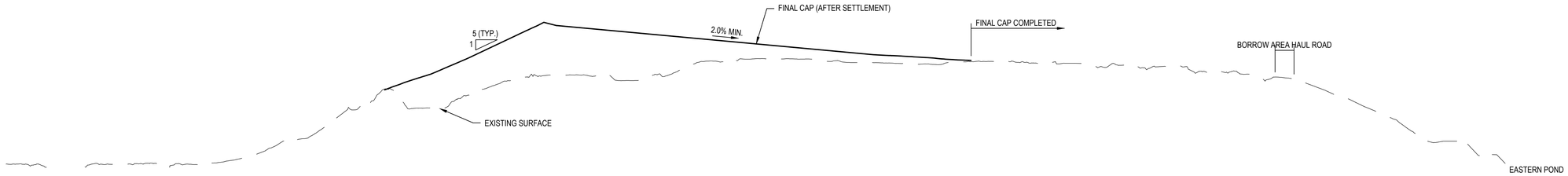
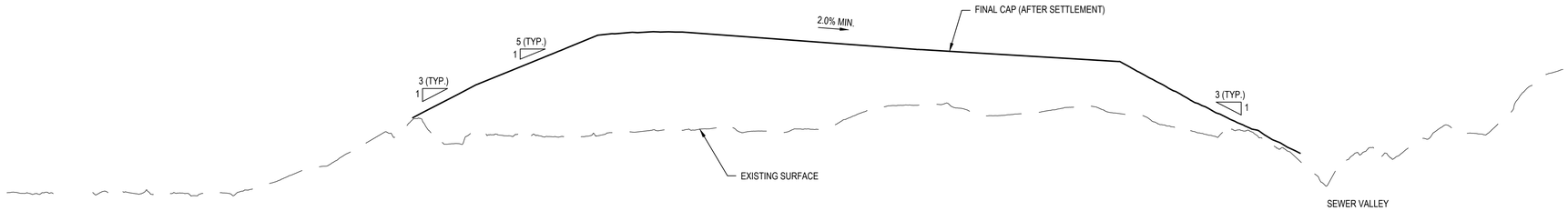



DATUM RL. -7.00

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL CAP SURFACE LEVEL | | | | | | | | | 17.859 | 21.364 | 25.818 | 30.514 | 30.176 | 29.257 | 28.338 | 27.418 | 26.499 | 25.579 | 24.660 | 24.115 | 23.474 | | | | | | | | | | | | | |
| EXISTING SURFACE LEVEL | 1.930 | | 1.886 | 2.141 | 1.737 | 3.377 | 7.265 | 12.531 | 17.461 | 13.462 | 17.759 | 20.335 | 20.467 | 19.269 | 21.426 | 23.982 | 23.745 | 23.310 | 23.020 | 22.702 | 23.256 | 23.062 | 22.858 | 22.865 | 22.196 | 20.972 | 20.219 | 18.743 | 14.893 | 10.105 | 6.666 | 3.483 | 2.057 |
| CHAINAGE | 0.00 | 20.00 | 40.00 | 60.00 | 80.00 | 100.00 | 120.00 | 140.00 | 160.00 | 180.00 | 200.00 | 220.00 | 240.00 | 260.00 | 280.00 | 300.00 | 320.00 | 340.00 | 360.00 | 380.00 | 400.00 | 420.00 | 440.00 | 460.00 | 480.00 | 500.00 | 520.00 | 540.00 | 560.00 | 580.00 | 600.00 | 620.00 | 622.76 |

## A LONGITUDINAL SECTION

C202 H 1:1000 V 1:500

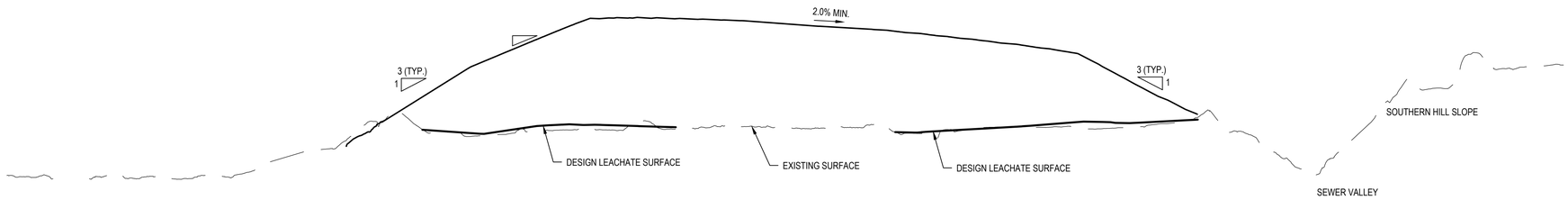



DATUM RL. -7.00

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL CAP SURFACE LEVEL | | | | | | | | | 19.060 | 23.596 | 27.667 | 30.443 | 30.671 | 30.013 | 29.268 | 28.523 | 27.778 | 27.151 | 26.544 | 25.937 | 25.110 | 19.745 | 14.702 | 9.805 | | | | | | | | | | |
| EXISTING SURFACE LEVEL | 1.852 | | 1.917 | 1.854 | 1.668 | 4.604 | 8.247 | 12.430 | 10.630 | 12.067 | 11.943 | 12.568 | 13.006 | 13.562 | 12.768 | 14.955 | 17.523 | 17.060 | 15.858 | 17.142 | 15.869 | 13.611 | 13.038 | 9.178 | 7.573 | 8.885 | 12.588 | 16.755 | | | | | | |
| CHAINAGE | 0.00 | 20.00 | 40.00 | 60.00 | 80.00 | 100.00 | 120.00 | 140.00 | 160.00 | 180.00 | 200.00 | 220.00 | 240.00 | 260.00 | 280.00 | 300.00 | 320.00 | 340.00 | 360.00 | 380.00 | 400.00 | 420.00 | 440.00 | 460.00 | 480.00 | 500.00 | 520.00 | 540.00 | 560.00 | 580.00 | 583.84 | | | |

## B LONGITUDINAL SECTION

C202/C204 H 1:1000 V 1:500




DATUM RL. -7.00

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL CAP SURFACE LEVEL | | | | | | | | 12.824 | 19.050 | 24.062 | 28.177 | 30.476 | 30.411 | 30.128 | 29.530 | 28.844 | 28.233 | 27.184 | 26.008 | 24.765 | 21.045 | 15.869 | | | | | | | | | | | | |
| DESIGN LEACHATE SURFACE LEVEL | | | | | | | | | 9.93 | 10.01 | 11.14 | 11.05 | 10.75 | | | | | 10.05 | 10.62 | 11.31 | 11.63 | 11.75 | | | | | | | | | | | | |
| EXISTING SURFACE LEVEL | 1.992 | | 1.981 | 1.370 | 1.685 | 5.094 | 7.168 | 13.462 | 9.780 | 9.395 | 10.173 | 10.202 | 10.347 | 10.911 | 10.709 | 10.581 | 10.494 | 10.215 | 10.742 | 10.778 | 10.486 | 11.365 | 11.524 | 6.166 | 4.945 | 15.108 | 17.800 | 21.204 | 21.926 | 21.956 | | | | |
| CHAINAGE | 0.00 | 20.00 | 40.00 | 60.00 | 80.00 | 100.00 | 120.00 | 140.00 | 160.00 | 180.00 | 200.00 | 220.00 | 240.00 | 260.00 | 280.00 | 300.00 | 320.00 | 340.00 | 360.00 | 380.00 | 400.00 | 420.00 | 440.00 | 460.00 | 480.00 | 500.00 | 520.00 | 540.00 | 560.00 | 564.93 | | | | |

## C LONGITUDINAL SECTION

C202/C204 H 1:1000 V 1:500

**FOR CONSENT NOT FOR CONSTRUCTION**

| Rev | Description | Checked | Approved | Date |
|---|---|---|---|---|
| A | PRELIMINARY ISSUE | PM* | PD* | 16.12.22 |

