



# The Sizewell C Project

## 6.3 Volume 2 Main Development Site Chapter 19 Groundwater and Surface Water Appendix 19A Groundwater and Surface Water: Numerical Modelling Report Part 4 of 6

---

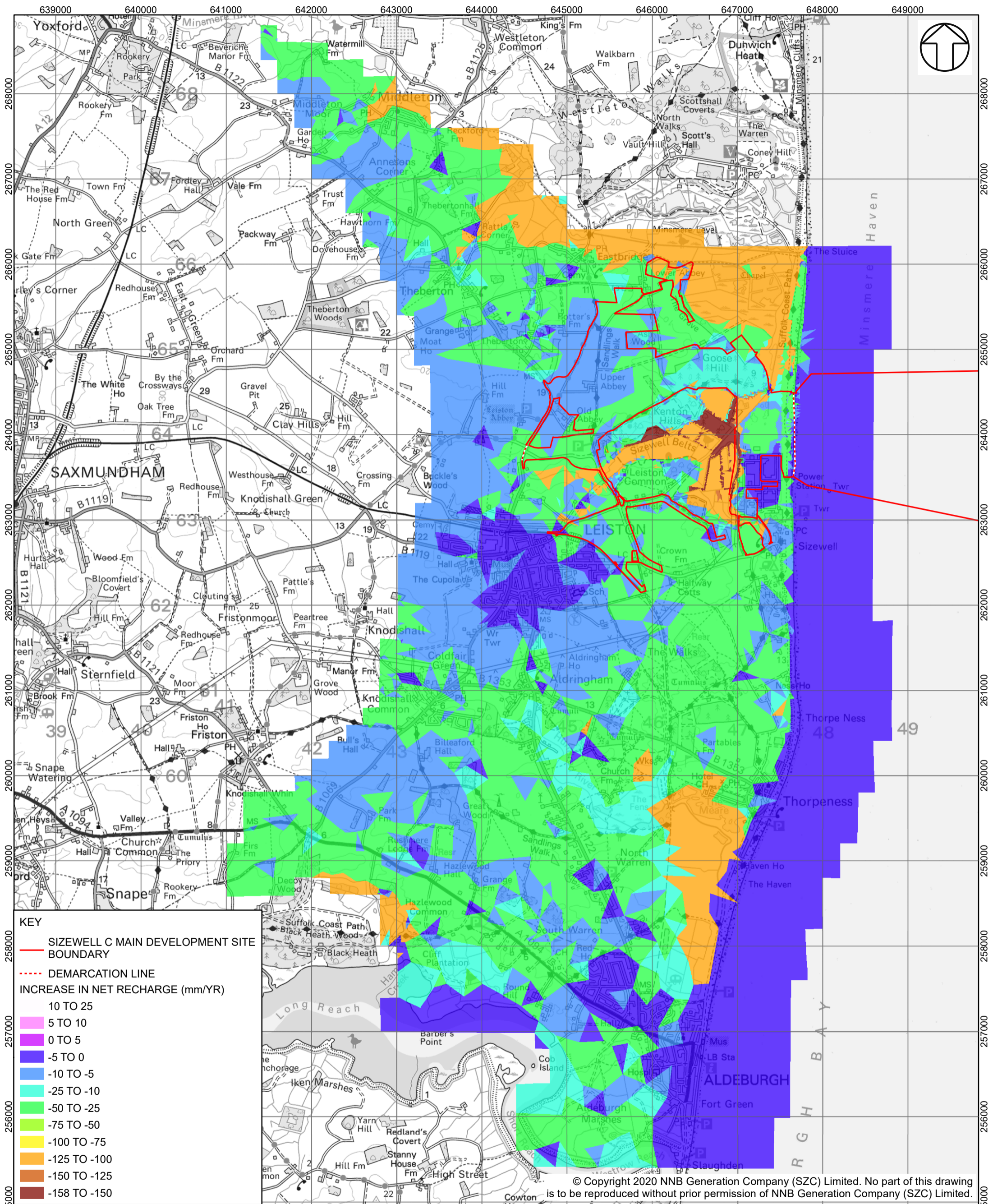
Revision: 1.0  
Applicable Regulation: Regulation 5(2)(a)  
PINS Reference Number: EN010012

---

May 2020

Planning Act 2008  
Infrastructure Planning (Applications: Prescribed  
Forms and Procedure) Regulations 2009





**KEY**

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY**
- DEMARCATIION LINE**
- INCREASE IN NET RECHARGE (mm/YR)**
- 10 TO 25
- 5 TO 10
- 0 TO 5
- 5 TO 0
- 10 TO -5
- 25 TO -10
- 50 TO -25
- 75 TO -50
- 100 TO -75
- 125 TO -100
- 150 TO -125
- 158 TO -150

**NOTES**  
 NET RECHARGE REPRESENTS RECHARGE MINUS EVAPOTRANSPIRATION FROM THE WATER TABLE WHEN THE GROUND IS FULLY SATURATED.

**COPYRIGHT**  
 Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

**DRAWING TITLE:**  
 CHANGE IN AVERAGE NET RECHARGE (MM/YR) APPLIED DURING THE DRY BASELINE SCENARIO (2015-2040) WITH RESPECT TO THE MODEL CALIBRATION PERIOD (2010-2015)

**NOT PROTECTIVELY MARKED**

**DRAWING NO:**  
 FIGURE 19A.70

**DATE:**  
 JAN 2020

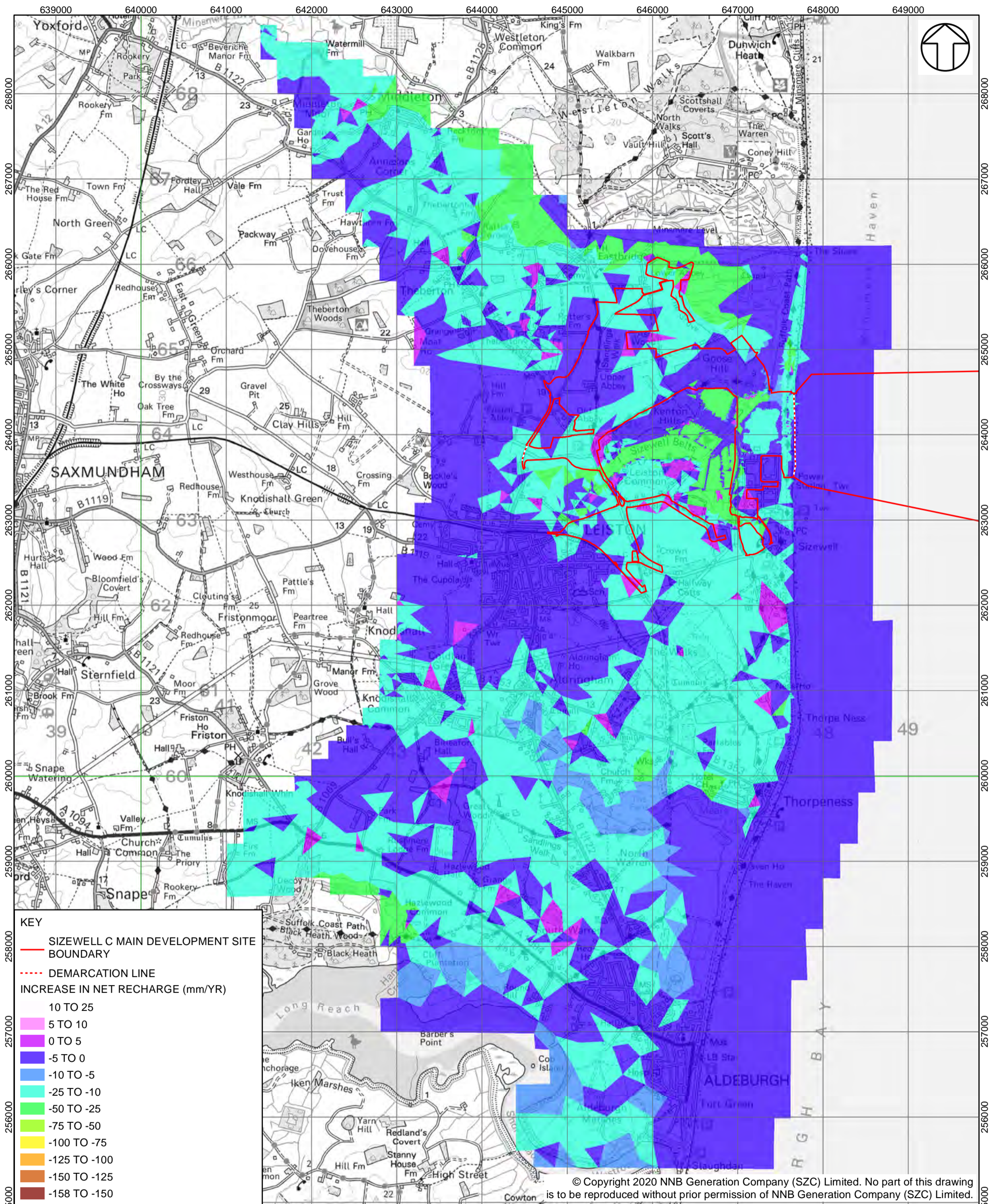
**DRAWN:**  
 M.G.

**SCALE:**  
 1:40,000 @A3

**DOCUMENT:**  
 SIZEWELL C ENVIRONMENTAL STATEMENT VOLUME 2 APPENDIX 19A NUMERICAL MODELLING REPORT

**SCALE BAR**  
 0 500 1,000 1,500 2,000 M

© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.



**KEY**

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- - - DEMARCATION LINE

**INCREASE IN NET RECHARGE (mm/YR)**

- 10 TO 25
- 5 TO 10
- 0 TO 5
- 5 TO 0
- 10 TO -5
- 25 TO -10
- 50 TO -25
- 75 TO -50
- 100 TO -75
- 125 TO -100
- 150 TO -125
- 158 TO -150

**NOTES**  
NET RECHARGE REPRESENTS RECHARGE MINUS EVAPOTRANSPIRATION FROM THE WATER TABLE WHEN THE GROUND IS FULLY SATURATED.

**COPYRIGHT**  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

**DRAWING TITLE:**  
CHANGE IN AVERAGE NET RECHARGE (MM/YR) APPLIED DURING THE INTERMEDIATE BASELINE SCENARIO (2015-2040) WITH RESPECT TO THE MODEL CALIBRATION PERIOD (2010-2015)

**NOT PROTECTIVELY MARKED**

**DRAWING NO:**  
FIGURE 19A.71

**DATE:**  
JAN 2020

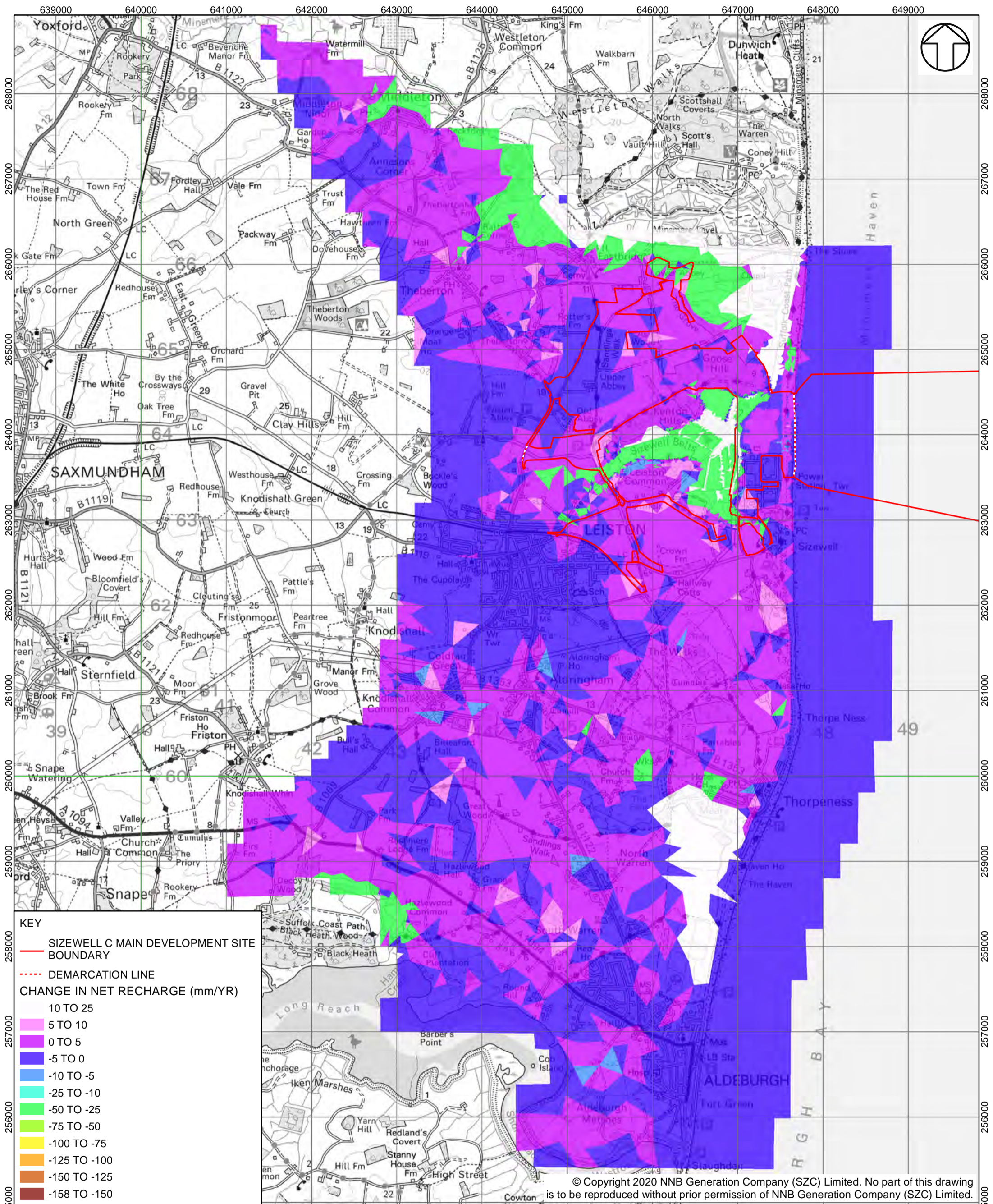
**DRAWN:**  
M.G.

**SCALE:**  
1:40,000 @A3

**DOCUMENT:**  
SIZEWELL C ENVIRONMENTAL STATEMENT VOLUME 2 APPENDIX 19A NUMERICAL MODELLING REPORT

**SCALE BAR**  
0 500 1,000 1,500 2,000 M

© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.



**KEY**

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- - - DEMARCATION LINE

**CHANGE IN NET RECHARGE (mm/YR)**

10 TO 25
5 TO 10
0 TO 5
-5 TO 0
-10 TO -5
-25 TO -10
-50 TO -25
-75 TO -50
-100 TO -75
-125 TO -100
-150 TO -125
-158 TO -150

**NOTES**  
NET RECHARGE REPRESENTS RECHARGE MINUS EVAPOTRANSPIRATION FROM THE WATER TABLE WHEN THE GROUND IS FULLY SATURATED.

