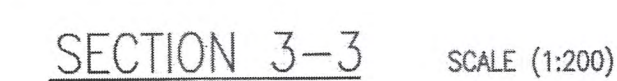
*[Signature]*  
L. D. LO MAN CHU, RAYMOND  
AUTHORIZED PERSON  
AP(E) 48/89

*[Signature]*  
L. D. LO MAN CHU, RAYMOND  
REGISTERED STRUCTURAL ENGINEER  
DPA No. C-18/2018/0001/0001  
RSE 48/89

*[Signature]*  
L. D. LO MAN CHU, RAYMOND  
REGISTERED GEOTECHNICAL ENGINEER  
RGE 48/89

| Rev.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Date                     | Description     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------|
| B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | AUG 2019                 | Minor Amendment |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | DEC 2018                 | Minor Amendment |
| <p>Authorized person/Registered Structural Engineer/Registered Geotechnical Engineer</p> <p>LEADTOPS RAYMOND LTD.<br/>INTEGRATED DESIGN AND PROJECT MANAGEMENT SPECIALISTS</p> <p>RmE/S/F HOP LUNG BUILDING/NO.1 MONG LUNG STREET,<br/>SHAUKWAN/HONGKONG<br/>Fax: +852 3007 0787 Tel: +852 2639 0336</p> <p>Project<br/>PROPOSED RESIDENTIAL DEVELOPMENT<br/>ON LOT 716 IN D.D. 216<br/>(TO BE KNOWN AS LOT 859 IN D.D. 216)<br/>NO. 101 TAI MONG TSAI ROAD, SAI KUNG, N.T.</p> <p>Drawing Title :<br/>ELS WORKS ELEVATION (4/4)</p> |                          |                 |
| Drawn :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Scale :                  | 1:150 (A1)      |
| Date : AUG 2019                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Checked :                |                 |
| Job Ref. J1166                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Drawing No. J1166/ELS-12 | Rev. 4 B        |

|                                                                                     |                            |
|-------------------------------------------------------------------------------------|----------------------------|
|   | SITE BOUNDARY              |
|  | EXISTING SOIL PROFILE      |
|  | DESIGN WATER TABLE         |
|  | TENTATIVE ROCKHEAD         |
|  | R.C. LAGGING WALL          |
|  | NO-FINE MASS CONCRETE FILL |
|  | PROPOSED FORMATION LEVEL   |
|  | SOIL FILL                  |