**Author** R.LOPEZ **Drafting Check**

**Designer** **Design Check**

0 20 40 60 80 100m

SCALE 1:2000 AT ORIGINAL SIZE

DUNEDIN CITY COUNCIL | kaunihera a-rohe o Ōtepoti

GHD Limited
Level 3, 138 Victoria Street
Christchurch 8013, New Zealand
**T** 64 3 378 0900 **F** 64 3 370 8001
**E** chcmail@ghd.com **W** www.ghd.com
www.ghd.com

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**Project No.** 12547621

Client DUNEDIN CITY COUNCIL

Project GREEN ISLAND LANDFILL CLOSURE

Status PRELIMINARY Status Code S2

Drawing Title LANDFILL CROSS SECTIONS SHEET 1

Size A1

Drawing No. 12547621-C206

Rev A

Plot Date: 25 July 2023 - 8:35 AM Plotted by: Riken Joshua Lopez

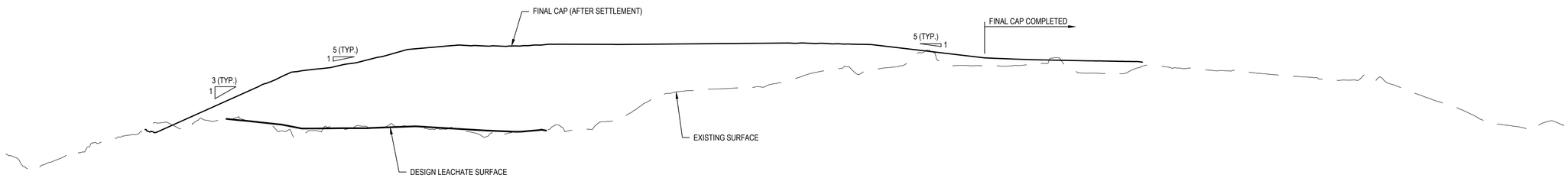
File Name: C:\12d\SW\data\P-00-12D-001\51-12547621 - Green Island Landfill_1439\CADD\Drawings\12547621-01-C206.dwg

DATUM RL. -6.00

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL CAP SURFACE LEVEL | | | | | 14.786 | 20.328 | 24.733 | 28.873 | 29.855 | 29.612 | 29.368 | 29.125 | 28.881 | 28.641 | 28.303 | 27.663 | 26.294 | 25.029 | 24.578 | 24.290 | 24.003 | | | | | | | | | | | | |
| DESIGN LEACHATE SURFACE LEVEL | | | | | 11.50 | 11.76 | 12.82 | 12.04 | | | | | | | | | | | | | | | | | | | | | | | | | |
| EXISTING SURFACE LEVEL | 1.788 | 2.951 | 6.081 | 9.695 | 13.662 | 11.232 | 12.845 | 12.879 | 10.923 | 12.588 | 12.886 | 15.972 | 18.823 | 20.480 | 22.641 | 22.732 | 23.550 | 23.664 | 22.650 | 22.328 | 22.629 | 21.697 | 21.872 | 21.888 | 20.165 | 14.765 | 12.657 | 7.727 | 7.318 | 7.688 | | | |
| CHAINAGE | 0.00 | 20.00 | 40.00 | 60.00 | 80.00 | 100.00 | 120.00 | 140.00 | 160.00 | 180.00 | 200.00 | 220.00 | 240.00 | 260.00 | 280.00 | 300.00 | 320.00 | 340.00 | 360.00 | 380.00 | 400.00 | 420.00 | 440.00 | 460.00 | 480.00 | 500.00 | 520.00 | 540.00 | 560.00 | 572.89 | | | |

## D LONGITUDINAL SECTION

C202/C204 H 1:1000 V 1:500




DATUM RL. -7.00

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL CAP SURFACE LEVEL | | | | 9.821 | 12.828 | 17.319 | 21.716 | 23.305 | 25.436 | 27.381 | 27.866 | 27.771 | 28.128 | 28.087 | 28.151 | 28.238 | 28.325 | 28.407 | 28.186 | 27.449 | 26.276 | 25.177 | 24.806 | 24.598 | 24.450 | | | | | | | | |
| DESIGN LEACHATE SURFACE LEVEL | | | | | | | 10.74 | 10.17 | 10.33 | 10.44 | 9.84 | 9.44 | | | | | | | | | | | | | | | | | | | | | |
| EXISTING SURFACE LEVEL | 4.691 | 3.099 | 7.031 | 10.025 | 11.210 | 12.280 | 9.633 | 10.318 | 10.498 | 10.077 | 9.218 | 9.580 | 9.628 | 11.786 | 17.296 | 18.539 | 18.994 | 21.273 | 23.332 | 23.281 | 24.170 | 23.553 | 24.020 | 21.968 | 22.410 | 23.051 | 22.484 | 21.689 | 20.955 | 21.560 | 17.949 | 14.504 | 10.871 | 11.798 | 10.724 |
| CHAINAGE | 0.00 | 20.00 | 40.00 | 60.00 | 80.00 | 100.00 | 120.00 | 140.00 | 160.00 | 180.00 | 200.00 | 220.00 | 240.00 | 260.00 | 280.00 | 300.00 | 320.00 | 340.00 | 360.00 | 380.00 | 400.00 | 420.00 | 440.00 | 460.00 | 480.00 | 500.00 | 520.00 | 540.00 | 560.00 | 580.00 | 600.00 | 620.00 | 640.00 | 660.00 | 665.32 |

## E LONGITUDINAL SECTION

C202/C204 H 1:1000 V 1:500

**FOR CONSENT NOT FOR CONSTRUCTION**

| Rev | Description | | Checked | Approved | Date |
|---|---|---|---|---|---|
| A | 1 | | PM* | PD* | 16.12.22 |

**Author** R.LOPEZ **Drafting Check**

**Designer** **Design Check**

VERTICAL 1:100 AT ORIGINAL SIZE 0 1 2 3 4 5m

HORIZONTAL 1:1000 AT ORIGINAL SIZE 0 10 20 30 40 50m

DUNEDIN CITY COUNCIL | kaunihera a-rohe o Ōtepoti

GHD Limited
Level 3, 138 Victoria Street
Christchurch 8013, New Zealand
**T** 64 3 378 0900 **F** 64 3 370 8001
**E** chcmail@ghd.com **W** www.ghd.com
www.ghd.com