**COPYRIGHT**  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

**DRAWING TITLE:**  
CHANGE IN AVERAGE NET RECHARGE (MM/YR) APPLIED DURING THE WET BASELINE SCENARIO (2015-2040) WITH RESPECT TO THE MODEL CALIBRATION PERIOD (2010-2015)

**NOT PROTECTIVELY MARKED**

**DRAWING NO:**  
FIGURE 19A.72

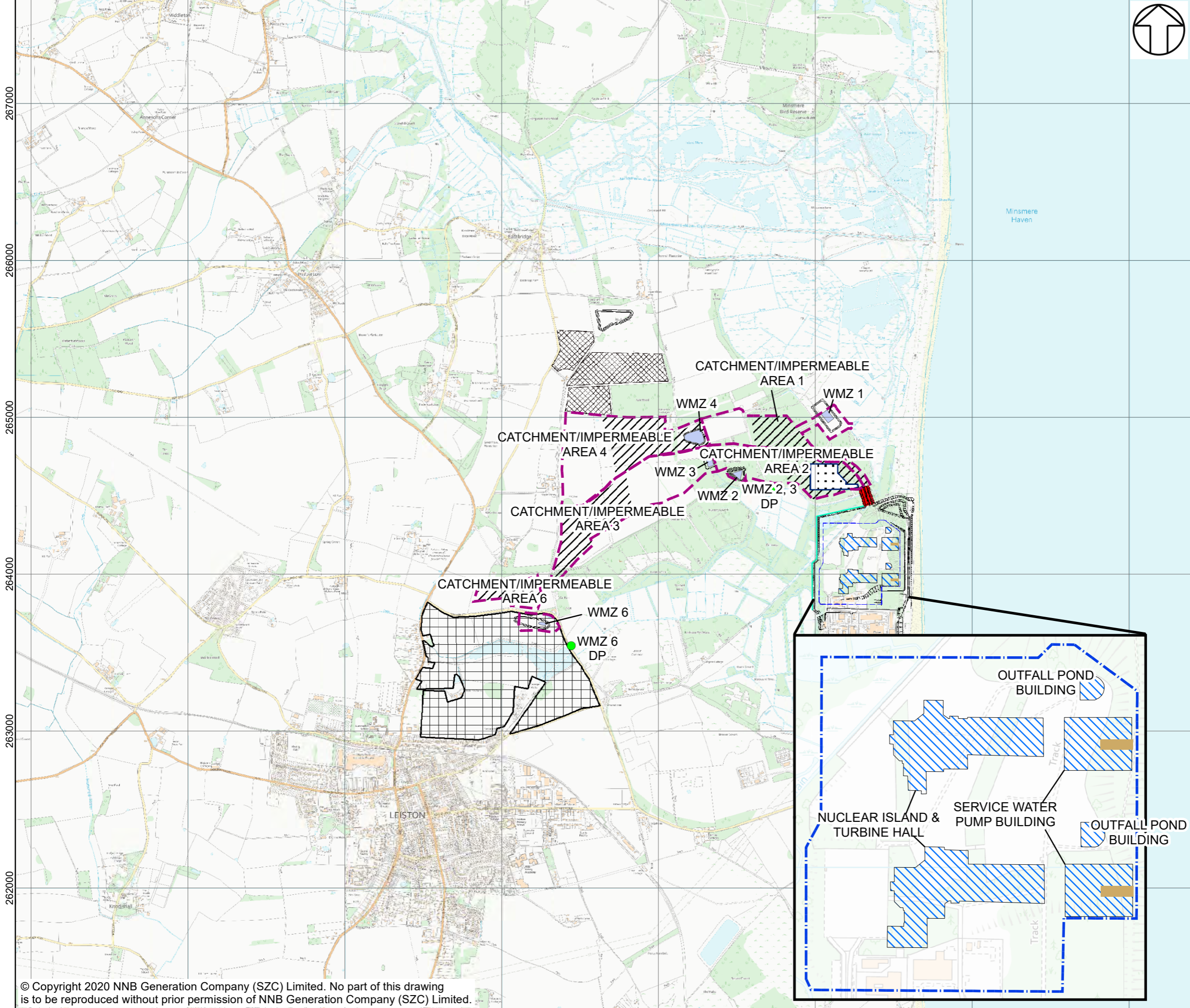
<b>DATE:</b> JAN 2020	<b>DRAWN:</b> M.G.	<b>SCALE:</b> 1:40,000 @A3
--------------------------	-----------------------	-------------------------------

**DOCUMENT:**  
SIZEWELL C ENVIRONMENTAL STATEMENT VOLUME 2 APPENDIX 19A NUMERICAL MODELLING REPORT

**SCALE BAR**  
0 500 1,000 1,500 2,000 M

© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.

642000 643000 644000 645000 646000 647000 648000 649000



- NOTES**
1. CATCHMENTS DEFINED IN WSP (2017). CATCHMENT/WMZ 5 OVERLAPS BORROW PIT AREAS WHICH ARE NOT CONSIDERED TO GENERATE EXCESS RUNOFF IN MODELLING HENCE HAVE NOT BEEN INCLUDED.
  2. IMPERMEABLE PORTION OF EACH CATCHMENT BASED ON PROPOSED DESIGNS IN WSP (2017). AREAS SELECTED TO MATCH IMPERMEABLE AREAS IN THE SITE DESIGN.
  3. MAXIMUM FOOTPRINTS AND LOCATIONS OF WMZS WERE DEFINED BASED ON SZC-SZ0100-XX-000-DRW-100000. THE ACTUAL FOOTPRINT SHOWN IS BASED ON THE MEAN AREA OF EACH WMZ PRESENTED BY WSP (2017).
  4. WMZ DPS ASSUMED TO DISCHARGE TO NEAREST SURFACE WATERCOURSE
  5. FOOTPRINT FROM SZC-SZ0100-XX-000-DRW-100000.
  6. FOOTPRINT FROM SZC-SZ0100-XX-000-DRW-100004.
  7. ALDHURST FARM HABITAT CREATION SCHEME AREAS FROM EDF (2014).
  8. LOCATION INFERRED AS BEING THE BASE OF EMBANKMENT DISPLAYED IN SZC-SZ0100-XX-000-DRW-100000.
  9. FOOTPRINT FROM SZC-ECEIGX-XX-000-DRW-000000.
  10. FOOTPRINT FROM SZC-ECEIGX-XX-000-DRW-000649

- KEY**
- WSP CATCHMENT<sup>1</sup> (2022-2032)
  - IMPERMEABLE CATCHMENT<sup>2</sup> (2022 - 2032)
  - WATER MANAGEMENT ZONE (WMZ)<sup>3</sup> (2022 - 2032)
  - WMZ DISCHARGE POINT (DP)<sup>4</sup> (2022-2032)
  - BORROW PITS<sup>5</sup> (2022 - )
  - SSSI CROSSING<sup>6</sup> (2020 - )
  - CUT-OFF WALL<sup>7</sup> (2022 - )
  - CAR PARK<sup>8</sup> (2032 - )
  - ALDHURST FARM<sup>9</sup> (2015 - )
  - SHEET PILE WALL<sup>10</sup> (2022 - )
  - TBM LAUNCH CHAMBER<sup>11</sup> (2024 - )
  - MAIN DEVELOPMENT AREA DEEP FOUNDATION<sup>12</sup> (2024 - )

NOT PROTECTIVELY MARKED

**COPYRIGHT**  
 Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

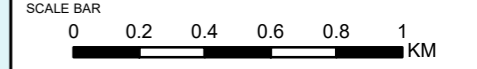


DOCUMENT:  
 SIZEWELL C  
 ENVIRONMENTAL STATEMENT  
 VOLUME 2  
 APPENDIX 19A  
 NUMERICAL MODELLING REPORT

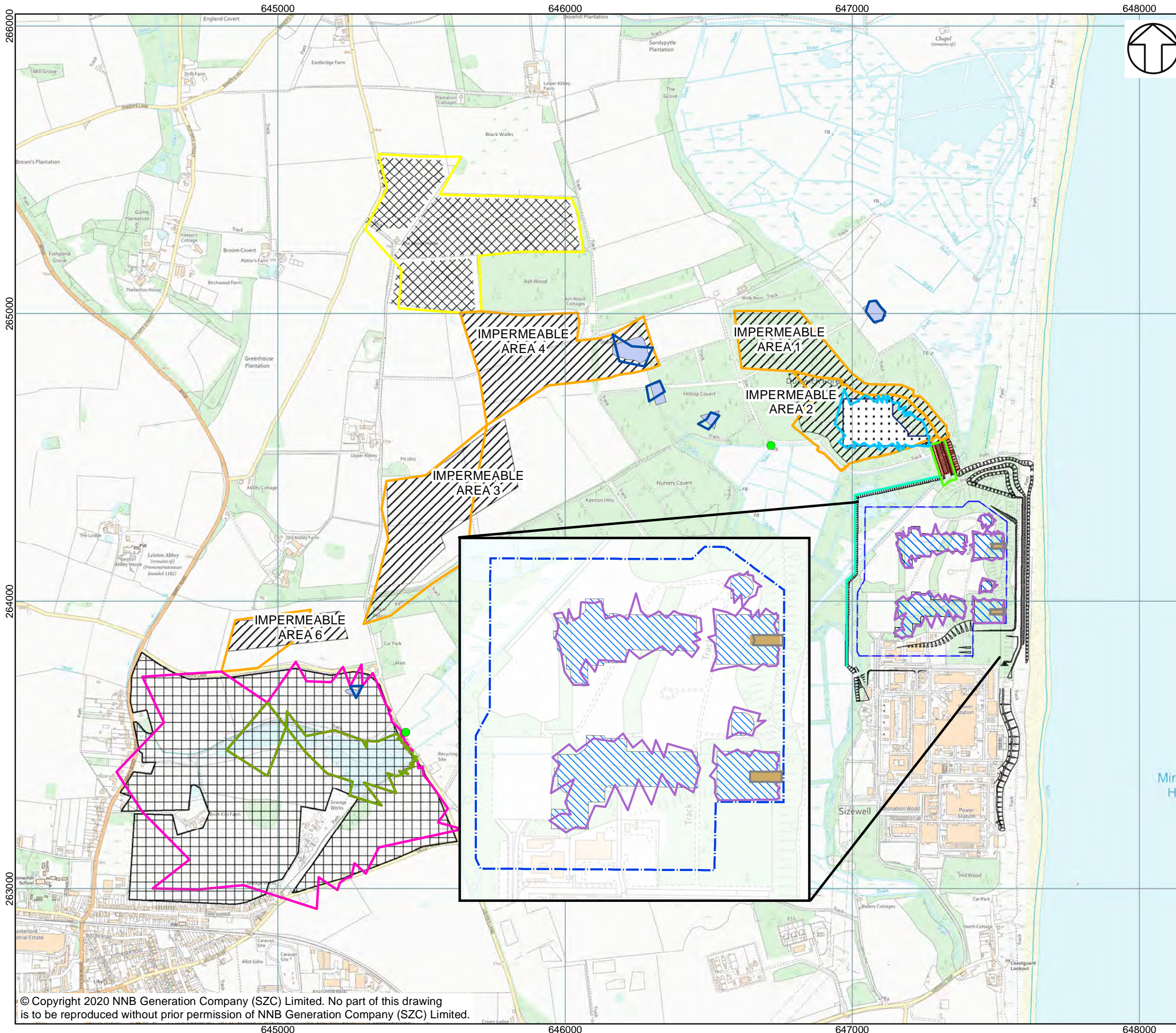
DRAWING TITLE:  
 DESIGN EXTENT OF HYDROGEOLOGICALLY SIGNIFICANT FEATURES

DRAWING NO:  
 FIGURE 19A.73

DATE: JAN 2020 DRAWN: H.M. SCALE: 1:23,000 @A3



642000 643000 644000 645000 646000 647000 648000 649000



**NOTES**  
 1. SOURCES OF DESIGN EXTENTS ARE LAID OUT IN FIGURE 4.4.  
 2. MODELLED FIELD EXTENT AS DEFINED IN FEFLOW MODEL.

- KEY**
- DESIGN FEATURE EXTENTS<sup>1</sup>**
- WATER MANAGEMENT ZONES (WMZs) (2022 - 2032)
  - IMPERMEABLE CATCHMENTS (2022 - 2032)
  - WMZ DISCHARGE POINT (2022-2032)
  - BORROW PITS
  - CAR PARK (2032 - )
  - CUT-OFF WALL (2022 - )
  - ALDHURST FARM (2015 - )
  - SHEET PILE WALL (2022 - )
  - MAIN DEVELOPMENT AREA (MDA) DEEP FOUNDATIONS (2024 - )
  - TBM LAUNCH CHAMBERS (2024 - )
  - SSSI CROSSING (2020 - )
- MODELLED FEATURE EXTENTS<sup>2</sup>**
- WMZs
  - IMPERMEABLE CATCHMENTS
  - WMZ DISCHARGE POINT (2022-2032)
  - BORROW PITS
  - CAR PARK
  - CUT-OFF WALL
  - ALDHURST FARM PASTURE
  - ALDHURST FARM WET REEDS
  - SHEET PILE WALL
  - MDA DEEP FOUNDATIONS
  - TBM LAUNCH CHAMBERS
  - SSSI CROSSING

NOT PROTECTIVELY MARKED

**COPYRIGHT**  
 Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

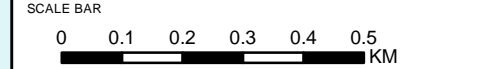


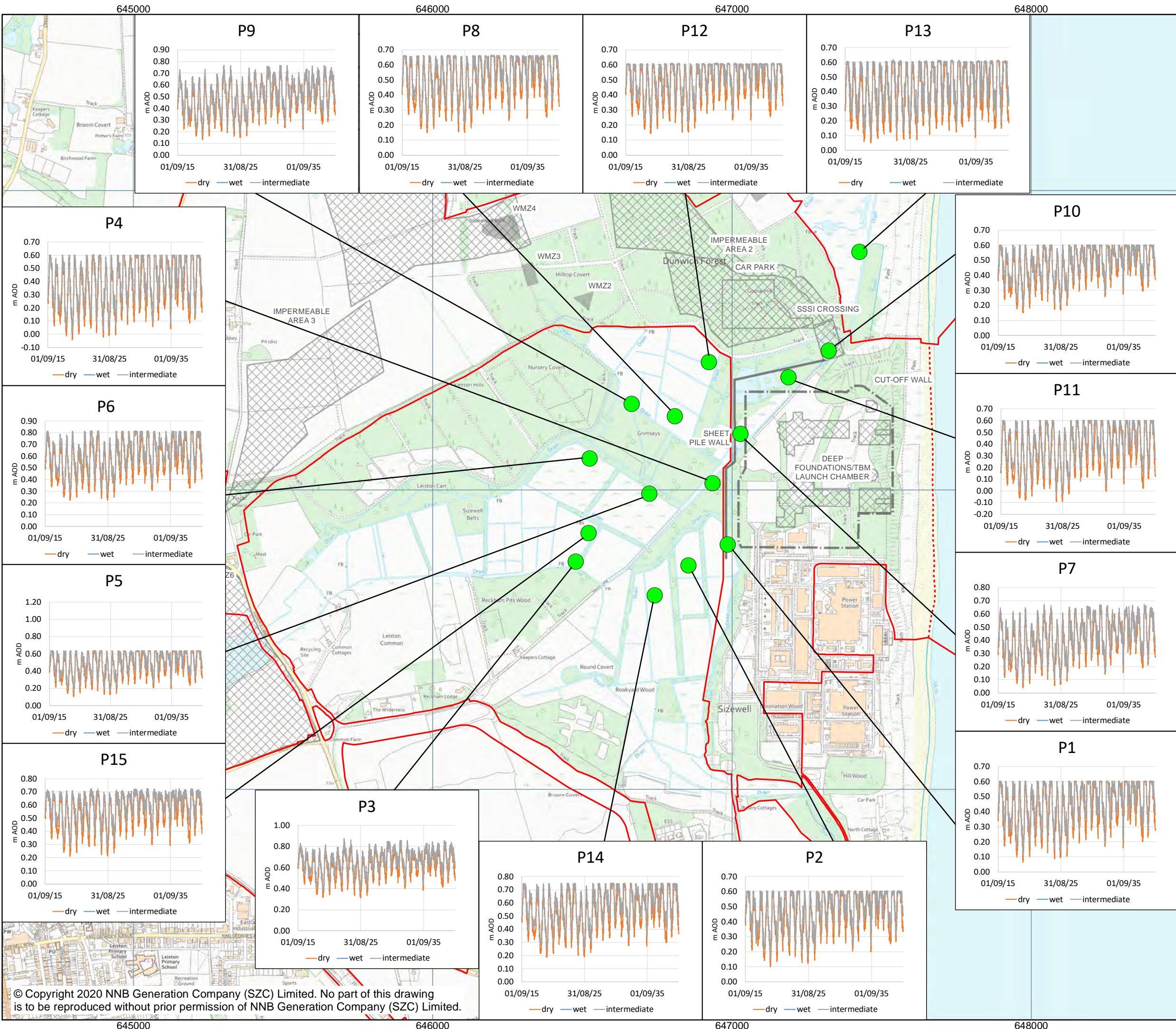
DOCUMENT:  
 SIZEWELL C  
 ENVIRONMENTAL STATEMENT  
 VOLUME 2  
 APPENDIX 19A  
 NUMERICAL MODELLING REPORT

