

| | QUANTITIES SUMMARY(WIDE CROSS-SECTION) | | | | | | | | | | | | | | | | | | | MARIMA MAKUTANO ROAD BATCH 1 | | | Apr-23 |
|--------------|--|--------------|---------------|----------|-----------|----------|---------------|---------------|------------|-------------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|------------------------------|-----------|---------------|--------|
| KM | BUSH LIGHT | BUSH HEAVY | GRUB | TREES | ETL | FILL | DRAINS (SOFT) | DRAINS (HARD) | CUL.900 MM | CUL.600 MM. | CD | AC | AD | T1 | T2 | T4 | MITRES | C/W | S/C | CHECK DAMS | GABIONS | GRAVEL | |
| | M2 | M3 | M2 | No | M3 | | M3 | | M | M | No. | No. | No. | M3 | M3 | M3 | M3 | M2 | No. | | | M3 | |
| 1 | 8,000 | 800 | 5,000 | | 10 | 0 | 1,453 | 145 | - | - | - | - | - | - | - | - | | | | | | | 1,800 |
| 2 | 8,000 | 800 | 5,000 | | 10 | | 1,453 | 145 | 17 | - | 2 | - | - | 2 | 2 | - | | | | | | | 1,800 |
| 3 | 8,000 | 800 | 5,000 | | 10 | | 1,669 | 167 | - | 6 | - | 1 | - | - | - | 2 | | | | | | 56 | 1,800 |
| 4 | 8,000 | 800 | 5,000 | | 10 | | 1,528 | 153 | - | - | - | - | - | - | - | - | | | | | | | 1,800 |
| 5 | 8,000 | 800 | 5,000 | | 10 | 0 | 1,939 | 194 | - | - | - | - | - | - | - | - | 30 | | | | | | 1,800 |
| 6 | 8,000 | 800 | 5,000 | | 10 | 0 | 1,496 | 150 | - | 6 | - | 1 | - | - | - | 2 | | | | | | | 1,800 |
| 7 | 1,600 | 160 | 1,000 | | 10 | 0 | 492 | 49 | | | | | | | | | 30 | | | | | | 540 |
| 8 | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL | 49,600 | 4,960 | 31,000 | 0 | 70 | 0 | 10,029 | 1,003 | 17 | 12 | 2 | 2 | 0 | 2 | 2 | 4 | 60 | 0 | 0 | 0 | 56 | 11,340 | |

| | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|
| Chainage: | 0+000 | 0+200 | 0+400 | 0+600 | 0+800 | 1+000 |
|-----------|-------|-------|-------|-------|-------|-------|

| Measurements for Clearing: | Aver. (m) 1 to 4 readings* | | | Free Clearance Width for Calculating areas | | | | | | | | | | | | | | | |
|----------------------------|----------------------------|---|---|--|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Bush Clearing | 8 | 8 | 8 | m | 8 | 8 | 8 | m | 8 | 8 | 8 | m | 8 | 8 | 8 | m | 8 | 8 |
| Grass Cutting | | | | m | | | | m | | | | m | | | | m | | | |
| Grubbing | 7 | 7 | 7 | m | 7 | 7 | 7 | m | 7 | 7 | 7 | m | 7 | 7 | 7 | m | 7 | 7 | 7 |
| 0 Tree and Stump Removal | 0 | | | m | 0 | | | m | 0 | | | m | 0 | | | m | 0 | | |

* Note: The user is free to select the number of reading required according to the site conditions. (min. 1 max. 4 for each section).

| Estimated measurements for small cut to fill: | Height of Cut for calculating volumes | | | | | | | | | | | | | | | | | | | |
|---|---------------------------------------|--|--|----|----|--|--|----|----|--|--|----|---|--|--|----|----|--|--|----|
| Height of cut < 0.25m | 12 | | | cm | 20 | | | cm | 15 | | | cm | 0 | | | cm | 19 | | | cm |

| For Reshaping: | Difference in Level between Exist. Camber and Side Drain for calculating volumes | | | | | | | | | | | | | | | | | | | |
|----------------|--|--|--|--|----|--|--|--|----|--|--|--|----|--|--|----|----|--|--|----|
| Existing Roads | 37 | | | | 36 | | | | 23 | | | | 18 | | | cm | 20 | | | cm |

