## COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

| 6-8 Rose Avenue, Croydon, Vic 3136 | Job No | 21259 |  |
| :--- | :--- | :--- | :--- |
| Client | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | Report No | $21259 / R 001$ |
| Project | TRIJENA - STAGE 12 | Date /ssued | $04 / 05 / 2021$ |
| Location | MICKLEHAM | Tested by | AC |


| Feature | CONSTRUCTION LAYER | Layer thickness | 150 mm | Time: |
| :--- | :--- | :--- | :--- | :--- |


| Test No |  | 1 | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Location <br> Chainage Offset |  | Janoli Street |  |  | Alice Avenue |  |  |
|  |  | $\begin{gathered} \hline 230 \\ 1.8 \\ \text { north } \\ \text { of kerb } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 280 \\ 1.8 \\ \text { east } \\ \text { of kerb } \end{gathered}$ | 330 <br> 1.8 <br> west <br> of kerb | $\begin{gathered} 100 \\ 1.8 \\ \text { east } \\ \text { of kerb } \end{gathered}$ | $\begin{gathered} \hline 150 \\ 1.8 \\ \text { west } \\ \text { of kerb } \end{gathered}$ | 200 <br> 1.8 <br> south <br> of kerb |
| Approximate depth from F.S.L. | $m$ |  |  |  |  |  |  |
| Measurement depth | mm | 125 | 125 | 125 | 125 | 125 | 125 |
| Field wet density | $t m^{3}$ | 2.19 | 2.16 | 2.17 | 2.19 | 2.19 | 2.20 |
| Field dry density | $t / m^{3}$ | 2.06 | 2.05 | 2.05 | 2.06 | 2.05 | 2.06 |
| Field moisture content | \% | 6.5 | 5.5 | 6.0 | 6.5 | 6.5 | 6.5 |

Laboratory Compaction AS 1289.5.1.1 \& 5.4.2 Assigned Values (See Report No 40AMWQACJ)

| Date of assignment | 29/04/2021 |  |
| :--- | ---: | :---: |
| Material source and location | 40mm Capping - MVQ, Donnybrook |  |
| Compactive effort | STANDARD |  |
| Maximum Dry Density | $t / m^{3}$ | 2.08 |
| Optimum Moisture Content | $\%$ | 9.5 |

Test procedure AS 1289.5.4.1

| Oversize rock retained on sieve | $m m$ | 37.5 | 37.5 | 37.5 | 37.5 | 37.5 | 37.5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of oversize material | wet | - | - | - | - | - | - |
| Percent of oversize material | dry | - | - | - | - | - | - |
| Adjusted Maximum Dry Density | $t / m^{3}$ | - | - | - | - | - | - |
| Adjusted Optimum Moisture Content | $\%$ | - | - | - | - | - | - |


| Moisture Variation From Optimum Moisture Content |  | $\begin{gathered} 3.0 \% \\ \text { dry } \\ \hline \end{gathered}$ | $\begin{gathered} 4.0 \% \\ \text { dry } \end{gathered}$ | $\begin{gathered} 3.5 \% \\ \text { dry } \end{gathered}$ | $\begin{gathered} 3.0 \% \\ \text { dry } \end{gathered}$ | $\begin{gathered} 3.0 \% \\ \mathrm{dry} \end{gathered}$ | $\begin{gathered} 3.0 \% \\ \text { dry } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Moisture Ratio ( $\mathrm{R}_{\mathrm{m}}$ ) | \% | 70.0 | 58.5 | 63.0 | 67.0 | 70.0 | 68.5 |
| Density Ratio ( $R_{D}$ ) | \% | 99.0 | 98.5 | 98.0 | 99.0 | 98.5 | 99.0 |

