

3DJH RI

\* 7UXP DQ  
: 63 ( QYURQP HQDO VQ  
8 QW & HQMURQ %XVQH W & HQNH  
' DEHQ\$ YHQKH  
%BQKHLP , QGXVNDQ WDM  
1 RNDJ KDP  
1 RNDJ KDP VKUH  
1\* : \$

- DQXDU

7( 67 5( 32 57

2 XU5 HSRUM XP EHU

<RXU2 UGHU5 H HUHOFH ' &

VRLODP SBI DQG Z DMUMDP SBI VXEP IWMG I RUDQDOVLV RQ

3 URMFWI DP H 2 VQDEXUJK 6 WHHW/ RQGRQ 1: 83

3 URMFW&RGH

/ DERUDRU DQDOVLV WDMGRQ

\$ QDERUDRU DQDOVLV FRP SGMGEI - DQXDU



5 H[ RQD 5 DKP DQ

\$ QDOVFDQ5 HSRUMQ 0 DQDU HU

\$/ &21752/ 7( &+1,&+( 0



6 KDURQ\* RRJK

3 URMFW&R 2 UELQDRLU

\$/ &21752/ 7( &+1,&+( 0

7HWP HMRG/ DUH GRFP HQNGIQ KRXH SURFHGXUV RUX KHU DSSURSUDM WQGDUGP HMRG/ 1 RQ DFFUHGNG WMM IL DSSOFDEI DUH  
IGHQMHGRQHDFK SDUH 3 URFHGXUV IRUMDP SDU DUH RXMCH VWH VFRSH RI VWH DERUDRU 8. \$6 DFFUHGVMRQ 2 SIQRQ/ DQIGMUSUMMRQV  
H[ SUMMHG KHUHQ DUH RXMCH VWH VFRSH RI RXUB. \$6 DFFUHGVMRQ \$ QMDP SBN FRQCHFWNG ZUM VWH UHSRUW IQFGIQ DQ RQKRO ZIDEH  
WUHG DQG GLSRVHGRI DFFRUGU V FRP SDQ SRDA \$ FRS RI VWH SRDA IV DYDDEI RQUHXHW

3' ) FUDNGZ LK) LQ-B UQVSG) DFRU 3 UR WIDOH-HMRQ KWB ZZZ ILCHSUCVFRP

\$/FRQWRO7HFKQFKHP  
6DP S01' HMFUSWRQ

- RE 1 XP EHU  
&CHOW: 63 ( QYL RQP HQMD/ V6  
3 URNFW&RGH

3 URMFWI DP H 2 VQDEXUJ K 6 WHHW/ RQGRQ 1: 83

[illegible]

3DJH RI

3' ) FUHDMGZLN ) LQ-B UQ/SG) DFVW 3URWIDOHUJMRQ KWS ZZZ ILQHSUQWFP

7 DE 01 21 5 HVX 0V

**3 URNFV&RGH**

3 URMFVM DP H

&CHQW : 63 ( QYLROF HQMO VG

[illegible]

**I ,62      DFFUHEUNG**

0 & ( 576 DFFUNGIRUMDQG (BDP DQGFOA

3DJH R

3' ) FUHDWGZ(LK) LQ-B UQ/SG) DFVRL 3 UR WIDOM-HUMRQ KWS ZZZ ILQ-SUQWFRP

7 DE 01 21 5 HVX 0V

- RE 1 XP EHU  
0 DML : DML  
3 URMFV&RGH

3 URNFVN DP H

2 VOEXUJ K 6 WHH/ RQGRQ 1: 83  
&QHJW: 63 ( QYLRQP HQMO/ VS

[illegible]