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**Project No.** 12547621

Client DUNEDIN CITY COUNCIL

Project GREEN ISLAND LANDFILL CLOSURE

Status PRELIMINARY Status Code S2

Drawing Title LANDFILL CROSS SECTIONS SHEET 2

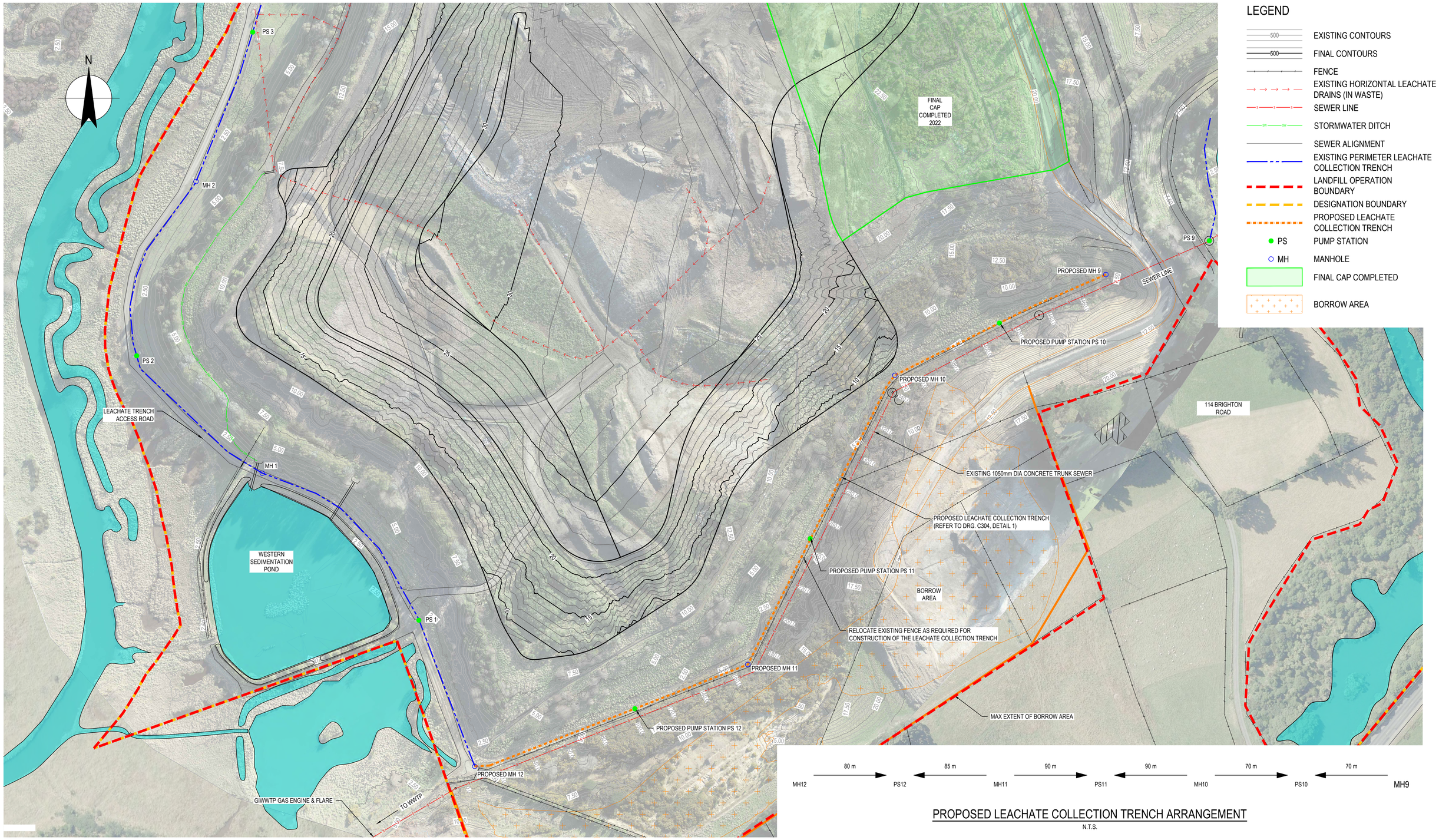
Size A1

Drawing No. 12547621-C207

Rev A

Plot Date: 26 September 2023 - 10:57 AM Plotted by: Riken Joshua Lopez

File Name: C:\12d\SW\data\P-00-12D-001\51-12547621 - Green Island Landfill_1439\CADD\Drawings\12547621-01-C207.dwg




PROPOSED LEACHATE COLLECTION TRENCH ARRANGEMENT

N.T.S.

PROPOSED LEACHATE COLLECTION TRENCH PLAN

SCALE 1:1000

**FOR CONSENT NOT FOR CONSTRUCTION**

| Rev | Description | Checked | Approved | Date |
|---|---|---|---|---|
| A | PRELIMINARY ISSUE | PM* | PD* | 16.12.22 |

**Author** R.LOPEZ **Drafting Check**

**Designer** **Design Check**

0 10 20 30 40 50m

SCALE 1:1000 AT ORIGINAL SIZE

DUNEDIN CITY COUNCIL | kaunihera a-rohe o Ōtepoti

GHD Limited
Level 3, 138 Victoria Street
Christchurch 8013, New Zealand
T 64 3 378 0900 F 64 3 370 8001
E chmail@ghd.com W www.ghd.com
www.ghd.com

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Project No. 12547621

Client: DUNEDIN CITY COUNCIL

Project: GREEN ISLAND LANDFILL CLOSURE

Status: PRELIMINARY Status Code: S2

Drawing Title: PROPOSED LEACHATE COLLECTION TRENCH PLAN

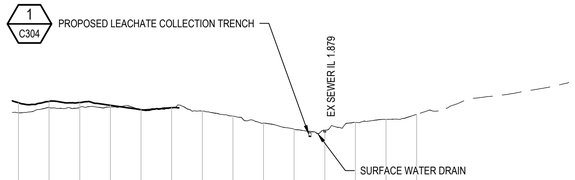
Size: A1

Drawing No. 12547621-C301

Rev: A

Plot Date: 20 September 2023 - 10:10 AM Plotted by: Riken Joshua Lopez

File Name: C:\12d\SW\data\P-00-12D-001\51-12547621 - Green Island Landfill_1439\CADD\Drawings\12547621-01-C301.dwg



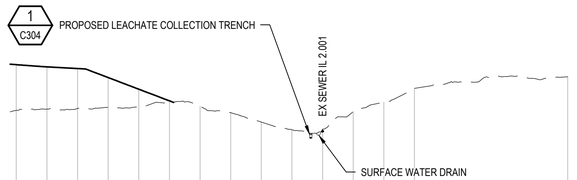

DATUM R.L. -24.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 11.476 | 11.869 | 11.523 | 10.631 | 9.200 | 9.840 | | | | | | | | | | | | |
| EXISTING SURFACE | 8.182 | 9.891 | 9.963 | 10.061 | 9.305 | 9.900 | 8.786 | 7.125 | 4.874 | 2.797 | 2.507 | 5.080 | 6.023 | 7.676 | | | | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

CH 60

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 23.698 | 23.074 | 22.015 | 17.727 | 13.334 | 8.919 | | | | | | | | | | | | |
| EXISTING SURFACE | 10.369 | 11.847 | 11.207 | 8.788 | 9.044 | 9.774 | 9.639 | 7.169 | 4.973 | 2.935 | 4.092 | 7.635 | 10.949 | 11.213 | | | | 23.926 |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

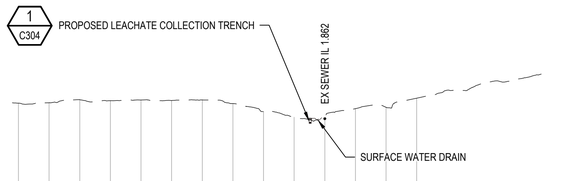
CH 140




DATUM R.L. -24.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 23.887 | 23.168 | 22.626 | 19.679 | 15.877 | 12.076 | | | | | | | | | | | | |
| EXISTING SURFACE | 8.947 | 9.375 | 9.593 | 9.965 | 10.038 | 11.177 | 10.288 | 8.215 | 5.162 | 2.619 | 2.844 | 8.593 | 11.622 | 16.162 | | | | 19.933 |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

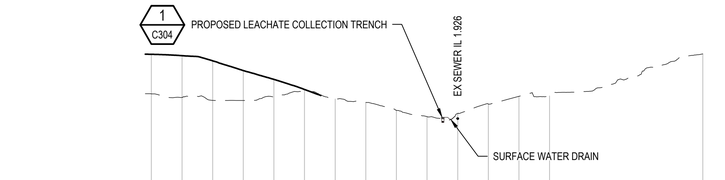
CH 220




DATUM R.L. -24.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING SURFACE | 7.095 | 7.228 | 8.230 | 7.901 | 8.129 | 7.954 | 8.175 | 6.970 | 4.342 | 2.486 | 2.359 | 5.302 | 5.735 | 8.725 | | | | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

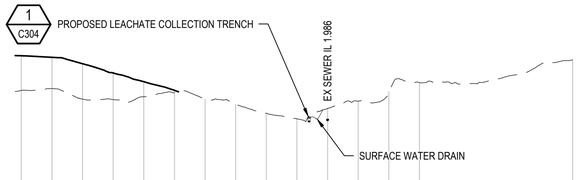
CH 40




DATUM R.L. -24.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 23.073 | 22.628 | 20.950 | 17.782 | 14.891 | 11.586 | | | | | | | | | | | | |
| EXISTING SURFACE | 10.180 | 8.996 | 8.038 | 8.003 | 9.139 | 10.766 | 8.488 | 7.380 | 4.767 | 2.724 | 3.783 | 6.849 | 9.356 | 9.469 | | | | 23.194 |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