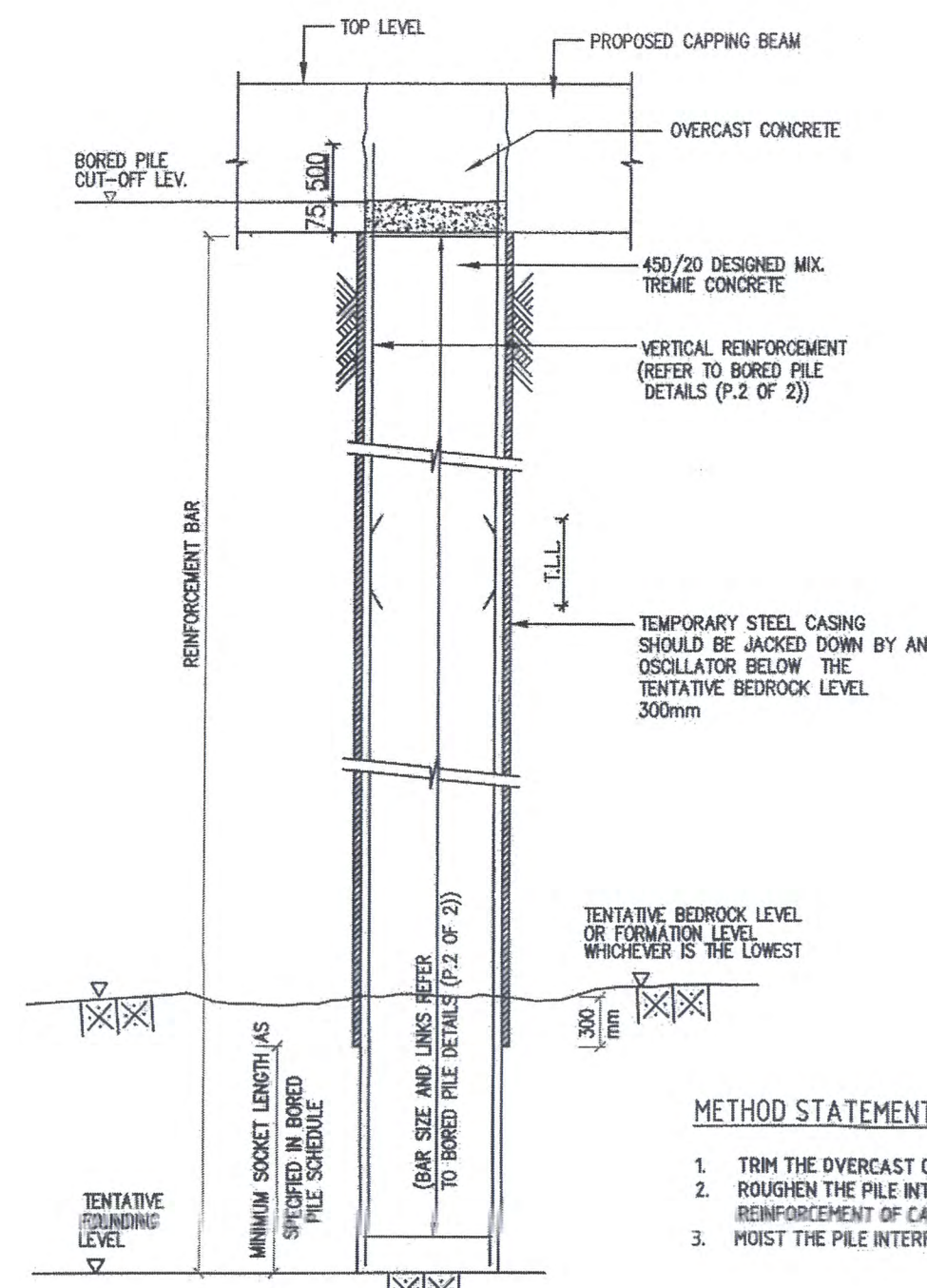


Note: This plan has been processed on a curtailed check basis under the centralized processing system as promulgated in PNAP ADM-19. The duties of the authorized person, registered structural engineer and/or registered geotechnical engineer concerned as specified under section 4(3)(b) and the provision of section 14(2)(c) of the Buildings Ordinance are of particular relevance in this regard.

|                                                                                                                                                                               |                         |                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------|
| C                                                                                                                                                                             | <u>AUG 2019</u>         | Minor Amendment |
| B                                                                                                                                                                             | DEC 2018                | Minor Amendment |
| A                                                                                                                                                                             | FEB 2018                | Minor Amendment |
| Rev.                                                                                                                                                                          | Date                    | Description     |
| Authorized Person/Registered Structural Engineer/Registered Geotechnical Engineer                                                                                             |                         |                 |
|  <b>LEADTOPS. RAYMOND LTD.</b><br>INTEGRATED DESIGNER AND PROJECT MANAGEMENT SPECIALISTS |                         |                 |
| Rm8&F HOP LUNG BUILDING/NO.1 MONG LUNG STREET,<br>SHAUKWAN/HONGKONG<br>Fax: +852 3007 0787 Tel: +852 2639 0336                                                                |                         |                 |
| Project                                                                                                                                                                       |                         |                 |
| PROPOSED RESIDENTIAL DEVELOPMENT<br>ON LOT 716 IN D.D. 216<br>(TO BE KNOWN AS LOT 859 IN D.D. 216)<br>NO. 101 TAI MONG TSAI ROAD, SAI KUNG, N.T.                              |                         |                 |
| Drawing Title :                                                                                                                                                               |                         |                 |
| SITE FORMATION<br>SECTION 1-1, SECTION 2-2 & SECTION 3-3                                                                                                                      |                         |                 |
| Drawn :                                                                                                                                                                       | Scale : AS SHOWN (A1)   |                 |
| Date : <u>AUG 2019</u>                                                                                                                                                        | Checked :               |                 |
| Job Ref. J1166                                                                                                                                                                | Drawing No. J1166/SF-03 | Rev. <u>-G-</u> |

## GENERAL NOTES FOR BORED-PILE WALL

- ALL WORKS SHALL COMPLY WITH BUILDING (CONSTRUCTION) REGULATIONS (1990).
- ALL R.C. WORKS SHALL COMPLY WITH THE CODE OF PRACTICE OF STRUCTURAL USE OF CONCRETE 2013.
- ALL STEEL WORKS SHALL COMPLY WITH THE CODE OF PRACTICE OF STRUCTURAL USE OF STEEL 2011.
- ALL GEOTECHNICAL WORKS SHALL COMPLY WITH THE GEOGUIDE 1 (SECOND EDITION): GUIDE TO RETAINING WALL DESIGN.
- ALL BORED-PILE WALL WITH ROCK SOCKET UNLESS OTHERWISE SPECIFIED SHALL BE SUNK INTO SLIGHTLY TO MODERATELY DECOMPOSED MODERATELY STRONG ROCK OF MATERIAL WEATHERING GRADE III OR BETTER, WITH A TOTAL CORE RECOVERY OF MORE THAN 85% OF THE GRADE AND MINIMUM UNIAXIAL COMPRESSIVE STRENGTH OF ROCK MATERIAL (UCS) NOT LESS THAN 25MPa (EQUIVALENT POINT LOAD INDEX STRENGTH PL150 NOT LESS THAN 1MPa).
- NO GROUND WATER DRAW DOWN SHOULD BE PERMITTED DURING THE PILING WORKS.
- THE ESTIMATED FOUNDING LEVELS (OR PILE TOP LEVEL) OF THE BORED-PILE WALL SHOWN ON THE DRAWING ARE TENTATIVE ONLY ACTUAL FOUNDING LEVELS SHALL BE DETERMINED ON SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY ACTIONS TO DIVERT OR PROTECT ANY SERVICES OR UTILITIES AFFECTED BY THE WORKS.
- PRE-DRILLING SHALL BE CARRIED OUT AS PER RELEVANT DRAWING TO CONFIRM THE ROCK HEAD LEVEL. THE RECORDS SHALL BE SUBMITTED PRIOR TO SUBMISSION OF FORM B414.
- MONITORING WORKS SHALL FOLLOW DRAWING NO. J1166/ELS-24.
- DISTANCE BETWEEN TWO PILES DURING CONSTRUCTION CONCURRENTLY AT THE SAME TIME SHOULD NOT BE LESS THAN 5m.
- THE TOLERANCE OF THE BORED-PILE WALL IS 75mm OFFSET AT ANY DIRECTION AND 1° VERTICALITY.
- TEMPORARY STEEL CASING SHALL BE GRADE S275 WITH MINIMUM YIELD STRENGTH OF 275 MPa & COMPLY WITH BS EN 10025 : 2004.
- CONCRETE MIX. FOR CAPPING BEAM SHALL BE DESIGN MIX GRADE 45D/20 TO CS1 : 2010 (EXCEPT SECTION 7.1).
- ALL STEEL BAR TO BE GRADE 500 HIGH YIELD DEFORMED BAR WITH MINIMUM YIELD STRENGTH OF 500 MPa & COMPLY WITH CS2:2012.
- CONCRETE STRENGTH SHALL BE REDUCED TO 0.8 fcu UNDER WATER
- RETAINING WALL INVOLVES BORED PILE WALL.