1,62 DFFUHGANG  
M 0 & ( 576 DFFUHGANGIRUVDQG GDP DQG FOM

3DJH RI

3' ) FUHDINGZ(LK) LQH3 UQVSG) DFVNU 3URWIDOHUMRQ KWS ZZZ ILQHSUQVFRP

\$/ FRQAR07 HFKQFKHP  
7DE01215 HX0V \$SSHQGL

- RE 1 XP EHU

3 URWFWI DP H

2 VQDEXUIK 6WHHW/ RQGRQ1: 83

&QH0W : 63 ( QYLRQP HQ00/ W0

3 URWFWI&RGH

6XP P DU RI P HMRGV FROMI0HGZ IMIQUHSRUW

|   |                                                                        |                                                                                                                                                                                           |   |
|---|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|   | ,QKRXVHP HMRG D0DSNGIURP 0 (: \$0 6XSKIGHIQ: DNLU/DOG( IIOHQW<br>+0 62 | ' HMLP LCDVRQ RI VXS KIGH IQ VRLODP S0VEI VXS KXUE DFIG DGGVRQ DEVRLSVRQ<br>RI 0EHUWNGKI GURJHQ VXS KIGH IQ VRGXP KI GUR IGH DVFRUEF DFIG EXIHU<br>VRQVRQ DGGIRQ VHD FWH H0DFWRGH GHMFVRQ | : |
| : | ,QKRXVHP HMRG                                                          | ' HMLP LCDVRQ RI 3&%FRQJHQHU/IQDTXFRXV VDP S0VEI KH DQH H VDFVRQ<br>IR0Z HGEI * & 0 6 GHMLP LCDVRQ                                                                                        |   |

6 RI0H/X0V DUH H SUHWHGRQ D GU Z HJ KWEDIV : KHLH V0H W0W0VH DV UHFHYHG VDP S0I DP RIW0UH FRUHFRQ I DFRULV DSS0HG VR W0H Z H0Z HJ KW0H/X0V7 KIV I DFRULV  
GHMLP I0HG JUDYP HMLFD0 X0I0 Z HJ KW0RV RQ GU I0I DW ž &

3DJH RI

\* 7UXP DQ  
: 63 ( QMLRQP HQDO' V8  
8 QW & HQMURQ %XVQH-W & HQNH  
' DEHQ\$ YHQX  
%@QKHP ,QGKNDQ VDN  
1 RNDJ KDP  
1 RNDJ KDP VKUH  
1\* : \$

- DQXDU

7(675(3257

2 XU5 HSRUW XP EHU

<RXU2 UGHU5 H HUHGFH ( ' &

VRLODP SBN VKEP IUNG I RUDQDOVLRQ

3 URMFWI DP H 2 VQDEXUJK 6 WPHW/ RQGRQ 1: 83

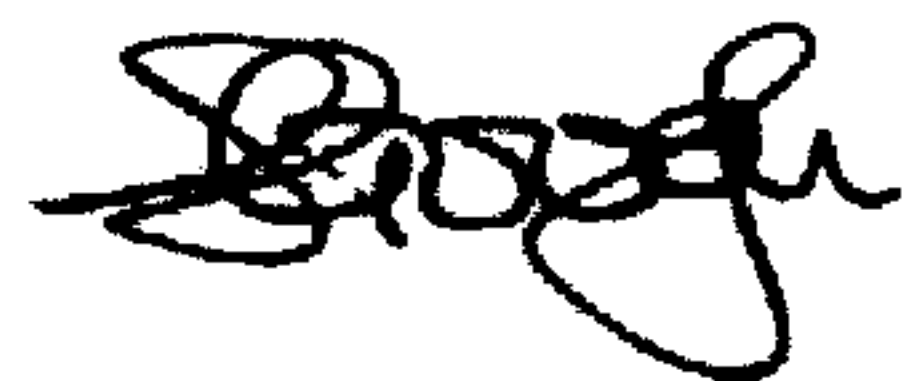
3 URMFW&RGH

/ DERUDVU DQDOVLRW IUNG RQ

\$ @DERUDVU DQDOVLRW FRP SBNAGEI - DQXDU



5 H[ RQD 5 DKP DQ  
\$ QDOVFDOS HSRUWJ 0 DQDU HU  
\$/ &21752/ 7( &+1,&+( 0



6 KDURQ\* RRJK  
3 URMFW&R 2 UGQDRLJ  
\$/ &21752/ 7( &+1,&+( 0

7 HWP HMRG/ DUH GRFXP HQNGIQ KRXVH SURFHGXUV RULZ KHJ DSSURSUDM WQDQDUGP HMRG/ 1 RQ DFFUHQWNG VWW 11 DSSQFDE@ DUH  
IGHQMLHG RQHDFK SDJH 3 URFHGXUV IRLVOP SDQJ DUH RXWNGH VWH VFRSH RI VWH DERUDVU 8. \$6 DFFUHQWNRQ 2 SQRQV DQG IQMUSUHMNRQV  
H[ SUHMHG KHUHQ DUH RXWNGH VWH VFRSH RI RXU8. \$6 DFFUHQWNRQ \$ QVOP SBN FRQHFVNG ZLN VLV UHSRUW IQFOIGQJ DQ RQKRG ZIDEH  
VWUHG DQG GLSRVHGRI DFFRUEQJ VR FRP SDQ SRQF \$ FRS RI VLV SRQF IV DYDQDE@ RQUHTXHW