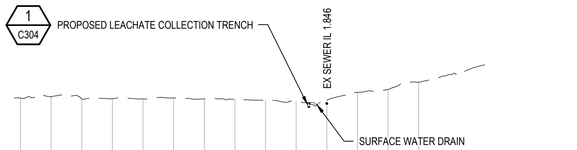
CH 120




DATUM R.L. -23.5

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 23.094 | 22.591 | 20.488 | 17.466 | 14.633 | 11.814 | | | | | | | | | | | | |
| EXISTING SURFACE | 11.761 | 12.402 | 8.958 | 8.775 | 9.730 | 11.048 | 8.880 | 7.319 | 4.316 | 2.521 | 5.912 | 8.270 | 11.408 | 14.336 | | | | 21.796 |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

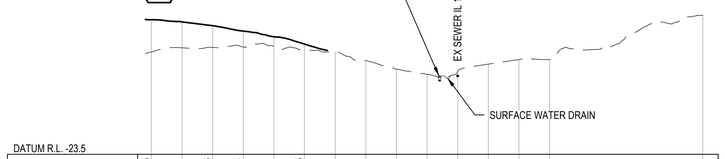
CH 200




DATUM R.L. -24.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING SURFACE | 3.781 | 4.154 | 3.515 | 3.601 | 3.530 | 3.831 | 3.510 | 3.387 | 3.072 | 2.610 | 2.978 | 5.664 | 6.593 | 8.918 | | | | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

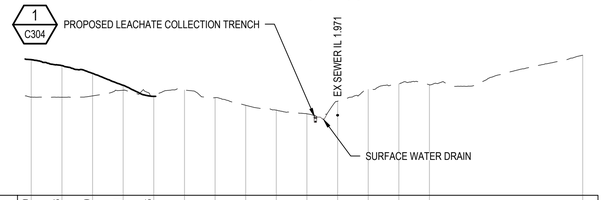
CH 20




DATUM R.L. -23.5

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 20.435 | 19.701 | 18.476 | 16.704 | 14.871 | 12.475 | | | | | | | | | | | | |
| EXISTING SURFACE | 9.917 | 11.272 | 11.365 | 11.507 | 11.751 | 10.583 | 10.062 | 7.112 | 4.291 | 2.593 | 3.624 | 5.936 | 7.426 | 7.418 | | | | 21.952 |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

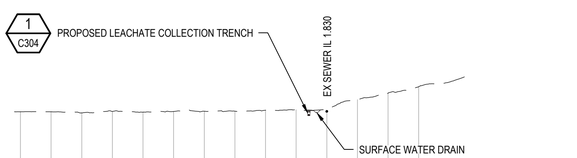
CH 100




DATUM R.L. -24.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 20.279 | 18.338 | 15.800 | 11.921 | 8.306 | | | | | | | | | | | | | |
| EXISTING SURFACE | 8.057 | 8.021 | 8.464 | 10.306 | 8.457 | 10.349 | 7.862 | 5.402 | 3.816 | 2.613 | 6.721 | 10.529 | 12.410 | 12.076 | | | | 21.736 |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

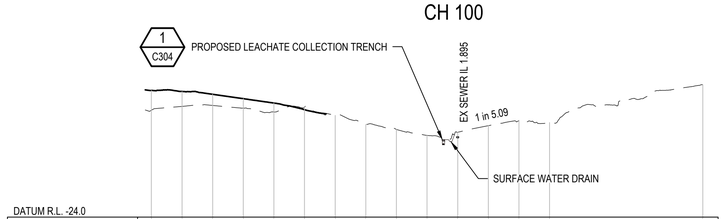
CH 180




DATUM R.L. -24.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING SURFACE | 1.855 | 1.853 | 1.487 | 1.963 | 1.735 | 1.944 | 2.055 | 2.078 | 2.371 | 2.515 | 2.431 | 5.811 | 7.954 | 10.037 | | | | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

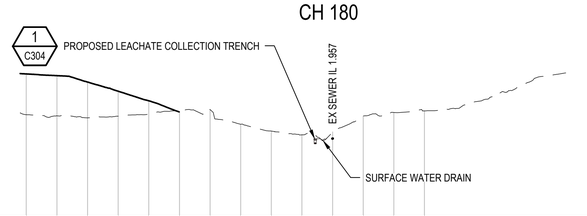
CH 0




DATUM R.L. -24.0

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 17.324 | 17.031 | 16.089 | 14.658 | 13.227 | 11.057 | | | | | | | | | | | | |
| EXISTING SURFACE | 10.873 | 12.148 | 12.445 | 11.546 | 10.318 | 11.925 | 9.181 | 6.287 | 4.595 | 2.677 | 3.674 | 5.843 | 7.526 | 6.875 | | | | 19.238 |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

CH 80




DATUM R.L. -23.5

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 23.234 | 22.671 | 20.580 | 17.590 | 14.454 | | | | | | | | | | | | | |
| EXISTING SURFACE | 9.930 | 9.551 | 8.903 | 9.432 | 10.117 | 11.000 | 11.576 | 6.822 | 4.578 | 3.391 | 4.305 | 9.519 | 10.659 | 11.180 | | | | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 |

CH 160

**FOR CONSENT NOT FOR CONSTRUCTION**

| Rev | Description | Checked | Approved | Date |
|---|---|---|---|---|
| A | PRELIMINARY ISSUE | PM* | PD* | 16.12.22 |

**Author** R.LOPEZ **Drafting Check**

**Designer** **Design Check**

0 10 20 30 40 50m

SCALE 1:1000 AT ORIGINAL SIZE

DUNEDIN CITY COUNCIL | kaunihera a-rohe o Ōtepoti

GHD
Level 3, 138 Victoria Street
Christchurch 8013, New Zealand
**T** 64 3 378 0900 **F** 64 3 370 8001
**E** chcmail@ghd.com **W** www.ghd.com

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**Project No.** 12547621

Client DUNEDIN CITY COUNCIL

Project GREEN ISLAND LANDFILL CLOSURE

Status PRELIMINARY

Status Code S2

Drawing Title PROPOSED LEACHATE COLLECTION TRENCH CROSS SECTIONS SHEET 1

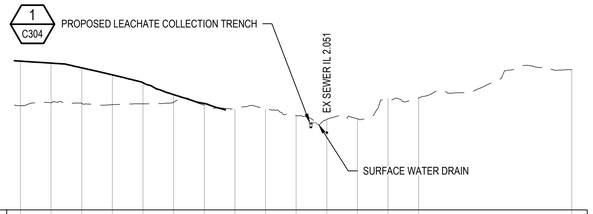
Size A1

Drawing No. 12547621-C302

Rev A

Plot Date: 20 September 2023 - 10:09 AM Plotted by: Riken Joshua Lopez

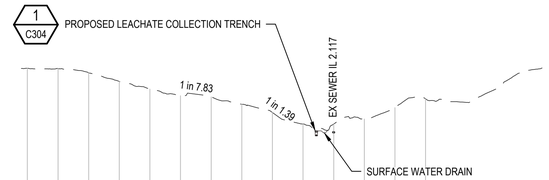
File Name: C:\12d\SW\data\P-00-12D-001\51-12547621 - Green Island Landfill_1439\CADD\Drawings\12547621-01-C302.dwg




DATUM R.L. -23.0

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 25.553 | 24.920 | 23.367 | 21.077 | 18.505 | 14.630 | 11.747 | | | | | | | | | | | | |
| EXISTING SURFACE | 10.989 | 12.026 | 11.749 | 11.348 | 11.635 | 12.135 | 11.192 | 9.880 | 9.884 | 7.788 | 6.560 | 6.768 | 13.349 | 13.485 | | | | 22.791 | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 | |