## COMPACTION ASSESSMENT



| AS 12892.1.1 \& 5.8.1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Test No |  | 7 |  |  |  |  |  |
| Location | Chainage Offset | Pioneer Way |  |  |  |  |  |
|  |  | $\begin{gathered} \hline 20 \\ 1.8 \\ \text { north } \\ \text { of kerb } \end{gathered}$ |  |  |  |  |  |
| Approximate depth from F.S.L. | $m$ |  |  |  |  |  |  |
| Measurement depth | mm | 125 |  |  |  |  |  |
| Field wet density | $t / m^{3}$ | 2.18 |  |  |  |  |  |
| Field dry density | $t / m^{3}$ | 2.04 |  |  |  |  |  |
| Field moisture content | \% | 6.5 |  |  |  |  |  |

Laboratory Compaction AS 1289.5.1.1 \& 5.4.2 Assigned Values (See Report No 40AMWQACJ)

| Date of assignment |  | $29 / 04 / 2021$ |
| :--- | ---: | :---: |
| Material source and location |  | 40mm Capping - MVQ, Donnybrook |
| Compactive effort | STANDARD |  |
| Maximum Dry Density | $\%$ | 2.08 |
| Optimum Moisture Content |  | 9.5 |

Test procedure AS 1289.5.4.1

| Oversize rock retained on sieve $\quad$ mm | 37.5 |  |  |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of oversize material | wet | - |  |  |  |  |  |
| Percent of oversize material | dry | - |  |  |  |  |  |
| Adjusted Maximum Dry Density $\quad \mathrm{Vm}$ | - |  |  |  |  |  |  |
| Adjusted Optimum Moisture Content | $\%$ | - |  |  |  |  |  |


| Moisture Variation From <br> Optimum Moisture Content | $2.5 \%$ <br> dry |  |  |  |  |  |
| :---: | :---: | :--- | :--- | :--- | :--- | :--- |


| Moisture Ratio $\left(R_{m}\right)$ | $\%$ | 71.5 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Density Ratio $\left(R_{0}\right)$ | $\%$ | 98.0 |  |  |  |  |  |

COMPACTION ASSESSMENT
CIVIL GEOTECHNICAL SERVICES

| -8 | Rose Avenue, Croydon, Vic 3136 | Job No | 21259 |
| :--- | :--- | :--- | :--- |
| Client | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | Report No | $21259 / R 003$ |
| Project | TRIJENA - STAGE 12 | Date /ssued | $06 / 05 / 2021$ |
| Location | MICKLEHAM | Tested by | AC |


| Feature | CAPPING | Layer thickness | 150 mm | Time: |
| :--- | :--- | :--- | :--- | :--- |


| Test No |  | 8 | 9 | 10 | 11 | 12 | 13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Location <br>  <br> Chainage <br> Offset |  | Janoli Street |  |  | Alice Avenue |  |  |
|  |  | $\begin{gathered} 330 \\ 1.8 \\ \text { north } \\ \text { of kerb } \\ \hline \end{gathered}$ | $\begin{gathered} 280 \\ 1.8 \\ \text { east } \\ \text { of kerb } \\ \hline \end{gathered}$ | 230 <br> 1.8 <br> north <br> of kerb | $\begin{aligned} & 100 \\ & 1.8 \end{aligned}$ <br> west <br> of kerb | 150 <br> 1.8 <br> east <br> of kerb | $\begin{gathered} \hline 200 \\ 1.8 \\ \text { west } \\ \text { of kerb } \end{gathered}$ |
| Approximate depth from F.S.L. | $m$ |  |  |  |  |  |  |
| Measurement depth | $m m$ | 125 | 125 | 125 | 125 | 125 | 125 |
| Field wet density | $t / m^{3}$ | 2.20 | 2.18 | 2.20 | 2.16 | 2.16 | 2.12 |
| Field dry density | $t / m^{3}$ | 2.07 | 2.06 | 2.06 | 2.05 | 2.04 | 2.04 |
| Field moisture content | \% | 6.5 | 6.0 | 6.5 | 5.0 | 5.5 | 4.0 |

Laboratory Compaction AS 1289.5.1.1 \& 5.4.2 Assigned Values (See Report No 40AMWQACH)

| Date of assignment | 29/04/2021 |  |
| :--- | ---: | :---: |
| Material source and location | 40mm Capping - MVQ, Donnybrook |  |
| Compactive effort | STANDARD |  |
| Maximum Dry Density | $\% / m^{3}$ | 2.08 |
| Optimum Moisture Content | $\%$ | 9.5 |