3' ) FUDNGZLN ) LQB UQVSGI) DFRVU 3 UR WDOYHUMRQ KWS ZZZ IGH SUQVFRP

\$/FRQMR07HFKQFKHP  
6DPSON' HMFUSWRQ

- RE 1 XP EHU  
&CHQW: 63 ( QYLRQP HQMDQ/ V6  
3 URMFW&RGH

3 URMFWI DP H 2 VQDEXUJK 6 WHHW/ RQGRQ 1: 0 DMI 6 RIO 83

[illegible]

3DJH R

3' ) FUHDWGZLN ) LQ-B UQ/SG) DFVU 3 UR WIDOH UMRQ KWS ZZZ ILQ-SUQ/FRP

7 DEC 12 15 HXOV

**3 URMFV&RGH**

3 URMFV DP H

&CHQW: 63 ( QYLROF HQMO' VG

[illegible]

M 0 & ( 5 7 6 DFFUHGUMGIRUMDQG GDP DQGFOA

3DH R

3' ) FUHDWGZLW ) LQ-B UQVSG ) DFVU 3URWDOY-HMRQ KWS ZZZ ILQ-SUQ/FRP

\$ / FRQAROT HFKQFKHP  
7DE01215 HVXOV \$ SSHQGL

- RE 1 XP EHU

3 URWFW DP H

2 VQDEXUIK 6WHW/ RQGRQ1: 83

&0H0W : 63 ( QYLROF HQMO' VG

3 URWFW&RGH

6XP P DU RI P HMRGV FRQMLQHG Z LMIQ UHSRUW

|  |                                                                  |                                                                                                                                                                       |   |
|--|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|  | ,QKPMHP HMRGDGDSNGIURP 0(: \$0 6XSKIGHIQ: DMU/DOG(110H0W<br>+062 | ' HMUP IQDMRQ RI VXSIGH IQVRODP SOVE VXSIXUE DFG DGGVRO DEVLISVRO<br>RI 0EHDMGKI GURHQ VXSIGH IQVRGP KI GURIGH DMFUEF DFG EXIHU<br>VROVRO DGGIRQ V0FWH H0FWRGH GMMVRO | : |
|--|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|

6 RIQHVXOV DUH[ SUHWHGRQ DGU Z HJ KWEDMV : KHLWHMVMKVHV DV UHFHYHG VOP SON DP RLVXUH FRUHFVRQ IDFVULV DSS0HG VR W0H Z H0Z HJ KWUHVXOV7 KLV IDFVULV  
GHMUP LQHG JUDYP HMFED0 XVLQ Z HJ KW0RVV RQGU IQJ DW 2 &

3' ) FUDMGZ L0 ) LQHB UQVSGI) DFVULV 3UR WID0YHUMRQ KWS ZZZ IICHSUQWFRP

3DUH RI

3DJH RI

\* 7UXP DQ  
: 63 ( QYLRQP HQDO V&  
8 QW & HQMURQ %XMCHW & HQNH  
' DEHQ\$ YHQH  
%DCKHP ,QGKNDQ VDM  
1 RMQJ KDP  
1 RMQJ KDP VKUH  
1\* : \$

- DQXDU

7(675(3257

2 XU5 HSRUW XP EHU

<RXU2 UGHU5 H HUHGFH ( ' &

VRLODP SBN VKEP IWMG I RUDQDOVLV RQ

3 URMFWI DP H 2 VQDEXUJK 6 WHHW/ RQGRQ 1: 83

3 URMFW&RGH

/ DERUDRU DQDOVLV WDUHGRQ

\$ QDERUDRU DQDOVLV FRP SBNAGEI - DQXDU

*Rehner*

5 H[ RQD 5 DKP DQ

\$ QDOVFDOS HSRUWQ 0 DQDU HU

\$/ &21752/ 7( &+1,&+( 0

*Bozgh*

6 KDURQ\* RRJK

3 URMFW&R 2 UHQDARU

\$/ &21752/ 7( &+1,&+( 0

7HWP HMRG/ DUH GRFXP HQNGIQ KRXH SURFHGXUW RUZ KHU DSSURSUDW WQDQDUGP HMRG/ 1 RQ DFFUHGXMG WAW IL DSSIFDEH DUH  
IGHQNHGRQH DFK SDUH 3 URFHGXUW I RUMDP SDQJ DUH RXWLGH WNH VFRSH RI WNH DERUDRU 8. \$6 DFFUHGXMG 2 SIQRQV DQG IGHQNHGRQH  
H[ SUHMHGKHUHQ DUH RXWLGH WNH VFRSH RI RXUB. \$6 DFFUHGXMG \$ QMDP SBN FRQCHFWGZ UH WNH UHSRUW IGHQNGQ DQ RQKRG ZIDEH  
WUHG DQG GLSRVHGRI DFFRUGQ VR FRP SDQ SRQA \$ FRS RI WNH SRQA IV DYQDQEBI RQUHXHW