TYPICAL ELEVATION OF BORED PILE WALL (N.T.S.)

### METHOD STATEMENT FOR CONSTRUCTION OF CAPPING BEAM

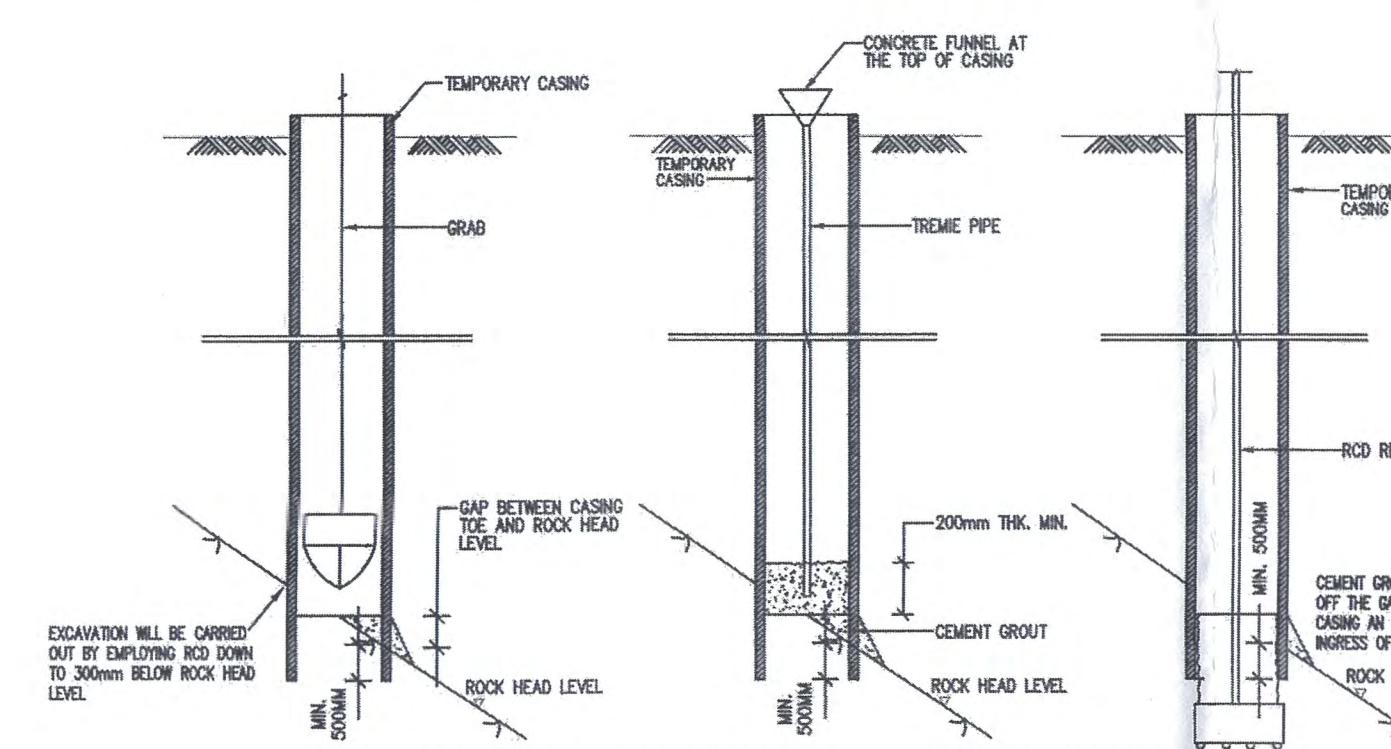
- TRIM THE OVERCAST CONCRETE OF BORED PILE.
- ROUGHEN THE PILE INTERFACE AT CUT-OFF LEVEL AND BRUSH THE EXPOSED REINFORCEMENT OF CAPPING BEAMS.
- MOIST THE PILE INTERFACE BEFORE CASTING CONCRETE OF CAPPING BEAMS.