DRAWING TITLE:  
 COMPARISON OF DESIGN AND MODELLED  
 EXTENT OF HYDROGEOLOGICALLY  
 SIGNIFICANT FEATURES

DRAWING NO:  
 FIGURE 19A.74

DATE: JAN 2020      DRAWN: H.M.      SCALE: 1:12,500 @A3





**NOTES**

**BASELINE RUNS:**

**DRY RUNS:**  
53-B-D-1520d / 2022b / 2232f / 3240d

**INTERMEDIATE RUNS:**  
53-B-I-1520e / 2022f / 2232f / 3240d

**WET RUNS:**  
53-B-W-1520b / 2022c / 2232f / 3240c

**KEY**

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- PEAT MONITORING BOREHOLES
- MODELLED DEVELOPMENT FEATURES

**NOT PROTECTIVELY MARKED**

**COPYRIGHT**  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

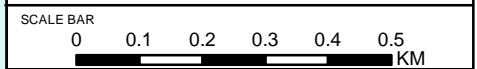


**DOCUMENT:**  
SIZEWELL C  
ENVIRONMENTAL STATEMENT  
VOLUME 2  
APPENDIX 19A  
NUMERICAL MODELLING REPORT

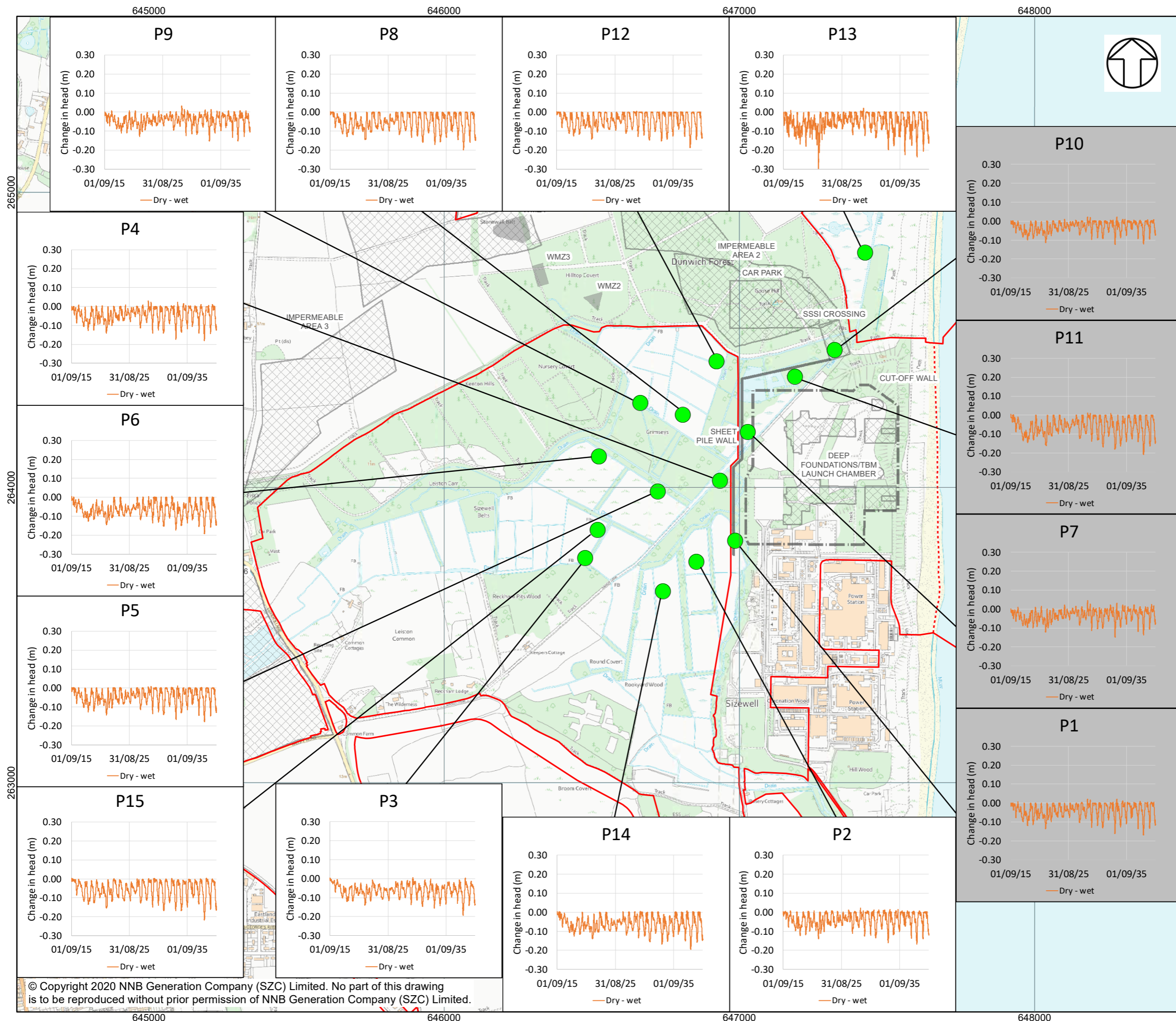
**DRAWING TITLE:**  
SIMULATED WATER LEVELS IN PEAT  
GROUNDWATER MONITORING  
BOREHOLES (BASELINE 2015-2040)

**DRAWING NO.:**  
FIGURE 19A.75

**DATE:** JAN 2020    **DRAWN:** MS    **SCALE:** 1:12,000 @A3



© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.



**NOTES**

HYDROGRAPHS OF BOREHOLES WITHIN FOOTPRINT OF PROPOSED DEVELOPMENT ARE SHOWN IN GREY

**BASELINE RUNS:**

**DRY RUNS:**  
53-B-D-1520d / 2022b / 2232f / 3240d

**WET RUNS:**  
53-B-W-1520b / 2022c / 2232f / 3240c

**KEY**

- PEAT MONITORING BOREHOLES
- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- - - DEMARCATION LINE
- MODELLED DEVELOPMENT FEATURES

NOT PROTECTIVELY MARKED

**COPYRIGHT**  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

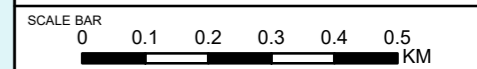


**DOCUMENT:**  
SIZEWELL C  
ENVIRONMENTAL STATEMENT  
VOLUME 2  
APPENDIX 19A  
NUMERICAL MODELLING REPORT

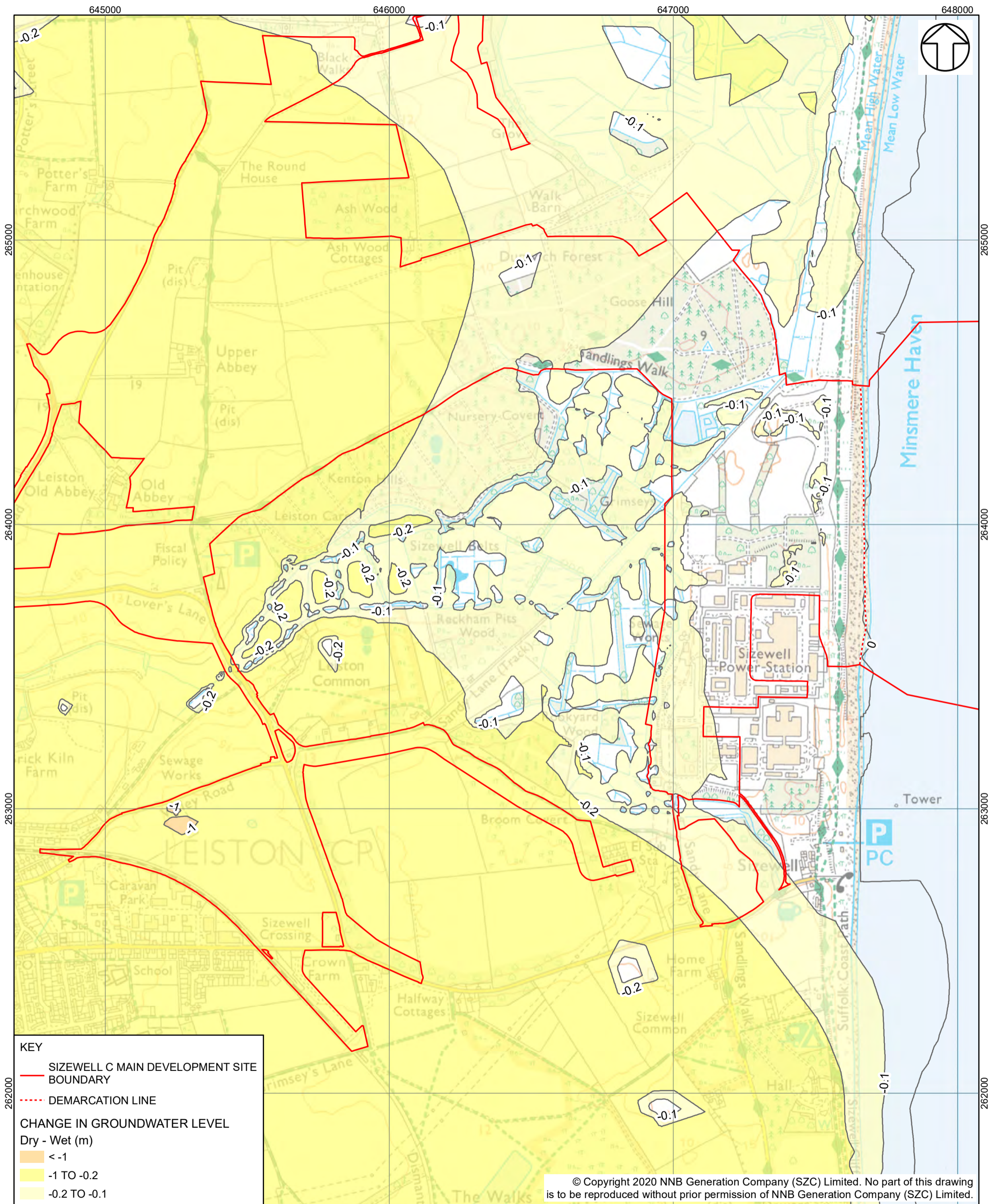
**DRAWING TITLE:**  
SIMULATED DIFFERENCE IN WATER LEVELS IN PEAT GROUNDWATER MONITORING BOREHOLES (DRY BASELINE - WET BASELINE 2015-2040)

**DRAWING NO:**  
FIGURE 19A.76

**DATE:** JAN 2020      **DRAWN:** MG      **SCALE:** 1:12,000 @A3







**KEY**

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- - - DEMARCATION LINE

**CHANGE IN GROUNDWATER LEVEL**  
Dry - Wet (m)

- < -1
- 1 TO -0.2
- 0.2 TO -0.1

© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.

**COPYRIGHT**  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationary Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

**NOTE**

BASELINE RUNS:  
53-B-D-2232f  
53-B-W-2232f

**DRAWING TITLE:**  
MAXIMUM SIMULATED SHALLOW WATER TABLE ELEVATION DIFFERENCE DURING CONSTRUCTION PERIOD (DRY BASELINE – WET BASELINE 17 JULY 2031)

**DRAWING NO.:**  
FIGURE 19A.77

**DATE:**  
JAN 2020

**DRAWN:**  
M.G.

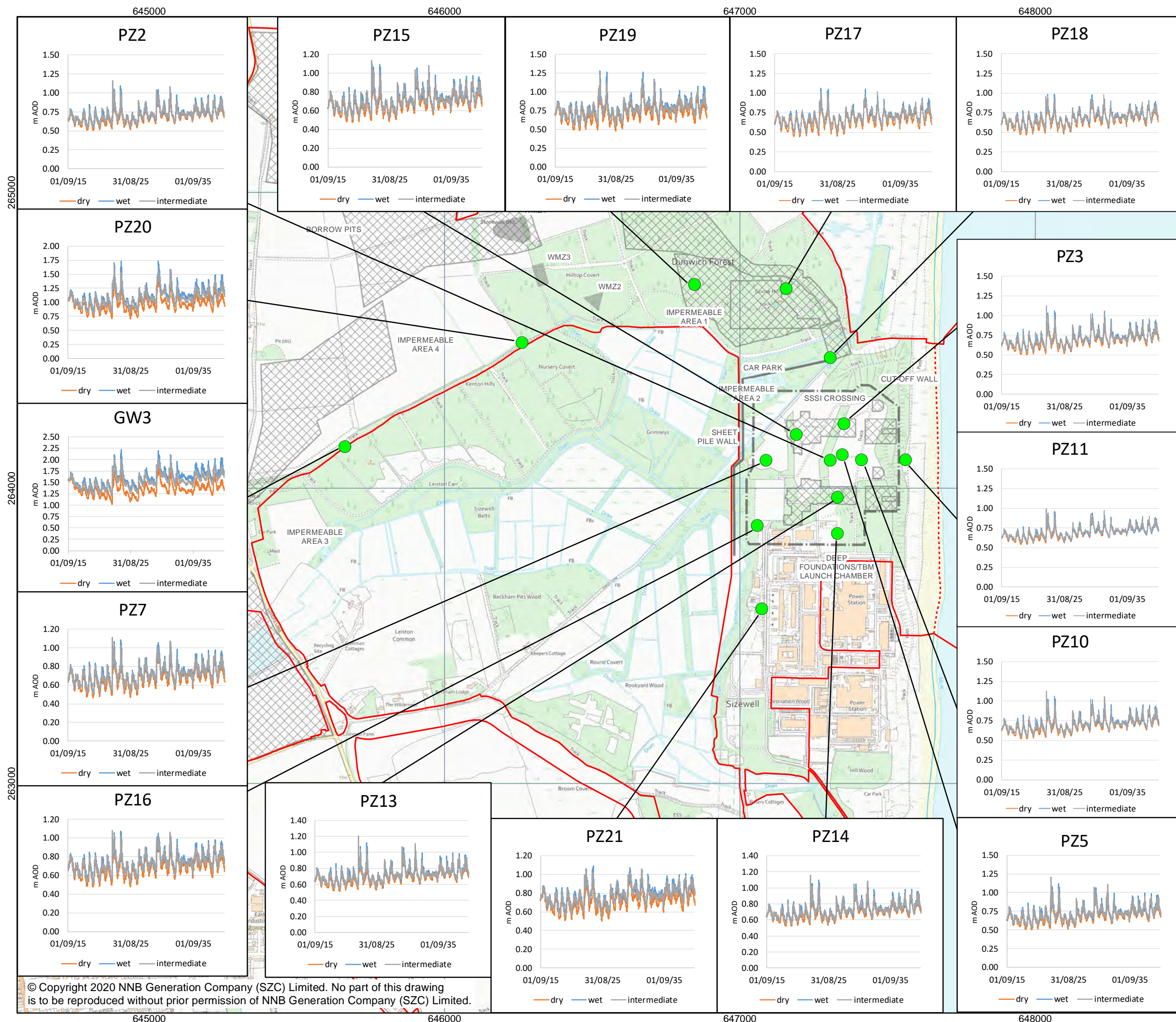
**SCALE:**  
1:12,000 @A3

**DOCUMENT:**  
SIZEWELL C ENVIRONMENTAL STATEMENT VOLUME 2 APPENDIX 19A NUMERICAL MODELLING REPORT

**SCALE BAR**

0 0.1 0.2 0.3 0.4 0.5 KM

**NOT PROTECTIVELY MARKED**



**NOTES**

**BASELINE RUNS:**  
53-B-D-1520d / 2022b / 2232f / 3240d

**INTERMEDIATE RUNS:**  
53-B-I-1520e / 2022f / 2232f / 3240d

**WET RUNS:**  
53-B-W-1520b / 2022c / 2232f / 3240c

**KEY**

- CRAG MONITORING BOREHOLES
- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- - - DEMARCATION LINE
- MODELLED DEVELOPMENT FEATURES

**NOT PROTECTIVELY MARKED**

**COPYRIGHT**  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

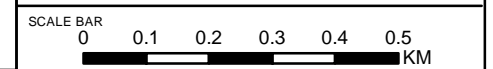


**DOCUMENT:**  
SIZEWELL C  
ENVIRONMENTAL STATEMENT  
VOLUME 2  
APPENDIX 19A  
NUMERICAL MODELLING REPORT

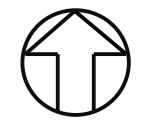
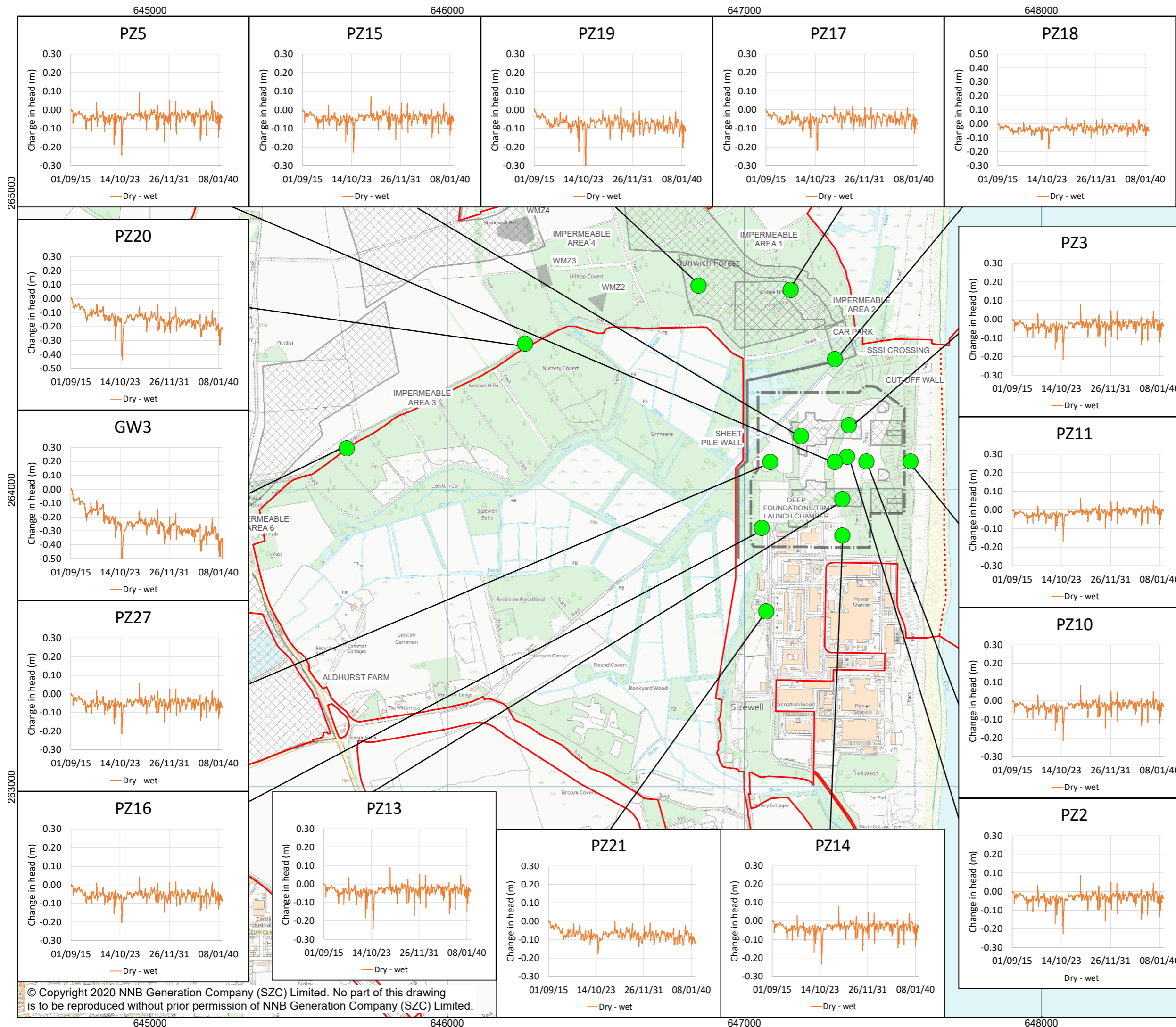
**DRAWING TITLE:**  
SIMULATED WATER LEVELS IN SHALLOW CRAG  
GROUNDWATER MONITORING BOREHOLES  
(ALL BASELINE SCENARIOS 2015-2040)

**DRAWING NO:**  
FIGURE 19A.78

**DATE:** JAN 2020    **DRAWN:** MG/MS    **SCALE:** 1:12,000 @A3



© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.