Test procedure AS 1289.5.4.1

| Oversize rock retained on sieve | mm | 37.5 | 37.5 | 37.5 | 37.5 | 37.5 | 37.5 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of oversize material | wet | - | - | - | - | - | - |
| Percent of oversize material | dry | - | - | - | - | - | - |
| Adjusted Maximum Dry Density | $\forall / m^{3}$ | - | - | - | - | - | - |
| Adjusted Optimum Moisture Content | $\%$ | - | - | - | - | - | - |


| Moisture Variation From <br> Optimum Moisture Content | $3.0 \%$ <br> dry | $3.5 \%$ <br> dry | $2.5 \%$ <br> dry | $4.5 \%$ <br> dry | $3.5 \%$ <br> dry | $5.5 \%$ <br> dry |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Moisture Ratio $\left(R_{m}\right)$ | $\%$ | 70.0 | 63.0 | 72.0 | 53.5 | 61.0 | 43.5 |


| Density Ratio $\left(R_{D}\right)$ |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |

NATA Accredited Laboratory No 9909
Accredited for compliance with ISOIIEC 17025-Testing

## COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

6-8 Rose Avenue. Croydon, Vic 3136 Job No | 21259 |
| :--- |
| Client |
| Wroject |
| WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) |
| TRIJENA - STAGE 12 |

| Feature | CAPPING | Layer thickness | 150 mm | Time: |
| :--- | :--- | :--- | :--- | :--- |

AS 12892.1.1 \& 5.8.1

| Test No |  | 14 |  |  |  |  |  |
| :--- | ---: | ---: | :--- | :--- | :--- | :--- | :--- |
| Location |  |  |  |  |  |  |  |

Laboratory Compaction AS 1289.5.1.1\&5.4.2 Assigned Values (See Report No 40AMWQACH)

| Date of assignment |  | 29/04/2021 |
| :--- | ---: | :---: |
| Material source and location | 40mm Capping - MVQ, Donnybrook |  |
| Compactive effort | STANDARD |  |
| Maximum Dry Density | $\%$ | 2.08 |
| Optimum Moisture Content | $\%$ | 9.5 |

Test procedure AS 1289.5.4.1

| Oversize rock retained on sieve | mm | 37.5 |  |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of oversize material | wet | - |  |  |  |  |  |
| Percent of oversize material | dry | - |  |  |  |  |  |
| Adjusted Maximum Dry Density | t/ $m^{3}$ | - |  |  |  |  |  |
| Adjusted Optimum Moisture Content | $\%$ | - |  |  |  |  |  |


| Moisture Variation From | $3.5 \%$ <br> Optimum Moisture Content |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Moisture Ratio $\left(R_{m}\right)$ | $\%$ | 64.0 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |
| Density Ratio $\left(R_{D}\right)$ | $\%$ | 98.0 |  |  |  |  |

COMPACTION ASSESSMENT

| CIVIL GEOTECHNICAL SERVICES |  | Job No | 21259 |
| :---: | :---: | :---: | :---: |
|  |  | Report No | 21259/R005 |
| 6-8 Rose Avenue, Croydon, Vic 3136 |  | Date Issued | 17/05/2021 |
| Client | WINSLOW CONSTRUC | Tested by | AC |
| Project | TRIJENA - STAGE 12 | Date tested | 17/05/21 |
| Location | MICKLEHAM | Checked by | JHF |


| Feature CLASS 3 | Layer thickness | 100 mm | Time: |
| :--- | :--- | :--- | :--- |