## BORED PILE WALL SCHEDULE

| BORED PILE MARK | PILE DIAMETER (m) | TOP LEVEL (mPD) | CUT-OFF LEVEL OF BORED PILE (mPD) | FORMATION LEVEL (mPD) | TENTATIVE ROCK HEAD LEVEL (mPD) | TENTATIVE FOUNDING LEVEL (mPD) | RETAINED HEIGHT (m) | MINIMUM SOIL EMBEDMENT DEPTH, ds (m) | MINIMUM ROCK SOCKET LENGTH REQUIRED (m) | PROVIDED (m) | TENTATIVE PILE LENGTH (m) |
|-----------------|-------------------|-----------------|-----------------------------------|-----------------------|---------------------------------|--------------------------------|---------------------|--------------------------------------|-----------------------------------------|--------------|---------------------------|
| BP1             | 1.5               | 9.76            | 8.835                             | 5.7                   | -3                              | -13                            | 4.06                | 8.5                                  | 8.5                                     | 10           | 22.76                     |
| BP2             | 1.5               | 11.55           | 10.625                            | 5.7                   | -1.6                            | -11                            | 5.85                | 7.1                                  | 7                                       | 9.4          | 22.55                     |
| BP3             | 1.5               | 12.78           | 11.855                            | 5.7                   | -0.5                            | -10.3                          | 7.08                | 6                                    | 7                                       | 9.8          | 23.08                     |
| BP4             | 1.5               | 14.28           | 13.355                            | 5.7                   | 1                               | -10.3                          | 8.58                | 4.5                                  | 8.5                                     | 11.3         | 24.58                     |
| BP5             | 1.5               | 15.65           | 14.725                            | 5.7                   | 2.5                             | -10.3                          | 9.95                | 3                                    | 10                                      | 12.8         | 25.95                     |
| BP6             | 1.5               | 16.57           | 15.645                            | 5.7                   | 4.3                             | -10                            | 10.87               | 1.2                                  | 11.5                                    | 14.3         | 26.57                     |
| BP7             | 1.5               | 17              | 16.075                            | 5.7                   | 5.3                             | -10                            | 11.3                | 0.2                                  | 13                                      | 15.3         | 27                        |
| BP8             | 1.5               | 17              | 16.075                            | 5.7                   | 6                               | -10.3                          | 11.3                | 0                                    | 13                                      | 16           | 27.3                      |
| BP9             | 1.5               | 17              | 16.075                            | 5.7                   | 6.5                             | -10.8                          | 11.3                | 0                                    | 13                                      | 16.5         | 27.8                      |
| BP10            | 1.5               | 17              | 16.075                            | 5.7                   | 7.3                             | -10.6                          | 11.3                | 0                                    | 13                                      | 16.3         | 27.6                      |
| BP11            | 1.5               | 17              | 16.075                            | 5.7                   | 7.8                             | -11.1                          | 11.3                | 0                                    | 13                                      | 16.8         | 28.1                      |
| BP12            | 1.5               | 17              | 16.075                            | 5.7                   | 8.3                             | -11.6                          | 11.3                | 0                                    | 13                                      | 17.3         | 28.6                      |
| BP13            | 1.5               | 17              | 16.075                            | 5.7                   | 8.5                             | -11.8                          | 11.3                | 0                                    | 13.5                                    | 17.5         | 28.8                      |
| BP14            | 1.5               | 17              | 16.075                            | 5.7                   | 8.5                             | -11.8                          | 11.3                | 0                                    | 12.5                                    | 17.3         | 28.8                      |
| BP15            | 1.5               | 17              | 16.075                            | 5.7                   | 7.8                             | -11.1                          | 11.3                | 0                                    | 12                                      | 16.8         | 28.1                      |
| BP16            | 1.5               | 17              | 16.075                            | 5.7                   | 7                               | -10.3                          | 11.3                | 0                                    | 13                                      | 16           | 27.3                      |
| BP17            | 1.5               | 17              | 16.075                            | 5.7                   | 6.3                             | -9.6                           | 11.3                | 0                                    | 12.5                                    | 15.3         | 26.6                      |
| BP18            | 1.5               | 16.83           | 15.905                            | 5.7                   | 5.9                             | -8.2                           | 11.13               | 0                                    | 11                                      | 13.9         | 25.03                     |
| BP19            | 1.5               | 16.03           | 15.105                            | 5.7                   | 5.7                             | -8                             | 10.33               | 0                                    | 11                                      | 13.7         | 24.03                     |
| BP20            | 1.5               | 15.02           | 14.095                            | 5.7                   | 5.3                             | -8                             | 9.32                | 0.2                                  | 9                                       | 13.3         | 23.02                     |
| BP21            | 1.5               | 14.14           | 13.215                            | 5.7                   | 4                               | -8                             | 8.44                | 1.5                                  | 8.5                                     | 12           | 22.14                     |
| BP22            | 1.5               | 13.04           | 12.115                            | 5.7                   | 2.5                             | -8                             | 7.34                | 3                                    | 7.5                                     | 10.5         | 21.04                     |
| BP23            | 1.5               | 11.9            | 10.975                            | 5.7                   | 1.5                             | -8.3                           | 6.2                 | 4                                    | 6.5                                     | 9.8          | 20.2                      |
| BP24            | 1.5               | 9.31            | 8.385                             | 5.7                   | 0.3                             | -8                             | 3.61                | 5.2                                  | 5.5                                     | 8.3          | 17.31                     |