3' ) FUDWNGZ UH) IGH3 UH/SGI) DFRU 3 UR WDOYHUMRQ KW& ZZZ IGH SUQVFRP

\$/ FRQAROF HKQFKHP  
6 DP S01' HMFUSWRQ

- RE 1 XP EHU  
&OHQW: 63 ( QYLRQP HQMBO/ VU  
3 URNFW&RGH

3 URNFWI DP H 2 VOEXUIK 6 WHHW/ RQGRQ1: 0 DMI 6 RLO 83

[illegible]

3DH R

3' ) FUHDMGZLNK ) LQ-B UQ/SGI ) DFVLU 3URWIDOHUJMRQ KWS ZZZ ILQHSUQ/FRP

7 DE 01 21 5 HVXOV

### 3 LRWFV&RGH

3 URMFVN DP H

&CHQW : 63 ( QYLLRQP HQMDQ VQ

|                               |     |     |     |     |    |
|-------------------------------|-----|-----|-----|-----|----|
| 6 DP SON 5 H H U Q F H        | : 6 | : 6 | : 6 | : 6 | 73 |
| 6 DP SON' H S W K P           | P   | P   | P   | P   | P  |
| ' DM 6 DP S O G               |     |     |     |     |    |
| ' DM 6 F K H G X O G          |     |     |     |     |    |
| / DER U M U 5 H H U Q F H 1 R |     |     |     |     |    |

0 RLWUH & RQNOW: HW HJ KW

\$FLG6R0E016XSKLGH

IM | PJ Nt

**\$/ FROM 07 HFKQFKHP  
7DE01215HVX0V**

- RE 1 XP EHU  
0 DMU 6 RL  
3 URWFW&RGH

3 URGENT DP H

2 VODEXUJ K 6 WHHW/ RQGRQ 1: 83  
& QHQW : 63 ( QYLRQP HQMD/ V6

[illegible]

I ,62 DFFUHGNG  
M 0 & ( 576 DFFUHGNGIRUVDQG GBDP DQGFOA

3DJH R

3' ) FUHDWGZLN ) LQ-B UQVSG ) DFWRU 3URWIDOH-UJMRQ KWS ZZZ ILQHSUQ/FRP

\$/ FRQAROT HFKQFKHP  
7DE01215 HXOW \$SSHQGL

- RE 1XP EHU

3URMFWM DP H

2 VQDEXUJK 6WHHW/ RQGRQ 1: 83

&QHGW: 63 ( QYLRQP HOMO VB

3URMFWRGH

6XP P DU RI P HMRGV FRQMLQHG Z LMQL UHSRUW

|  |                                                                        |                                                                                                                                                                         |   |
|--|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|  | ,Q KRXVHP HMRG DQDSINGIURP 0 (: \$0 6XSKIGHIQ: DMU/DQG (110HQW<br>+062 | HMLP LQDMRQ RI VXSIGH IQVRODP S0VE VXSIXUE DRG DGGMRQ DEVRUSMRQ<br>RI QEHDMG K GURJHQ VXSIGH IQVRGP K GURIGH DMFRUEF DRG EXIHU<br>VRQMRQ DQG IRO VHDVYH H0FVRGH GHMFVRQ | : |
|--|------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|

6 RLOHMXOW DUH H SUHWHGRQ D GU Z HJ KWEDMV : KHUWH WWWWVHV DV UFHLYHG VDP SON DP RLVXUH FRUHFVRQ I DFMRLV DSSQHG VR WKH Z HAZ HJ KWUHXOW KIV I DFMRLV  
GHMLP LQHG JUDYP HMFDOO XVIQJ Z HJ KWVRV RQ GU LQJ DW ž &