**NOTES**

**BASELINE RUNS:**

**DRY RUNS:**  
53-B-D-1520d / 2022b / 2232f / 3240d

**WET RUNS:**  
53-B-W-1520b / 2022c / 2232f / 3240c

**KEY**

- CRAG MONITORING BOREHOLES
- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- MODELLLED DEVELOPMENT FEATURES

NOT PROTECTIVELY MARKED

COPYRIGHT  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

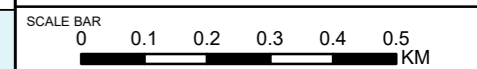


DOCUMENT:  
SIZEWELL C  
ENVIRONMENT STATEMENT  
VOLUME 2  
APPENDIX 19A  
NUMERICAL MODELLING REPORT

DRAWING TITLE:  
SIMULATED DIFFERENCE IN WATER LEVELS IN SHALLOW CRAG GROUNDWATER MONITORING BOREHOLES (DRY BASELINE - WET BASELINE 2015-2040)

DRAWING NO:  
**FIGURE 19A.79**

DATE: JAN 2020      DRAWN: MG/MS      SCALE: 1:12,000 @A3



© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.

643000 644000 645000 646000 647000 648000 649000

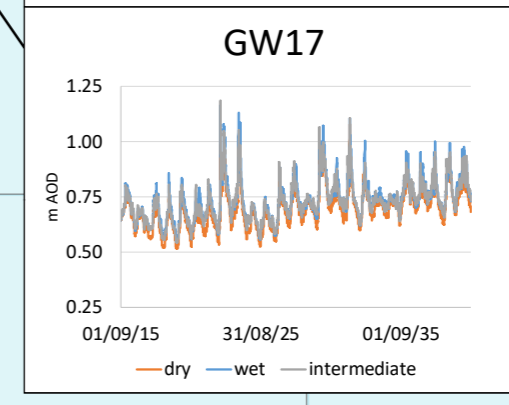
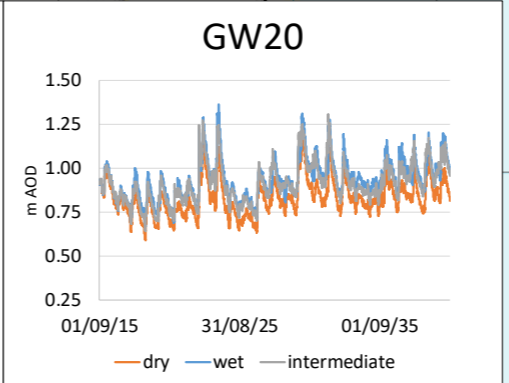
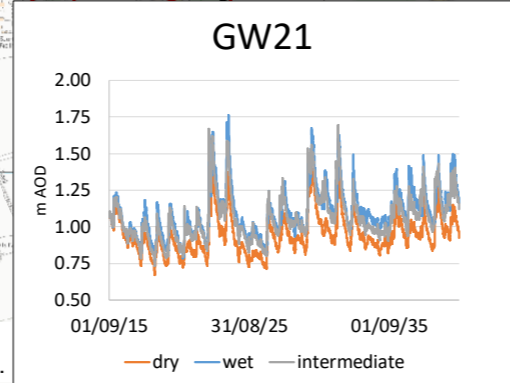
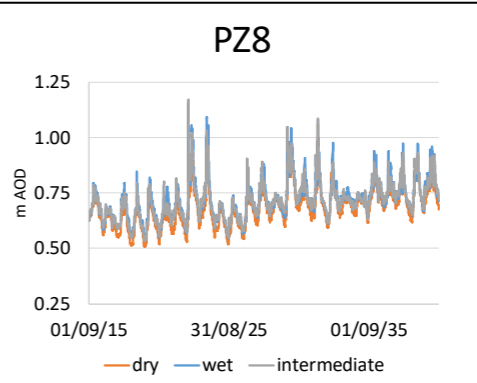
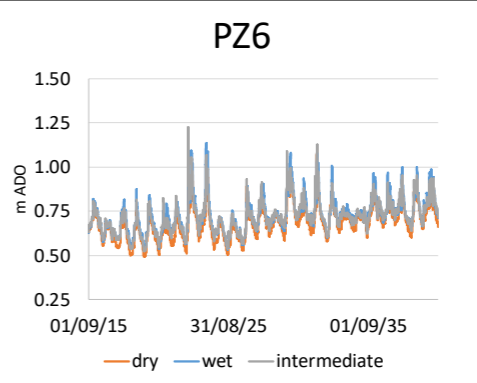
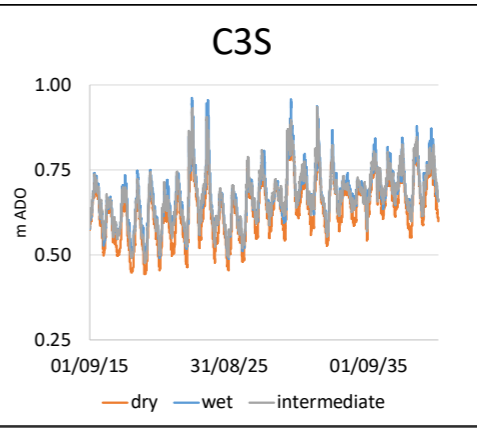
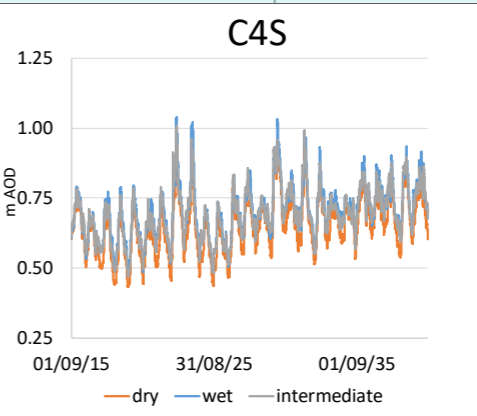
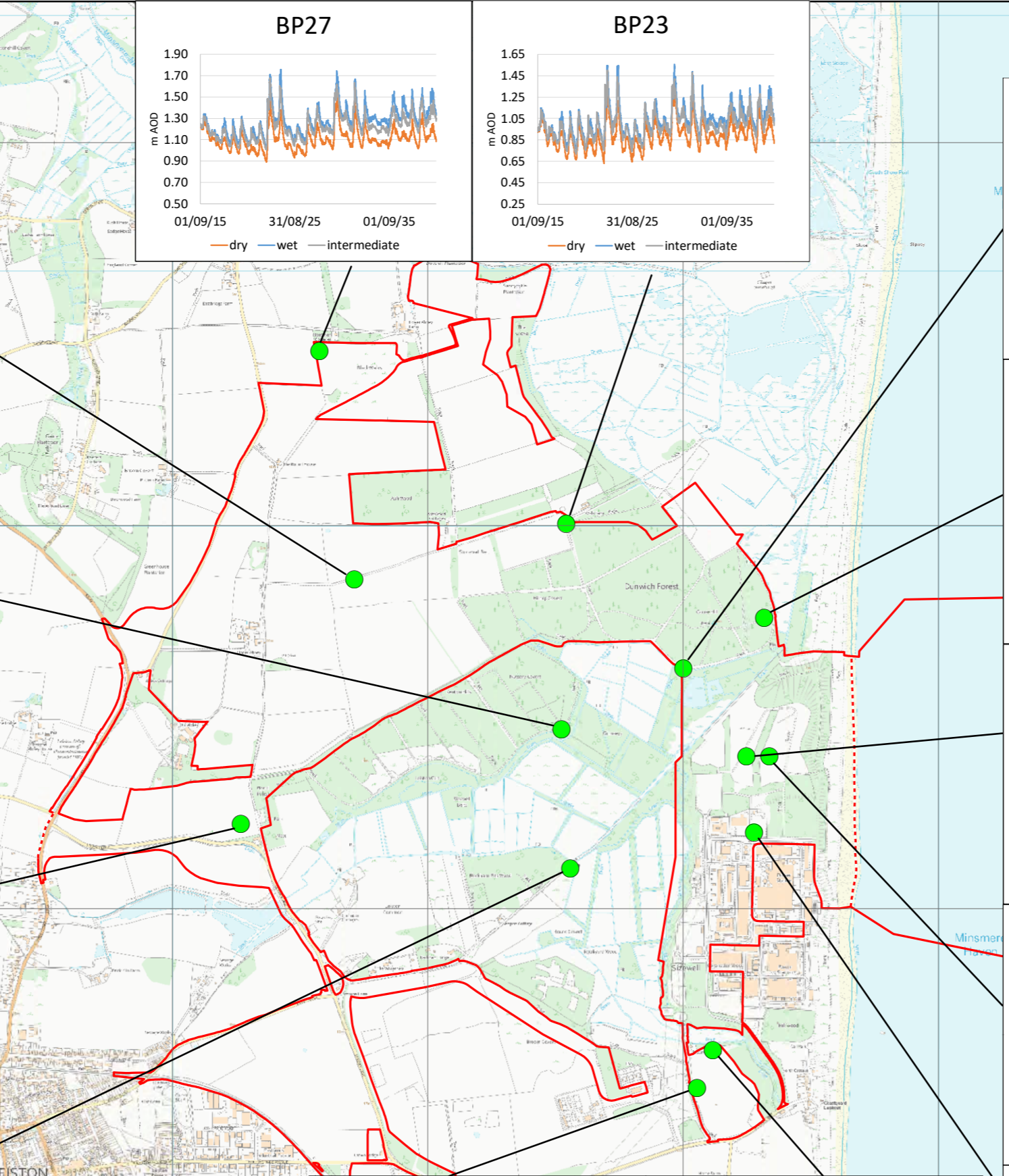
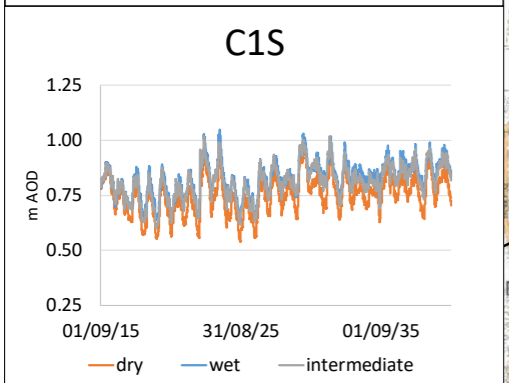
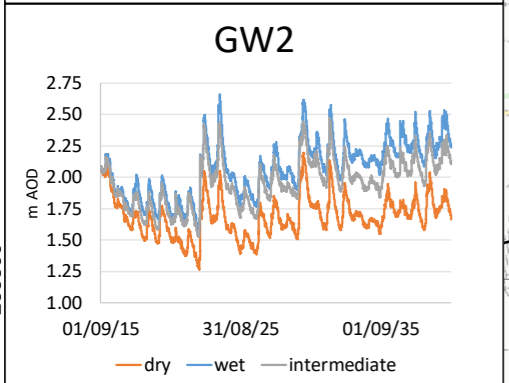
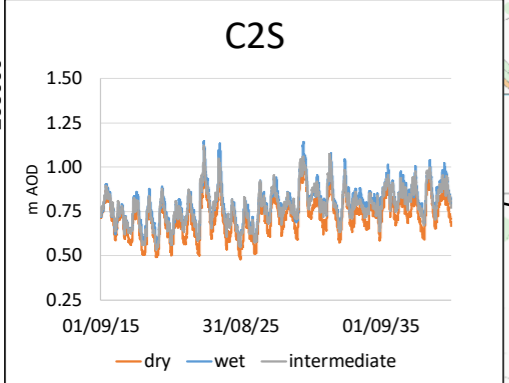
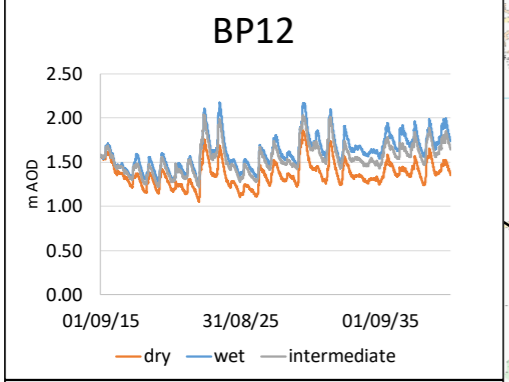
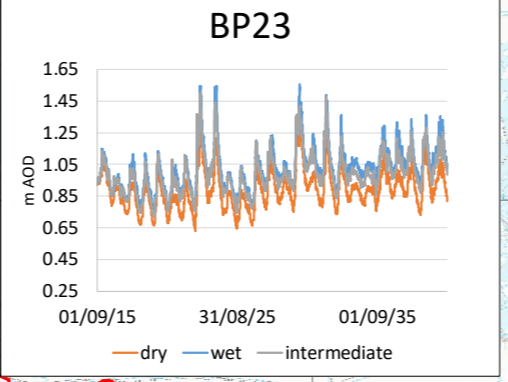
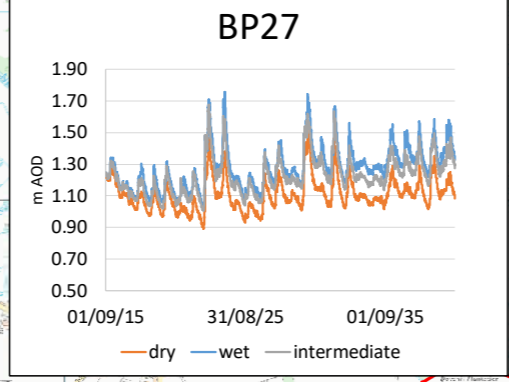
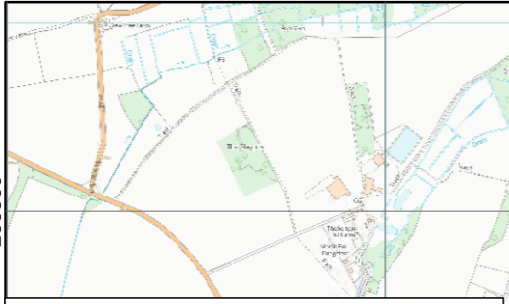
266500

265500

263500

262000

643000 644000 645000 646000 647000 648000 649000



NOTES

BASELINE RUNS:

DRY RUNS:  
53-B-D-1520d / 2022b / 2232f / 3240d

INTERMEDIATE RUNS:  
53-B-I-1520e / 2022f / 2232f / 3240d

WET RUNS:  
53-B-W-1520b / 2022c / 2232f / 3240c

KEY

- CRAG GROUNDWATER MONITORING BOREHOLES
- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- MODELLED DEVELOPMENT FEATURES