### NOTES FOR PROBE TEST BY INTERFACE CORING (FOR BP23, BP24 ONLY)

- CONCRETE/ROCK INTERFACE CORE DRILLING:
  - CORE DRILLING SHOULD BE CARRIED OUT AT THE CONCRETE/ROCK INTERFACE FOR EACH OF THE BORED PILES.
  - A PIPE OF NOT LESS THAN 150mm DIAMETER SHOULD BE LEFT IN AT ABOUT 1m ABOVE THE INTERFACE, AND THE CORE DRILLING SHOULD BE CARRY OUT DOWN TO AT LEAST 1m BELOW THE INTERFACE.
  - RECORDS OF INTERFACE CORING SHOULD BE SUBMITTED TO BD UPON COMPLETION OF BORED PILE WORKS.



METHOD STATEMENT FOR PREVENT THE INGRESS OF WATER AND SOIL INTO THE BORED PILE DURING PILING CONSTRUCTION (N.T.S.)

### NOTES FOR PROBE TEST BY FULL CORE-DRILLING (FOR BP23, BP24 ONLY)

- FOR PROBE TESTS CARRIED OUT BY FULL CORE-DRILLING:
  - THE CORE-DRILLING SHOULD BE TAKEN THROUGH THE FULL DEPTH OF THE PILE AND CARRIED DOWN TO A DISTANCE OF AT LEAST HALF A DIAMETER OF THE BASE, OR 300mm, WHICHEVER IS LARGER, INTO THE ROCK UPON WHICH THE PILE IS FORMED.
  - THE COMPLETED CORE TAKEN SHOULD BE PROPERLY MARKED AND APPROPRIATE IN ORDER FOR INSPECTION.
  - ANY ROCK CORE OBTAINED SHOULD BE VISUALLY EXAMINED TO CONFORM WITH THE REQUIRED ROCK MATERIAL SPECIFIED IN THE DESIGN.
  - THE CORES SHALL ALSO BE EXAMINED TO CONFIRM THE ADEQUACY OF THE INTERFACE BETWEEN THE CONCRETE AND ROCK.