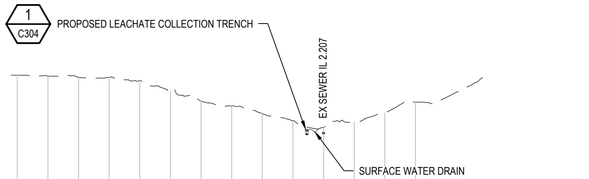
CH 300




DATUM R.L. -23.0

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING SURFACE | 23.217 | 23.079 | 21.692 | 18.875 | 16.407 | 14.225 | 13.878 | 11.433 | 8.765 | 5.014 | 4.987 | 6.614 | 10.362 | 13.221 | | | | | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 | |

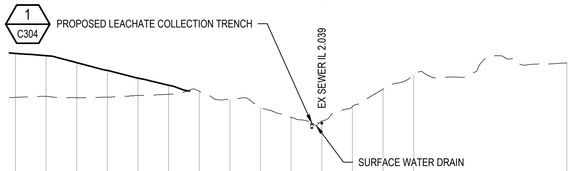
CH 380




DATUM R.L. -23.0

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING SURFACE | 21.251 | 20.930 | 20.504 | 20.536 | 19.534 | 16.301 | 12.775 | 11.239 | 8.730 | 6.514 | 4.201 | 6.020 | 8.956 | 12.488 | | | | | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 | |

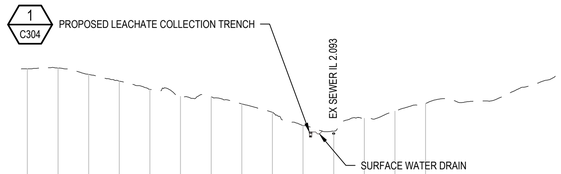
CH 460




DATUM R.L. -23.5

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 25.004 | 24.270 | 21.992 | 19.445 | 16.929 | 14.634 | | | | | | | | | | | | | |
| EXISTING SURFACE | 10.651 | 10.985 | 10.529 | 10.736 | 11.248 | 11.665 | 12.685 | 9.972 | 7.300 | 4.143 | 2.937 | 7.762 | 13.352 | 17.882 | | | | 21.885 | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 | |

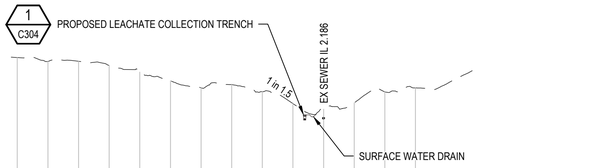
CH 280




DATUM R.L. -23.0

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING SURFACE | 23.385 | 23.567 | 21.570 | 19.382 | 16.678 | 14.367 | 14.273 | 11.948 | 9.175 | 4.884 | 3.053 | 7.207 | 9.553 | 12.034 | | | | 25.317 | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 | |

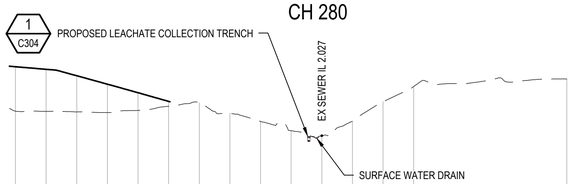
CH 360




DATUM R.L. -23.0

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING SURFACE | 22.157 | 20.903 | 20.938 | 19.565 | 17.435 | 14.637 | 12.298 | 13.373 | 11.026 | 7.131 | 5.326 | 7.360 | 10.973 | 12.247 | | | | | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 | |

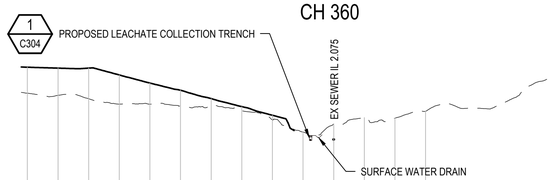
CH 440




DATUM R.L. -24.0

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 24.708 | 23.862 | 21.758 | 19.016 | 16.218 | 13.399 | | | | | | | | | | | | | |
| EXISTING SURFACE | 10.197 | 10.151 | 9.952 | 9.746 | 10.437 | 11.808 | 12.923 | 9.516 | 6.827 | 3.813 | 2.049 | 6.921 | 13.327 | 18.221 | | | | 20.697 | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 | |

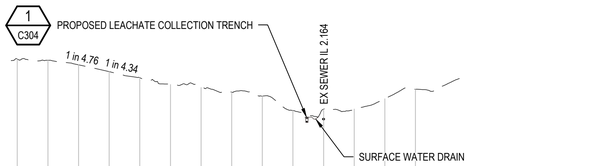
CH 260




DATUM R.L. -23.0

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 25.827 | 25.531 | 25.541 | 23.291 | 20.674 | 18.311 | 15.590 | 12.969 | 10.142 | | | | | | | | | | |
| EXISTING SURFACE | 17.354 | 16.644 | 15.536 | 13.758 | 13.755 | 13.174 | 13.269 | 11.500 | 8.666 | 4.676 | 7.339 | 9.394 | 9.212 | 11.468 | | | | 80.000 | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | | |

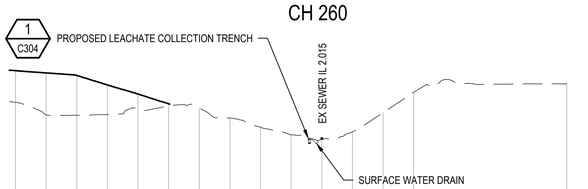
CH 340




DATUM R.L. -23.0

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING SURFACE | 21.975 | 21.523 | 20.056 | 17.818 | 15.880 | 13.609 | 12.632 | 11.134 | 9.859 | 5.115 | 5.654 | 5.615 | 8.979 | 12.086 | | | | | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 | |

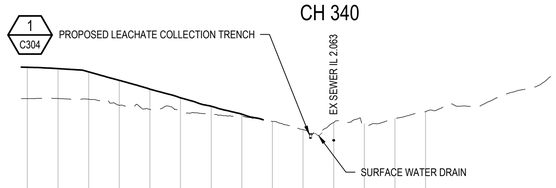
CH 420




DATUM R.L. -24.0

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 24.296 | 23.549 | 22.738 | 19.635 | 16.671 | 13.484 | | | | | | | | | | | | | |
| EXISTING SURFACE | 13.958 | 9.830 | 9.716 | 9.988 | 12.126 | 12.944 | 12.058 | 8.815 | 5.832 | 3.337 | 1.830 | 4.326 | 10.576 | 17.239 | | | | 20.032 | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 | |

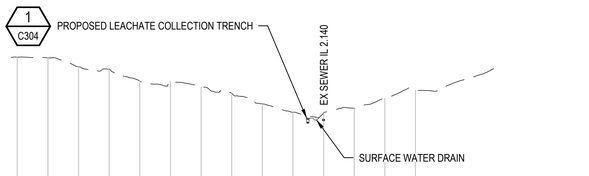
CH 240




DATUM R.L. -23.0

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| FINAL LANDFORM SURFACE | 26.073 | 25.629 | 24.576 | 21.776 | 18.945 | 16.107 | 13.350 | 10.755 | | | | | | | | | | | |
| EXISTING SURFACE | 15.846 | 15.863 | 15.659 | 13.650 | 12.300 | 11.982 | 10.703 | 10.004 | 8.360 | 5.732 | 8.033 | 7.623 | 9.330 | 11.611 | | | | 24.745 | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 | |

CH 320




DATUM R.L. -23.0

| | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EXISTING SURFACE | 22.811 | 22.983 | 19.670 | 18.934 | 14.997 | 14.883 | 13.082 | 10.977 | 7.564 | 4.807 | 4.678 | 6.110 | 9.483 | 12.104 | | | | | |
| OFFSET | -100.000 | -90.000 | -80.000 | -70.000 | -60.000 | -50.000 | -40.000 | -30.000 | -20.000 | -10.000 | 0.000 | 10.000 | 20.000 | 30.000 | | | | 80.000 | |

CH 400

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| Rev | Description | Checked | Approved | Date |
|---|---|---|---|---|
| A | PRELIMINARY ISSUE | PM* | PD* | 16.12.22 |