---

## Appendix D

### Groundwater & Ground Gas Monitoring Results

### Ground Gas & Groundwater Monitoring

12040881/001 - Osnaburgh Street, London

| BH101 | 05/01/2007 | 1013 | 20.7 | 0.0 | 0.1 | 1.3  | Damp  | 50.4  | Thanet Sands  |                       |
|-------|------------|------|------|-----|-----|------|-------|-------|---------------|-----------------------|
| BH101 | 05/01/2007 | 1013 | 20.8 | 0.0 | 0.1 | <0.1 | 5.59  | 6.1   | Gravels       |                       |
| BH102 | 05/01/2007 | N/A  | N/A  | N/A | N/A | N/A  |       | 33.3  | Lambeth Group | No access to BH.      |
| BH103 | 05/01/2007 | 1013 | 20.8 | 0.0 | 0.1 | <0.1 | 5.36  | 6.0   | Gravels       |                       |
| BH105 | 05/01/2007 | 1013 | 20.4 | 0.1 | 0.0 | <0.1 | 5.28  | 21.0  | London Clay   |                       |
| BH106 | 05/01/2007 | 1013 | 20.6 | 0.1 | 0.1 | <0.1 | 6.92  | 7.7   | Gravels       |                       |
| WS7   | 05/01/2007 | 1013 | 20.3 | 0.5 | 0.0 | <0.1 | Dry   | 2.6   | MG            |                       |
|       |            |      |      |     |     |      |       |       |               |                       |
| BH101 | 12/01/2007 |      |      |     |     |      | 50.03 | 50.40 | Thanet Sands  | Cover broken          |
| BH101 | 12/01/2007 |      |      |     |     |      | 5.58  | 6.10  | Gravels       | Cover broken          |
| BH102 | 12/01/2007 | N/A  | N/A  | N/A | N/A | N/A  | 9.48  | 33.30 | Lambeth Group | Piezo tip             |
| BH103 | 12/01/2007 | 1015 | 20.8 | 0.0 | 0.1 | <0.1 | 5.43  | 6.00  | Gravels       |                       |
| BH105 | 12/01/2007 | 1016 | 20.2 | 0.2 | 0.1 | <0.1 | 5.37  | 21.00 | London Clay   |                       |
| BH106 | 12/01/2007 | 1015 | 20.5 | 0.2 | 0.1 | <0.1 | 6.90  | 7.70  | Gravels       |                       |
| WS7   | 12/01/2007 | 1015 | 20.3 | 0.4 | 0.1 | <0.1 | Dry   | 2.60  | MG            |                       |
|       |            |      |      |     |     |      |       |       |               |                       |
| BH101 | 26/01/2007 |      |      |     |     |      | Damp  | 50.40 | Thanet Sands  | Gas meter malfunction |
| BH101 | 26/01/2007 |      |      |     |     |      | 5.58  | 6.10  | Gravels       | no gas data available |
| BH102 | 26/01/2007 | N/A  | N/A  | N/A | N/A | N/A  | 8.23  | 33.30 | Lambeth Group |                       |
| BH103 | 26/01/2007 |      |      |     |     |      | 5.46  | 6.00  | Gravels       |                       |
| BH105 | 26/01/2007 |      |      |     |     |      |       | 21.00 | London Clay   | No access to BH       |
| BH106 | 26/01/2007 |      |      |     |     |      | 6.91  | 7.70  | Gravels       |                       |
| WS7   | 26/01/2007 |      |      |     |     |      | Dry   | 2.60  | MG            |                       |