NOT PROTECTIVELY MARKED

COPYRIGHT  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

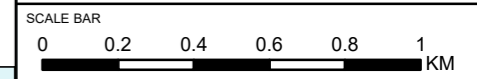


DOCUMENT:  
SIZEWELL C  
ENVIRONMENTAL STATEMENT  
VOLUME 2  
APPENDIX 19A  
NUMERICAL MODELLING REPORTS

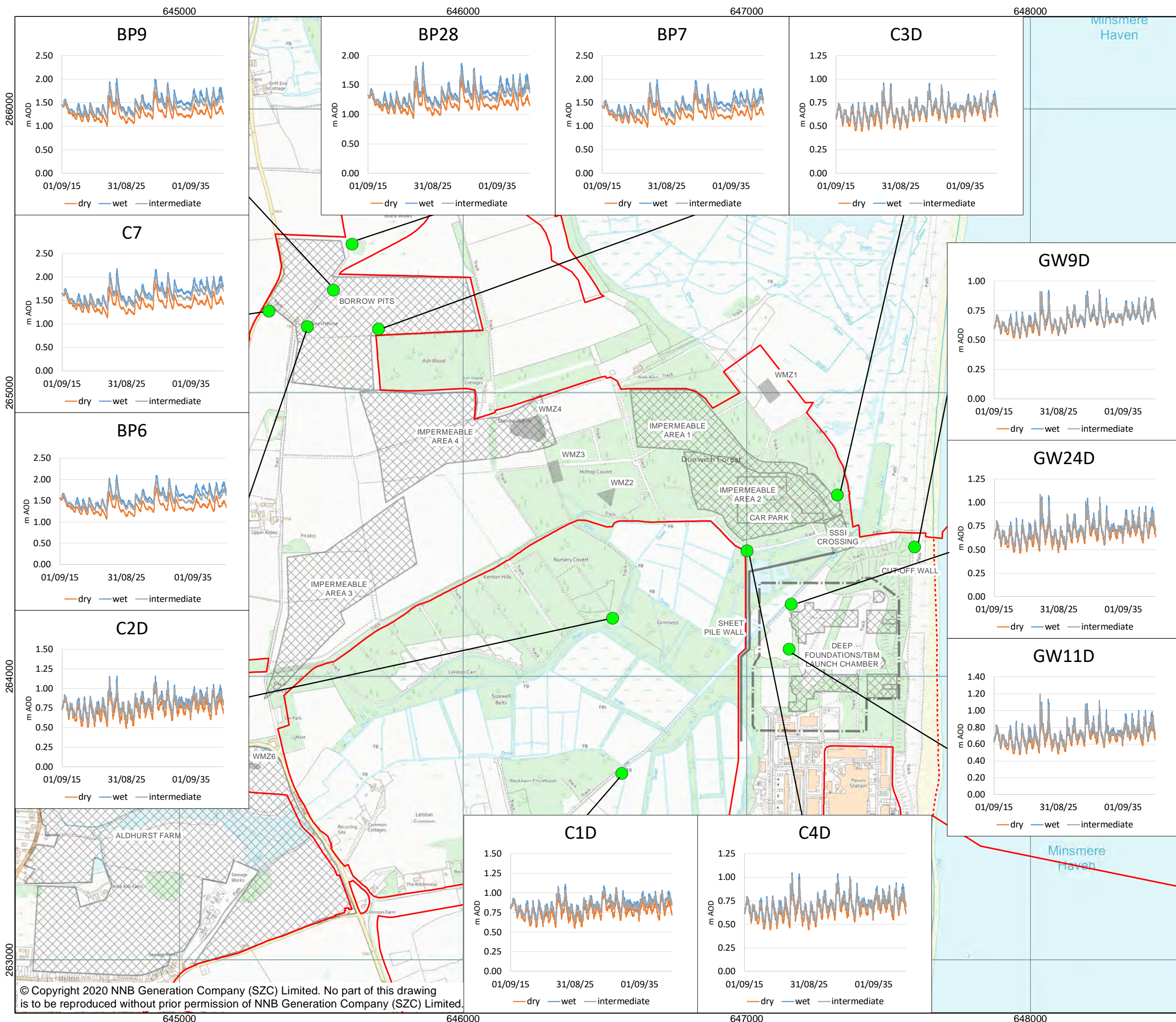
DRAWING TITLE:  
SIMULATED WATER LEVELS IN MIDDLE CRAG  
GROUNDWATER MONITORING BOREHOLES  
(ALL BASELINE SCENARIOS 2015-2040)

DRAWING NO:  
FIGURE 19A.80

DATE: JAN 2020 DRAWN: M.S SCALE: 1:20,000 @A3



© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.



**NOTES**

**BASELINE RUNS:**

53-B-D-1520d / 2022b / 2232f / 3240d

**INTERMEDIATE RUNS:**

53-B-I-1520e / 2022f / 2232f / 3240d

**WET RUNS:**

53-B-W-1520b / 2022c / 2232f / 3240c

**KEY**

- CRAG GROUNDWATER BOREHOLES
- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- - - DEMARCATION LINE
- MODELLED DEVELOPMENT FEATURES

**NOT PROTECTIVELY MARKED**

**COPYRIGHT**  
 Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationary Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

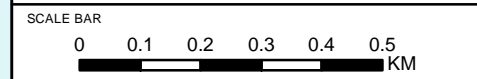


**DOCUMENT:**  
 SIZEWELL C  
 ENVIRONMENTAL STATEMENT  
 VOLUME 2  
 CHAPTER 19A  
 NUMERICAL MODELLING REPORT

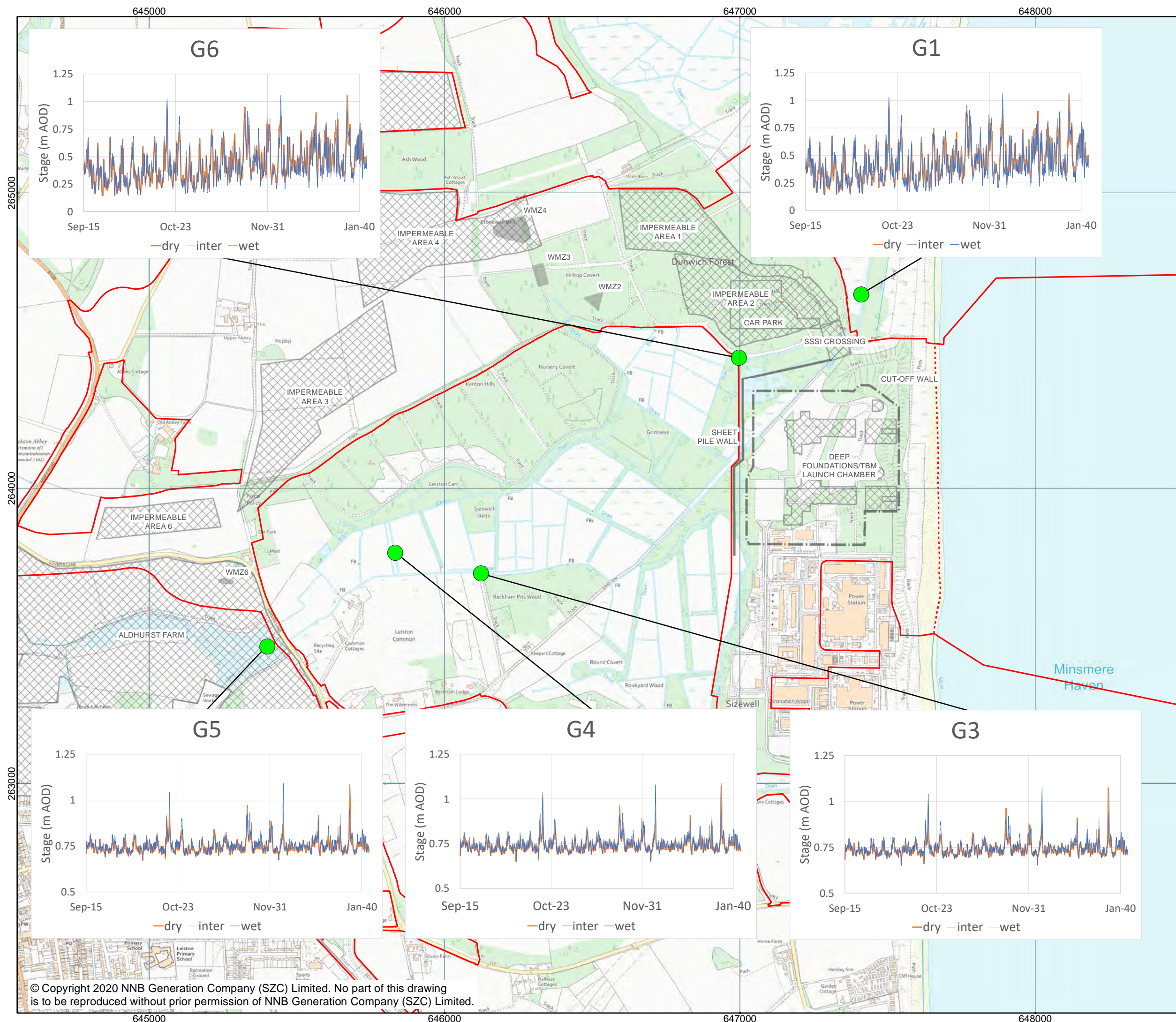
**DRAWING TITLE:**  
 SIMULATED WATER LEVELS IN DEEP CRAG  
 GROUNDWATER MONITORING BOREHOLES  
 (ALL BASELINE SCENARIOS 2015-2040)

**DRAWING NO:**  
 FIGURE 19A.81

**DATE:** JAN 2020      **DRAWN:** M.S      **SCALE:** 1:12,500 @A3



© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.



**NOTES**  
 G7 OMITTED DUE TO LOCATION WITHIN MAIN DEVELOPMENT SITE

**BASELINE RUNS:**  
**DRY RUNS:**  
 53-B-D-1520d / 2022b / 2232f / 3240d

**INTERMEDIATE RUNS:**  
 53-B-I-1520e / 2022f / 2232f / 3240d

**WET RUNS:**  
 53-B-W-1520b / 2022c / 2232f / 3240c

- KEY**
- SURFACE WATER GAUGING LOCATIONS
  - SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
  - DEMARCATION LINE
  - MODELLED DEVELOPMENT FEATURES

NOT PROTECTIVELY MARKED

**COPYRIGHT**  
 Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

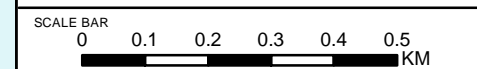


**DOCUMENT:**  
 SIZEWELL C  
 ENVIRONMENTAL STATEMENT  
 VOLUME 2  
 APPENDIX 19A  
 NUMERICAL MODELLING REPORT

**DRAWING TITLE:**  
 SIMULATED STAGE AT STREAM  
 GAUGING LOCATIONS  
 (ALL BASELINE SCENARIOS 2015-2040)

**DRAWING NO:**  
 FIGURE 19A.82

**DATE:** JAN 2020     **DRAWN:** MS     **SCALE:** 1:12,000 @A3



© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.

645000

646000

647000

648000

265000

264000

263000

645000

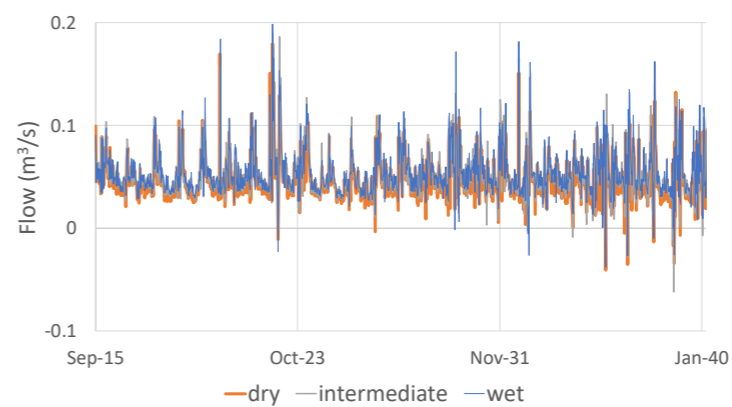
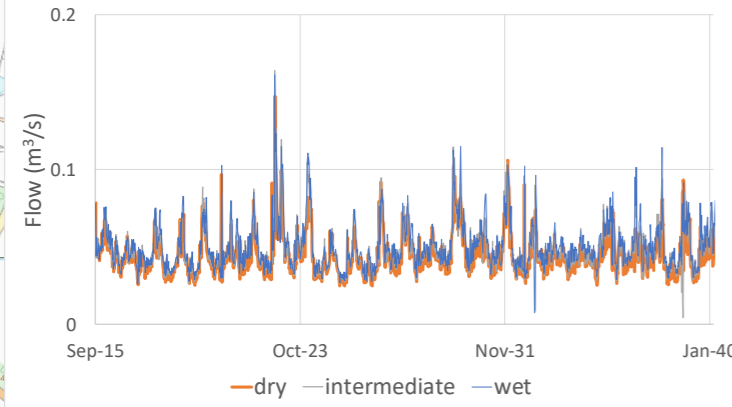
646000

647000

648000

G6

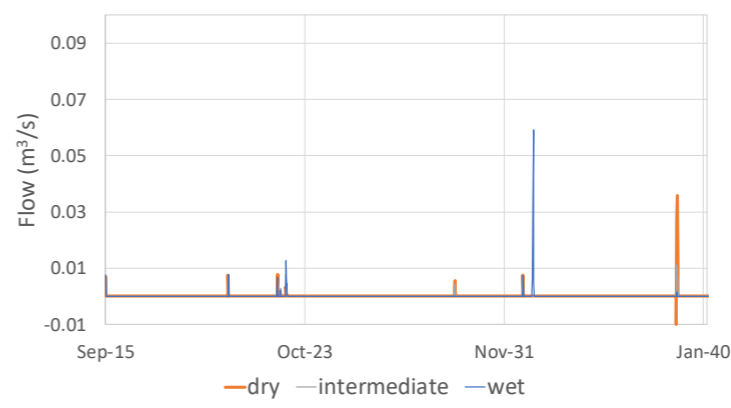
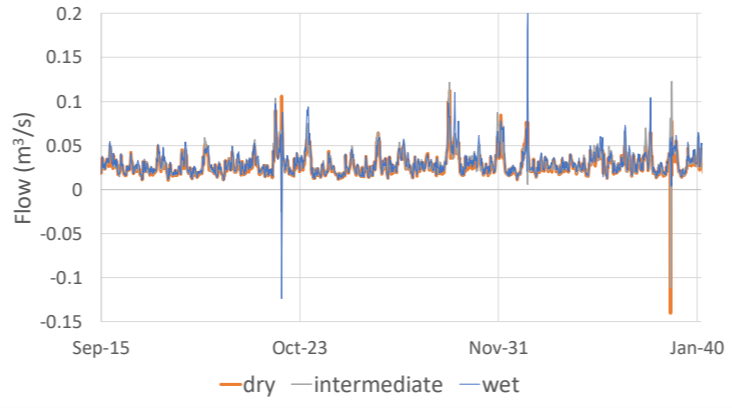
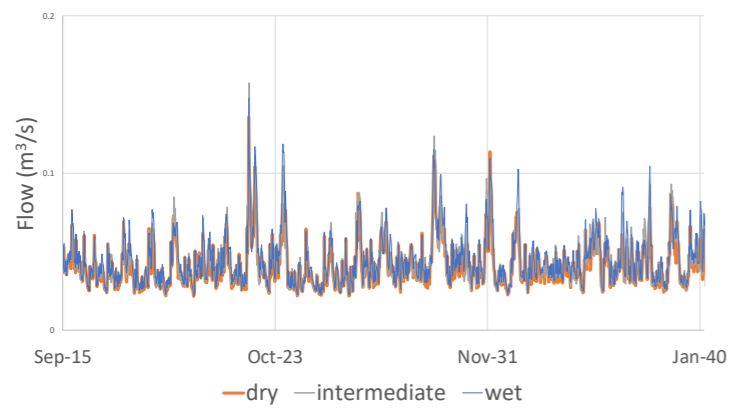
G1



G5

G4

G3



NOTES



G7 OMITTED DUE TO LOCATION WITHIN MAIN DEVELOPMENT SITE

BASELINE RUNS:

DRY RUNS: 53-B-D-1520d / 2022b / 2232f / 3240d

INTERMEDIATE RUNS: 53-B-I-1520e / 2022f / 2232f / 3240d

WET RUNS: 53-B-W-1520b / 2022c / 2232f / 3240c

KEY

- SURFACE WATER GAUGING LOCATIONS
- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- MODELLED DEVELOPMENT FEATURES

NOT PROTECTIVELY MARKED

COPYRIGHT  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

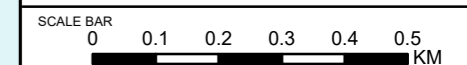


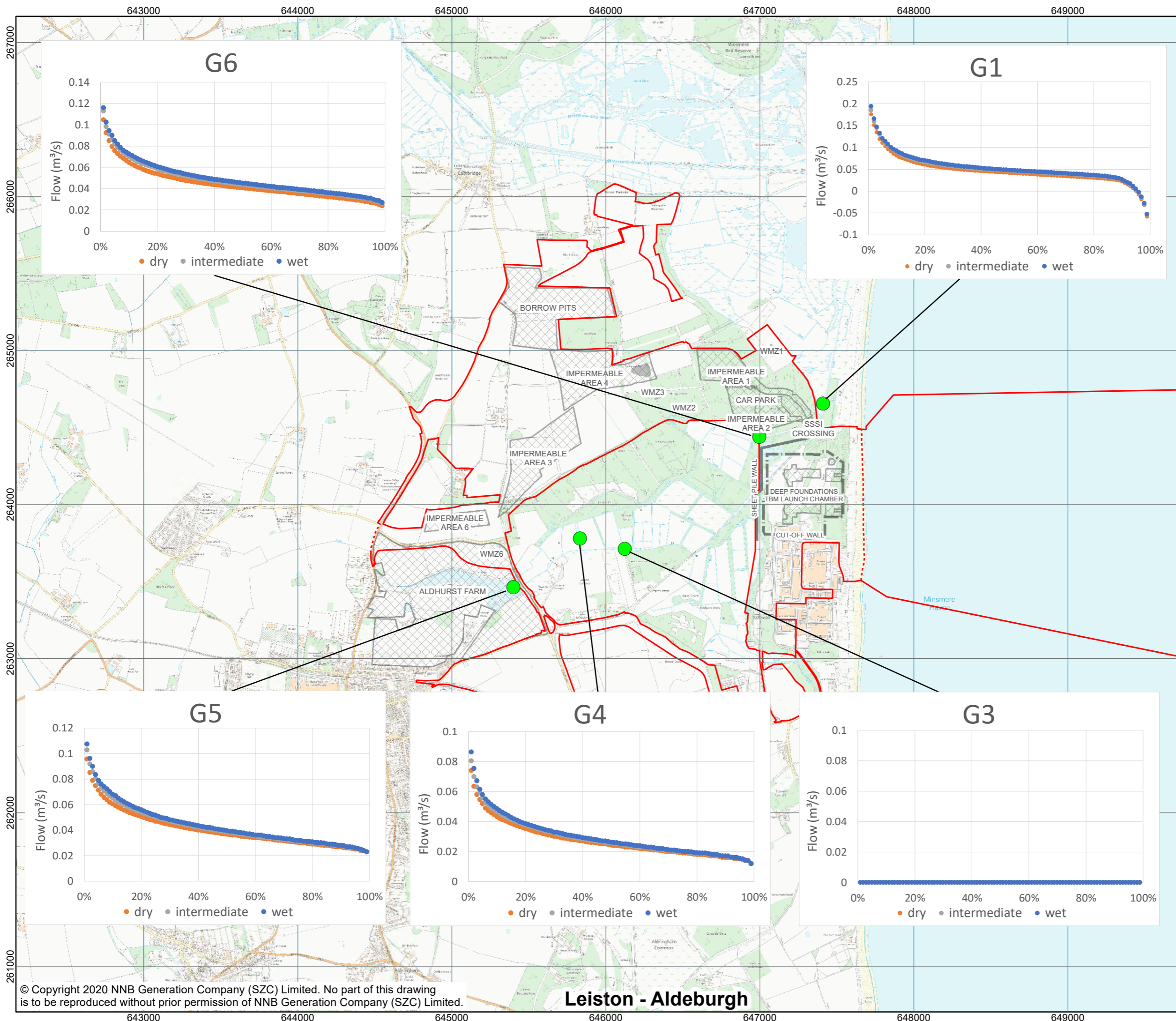
DOCUMENT:  
SIZEWELL C  
ENVIRONMENTAL STATEMENT  
VOLUME 2  
APPENDIX 19A  
NUMERICAL MODELLING REPORT

DRAWING TITLE:  
SIMULATED FLOW AT STREAM  
GAUGING LOCATIONS  
(ALL BASELINE SCENARIOS 2015-2040)

DRAWING NO:  
FIGURE 19A.83

DATE: JAN 2020 DRAWN: M.S. SCALE: 1:12,000 @A3





**NOTES**  
 G7 OMITTED DUE TO LOCATION WITHIN MAIN DEVELOPMENT SITE

**BASELINE RUNS:**  
**DRY RUNS:**  
 53-B-D-1520d / 2022b / 2232f / 3240d  
**INTERMEDIATE RUNS:**  
 53-B-I-1520e / 2022f / 2232f / 3240d  
**WET RUNS:**  
 53-B-D-1520d / 2022b / 2232f / 3240d

- KEY**
- SURFACE WATER GAUGING LOCATIONS
  - SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
  - - - DEMARCATION LINE
  - MODELLED DEVELOPMENT FEATURES

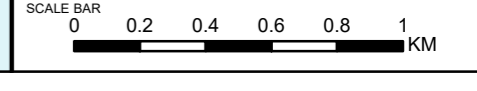
**NOT PROTECTIVELY MARKED**  
 COPYRIGHT  
 Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.



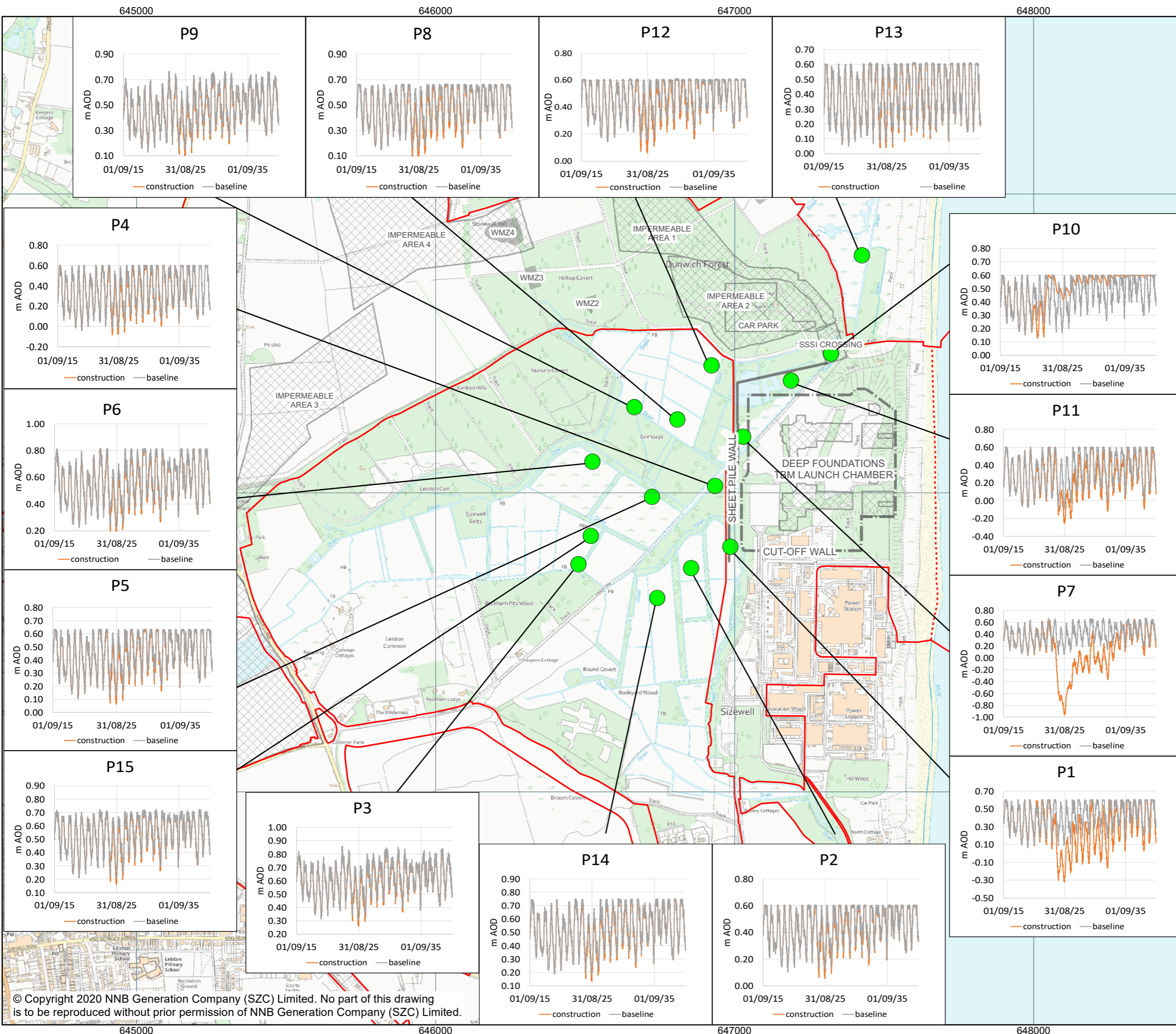
**DOCUMENT:**  
 SIZEWELL C  
 ENVIRONMENTAL STATEMENT  
 VOLUME 2  
 APPENDIX 19A  
 NUMERICAL MODELLING REPORT

**DRAWING TITLE:**  
 SIMULATED WATER FLOW DURATION CURVES  
 AT STREAM GAUGING LOCATIONS  
 (ALL BASELINE SCENARIOS 2015-2040)

**DRAWING NO:**  
 FIGURE 19A.84  
**DATE:** JAN 2020    **DRAWN:** M.S.    **SCALE:** 1:23,000 @A3







**NOTES**

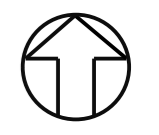
HYDROGRAPHS OF BOREHOLES WITHIN FOOTPRINT OF PROPOSED EXCAVATION WORKS ARE SHOWN IN GREY.

**BASELINE RUNS:**  
53-B-D-1520d / 2022b / 2232f / 3240d

**CONSTRUCTION RUNS:**  
53-C-D-1520b / 2022a / 2224h / 2432g / 3240d

**KEY**

- PEAT MONITORING BOREHOLES
- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- - - DEMARCATION LINE
- MODELLED DEVELOPMENT FEATURES



NOT PROTECTIVELY MARKED

**COPYRIGHT**  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

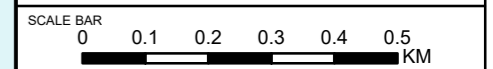


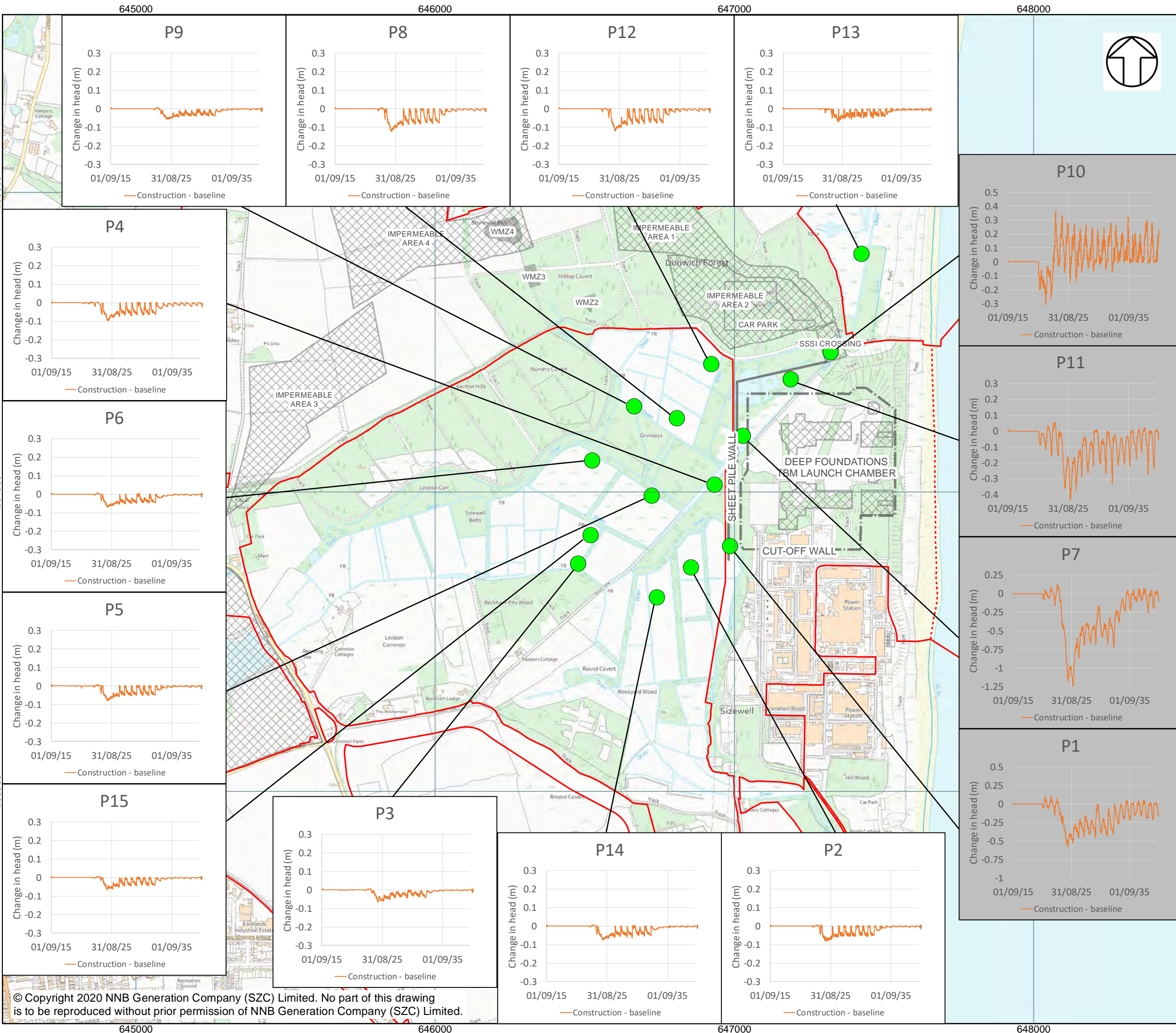
**DOCUMENT:**  
SIZEWELL C  
ENVIRONMENTAL STATEMENT  
VOLUME 2  
APPENDIX 19A  
NUMERICAL MODELLING REPORT

**DRAWING TITLE:**  
SIMULATED WATER LEVELS IN PEAT  
GROUNDWATER MONITORING BOREHOLES  
(CONSTRUCTION AND BASELINE DRY  
SCENARIO 2015-2040)

**DRAWING NO:**  
FIGURE 19A.85

**DATE:** JAN 2020      **DRAWN:** MG/MS      **SCALE:** 1:12,000 @A3





**NOTES**

HYDROGRAPHS OF BOREHOLES WITHIN FOOTPRINT OF PROPOSED EXCAVATION WORKS ARE SHOWN IN GREY.

**BASELINE RUNS:**  
53-B-D-1520d / 2022b / 2232f / 3240d

**CONSTRUCTION RUNS:**  
53-C-D-1520b / 2022a / 2224h / 2432g / 3240d

**KEY**

- PEAT MONITORING BOREHOLES
- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- - - DEMARCATION LINE
- MODELLED DEVELOPMENT FEATURES

NOT PROTECTIVELY MARKED

**COPYRIGHT**  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.



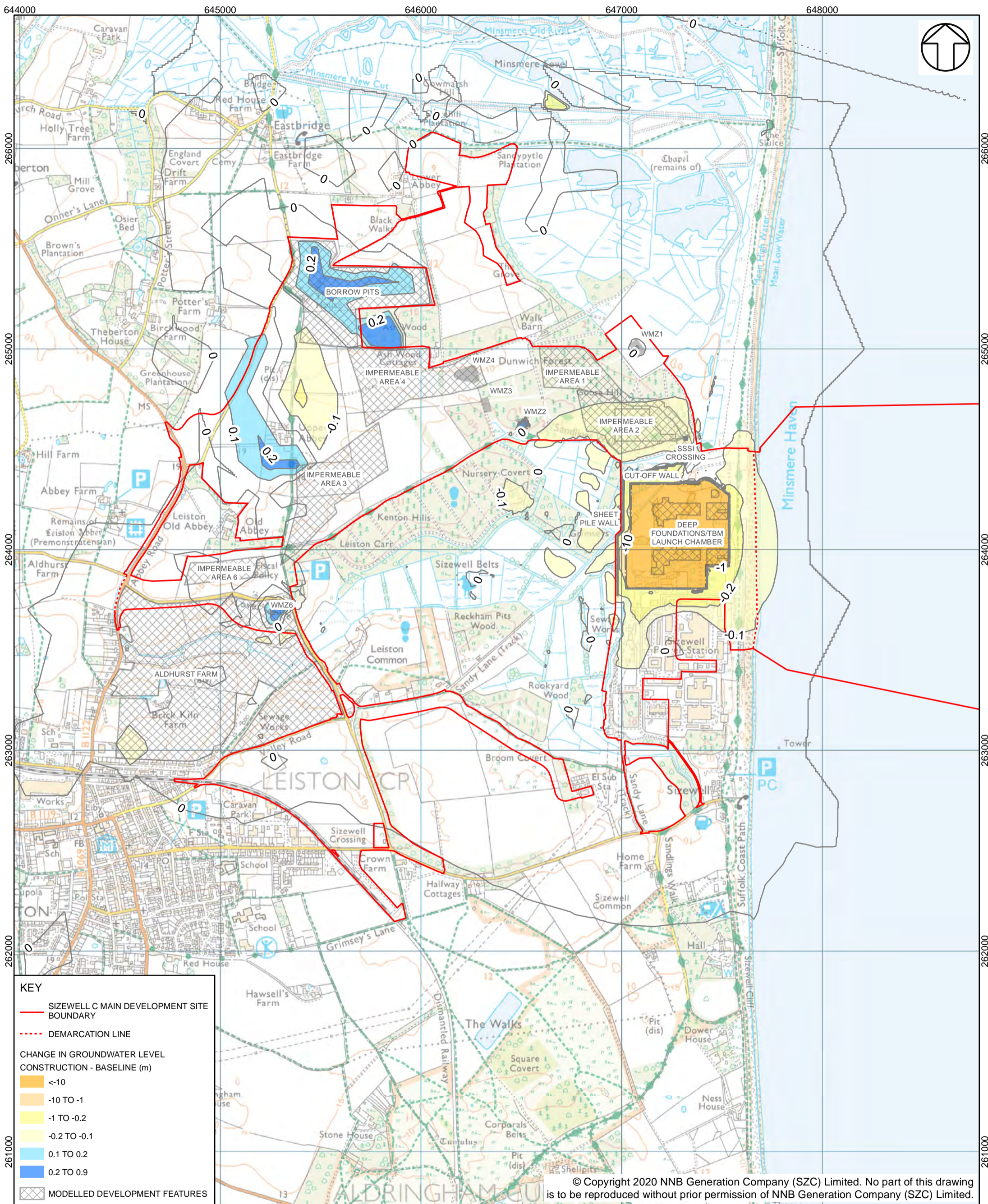
**DOCUMENT:**  
SIZEWELL C ENVIRONMENTAL STATEMENT VOLUME 2 APPENDIX 19A NUMERICAL MODELLING REPORT

**DRAWING TITLE:**  
PROJECTED CHANGES IN SIMULATED GROUNDWATER LEVELS IN THE PEAT FROM CONSTRUCTION: DRY SCENARIO (2015-2040)

**DRAWING NO:**  
FIGURE 19A.86

**DATE:** JAN 2020 **DRAWN:** MG **SCALE:** 1:12,000 @A3





© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.