## METHOD STATEMENT FOR CONSTRUCTION OF BORED PILE WALL

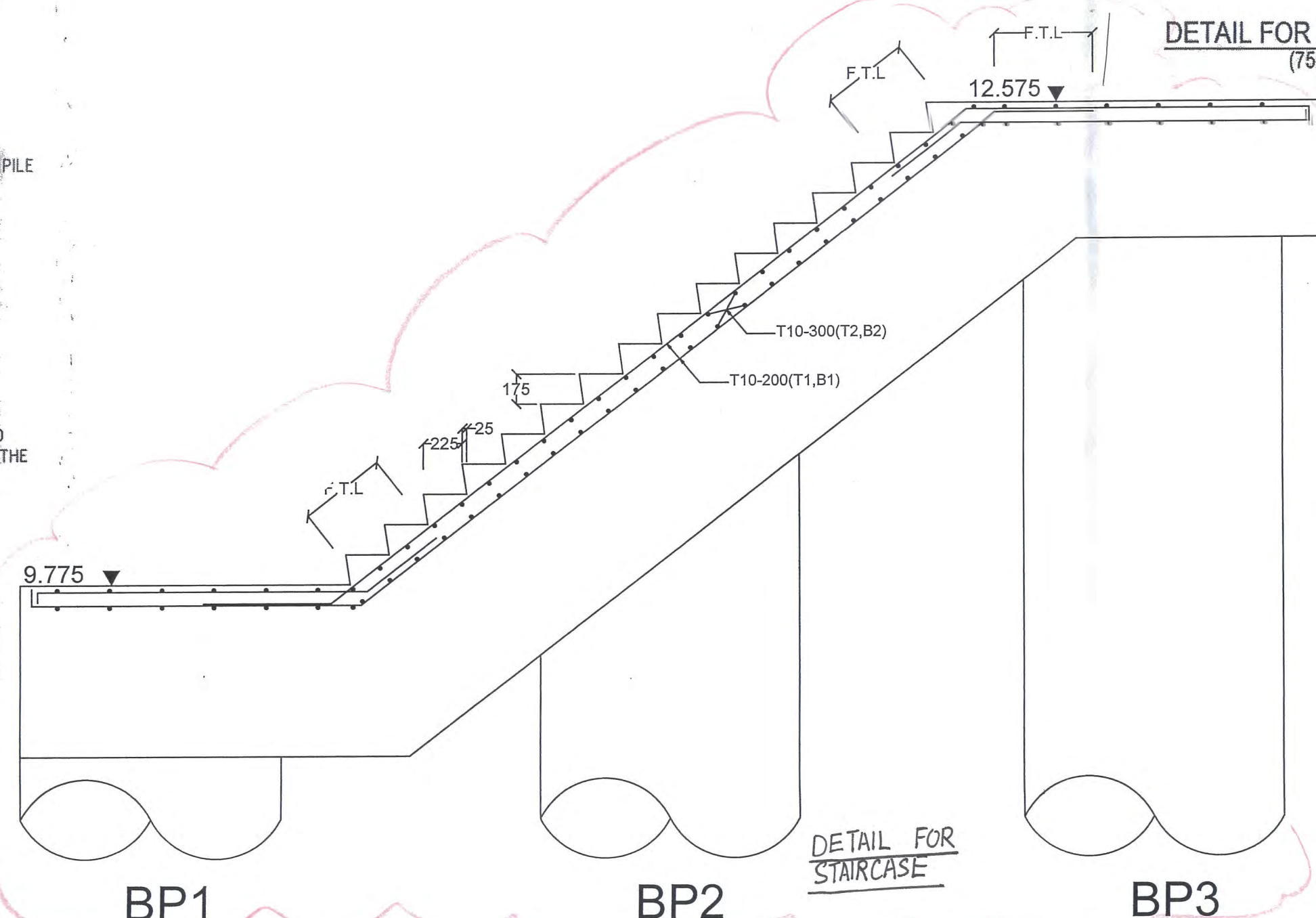
- SURVEY AND ESTABLISH THE CENTERLINE OF THE PILES, SET UP FOR DRILLING AND TO THE APPROVAL OF THE ENGINEER PRIOR TO THE START OF WORK.
- THE TEMPORARY STEEL CASING WILL BE INSTALLED IN SECTIONS BY USING HYDRAULIC OSCILLATOR.
- THE PILE SHAFT EXCAVATION WILL BE CARRIED OUT BY REVERSE CIRCULATION DRILL (RCD) WHEN BOULDERS ARE ENCOUNTERED EXTREME CARE SHALL BE EXERCISE TO AVOID DAMAGE TO ADJACENT LAND AND BUILDING.
- DURING CONSTRUCTION OF BORED PILE WALL, ENSURE THAT AT LEAST 1.5m DEPTH OF STEEL CASING BELOW THE EXCAVATION LEVEL BY OSCILLATOR AND AT LEAST 20m HEIGHT OF STEEL CASING EXPOSED CASING ABOVE GROUND LEVEL.
- COMMENCE EXCAVATION INSIDE THE CASING BY REVERS CIRCULATION DRILLING MACHINE.
- ALL PILES UNLESS OTHERWISE SPECIFIED SHALL BE SOCKETTED INTO SLIGHTLY TO MODERATELY DECOMPOSED MODERATELY STRONG ROCK OF MATERIAL WEATHERING GRADE III OR BETTER, WITH A TOTAL CORE RECOVER NOT LESS THAN 85% OF THE GRADE THE SLIGHTLY TO MODERATELY DECOMPOSED MODERATELY STRONG ROCK SHALL HAVE A MINIMUM UNIAXIAL COMPRESSIVE STRENGTH OF ROCK MATERIAL (UCS) NOT LESS THAN 25MPa (EQUIVALENT POINT LOAD INDEX STRENGTH PL150 NOT LESS THAN 1MPa) AS STATED IN CODE OF PRACTICE FOUNDATIONS.
- WHEN THE BEDROCK IS REACHED. THE TEMPORARY CASING WILL BE FURTHER PENETRATE INTO THE BEDROCK DOWN TO 500mm BELOW, DRILL A 1500mm INTERNAL MIN. DIAMETER HOLE FROM ROCKHEAD TO FORM THE SOCKET BY REVERSE CIRCULATION DRILL (RCD).
- VERTICALLY OF THE CASING SHALL BE MONITORED BY MEANS OF SPIRIT LEVEL LESS THAN 1/75 FROM TIME TO TIME.
- STEEL REINFORCEMENT WILL BE PRE-FABRICATION INTO CAGES AND THE STEEL CAGE WILL BE INSTALLED TO THE BOTTOM OF THE ROCK SOCKET AFTERWARDS.
- THE SONIC TUBES TO THE WHOLE LENGTH OF THE REINFORCEMENT AND PLACE REINFORCEMENT INTO THE DRILL HOLE BY CRANE.
- WHEN DRILLING IS COMPLETED, THE PILE BASE SHALL BE THOROUGHLY CLEANED TO GET RID OF LOOSE SOILS BY AIR FLUSHING WITH A POSITIVE HEAD OF WATER INSIDE THE CASING. CLEANING IS CONSIDERED TO BE COMPLETED WITH NO FINE GRAINED DEBRIS IS FOUND FROM WATER SAMPLE COLLECTED FROM THE EXHAUSTED PIPE. CARE SHALL BE TAKEN TO PREVENT EROSION OF EXISTING ROUND. THE ABOVE AIR FLUSHING OPERATION SHOULD BE CARRIED OUT AGAIN BEFORE CONCRETING OF PILE TO ENSURE THE CLEANLINESS OF PILE BASE.
- CONCRETE WITH A MINIMUM CUBE STRENGTH OF 45MPa AT 28 DAYS WILL PLACED BY TREME METHOD.
- CONCRETE SHALL BE PLACED BY TREME METHOD. THE BORED PILE SHALL BE CONCRETED TO AT LEAST TWO METER ABOVE THE CUT-OFF LEVEL TO ALLOW FOR LAITANCE BUILT UP AT THE TOP OF PILE. COMPETING SHALL BE CARRIED OUT IN ONE CONTINUOUS OPERATION UNTIL THE REQUIRED LEVEL IS REACHED.
- DURING CONCRETING OPERATIONS, THE TEMPORARY CASING WILL BE EXTRACTED SIMULTANEOUSLY. A HEAD OF APPROXIMATELY 2 M WILL BE MAINTAINED BETWEEN THE TOP OF THE CONCRETE AND THE BASE OF THE STEEL CASING.
- THE BASE OF THE TREME PIPE SHALL BE AT A MINIMUM DEPTH OF APPROX. 2M BELOW THE SURFACE OF THE CONCRETE.
- THE CONCRETE SHALL EXERCISE EXTREME CARE DURING ANY STAGE OF THE CONCRETE WORKS.
- THE TEMPORARY CASING AND TREME PIPE WILL BE WITHDRAWN UPON COMPLETION. (AFTER CONCRETION WORK TO BORED PILE HAS BEEN COMPLETED. EMPTY BORE BETWEEN TOP OF PILE HEAD TO GROUND LEVEL IS TO BE BACKFILL WITH SUITABLE MATERIAL BEFORE COMPLETELY EXTRACTING THE TEMPORARY STEEL CASING OUT OF THE GROUND.)
- ALL WELDS AND WELDING SHALL COMPLY WITH BS EN 1011, PART 1:2009, PART 2:2001.
- ELECTRODES SHALL COMPLY WITH BS EN 756:2004 AND THE STRENGTH SHALL BE ADAPTED TO GRADE S275.