Notes: Limit of gas detection = 0.1%

ND: Not Detected

N/A: Not Applicable



---

## Appendix E

### Laboratory Geotechnical Test Results

### Summary of Geotechnical Laboratory results

| Sample Data |           |              |             |                 |              | Classification     |                |                 |                    |                     |                          |                    |                   |                            |                        | Compaction    |     |            | Chemical                    |      |                     |                       |                              | Strength & Compression testing |             |                   |                               |                                 |                    |                 |                     |                                 |  | Remarks |
|-------------|-----------|--------------|-------------|-----------------|--------------|--------------------|----------------|-----------------|--------------------|---------------------|--------------------------|--------------------|-------------------|----------------------------|------------------------|---------------|-----|------------|-----------------------------|------|---------------------|-----------------------|------------------------------|--------------------------------|-------------|-------------------|-------------------------------|---------------------------------|--------------------|-----------------|---------------------|---------------------------------|--|---------|
|             |           |              |             |                 |              | BS 1377:Part 2     |                |                 |                    |                     |                          |                    |                   |                            |                        | BS1377:Part 4 |     |            | BS 1377:Part 3              |      |                     |                       |                              | BS 1377:Part's 5 & 7           |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH/TP/WS No | Sample No | Specimen Ref | Sample Type | Deppth From (m) | Depth to (m) | Moisture Content % | Liquid Limit % | Plastic Limit % | Plasticity index % | Plasticity category | Material passing 425um % | Bulk Density Mg/m3 | Dry Density Mg/m3 | Particle Size Distribution | Particle Density Mg/m3 | CBR           | MCV | Compaction | Water Soluble Suphate g/l * | pH * | Organic Matter % ** | Loss on Ignition % ** | Water Soluble Chloride g/l * | Triaxial Type                  | Diameter mm | Cell Pressure kPa | Corrected Deviator Stress kPa | Undrained Shear Strength CU kPa | Strain @ Failure % | Mode of Failure | Hand Shear Vane Kpa | One dimensional Consolidation * |  |         |
| BH101       | B         |              |             | 0.35            | 0.90         | 27                 |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             | 0.07 | 9.0                 |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | D         |              |             | 0.95            |              | 21                 |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | D         |              |             | 1.00            | 1.45         | 22                 | 37             | 17              | 20                 | CL                  | 85                       |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | D         |              |             | 5.00            |              |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | D         |              |             | 6.00            |              |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | B         |              |             | 6.10            | 6.50         |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | D         |              |             | 6.15            |              |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | U         |              |             | 6.50            | 7.00         | 30                 |                |                 |                    |                     |                          | 1.98               | 1.52              |                            |                        |               |     |            |                             |      |                     |                       |                              | UU                             | 102         | 200               | 90                            | 45                              | 5.0                | B               |                     |                                 |  |         |
| BH101       | D         |              |             | 7.00            |              | 25                 | 71             | 24              | 47                 | CV                  | 100                      |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | D         |              |             | 7.20            |              | 27                 |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | D         |              |             | 7.50            | 7.95         |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | U         |              |             | 8.50            |              | 27                 |                |                 |                    |                     |                          | 2.07               | 1.63              |                            |                        |               |     |            |                             |      |                     |                       |                              | UU                             | 103         | 259               | 120                           | 60                              | 7.6                | B               |                     |                                 |  |         |
| BH101       | D         |              |             | 9.20            |              | 27                 |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | U         |              |             | 10.50           | 11.00        | 26                 |                |                 |                    |                     |                          | 2.07               | 1.64              |                            |                        |               |     |            |                             |      |                     |                       |                              | UU                             | 103         | 319               | 291                           | 145                             | 6.1                | B               |                     |                                 |  |         |
| BH101       | D         |              |             | 11.00           |              |                    | 73             | 26              | 47                 | CV                  | 100                      |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | D         |              |             | 12.20           |              |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             | 0.78 | 7.8                 |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | U         |              |             | 12.50           | 13.00        | 25                 |                |                 |                    |                     |                          | 2.10               | 1.67              |                            |                        |               |     |            |                             |      |                     |                       |                              | UU                             | 103         | 376               | 200                           | 100                             | 3.7                | B               |                     |                                 |  |         |
| BH101       | D         |              |             | 13.50           | 13.95        | 26                 |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | U         |              |             | 14.50           | 15.00        | 26                 |                |                 |                    |                     |                          | 2.07               | 1.65              |                            |                        |               |     |            |                             |      |                     |                       |                              | UU                             | 102         | 459               | 203                           | 101                             | 6.2                | B               |                     |                                 |  |         |
| BH101       | U         |              |             | 16.50           | 17.00        | 24                 |                |                 |                    |                     |                          | 2.04               | 1.65              |                            |                        |               |     |            |                             |      |                     |                       |                              | UU                             | 104         | 561               | 216                           | 108                             | 4.7                | B               |                     |                                 |  |         |
| BH101       | D         |              |             | 17.00           |              |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | D         |              |             | 17.20           |              |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | D         |              |             | 17.50           | 17.95        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | D         |              |             | 18.20           |              |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | U         |              |             | 18.50           | 19.00        | 24                 |                |                 |                    |                     |                          | 2.00               | 1.62              |                            |                        |               |     |            |                             |      |                     |                       |                              | UU                             | 104         | 561               | 184                           | 92                              | 5.2                | B               |                     |                                 |  |         |
| BH101       | D         |              |             | 19.00           |              |                    | 68             | 27              | 41                 | CH                  | 100                      |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |
| BH101       | U         |              |             | 20.50           | 21.00        | 23                 |                |                 |                    |                     |                          |                    |                   |                            |                        |               |     |            |                             |      |                     |                       |                              |                                |             |                   |                               |                                 |                    |                 |                     |                                 |  |         |