**COPYRIGHT**  
 Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationary Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

**NOTE**  
 BASELINE RUN:  
 53-B-D-2232f  
 CONSTRUCTION RUN:  
 53-C-D-2432g

**DRAWING TITLE:**  
 PROJECTED MAXIMUM DRAWDOWN CONTOURS IN THE WATER TABLE AQUIFER - DRY SCENARIO (12 DECEMBER 2024)

**NOT PROTECTIVELY MARKED**

**DRAWING NO.:**  
 FIGURE 19A.87

**DATE:**  
 JAN 2020

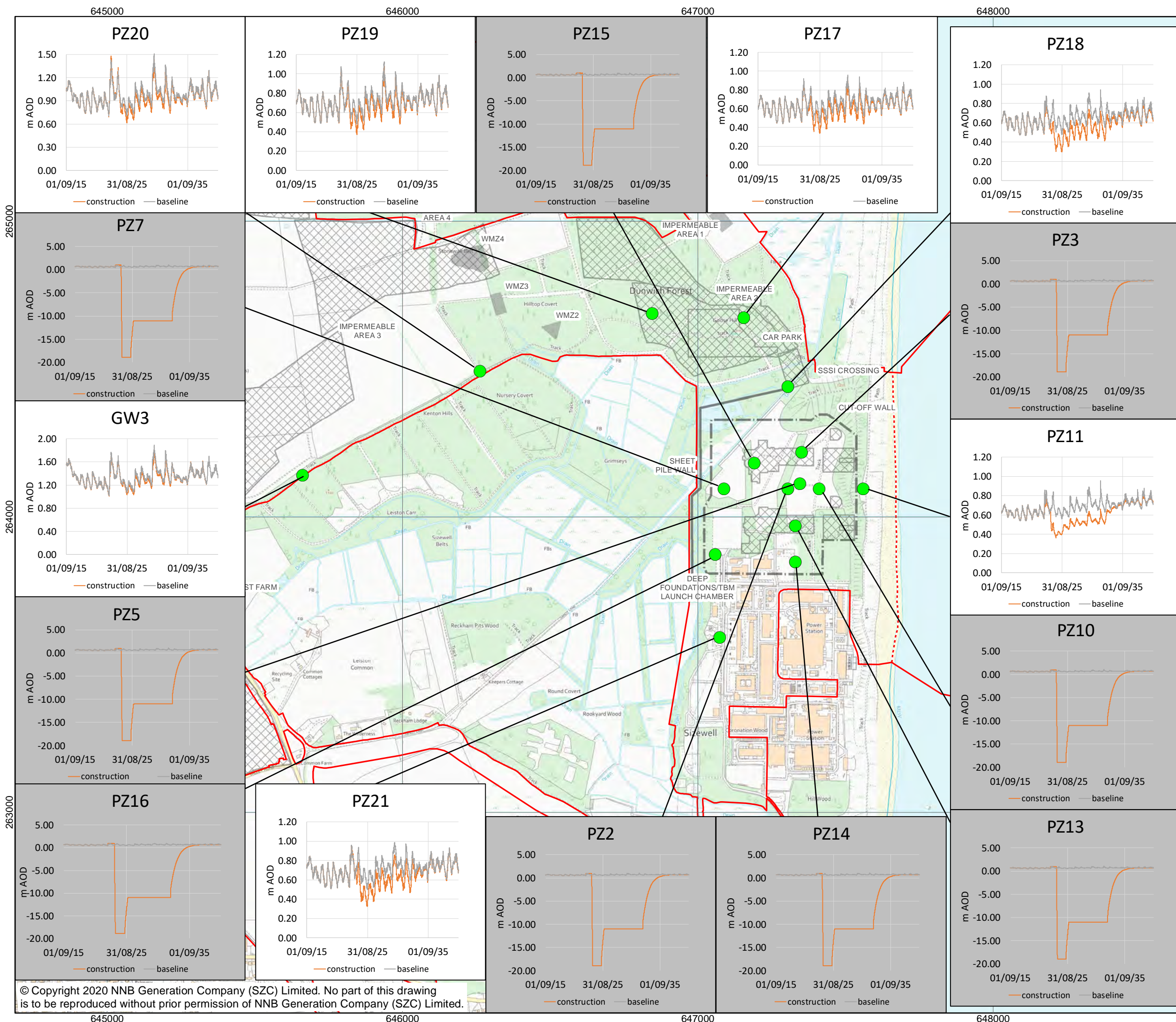
**DRAWN:**  
 M.G.

**SCALE:**  
 1:17,000 @A3

**DOCUMENT:**  
 SIZEWELL C ENVIRONMENTAL STATEMENT VOLUME 2 APPENDIX 19A NUMERICAL MODELLING REPORT

**SCALE BAR**  
 0 0.2 0.4 0.6 0.8 1 KM





**NOTES**  
 HYDROGRAPHS OF BOREHOLES WITHIN FOOTPRINT OF PROPOSED DEVELOPMENT ARE SHOWN IN GREY

**BASELINE RUNS:**  
 53-B-D-1520d / 2022b / 2232f / 3240d

**CONSTRUCTION RUNS:**  
 53-C-D-1520b / 2022a / 2224h / 2432g / 3240d

- KEY**
- CRAG GROUNDWATER MONITORING BOREHOLES
  - SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
  - - - DEMARCATION LINE
  - MODELLED DEVELOPMENT FEATURES

NOT PROTECTIVELY MARKED

**COPYRIGHT**  
 Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

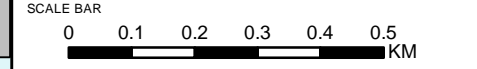


**DOCUMENT:**  
 SIZEWELL C ENVIRONMENTAL STATEMENT VOLUME 2 APPENDIX 19A NUMERICAL MODELLING REPORT

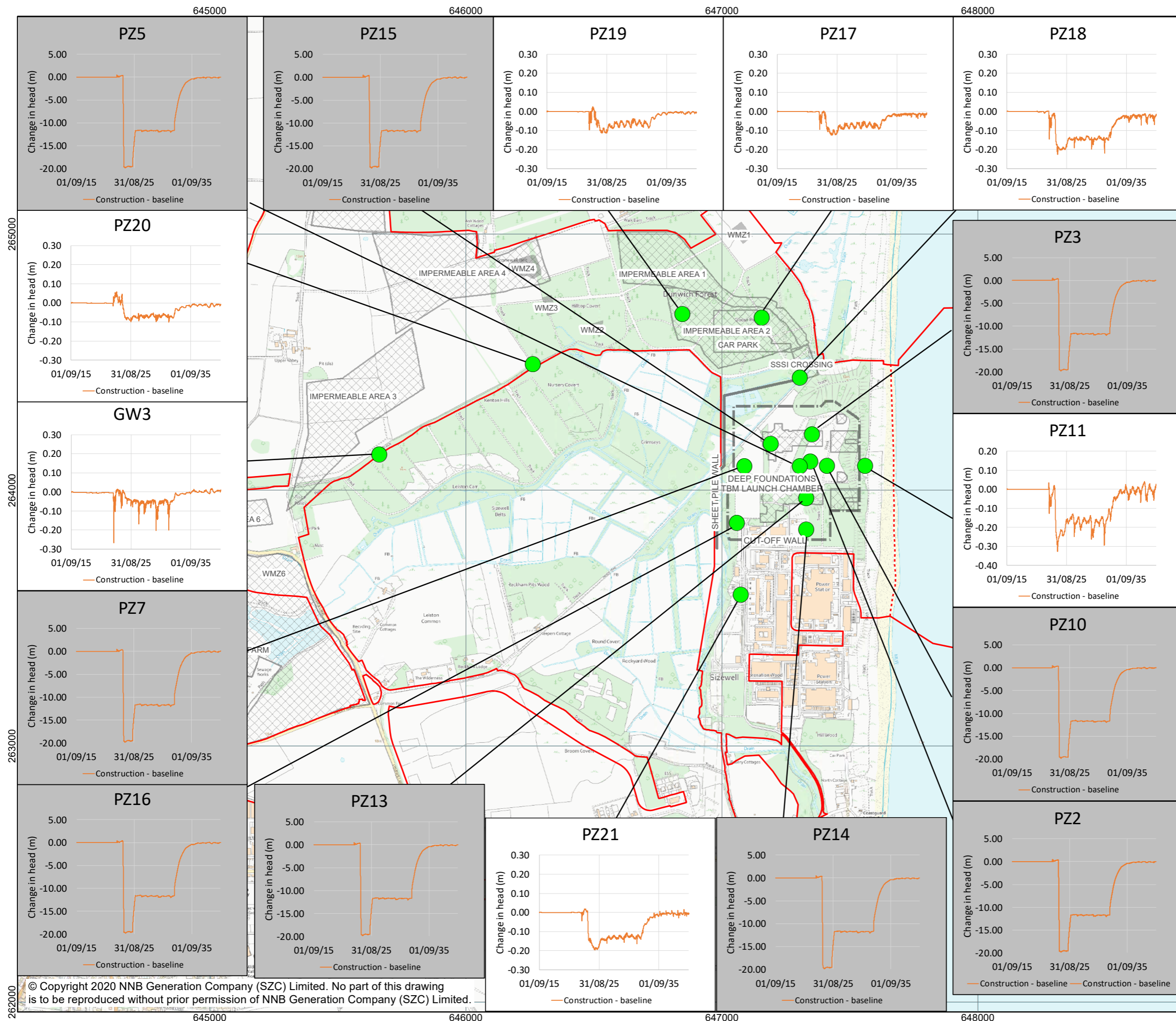
**DRAWING TITLE:**  
 SIMULATED WATER LEVELS IN SHALLOW CRAG GROUNDWATER MONITORING BOREHOLES (CONSTRUCTION AND BASELINE DRY SCENARIO 2015-2040)

**DRAWING NO:**  
 FIGURE 19A.88

**DATE:** JAN 2020 **DRAWN:** M.G. **SCALE:** 1:12,000 @A3



© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.



**NOTES**

HYDROGRAPHS OF BOREHOLES WITHIN FOOTPRINT OF PROPOSED EXCAVATION WORKS ARE SHOWN IN GREY

**BASELINE RUNS:**  
53-B-D-1520d / 2022b / 2232f / 3240d

**CONSTRUCTION RUNS:**  
53-C-D-1520b / 2022a / 2224h / 2432g / 3240d

**KEY**

- CRAG MONITORING BOREHOLES
- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- - - DEMARCATION LINE
- MODELLLED DEVELOPMENT FEATURES

NOT PROTECTIVELY MARKED

**COPYRIGHT**  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

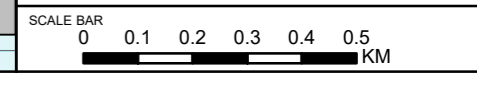


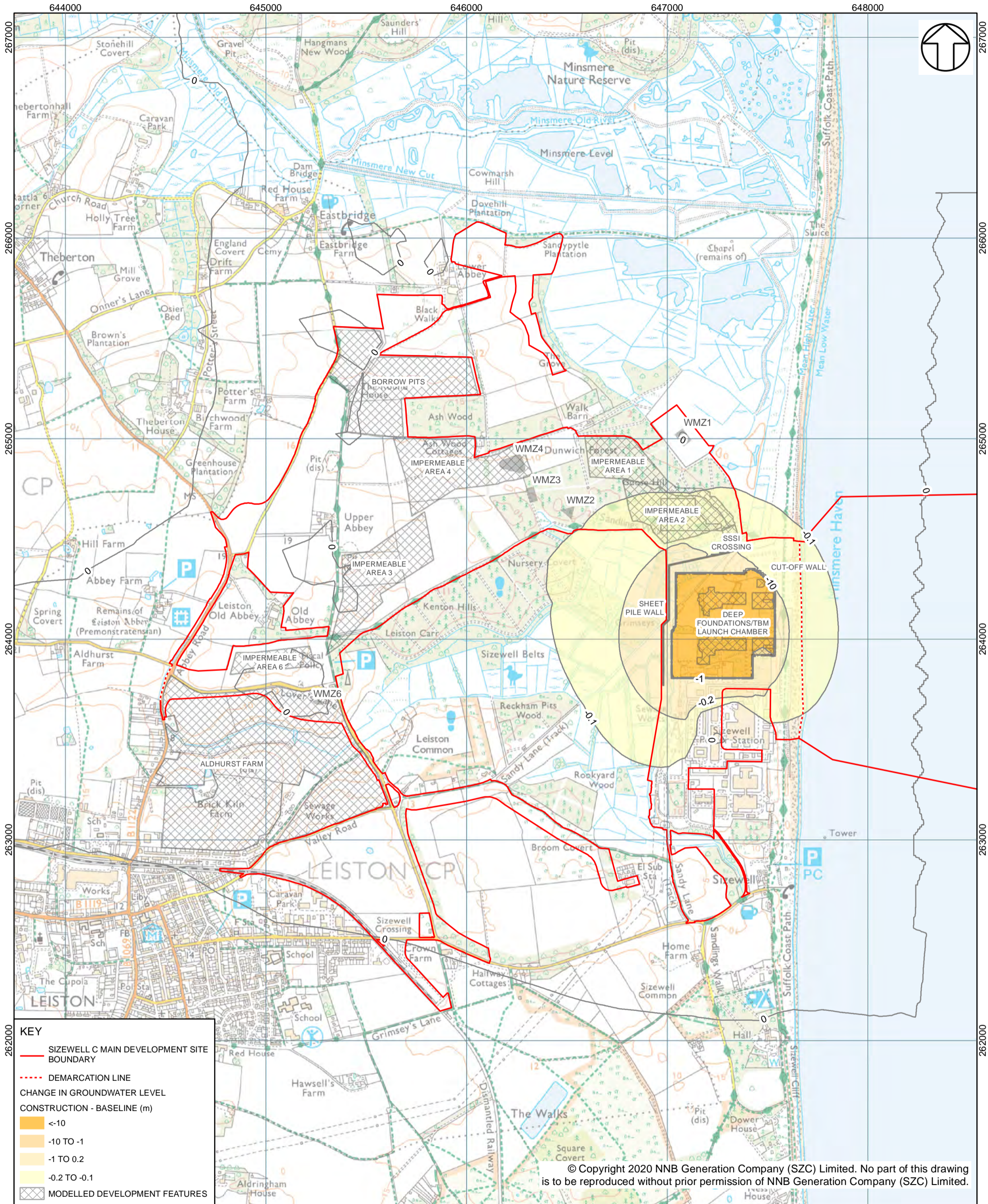
**DOCUMENT:**  
SIZEWELL C ENVIRONMENTAL STATEMENT VOLUME 2 APPENDIX 19A NUMERICAL MODELLING REPORT

**DRAWING TITLE:**  
PROJECTED CHANGES IN SIMULATED GROUNDWATER LEVELS IN THE SHALLOW CRAG FROM CONSTRUCTION: DRY SCENARIO (2015-2040)

**DRAWING NO:**  
FIGURE 19A.89

**DATE:** JAN 2020    **DRAWN:** MG    **SCALE:** 1:13,839 @A3





**KEY**

- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- - - DEMARCATION LINE
- CHANGE IN GROUNDWATER LEVEL CONSTRUCTION - BASELINE (m)
- <math><-10</math>
- 10 TO -1
- 1 TO 0.2
- 0.2 TO -0.1
- MODELLED DEVELOPMENT FEATURES

© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.