Author R.LOPEZ — Drafting Check
Designer — Design Check

0 10 20 30 40 50m
SCALE 1:1000 AT ORIGINAL SIZE

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GHD
Level 3, 138 Victoria Street
Christchurch 8013, New Zealand
T 64 3 378 0900 F 64 3 370 8001
E chcmail@ghd.com W www.ghd.com
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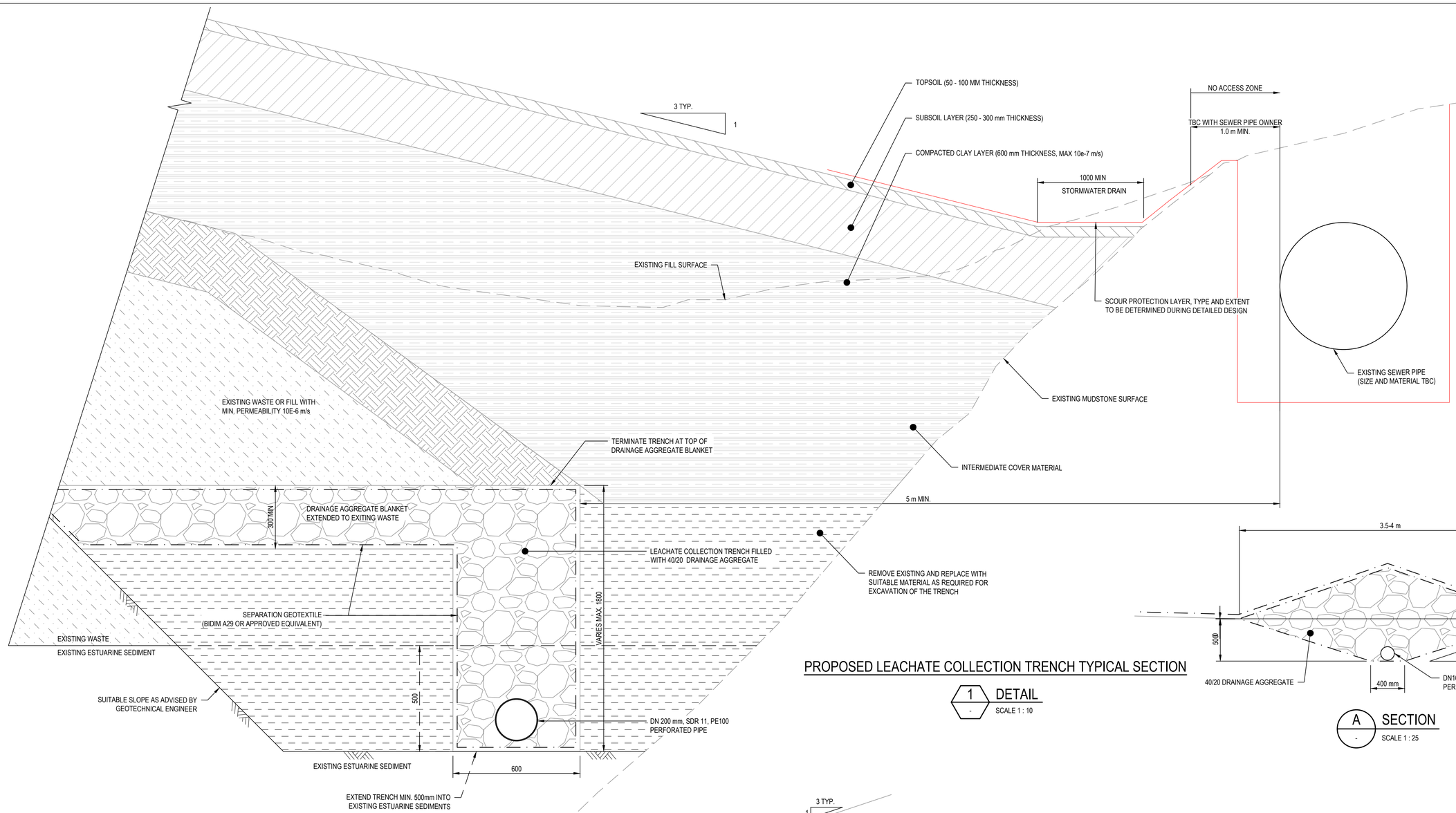
Project No. 12547621

Client: DUNEDIN CITY COUNCIL
Project: GREEN ISLAND LANDFILL CLOSURE
Status: PRELIMINARY — Status Code: S2

Drawing Title: PROPOSED LEACHATE COLLECTION TRENCH CROSS SECTIONS SHEET 2

Size: A1
Drawing No.: 12547621-C303
Rev: A

Plot Date: 20 September 2023 - 10:09 AM Plotted by: Riken Joshua Lopez
File Name: C:\12dh\SW\data\P-00-12D-001\51-12547621 - Green Island Landfill_1439\CADD\Drawings\12547621-01-C303.dwg

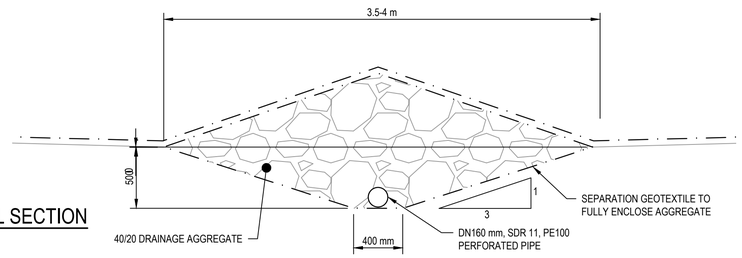



## PROPOSED LEACHATE COLLECTION TRENCH TYPICAL SECTION

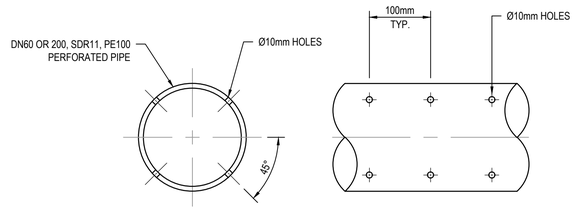
1 DETAIL
SCALE 1 : 10

## NOTES:

1. DEPTH OF LEACHATE COLLECTION TRENCH TO BE CONFIRMED DURING DETAILED DESIGN BASED ON GEOTECHNICAL INVESTIGATION AND DRAINAGE REQUIREMENT.
2. OFFSET OF THE TRENCH TO THE EXISTING SEWER PIPE MAY BE ADJUSTED BASED ON THE ACTUAL GROUND CONDITIONS FOR SAFE EXCAVATION AND AVOID DAMAGING THE SEWER PIPE.
3. BENCHING AS REQUIRED FOR CONSTRUCTION OF THE TRENCH.
4. EXCAVATE AND REPLACE OF EXISTING MATERIALS WITH SUITABLE MATERIALS MAY BE REQUIRED FOR CONSTRUCTION OF THE TRENCH.
5. WASTE, LEACHATE AND LANDFILL GAS MANAGEMENT MEASURES TO BE CONDUCTED DURING THE CONSTRUCTION AS APPLICABLE.
6. STORMWATER DRAIN DIMENSIONS TO BE CONFIRMED DURING DETAILED DESIGN. OFFSET TO BE ADJUSTED ACCORDINGLY.
7. ALL EXCAVATED MATERIALS TO BE PLACED AT LOCATION AS APPROVED BY COUNCIL.