### Summary of Geotechnical Laboratory results

| Sample Data |           |              |             |                 |              | Classification     |                |                 |                    |                     |                          |                    |                   |                            | Compaction             |     |     | Chemical       |                             |      |                     |                       | Strength & Compression testing |               |             |                   |                               |                                 |                    |                 |                       | Remarks |                                 |  |
|-------------|-----------|--------------|-------------|-----------------|--------------|--------------------|----------------|-----------------|--------------------|---------------------|--------------------------|--------------------|-------------------|----------------------------|------------------------|-----|-----|----------------|-----------------------------|------|---------------------|-----------------------|--------------------------------|---------------|-------------|-------------------|-------------------------------|---------------------------------|--------------------|-----------------|-----------------------|---------|---------------------------------|--|
|             |           |              |             |                 |              | BS 1377:Part 2     |                |                 |                    |                     |                          |                    |                   |                            | BS1377:Part 4          |     |     | BS 1377:Part 3 |                             |      |                     |                       | BS 1377:Part's 5 & 7           |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH/TP/WS No | Sample No | Specimen Ref | Sample Type | Deppth From (m) | Depth to (m) | Moisture Content % | Liquid Limit % | Plastic Limit % | Plasticity index % | Plasticity category | Material passing 425um % | Bulk Density Mg/m3 | Dry Density Mg/m3 | Particle Size Distribution | Particle Density Mg/m3 | CBR | MCV | Compaction     | Water Soluble Suphate g/l * | pH * | Organic Matter % ** | Loss on Ignition % ** | Water Soluble Chloride g/l *   | Triaxial Type | Diameter mm | Cell Pressure kPa | Corrected Deviator Stress kPa | Undrained Shear Strength CU kPa | Strain @ Failure % | Mode of Failure | Hand Shear Vane Kpa * |         | One dimensional Consolidation * |  |
| BH101       | D         |              |             | 23.00           |              | 25                 | 70             | 26              | 44                 | CH                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | U         |              |             | 24.50           | 25.00        | 28                 |                |                 |                    |                     |                          | 2.00               | 1.57              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 103         | 771               | 267                           | 133                             | 4.8                | B               |                       |         |                                 |  |
| BH101       | U         |              |             | 26.50           | 27.00        | 22                 |                |                 |                    |                     |                          | 1.99               | 1.63              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 103         | 798               | 266                           | 133                             | 5.3                | B               |                       |         |                                 |  |
| BH101       | D         |              |             | 27.00           |              |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 27.20           |              | 23                 | 83             | 26              | 57                 | CV                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | U         |              |             | 28.50           | 28.80        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 29.50           | 29.95        | 22                 |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | U         |              |             | 30.50           | 31.00        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | U         |              |             | 32.50           | 33.00        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 33.20           |              | 21                 | 57             | 20              | 37                 | CH                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | U         |              |             | 34.50           | 35.00        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 37.20           |              | 23                 | 94             | 24              | 70                 | CE                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 37.50           | 37.95        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                | 0.01                        | 9.0  |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | U         |              |             | 38.50           | 39.00        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 39.20           |              | 21                 |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | U         |              |             | 40.50           | 40.85        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 41.20           |              | 20                 |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | U         |              |             | 42.50           | 42.90        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 43.20           |              | 21                 | 65             | 25              | 40                 | CH                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | U         |              |             | 44.50           | 44.80        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 45.50           |              | 15                 |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | U         |              |             | 46.50           | 46.80        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 47.90           |              | 18                 |                | NP              | NP                 | NP                  |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 49.00           |              | 19                 |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | B         |              |             | 49.20           | 49.70        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |
| BH101       | D         |              |             | 50.20           |              |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             | 6.4  |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |         |                                 |  |