## NOTES FOR PREDRILLING FOR BORED-PILE WALL

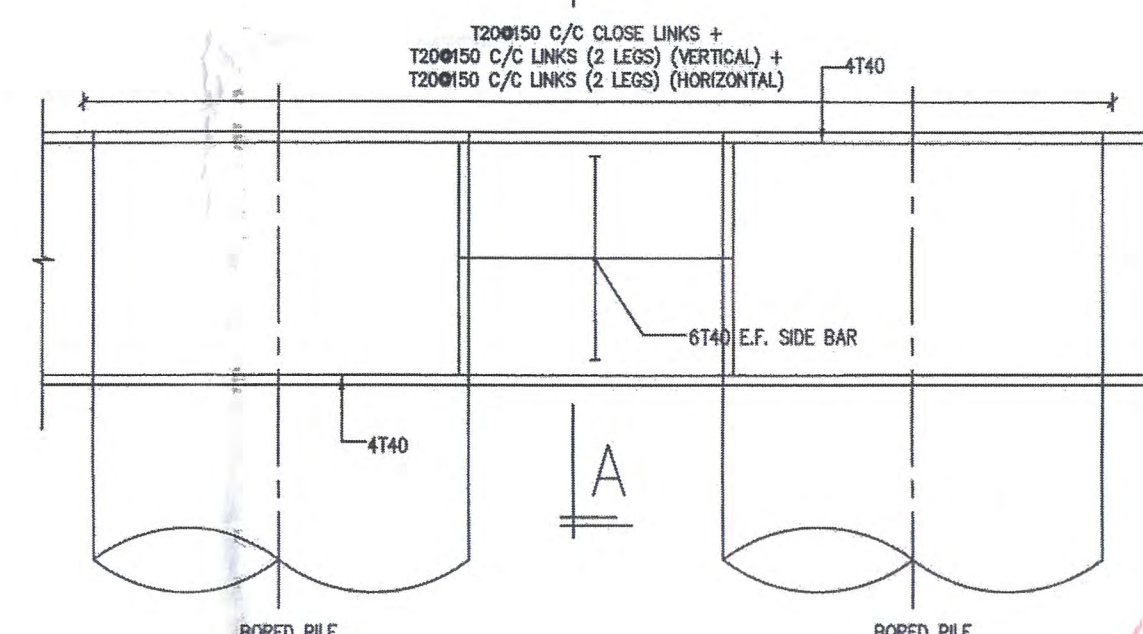
- PRE-DRILLING SHOULD BE CARRIED OUT SUCH THAT THE TIP OF EVERY BORED-PILE WALL SHOULD BE WITHIN 5m DISTANCE FROM A PRE-DRILLING HOLE. THE PRE-DRILLING SHOULD BE SUNK AT LEAST 5m INTO THE CATEGORY OF II(c) ROCK SPECIFIED FOR FOUNDING OR FORMING OF ROCK SOCKET OR THE DESIGNED ROCK SOCKET LENGTH OF THE NEAREST PILE WHICHEVER IS THE DEEPER.
- REQUIREMENT OF PRE-DRILLING SHALL COMPLY WITH CODE OF PRACTICE FOR FOUNDATIONS 2004.

## NOTES FOR OVERCOMING OBSTRUCTION OR FORMING ROCK SOCKET DURING THE CONSTRUCTION OF BORED PILE WALL

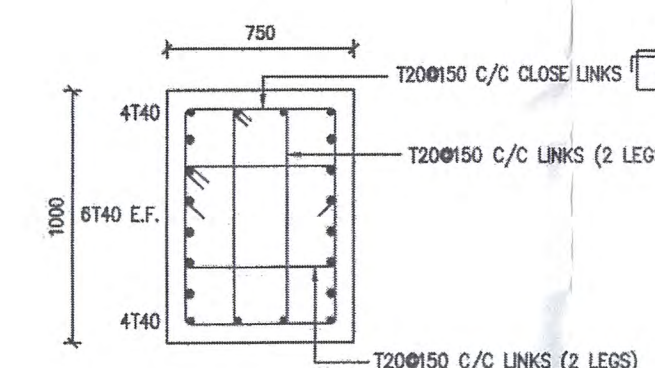
- WHENEVER SMALL OBSTRUCTION IS ENCOUNTERED, IT WILL BE BROKEN THROUGH BY USE RCD METHOD VIBRATION WILL BE CLOSELY MONITORED.