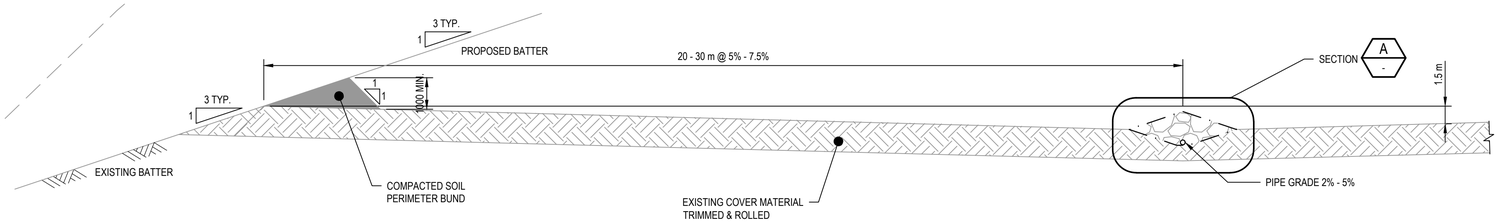



A SECTION
SCALE 1 : 25




## TYPICAL PIPE PERFORATION DETAIL

2 DETAIL
SCALE 1 : 5




## SECTION DETAIL OF PROPOSED HORIZONTAL LEACHATE DRAIN

3 DETAIL
SCALE 1 : 100

**FOR CONSENT NOT FOR CONSTRUCTION**

| Rev | Description | Checked | Approved | Date |
|---|---|---|---|---|
| A | PRELIMINARY ISSUE | PM* | PD* | 16.12.22 |

**Author** R.LOPEZ **Drafting Check**
**Designer** **Design Check**

0 50 100 150 200 250mm
SCALE 1:5 AT ORIGINAL SIZE
0 250 500 750 1000 1250mm
SCALE 1:25 AT ORIGINAL SIZE

DUNEDIN CITY COUNCIL | kaunihera a-rohe o Ōtepoti

GHD
Level 3, 138 Victoria Street
Christchurch 8013, New Zealand
T 64 3 378 0900 F 64 3 370 8001
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Project No. 12547621

Client DUNEDIN CITY COUNCIL
Project GREEN ISLAND LANDFILL CLOSURE
Status PRELIMINARY
Status Code S2
Drawing Title TYPICAL DETAILS
Size A1
Drawing No. 12547621-C304
Rev A

Plot Date: 20 September 2023 - 10:09 AM Plotted by: Riken Joshua Lopez
File Name: C:\12d\SW\data\P-00-12D-001\51-12547621 - Green Island Landfill_1439\CADD\Drawings\12547621-01-C304.dwg

## EXISTING SURFACE WATER COLLECTION SYSTEM PLAN

SCALE 1:2000

**FOR CONSENT NOT FOR CONSTRUCTION**

| Rev | Description | Checked | Approved | Date |
|---|---|---|---|---|
| A | PRELIMINARY ISSUE | PM* | PD* | 16.12.22 |

**Author** R.LOPEZ **Drafting Check**

**Designer** **Design Check**

0 20 40 60 80 100m

SCALE 1:2000 AT ORIGINAL SIZE

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GHD Limited
Level 3, 138 Victoria Street
Christchurch 8013, New Zealand
**T** 64 3 378 0900 **F** 64 3 370 8001
**E** chcmail@ghd.com **W** www.ghd.com
www.ghd.com

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**Project No.** 12547621

Client: DUNEDIN CITY COUNCIL

Project: GREEN ISLAND LANDFILL CLOSURE

Status: PRELIMINARY — Status Code: S2

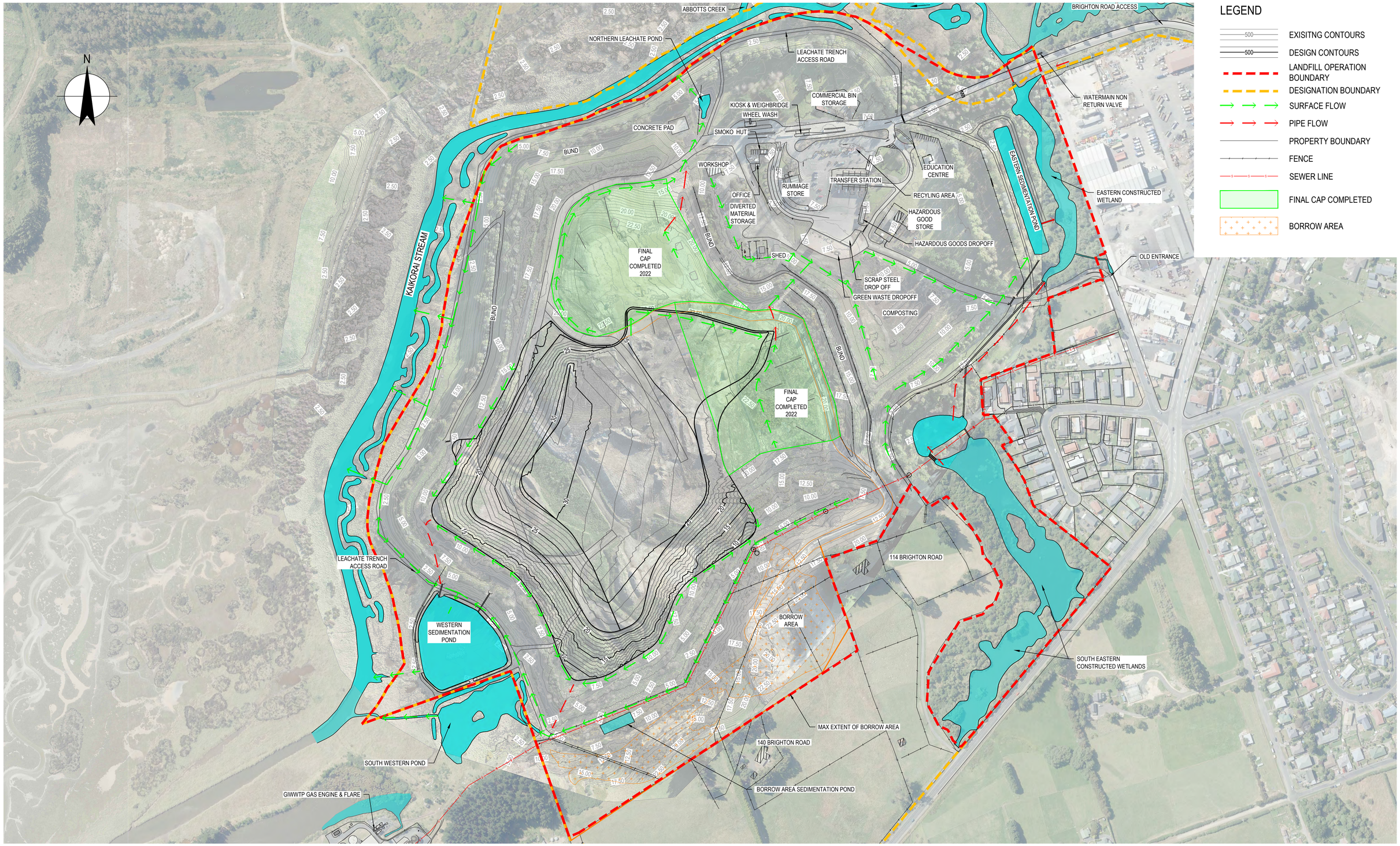
Drawing Title: EXISTING SURFACE WATER COLLECTION SYSTEM

Size: A1

Drawing No.: 12547621-C401

Rev: A

Plot Date: 10 March 2023 - 10:37 AM Plotted by: Riken Joshua Lopez File Name: C:\12d\SW\data\P-00-12D-001\51-12547621 - Green Island Landfill_1439\CADD\Drawings\12547621-01-C401.dwg




## SURFACE WATER COLLECTION SYSTEM

SCALE 1:2000

**FOR CONSENT NOT FOR CONSTRUCTION**

| Rev | Description | Checked | Approved | Date |
|---|---|---|---|---|
| A | PRELIMINARY ISSUE | PM* | PD* | 16.12.22 |

**Author** R.LOPEZ **Drafting Check**

**Designer** **Design Check**

0 20 40 60 80 100m

SCALE 1:2000 AT ORIGINAL SIZE

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GHD

Level 3, 138 Victoria Street
Christchurch 8013, New Zealand
**T** 64 3 378 0900 **F** 64 3 370 8001
**E** chcmail@ghd.com **W** www.ghd.com