### Summary of Geotechnical Laboratory results

| Sample Data |           |              |             |                 |              | Classification     |                |                 |                    |                     |                          |                    |                   |                            | Compaction             |     |     | Chemical       |                             |      |                     |                       | Strength & Compression testing |               |             |                   |                               |                                 |                    |                 |                       |                                 | Remarks |
|-------------|-----------|--------------|-------------|-----------------|--------------|--------------------|----------------|-----------------|--------------------|---------------------|--------------------------|--------------------|-------------------|----------------------------|------------------------|-----|-----|----------------|-----------------------------|------|---------------------|-----------------------|--------------------------------|---------------|-------------|-------------------|-------------------------------|---------------------------------|--------------------|-----------------|-----------------------|---------------------------------|---------|
|             |           |              |             |                 |              | BS 1377:Part 2     |                |                 |                    |                     |                          |                    |                   |                            | BS1377:Part 4          |     |     | BS 1377:Part 3 |                             |      |                     |                       | BS 1377:Part's 5 & 7           |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH/TP/WS No | Sample No | Specimen Ref | Sample Type | Deppth From (m) | Depth to (m) | Moisture Content % | Liquid Limit % | Plastic Limit % | Plasticity index % | Plasticity category | Material passing 425um % | Bulk Density Mg/m3 | Dry Density Mg/m3 | Particle Size Distribution | Particle Density Mg/m3 | CBR | MCV | Compaction     | Water Soluble Suphate g/l * | pH * | Organic Matter % ** | Loss on Ignition % ** | Water Soluble Chloride g/l *   | Triaxial Type | Diameter mm | Cell Pressure kPa | Corrected Deviator Stress kPa | Undrained Shear Strength CU kPa | Strain @ Failure % | Mode of Failure | Hand Shear Vane Kpa * | One dimensional Consolidation * |         |
| BH102       | U         |              |             | 0.50            | 1.00         | 27                 |                |                 |                    |                     |                          | 1.95               | 1.54              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 103         | 10                | 21                            | 11                              | 2.6                | C               |                       |                                 |         |
| BH102       | D         |              |             | 1.00            |              |                    | 39             | 25              | 14                 | CI                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | B         |              |             | 2.30            | 2.80         |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | D         |              |             | 6.30            | 6.75         | 24                 | 62             | 23              | 39                 | CH                  | 90                       |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | U         |              |             | 7.10            | 7.60         | 25                 |                |                 |                    |                     |                          | 2.06               | 1.65              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 103         | 214               | 199                           | 100                             | 10.8               | B               |                       |                                 |         |
| BH102       | D         |              |             | 7.60            |              |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                | 0.96                        | 7.6  |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | U         |              |             | 9.10            | 9.60         | 27                 |                |                 |                    |                     |                          | 2.03               | 1.60              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 104         | 273               | 150                           | 75                              | 5.8                | B               |                       |                                 |         |
| BH102       | D         |              |             | 10.10           | 10.55        | 26                 | 69             | 25              | 44                 | CH                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | U         |              |             | 11.10           | 11.60        | 23                 |                |                 |                    |                     |                          | 2.01               | 1.64              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 104         | 333               | 244                           | 122                             | 7.0                | B               |                       |                                 |         |
| BH102       | D         |              |             | 12.73           |              | 26                 |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | D         |              |             | 14.75           |              | 25                 | 76             | 26              | 50                 | CV                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | U         |              |             | 16.00           | 16.50        | 25                 |                |                 |                    |                     |                          | 1.99               | 1.60              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 104         | 488               | 225                           | 112                             | 3.3                | B               |                       |                                 |         |
| BH102       | U         |              |             | 18.00           | 18.50        | 22                 |                |                 |                    |                     |                          | 2.07               | 1.69              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 103         | 546               | 241                           | 121                             | 5.2                | B               |                       |                                 |         |
| BH102       | U         |              |             | 20.00           | 20.50        | 22                 |                |                 |                    |                     |                          | 2.07               | 1.70              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 103         | 607               | 192                           | 92                              | 5.4                | B               |                       |                                 |         |
| BH102       | D         |              |             | 20.75           |              | 24                 | 71             | 27              | 44                 | CH                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | U         |              |             | 22.00           | 22.50        | 25                 |                |                 |                    |                     |                          | 2.01               | 1.61              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 104         | 684               | 255                           | 128                             | 7.0                | B               |                       |                                 |         |
| BH102       | D         |              |             | 23.00           | 23.45        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                | 0.60                        | 7.9  |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | U         |              |             | 24.00           | 24.50        | 23                 |                |                 |                    |                     |                          | 2.04               | 1.66              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 104         | 727               | 259                           | 130                             | 2.6                | B               |                       |                                 |         |
| BH102       | U         |              |             | 26.00           | 26.50        | 31                 |                |                 |                    |                     |                          | 1.98               | 1.52              |                            |                        |     |     |                |                             |      |                     |                       |                                | UU            | 103         | 783               | 247                           | 124                             | 7.5                | B               |                       |                                 |         |
| BH102       | D         |              |             | 26.75           |              | 27                 | 81             | 29              | 52                 | CV                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | U         |              |             | 30.00           | 30.50        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | D         |              |             | 31.75           |              | 24                 | 55             | 19              | 36                 | CH                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | U         |              |             | 33.50           | 34.00        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | U         |              |             | 35.50           | 36.00        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | U         |              |             | 37.50           | 38.00        |                    |                |                 |                    |                     |                          |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |
| BH102       | D         |              |             | 38.00           |              | 25                 | 95             | 29              | 66                 | CE                  | 100                      |                    |                   |                            |                        |     |     |                |                             |      |                     |                       |                                |               |             |                   |                               |                                 |                    |                 |                       |                                 |         |