| AS 12892.1.1 \& 5.8.1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Test No |  | 15 | 16 | 17 | 18 | 19 |  |
| Location | Chainage Offset | Pioneer Way | Alice Avenue | Janoli Street |  |  |  |
|  |  | $\begin{gathered} \hline 15 \\ 1.8 \\ \text { south } \\ \text { of kerb } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 210 \\ 1.8 \\ \text { east } \\ \text { of kerb } \end{gathered}$ | $\begin{gathered} \hline 230 \\ 1.8 \\ \text { north } \\ \text { of kerb } \end{gathered}$ | $\begin{gathered} \hline 280 \\ 1.8 \\ \text { east } \\ \text { of kerb } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 330 \\ 1.8 \\ \text { west } \\ \text { of kerb } \end{gathered}$ |  |
| Approximate depth from F.S.L. | $m$ |  |  |  |  |  |  |
| Measurement depth | mm | 75 | 75 | 75 | 75 | 75 |  |
| Field wet density | $t / m^{3}$ | 2.43 | 2.41 | 2.42 | 2.42 | 2.41 |  |
| Field dry density | $t m^{3}$ | 2.31 | 2.29 | 2.31 | 2.28 | 2.28 |  |
| Field moisture content | \% | 5.5 | 5.5 | 5.0 | 6.0 | 5.5 |  |

Laboratory Compaction AS 1289.5.2.1 \& 5.4.2 Assigned Values (See Report No 203ACMBD)

| Date of assignment |  | $31 / 03 / 2021$ |
| :--- | ---: | :---: |
| Material source and location |  | 20mm Class 3 - ACM, Beveridge |
| Compactive effort | $\ddots m^{3}$ | MODIFIED |
| Maximum Dry Density | $\%$ | 2.33 |
| Optimum Moisture Content |  | 7.5 |

Test procedure AS 1289.5.4.1

| Oversize rock retained on sieve | mm | 19.0 | 19.0 | 19.0 | 19.0 | 19.0 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of oversize material | wet | - | - | - | - | - |  |
| Percent of oversize material | $d r y$ | - | - | - | - | - |  |
| Adjusted Maximum Dry Density | $t m^{3}$ | - | - | - | - | - |  |
| Adjusted Optimum Moisture Content | $\%$ | - | - | - | - | - |  |


| Moisture Variation From <br> Optimum Moisture Content | $2.0 \%$ <br> dry | $2.0 \%$ <br> dry | $2.5 \%$ <br> dry | $1.5 \%$ <br> dry | $2.0 \%$ <br> dry |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Moisture Ratio $\left(R_{m}\right)$ | \% | 73.5 | 72.5 | 67.5 | 79.0 | 72.5 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| Density Ratio $\left(R_{0}\right)$ | $\%$ | $\overline{9} 9.0$ | 98.0 | 99.0 | $\overline{9} \overline{8} . \overline{0}$ | $\overline{98} . \overline{0}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## COMPACTION ASSESSMENT

|  |  | Job No | 21259 |
| :--- | :--- | :--- | :--- |
| CIVIL GEOTECHNICAL SERVICES | Report No | $21259 / R 006$ |  |
| $6-8$ | Rose Avenue, Croydon, Vic 3136 | Date /ssued | $17 / 05 / 2021$ |
| Client | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | Tested by | AC |
| Project | TRIJENA - STAGE 12 | Date tested | $17 / 05 / 21$ |
| Location | MICKLEHAM | Checked by | JHF |


| Feature CLASS 3 | Layer thickness | $130 / 170 \mathrm{~mm}$ | Time: | 12:18:02 |
| :--- | :--- | :--- | :--- | :--- |


Laboratory Compaction AS 1289.5.2.1 \& 5.4.2 Assigned Values (See Report No 203ACMBD)

| Date of assignment |  | $31 / 03 / 2021$ |
| :--- | ---: | :---: |
| Material source and location | 20mm Class 3 - ACM, Beveridge |  |
| Compactive effort | MODIFIED |  |
| Maximum Dry Density | $\%$ | 2.33 |
| Optimum Moisture Content |  | 7.5 |