**COPYRIGHT**  
 Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationary Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

**NOTE**  
 BASELINE RUN:  
 53-B-D-2232f

CONSTRUCTION RUN:  
 53-C-D-2432g

**DRAWING TITLE:**  
 PROJECTED MAXIMUM DRAWDOWN CONTOURS IN THE SHALLOW CRAG: DRY SCENARIO (12 DECEMBER 2024)

**NOT PROTECTIVELY MARKED**

**DRAWING NO.:**  
 FIGURE 19A.90

**DATE:**  
 JAN 2020

**DRAWN:**  
 M.S./M.G.

**SCALE:**  
 1:17,000 @A3

**DOCUMENT:**  
 SIZEWELL C ENVIRONMENTAL STATEMENT VOLUME 2 APPENDIX 19A NUMERICAL MODELLING REPORT

**SCALE BAR**

0 0.2 0.4 0.6 0.8 1 KM



645000

646000

647000

648000



NOTES

G7 OMITTED DUE TO LOCATION WITHIN MAIN DEVELOPMENT SITE

BASELINE RUNS: 53-B-D-1520d / 2022b / 2232f / 3240d

CONSTRUCTION RUNS: 53-C-D-1520b / 2022a / 2224h / 2432g 3240d

KEY

- SURFACE WATER GAUGING
- SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
- DEMARCATION LINE
- MODELLED DEVELOPMENT

NOT PROTECTIVELY MARKED

COPYRIGHT  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

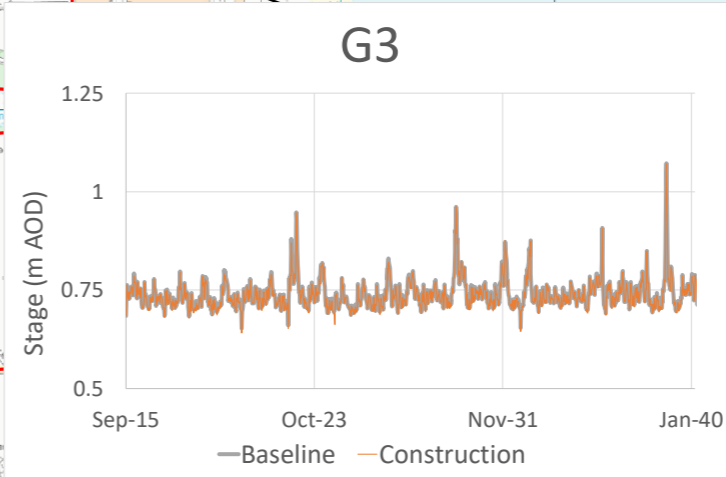
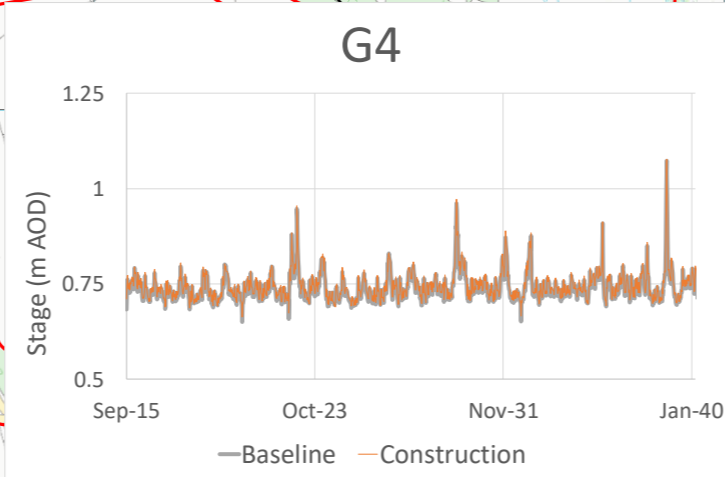
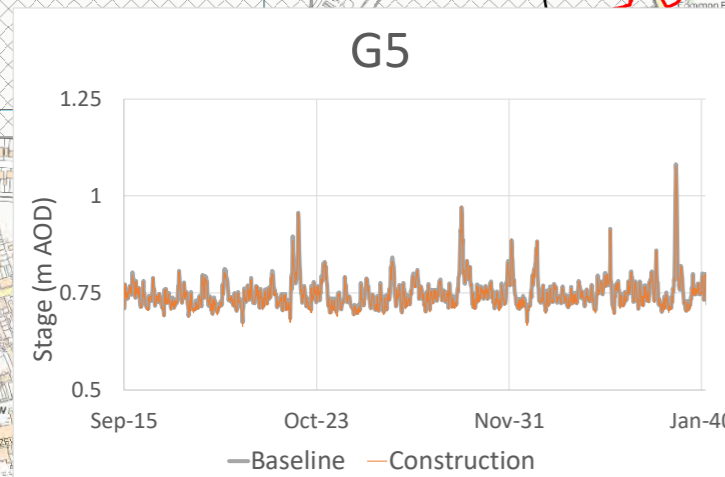
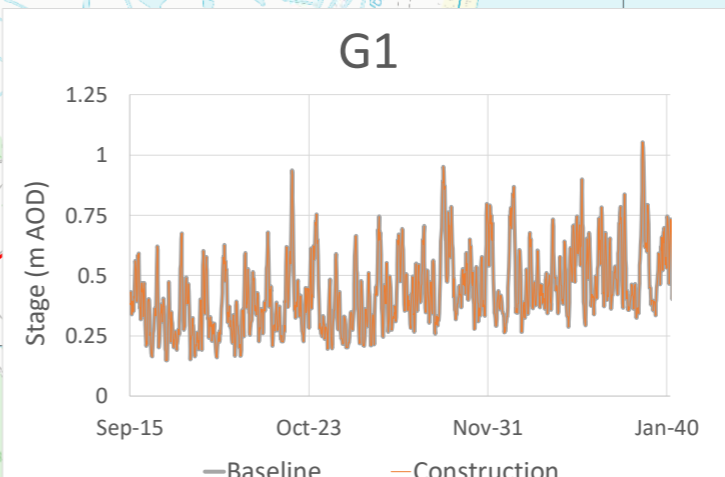
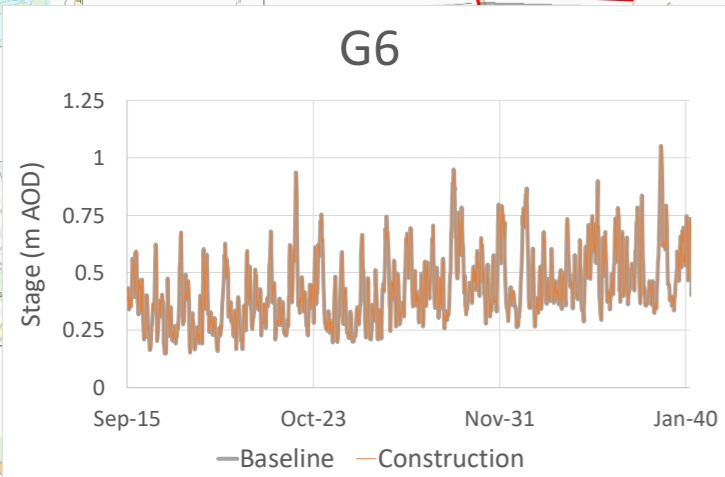
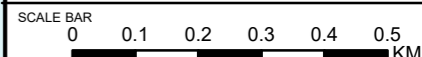


DOCUMENT:  
SIZEWELL C  
ENVIRONMENTAL STATEMENT  
VOLUME 2  
APPENDIX 19A  
NUMERICAL MODELLING REPORT

DRAWING TITLE:  
SIMULATED STAGE AT STREAM GAUGING LOCATIONS (CONSTRUCTION AND BASELINE DRY SCENARIO 2015-2040)

DRAWING NO:  
FIGURE 19A.91

DATE: JAN 2020      DRAWN: M.S      SCALE: 1:12,000 @A3



645000

646000

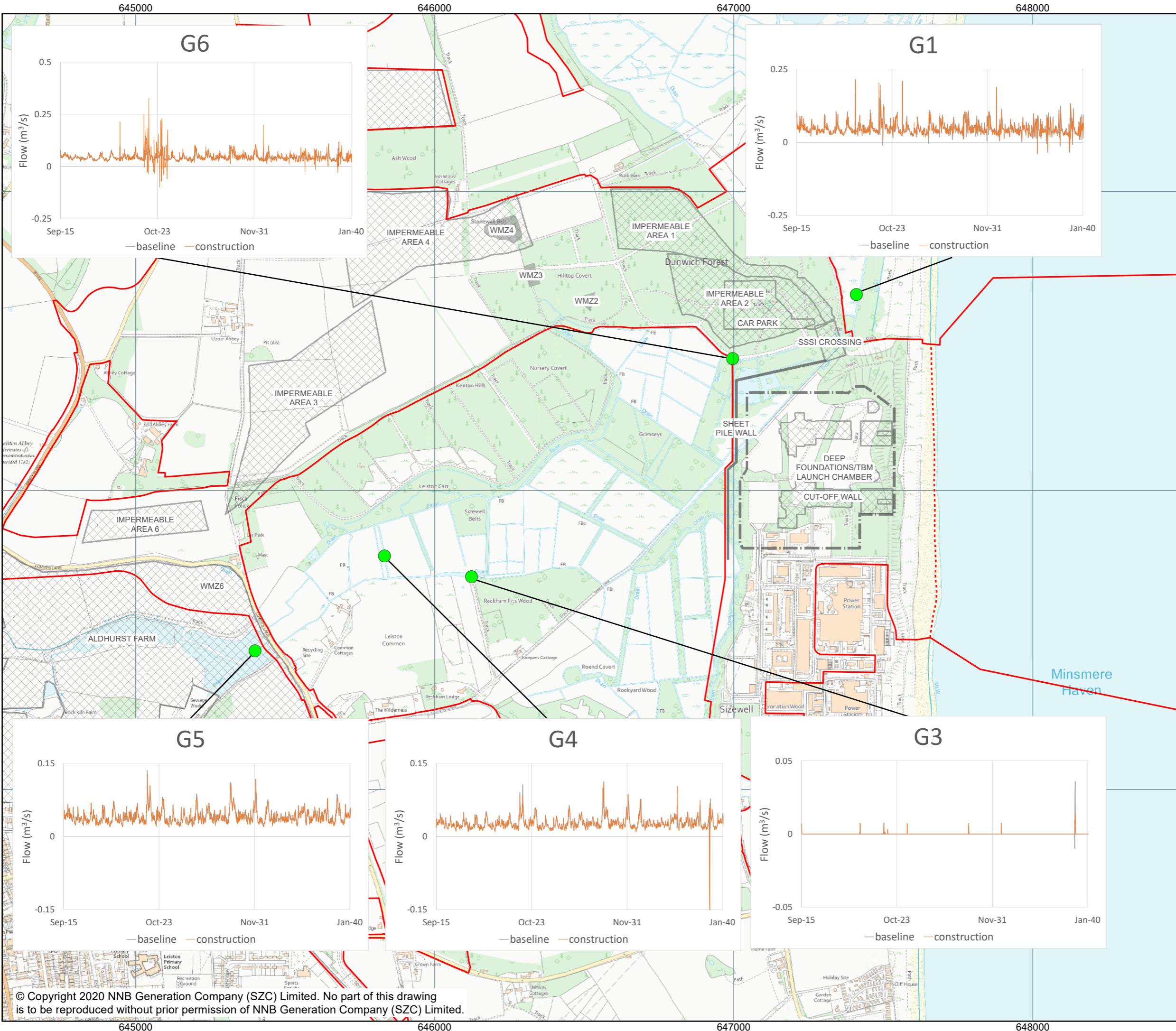
647000

648000

265000

264000

263000



**NOTES**

G7 OMITTED DUE TO LOCATION WITHIN MAIN DEVELOPMENT SITE

**BASELINE RUNS:**  
53-B-D-1520d / 2022b / 2232f / 3240d

**CONSTRUCTION RUNS:**  
53-C-D-1520b / 2022a / 2224h / 2432g / 3240d

- KEY**
- SURFACE WATER GAUGING LOCATIONS
  - SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
  - - - DEMARCATION LINE
  - MODELLED DEVELOPMENT FEATURES

NOT PROTECTIVELY MARKED

**COPYRIGHT**  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.

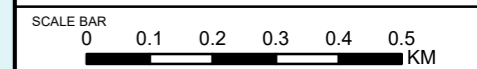


**DOCUMENT:**  
SIZEWELL C ENVIRONMENTAL STATEMENT VOLUME 2 APPENDIX 19A NUMERICAL MODELLING REPORT

**DRAWING TITLE:**  
SIMULATED FLOW AT STREAM GAUGING LOCATIONS (CONSTRUCTION AND BASELINE DRY SCENARIO 2015-2040)

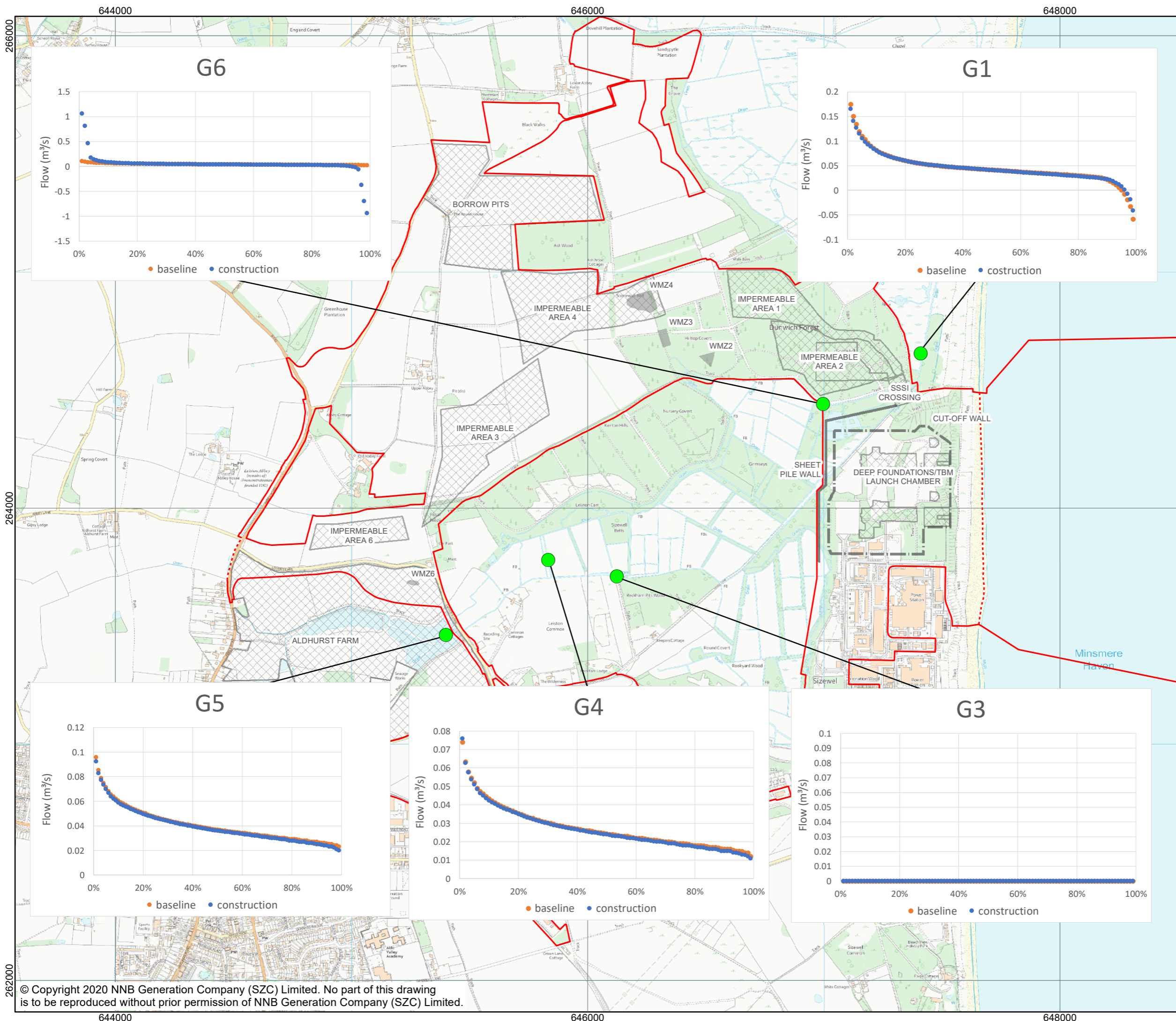
**DRAWING NO:**  
FIGURE 19A.92

**DATE:** JAN 2020 **DRAWN:** M.S **SCALE:** 1:12,000 @A3



© Copyright 2020 NNB Generation Company (SZC) Limited. No part of this drawing is to be reproduced without prior permission of NNB Generation Company (SZC) Limited.





**NOTES**

G7 OMITTED DUE TO LOCATION WITHIN MAIN DEVELOPMENT SITE

**BASELINE RUNS:**  
53-B-D-1520d / 2022b / 2232f / 3240d

**CONSTRUCTION RUNS:**  
53-C-D-1520b / 2022a / 2224h / 2432g / 3240d

- KEY**
- SURFACE WATER GAUGING LOCATIONS
  - SIZEWELL C MAIN DEVELOPMENT SITE BOUNDARY
  - DEMARCATION LINE
  - MODELLED DEVELOPMENT FEATURES

**NOT PROTECTIVELY MARKED**

**COPYRIGHT**  
Reproduced from Ordnance Survey map with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationery Office © Crown Copyright (2019). All Rights reserved. NNB GenCo 0100060408.



**DOCUMENT:**  
SIZEWELL C  
ENVIRONMENTAL STATEMENT  
VOLUME 2  
APPENDIX 19A  
NUMERICAL MODELLING REPORT

**DRAWING TITLE:**  
SIMULATED WATER FLOW DURATION CURVES  
AT STREAM GAUGING LOCATIONS  
(CONSTRUCTION AND BASELINE DRY SCENARIO  
2015-2040)

**DRAWING NO:**  
FIGURE 19A.93

**DATE:** JAN 2020      **DRAWN:** M.S.      **SCALE:** 1:15,000 @A3