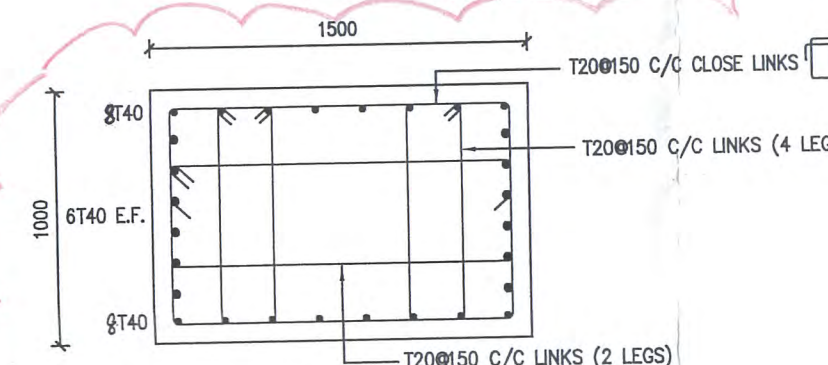
DETAIL FOR STAIRCASE



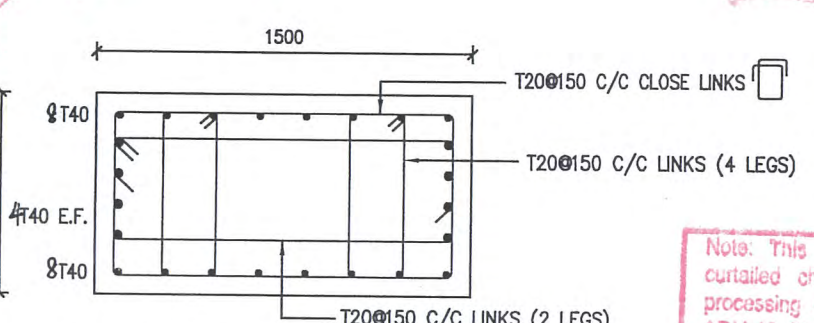
DETAIL FOR CAPPING BEAM (750x1000) (1:30)



SECTION A-A (750x1000) (TYPE A)



SECTION A-A (1500x1000) (TYPE B)



SECTION A-A (1500x795) (TYPE C)

### TABLE FOR CAPPING BEAM

| TYPES   | SIZE        |
|---------|-------------|
| TYPES A | (750x1000)  |
| TYPES B | (1500x1000) |
| TYPES C | (1500x795)  |

Note: This plan has been processed on a computerized system under the centralized processing system as promulgated in PNAS ADM-19. The duties of the authorized person, registered structural engineer and/or registered geotechnical engineer concerned as required under Section 4(3)(b) and the provision of Section 14(2)(c) of the Buildings Ordinance are of particular relevance in this regard.

Plan Approved  
LEUNG Chi-keung  
Senior Building Surveyor  
for BUILDING AUTHORITY  
30 AUG 2019

The works shown on these plans are Type II works (site formation) in respect of which consent is applied for the purpose of Fast Track consent application under regulation 33 of the Building (Administration) Regulations.

LEUNG CHI-KUANG  
REGISTERED GEOTECHNICAL ENGINEER  
RGE 4099

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| C                                                                                                                                                           | AUG 2019                     | Minor Amendment                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------------------|
| B                                                                                                                                                           | DEC 2018                     | Minor Amendment                         |
| A                                                                                                                                                           | FEB 2018                     | Minor Amendment                         |
| Rev.                                                                                                                                                        | Date                         | Description                             |
| Authorized Person/Registered Structural Engineer/Registered Geotechnical Engineer                                                                           |                              |                                         |
| <div> <div></div> <div></div> <div></div> <div></div> </div> <b>LEADTOPS RAYMOND LTD.</b><br>INTEGRATED DESIGN AND PROJECT MANAGEMENT SPECIALISTS           |                              |                                         |
| Rm8/B/F HOP LUNG BUILDING/NO.1 MONG LUNG STREET, SHAUKEWAN/HONGKONG<br>Fax: +852 3007 0787 Tel: +852 2638 0336                                              |                              |                                         |
| Project<br>PROPOSED RESIDENTIAL DEVELOPMENT<br>ON LOT 716 IN D.D. 216<br>(TO BE KNOWN AS LOT 859 IN D.D. 216)<br>NO. 101 TAI MONG TSAI ROAD, SAI KUNG, N.T. |                              |                                         |
| Drawing Title :<br>SITE FORMATION<br>BORED PILE WALL DETAILS (P.1 OF 2)                                                                                     |                              |                                         |
| Drawn :<br>Date :<br>Job Ref.                                                                                                                               | Scale :<br>AUG 2019<br>J1166 | Checked :<br>J1166/SF-05<br>Rev. :<br>C |