Test procedure AS 1289.5.4.1

| Oversize rock retained on sieve | $m m$ | 19.0 | 19.0 |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of oversize material | wet | - | - |  |  |  |  |
| Percent of oversize material | $d r y$ | - | - |  |  |  |  |
| Adjusted Maximum Dry Density $\quad t / m^{3}$ | - | - |  |  |  |  |  |
| Adjusted Optimum Moisture Content | $\%$ | - | - |  |  |  |  |


| Moisture Variation From <br> Optimum Moisture Content | $2.0 \%$ <br> dry | $2.0 \%$ <br> dry |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Moisture Ratio $\left(R_{m}\right)$ | $\%$ | 76.0 | 73.5 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |
| Density Ratio $\left(R_{D}\right)$ | $\%$ | 98.0 | 99.0 |  |  |  |  |

COMPACTION ASSESSMENT

|  |  | Job No | 21259 |
| :--- | :--- | :--- | :--- |
| CIVIL GEOTECHNICAL SERVICES | Report No | $21259 / R 007$ |  |
| $6-8$ Rose Avenue. Croydon, Vic 3136 | Date /ssued | $25 / 05 / 2021$ |  |
| Client | WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) | Tested by | AC |
| Project | TRIJENA - STAGE 12 | Date tested | $25 / 05 / 21$ |
| Location | MICKLEHAM | Checked by | JHF |


| Feature | CLASS 2 (1st Layer) | Layer thickness | 100 mm |
| :--- | :--- | :--- | :--- |



Laboratory Compaction AS 1289.5.2.1 \& 5.4.2 Assigned Values (See Report No 202ABAD)

| Date of assignment | $31 / 03 / 2021$ |  |
| :--- | ---: | :---: |
| Material source and location | 20mm Class 2-ACM, Beveridge |  |
| Compactive effort | MODIFIED |  |
| Maximum Dry Density | $\% m^{3}$ | 2.35 |
| Optimum Moisture Content | $\%$ | 7.0 |

Test procedure AS 1289.5.4.1

| Oversize rock retained on sieve $\quad \mathrm{mm}$ | 19.0 |  |  |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of oversize material | wet | - |  |  |  |  |  |
| Percent of oversize material | $d r y$ | - |  |  |  |  |  |
| Adjusted Maximum Dry Density $\quad t m^{3}$ | - |  |  |  |  |  |  |
| Adjusted Optimum Moisture Content $\%$ | $\%$ | - |  |  |  |  |  |


| Moisture Variation From <br> Optimum Moisture Content | $2.0 \%$ <br> dry |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Moisture Ratio $\left(R_{m}\right)$ | $\%$ | 74.0 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Density Ratio $\left(R_{D}\right)$ | $\%$ | 98.0 |  |  |  |  |  |

Approved Signatory : Justin Fry

## COMPACTION ASSESSMENT

CIVIL GEOTECHNICAL SERVICES

| Client | Wose Avenue, Croydon, Vic 3136 | Job No | 21259 |
| :--- | :--- | :--- | :--- |
| Project | TRIJENA - STAGE 12 | Report No | $21259 / R 008$ |
| Location | MICKLEHAM | Date /ssued | $25 / 05 / 2021$ |


| Feature | CLASS 2 | Layer thickness | 130 mm | Time: |
| :--- | :--- | :--- | :--- | :--- |


| AS 12892.1.1 \& 5.8.1 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Test No |  | 23 | 24 | 25 | 26 | 27 | 28 |
| Location |  | Alice Avenue |  | Pioneer Way | Janoli Street |  |  |
|  | Chainage Offset | 150 <br> 1.8 <br> west <br> of kerb | $\begin{gathered} \hline 200 \\ 1.8 \\ \text { east } \\ \text { of kerb } \end{gathered}$ | $\begin{gathered} \hline 15 \\ 1.8 \\ \text { south } \\ \text { of kerb } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 230 \\ 1.8 \\ \text { north } \\ \text { of kerb } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 280 \\ 1.8 \\ \text { east } \\ \text { of kerb } \\ \hline \end{gathered}$ | $\begin{gathered} \hline 330 \\ 1.8 \\ \text { west } \\ \text { of kerb } \end{gathered}$ |
| Approximate depth from F.S.L. | $m$ |  |  |  |  |  |  |
| Measurement depth | mm | 100 | 100 | 100 | 100 | 100 | 75 |
| Field wet density | $t m^{3}$ | 2.46 | 2.45 | 2.45 | 2.48 | 2.46 | 2.49 |
| Field dry density | $t / m^{3}$ | 2.32 | 2.30 | 2.30 | 2.35 | 2.34 | 2.34 |
| Field moisture content | $\%$ | 6.5 | 6.5 | 6.5 | 5.0 | 5.5 | 6.0 |