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**Project No.** 12547621

Client: DUNEDIN CITY COUNCIL

Project: GREEN ISLAND LANDFILL CLOSURE

Status: PRELIMINARY

Status Code: S2

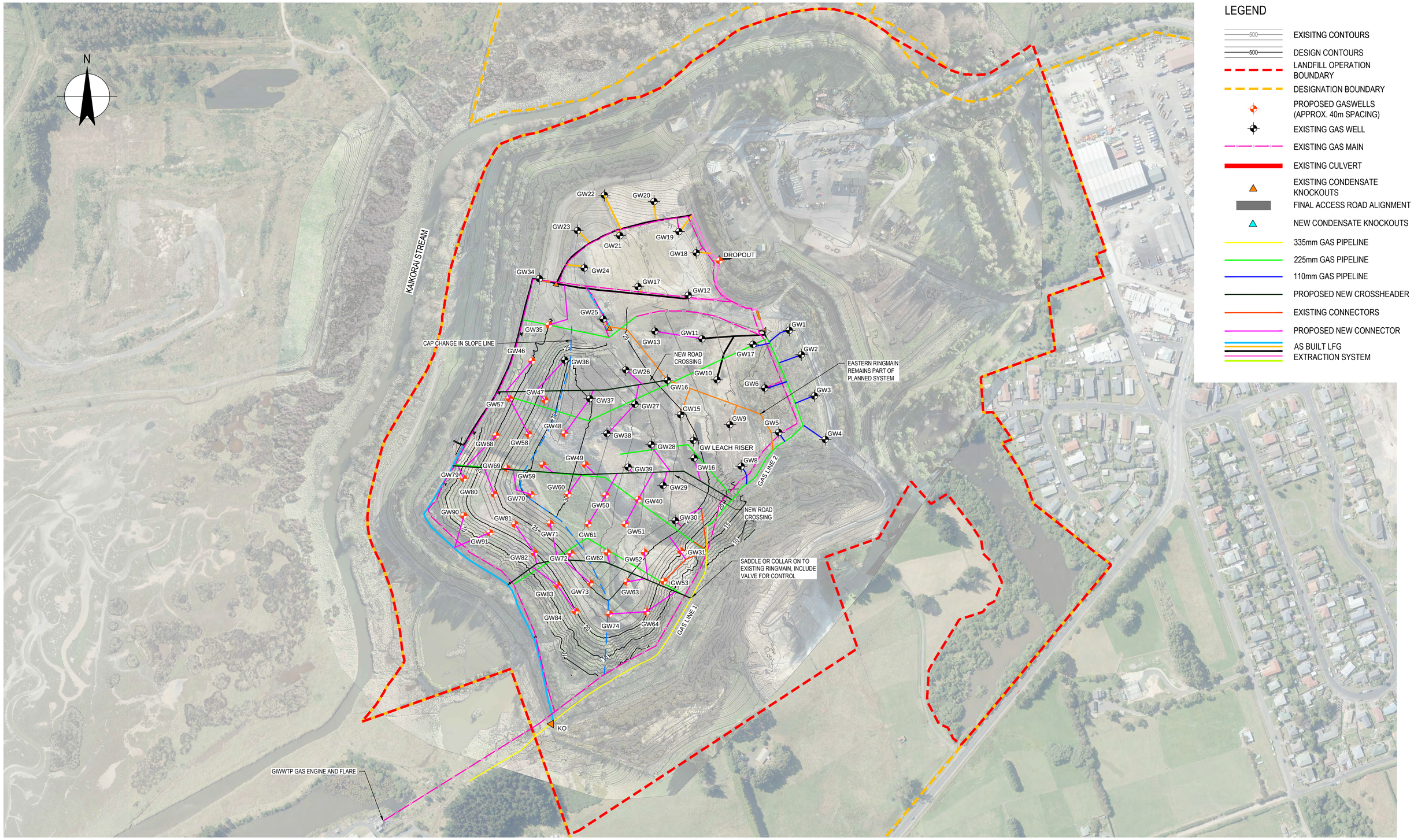
Drawing Title: FINAL SURFACE WATER COLLECTION SYSTEM

Size: A1

Drawing No.: 12547621-C402

Rev: A

Plot Date: 25 July 2023 - 7:53 AM Plotted by: Riken Joshua Lopez File Name: C:\12d\SW\data\P-00-12D-001\51-12547621 - Green Island Landfill_1439\CADD\Drawings\12547621-01-C402.dwg




INDICATIVE GAS WELL AND GASMAIN LAYOUT FOR FINAL LANDFORM

SCALE 1:2000

**FOR CONSENT NOT FOR CONSTRUCTION**

| Rev | Description | Checked | Approved | Date |
|---|---|---|---|---|
| A | PRELIMINARY ISSUE | PM* | PD* | 16.12.22 |

**Author** R.LOPEZ **Drafting Check**

**Designer** **Design Check**

0 20 40 60 80 100m

SCALE 1:2000 AT ORIGINAL SIZE

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GHD Limited

Level 3, 138 Victoria Street
Christchurch 8013, New Zealand
**T** 64 3 378 0900 **F** 64 3 370 8001
**E** chcmail@ghd.com **W** www.ghd.com

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**Project No.** 12547621

Client: DUNEDIN CITY COUNCIL

Project: GREEN ISLAND LANDFILL CLOSURE

Status: PRELIMINARY

Status Code: S2

Drawing Title: INDICATIVE GAS WELL AND GASMAIN LAYOUT FOR FINAL LANDFORM

Size: A1

Drawing No.: 12547621-C501

Rev: A

Plot Date: 26 September 2023 - 10:57 AM Plotted by: Riken Joshua Lopez

File Name: C:\12d\SW\data\P-00-12D-001\51-12547621 - Green Island Landfill_1439\CADD\Drawings\12547621-01-C501.dwg

## LEGEND

- EXISITNG CONTOURS
- DESIGN CONTOURS
- LANDFILL OPERATION BOUNDARY
- DESIGNATION BOUNDARY
- LANDFILL GAS MONITORING WELL LOCATION
- STAFF GAUGE
- PUMP STATION
- MANHOLE
- SURFACE WATER MONITORING LOCATION
- SEDIMENT POND MONITORING LOCATION
- LEACHATE POND MONITORING LOCATION
- GROUND WATER MONITORING ARRAY

INLET

# ENVIRONMENTAL MONITORING PLAN

SCALE 1:2500

**FOR CONSENT NOT FOR CONSTRUCTION**

| Rev | Description | Checked | Approved | Date |
|---|---|---|---|---|
| A | PRELIMINARY ISSUE | PM* | PD* | 16.12.22 |

Author R.LOPEZ — Drafting Check
Designer — Design Check

0 25 50 75 100 125m
SCALE 1:2500 AT ORIGINAL SIZE

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GHD Limited
Level 3, 138 Victoria Street
Christchurch 8013, New Zealand
T 64 3 378 0900 F 64 3 370 8001
E chcmail@ghd.com W www.ghd.com
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Project No. 12547621

Client: DUNEDIN CITY COUNCIL
Project: GREEN ISLAND LANDFILL CLOSURE
Status: PRELIMINARY — Status Code: S2
Drawing Title: ENVIRONMENTAL MONITORING PLAN
Size: A1
Drawing No.: 12547621-C601
Rev: A

Plot Date: 13 March 2023 - 8:40 AM Plotted by: Riken Joshua Lopez File Name: C:\12d\SW\data\P-00-12D-001\51-12547621 - Green Island Landfill_1439\CADD\Drawings\12547621-01-C601.dwg

# Appendix B - 2021 Monitoring Report – NOT INCLUDED IN THIS UPDATE - SEE GHD SURFACE WATER REPORT OCTOBER 2024 UPDATE FOR LATEST VERSION

# Appendix C - T + T LFG Report NOT INCLUDED IN THIS UPDATE - SEE T+T OCTOBER 2024 UPDATED VERSION

# Appendix D - Green Island Landfill – Fire Management Plan

# Fire Management Plan

## Green Island Landfill

Dunedin City Council

13 March 2023

→ **The Power of Commitment**

# Appendix D - Green Island Landfill – Fire Management Plan

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The Power of Commitment