| Laboratory Compaction AS 1289.5.2.1\&5.4.2 Assigned Values (See Report No 202ABAD) |
| :--- |
| $\left.\begin{array}{\|l\|c\|}\hline \text { Date of assignment } & 31 / 03 / 2021 \\ \hline \text { Material source and location } & \text { 20mm Class 2 - ACM, Beveridge } \\ \hline \text { Compactive effort } & \text { MODIFIED } \\ \hline \text { Maximum Dry Density } & \% \mathrm{~m}^{3}\end{array}\right] 2.35$ |
| Optimum Moisture Content |

Test procedure AS 1289.5.4.1

| Oversize rock retained on sieve | mm | 19.0 | 19.0 | 19.0 | 19.0 | 19.0 | 19.0 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of oversize material | wet | - | - | - | - | - | - |
| Percent of oversize material | dry | - | - | - | - | - | - |
| Adjusted Maximum Dry Density | $t / m^{3}$ | - | - | - | - | - | - |
| Adjusted Optimum Moisture Content | $\%$ | - | - | - | - | - | - |


| Moisture Variation From <br> Optimum Moisture Content | $1.0 \%$ <br> dry | $0.5 \%$ <br> dry | $1.0 \%$ <br> dry | $2.0 \%$ <br> dry | $2.0 \%$ <br> dry | $1.0 \%$ <br> dry |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Moisture Ratio $\left(R_{m}\right)$ | $\%$ | 89.0 | 93.5 | 88.5 | 73.0 | 74.5 | 86.0 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Density Ratio $\left(R_{D}\right)$ $\%$ 98.5 98.0 98.0 100.0 |  |  |  |  |  |  |

COMPACTION ASSESSMENT

| CIVIL GEOTECHNICAL SERVICES |
| :--- |
| 6-8 Rose Avenue, Croydon, Vic 3136 Job No 21259 <br> Client WINSLOW CONSTRUCTORS PTY LTD (CAMPBELLFIELD) Report No <br> Project TRIJENA - STAGE 12 Date /ssued 05/05/2021 |
| Location |


| Feature CLASS 2 (2nd Layer) | Layer thickness | 110 mm | Time: |
| :--- | :--- | :--- | :--- |



Laboratory Compaction AS 1289.5.2.1 \& 5.4.2 Assigned Values (See Report No 202ABAD)

| Date of assignment | $31 / 03 / 2021$ |
| :--- | :---: |
| Material source and location | 20mm Class 2 - ACM, Beveridge |
| Compactive effort | MODIFIED |
| Maximum Dry Density | $\boxed{m^{3}}$ |
| Optimum Moisture Content | $\%$ |

Test procedure AS 1289.5.4.1

| Oversize rock retained on sieve $\quad m m$ | 19.0 |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent of oversize material | wet | - |  |  |  |  |  |
| Percent of oversize material | $d r y$ | - |  |  |  |  |  |
| Adjusted Maximum Dry Density $\quad U m^{3}$ | - |  |  |  |  |  |  |
| Adjusted Optimum Moisture Content | $\%$ | - |  |  |  |  |  |


| Moisture Variation From <br> Optimum Moisture Content | $1.5 \%$ <br> dry |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Moisture Ratio $\left(R_{m}\right)$ | $\%$ | 82.0 |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \begin{tabular}{\|l|l|l|l|l|l|l|}
\hline
\end{tabular} |  |  |  |  |  |  |
| Density Ratio $\left(R_{D}\right)$ | $\%$ | 98.5 |  |  |  |  |  |



CIVIL GEOTECHNICAL SERVICES
ABN 26474013724
PO Box 678 Croydon Vic 3136
Telephone: 97230744 Facsimile: 97230799
$29^{\text {th }}$ June 2021
Our Reference: 21263:NB977
Winslow Constructors Pty Ltd
50 Barry Road
CAMPBELLFIELD VIC 3061

Dear Sirs/Madams,

## RE: LEVEL 1 EARTHWORKS INSPECTION AND TESTING <br> TRIJENA - STAGE 12 (MICKLEHAM)

Please find attached our Report No 21263/R001 which relates to the field density testing that was conducted within the filled allotments at the above subdivision. The level 1 inspections and associated field density was performed in June 2021.

The inspections and testing of the earthworks was undertaken in general accordance with the Level 1 requirements of AS 3798 - Guidelines on Earthworks for Commercial and Residential Developments.

The site inspection and testing was performed by experienced geotechnicians from this office. Any areas that were deemed unsatisfactory were reworked and retested under their supervision. The testing was performed to the relevant Australian Standards and the accompanying test reports carry NATA endorsement. The attached compaction results, which were located randomly throughout the fill profile, are considered to be representative of the bulk fill materials that were placed across the reported allotments by Winslow Constructors during the aforementioned period. The approximate locations of the field density tests can be seen on the attached plan (Figure 1).

We are of the view that the bulk fill materials that have been placed across the reported allotments by Winslow Constructors during the aforementioned period can be considered as having been placed in a controlled manner to a minimum density ratio of $95 \%$ (standard compactive effort).

Please contact the undersigned if you require any additional information.
Civil Geotechnical Services


Nick Brock

## FIGURE 1



| CIVIL GEOTECHNICAL SERVICES |  |  |  | Job No <br> Report No <br> Date Issued | $\begin{aligned} & 21263 \\ & 21263 / \mathrm{R001} \\ & 29 / 06 / 2021 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 6-8 Rose Av | Croydon 3136 |  |  |  |  |
| Client <br> Project <br> Location | WINSLOW CONS TRIJENA - STAG MICKLEHAM | (CAMPBELLF |  | Tested by Date tested Checked by | $\begin{aligned} & \hline \text { AC } \\ & 21 / 06 / 21 \\ & \text { JHF } \end{aligned}$ |
| Feature | EARTHWORKS | Layer thickness | 200 mm | Tim | 13:28 |

Test procedure AS 1289.2.1.1 \& 5.8.1

| Test No | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | - |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Location | REFER <br> TO <br> FIGURE 1 | REFER <br> TO <br> FIGURE 1 | REFER <br> TO | REFER <br> FIGURE 1 | REFER <br> TO |  |
| FIGURE 1 | FIGURE 1 |  |  |  |  |  |

Test procedure AS 1289.5.7.1

| Test No <br> Compactive effort <br> Or |  | 1 | 2 | 3 | 4 | 5 | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Standard |  |  |  |  |  |
| Oversize rock retained on sieve | mm | 19.0 | 19.0 | 19.0 | 19.0 | 19.0 | - |
| Percent of oversize material | wet | 0 | 0 | 0 | 0 | 0 | - |
| Peak Converted Wet Density | $t / m^{3}$ | 2.01 | 2.01 | 2.01 | 1.92 | 1.91 | - |
| Adjusted Peak Converted Wet Density | $t m^{3}$ | - | - | - | - | - | - |
| Optimum Moisture Content | \% | 12.5 | 18.5 | 17.5 | 15.0 | 17.0 | - |


| Moisture Variation From <br> Optimum Moisture Content | $2.0 \%$ <br> wet | $2.0 \%$ <br> wet | $2.5 \%$ <br> wet | $2.0 \%$ <br> wet | $2.5 \%$ <br> wet | - |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Density Ratio ( $R_{H D}$ ) $\%$ | 97.0 | 98.5 | 96.0 | 96.5 | 96.5 | - |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Material description
No1-5 Clay Fill