| Quantities | | | | | | | | | | Total this page |
|-----------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-----------------|
| Bush Clearing | 1600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | 8,000 |
| Grass Cutting | | m2 | | m2 | | m2 | | m2 | | 0 |
| Grubbing | 1,000 | m2 | 1,000 | m2 | 1,000 | m2 | 1,000 | m2 | 1,000 | 5,000 |
| Tree and Stump Removal | 0 | No. | 0 | No. | 0 | No. | 0 | No. | 0 | 0 |
| | | | | | | | | | | 0 |
| Height of cut < 0.25m | 0 | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Height of cut > 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Embankment | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Drains full re-construction | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Reshaping by Labour | 140 | m3 (insitu) | 151 | m3 (insitu) | 292 | m3 (insitu) | 346 | m3 (insitu) | 324 | 1,253 |
| By Towed Grader / Labour | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| By Equipment Based Meth. | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |

Quantities verified and accepted by the Contractor Name: Date: Signature:
 For the Employer Name: Date: Signature:

| | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|
| Chainage: | 1+000 | 1+200 | 1+400 | 1+600 | 1+800 | 2+000 |
|-----------|-------|-------|-------|-------|-------|-------|

| Measurements for Clearing: | | Free Clearance Width for Calculating areas | | | | | | | | | | | | Aver. (m) 1 to 4 readings* | | | | | | | | |
|------------------------------|--|--|---|---|--|---|------------------|---|---|--|---|------------------|---|----------------------------|--|---|---|---|---|--|---|--|
| | | 1 to 4 readings* | | | | | 1 to 4 readings* | | | | | 1 to 4 readings* | | | | | | | | | | |
| Bush Clearing | | 8 | 8 | 8 | | m | 8 | 8 | 8 | | m | 8 | 8 | 8 | | m | 8 | 8 | 8 | | m | |
| Grass Cutting | | | | | | m | | | | | m | | | | | m | | | | | m | |
| Grubbing | | 7 | 7 | 7 | | m | 7 | 7 | 7 | | m | 7 | 7 | 7 | | m | 7 | 7 | 7 | | m | |
| #REF! Tree and Stump Removal | | | | | | m | 0 | | | | m | 0 | | | | m | 0 | | | | m | |

Note: The user is free to select the number of reading required according to the site conditions. (min. 1 max. 4 for each section).

| Estimated measurements for small cut to fill: | | Height of Cut for calculating volumes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---------------------------------------|--|--|--|----|----|--|--|--|----|--|--|--|--|----|----|--|--|--|----|---|--|--|--|----|
| Height of cut < 0.25m | | 7 | | | | cm | 14 | | | | cm | | | | | cm | 11 | | | | cm | 9 | | | | cm |

| For Reshaping: | | Difference in Level between Exist. Camber and Side Drain for calculating volumes | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|--|--|--|--|--|----|--|--|--|--|----|--|--|--|--|----|--|--|--|----|----|---|--|--|----|
| Existing Roads | | 31 | | | | | 11 | | | | | 32 | | | | | 35 | | | | cm | 19 | 5 | | | cm |

| Quantities | | | | | | | | | | Total this page |
|-----------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-----------------|
| Bush Clearing | 1600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | 8,000 |
| Grass Cutting | | m2 | | m2 | | m2 | | m2 | | 0 |
| Grubbing | 1,000 | | 1,000 | m2 | 1,000 | m2 | 1,000 | m2 | 1,000 | 5,000 |
| Tree and Stump Removal | | No. | 0 | No. | 0 | No. | 0 | No. | 0 | 0 |
| Height of cut < 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Height of cut > 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Embankment | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Drains full re-construction | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Reshaping by Labour | 205 | m3 (insitu) | 421 | m3 (insitu) | 194 | m3 (insitu) | 162 | m3 (insitu) | 335 | 1,318 |
| By Towed Grader / Labour | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| By Equipment Based Meth. | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |

Quantities verified and accepted by the Contractor Name: Date: Signature:
 For the Employer Name: Date: Signature:

| Road Improvement Plan | | County | | Tharaka Nithi | | From: 2+000 | | To: 3+000 | | Page: 3 | | | | |
|--|--------------------------------|-------------------------------------|--|---------------|-----|-------------|--|-----------|--|---------|----|----|-----|---|
| Chain- age | (kilometres) | | | | | | | | | | | | | |
| | (metres) | | | | | | | | | | | | | |
| Road form. | Subgrade | | | | | | | | | | | | | |
| | Cross section | | | | | | | | | | | | | |
| Earthworks / Reshaping | Method: RES, ETL or Fill | | | | | | | | | | | | | |
| | Choice of reshaping: L, T or E | | | | | | | | | | | | | |
| | Volume of ETL or Fill (m3/m) | | | | | | | | | | | | | |
| Gravel | Total | Thickness (cm,comp.) | 30 | MS4 | 275 | MS3 | | | | | | | | |
| | 1800 | Source (quarry No.) | MS4 | 275 | MS3 | | | | | | | | | |
| Improved Subgrade | Total | Thickness (cm,comp.) | 30 | MS4 | 275 | MS3 | | | | | | | | |
| | 2200 | Source (quarry No.) | MS4 | 275 | MS3 | | | | | | | | | |
| Longitudinal gradient (in %) | | | | | | | | | | | | | | |
| Mitre drains | Total | Number left = | | | | | | | | | | | | |
| | 0 | Number right = | | | | | | | | | | | | |
| Catch water | Total | Length of drain left = | | | | | | | | | | | | |
| | | Length of drain right = | | | | | | | | | | | | |
| Culverts | N/Ex | Chainage (m) New / Existing line | | | | | | | | | | | | |
| | CD | 0 | = Cross drainage | | | | | | | | AC | R | 5.7 | |
| | | 1 | = Access culvert/drift | | | | | | | | | | | |
| | AD | 0 | = Left/right | R | | | | | | | | L | IV | 4 |
| | | | Ø 450 mm | | | | | | | | | | | |
| | Length (m) | 6 | Ø 600mm | | | | | | | | L | IV | 4 | |
| - | | Ø 900 mm | | | | | | | | | | | | |
| Ramp | | Earth fill (m3) | | | | | | | | | | | | |
| | | Haunch Type | | | | | | | | | | | | |
| Head- walls | T4=2 | T3= | Inlet (Material/Type) | | | | | | | | L | IV | 4 | |
| | T2= | T1= | Outlet (Material/Type) | | | | | | | | | | | |
| Scour Checks | SM | | = Material this sheet/ Spacing left (m) = | | | | | | | | L | IV | 4 | |
| | 0 | | Spacing right (m) = =Total No. this sheet | | | | | | | | | | | |
| Additional instruction as per Reference | | | | | | | | | | | | | | |

Chainage: 2+000 2+200 2+400 2+600 2+800 3+000

| Measurements for Clearing: | | Free Clearance Width for Calculating areas | | | | | | | | | | | | | | | |
|------------------------------|---|--|---|--|---|---|---|--|---|----------------------------|---|--|---|---|---|--|---|
| | | #REF! 1 to 4 readings* | | | | | | | | Aver. (m) 1 to 4 readings* | | | | | | | |
| Bush Clearing | m | 8 | 8 | | 8 | 8 | 8 | | 8 | 8 | 8 | | 8 | 8 | 8 | | 8 |
| Grass Cutting | m | | | | | | | | | | | | | | | | |
| Grubbing | m | 7 | 7 | | 7 | 7 | 7 | | 7 | 7 | 7 | | 7 | 7 | 7 | | 7 |
| #REF! Tree and Stump Removal | m | | | | | 0 | | | | 0 | | | | 0 | | | |

Note: The user is free to select the number of reading required according to the site conditions. (min. 1 max. 4 for each section).

Estimated measurements for small cut to fill: Height of Cut for calculating volumes

| | | | | | | | | |
|-----------------------|----|----|---|----|----|----|---|----|
| Height of cut < 0.25m | 15 | cm | 5 | cm | 13 | cm | 4 | cm |
|-----------------------|----|----|---|----|----|----|---|----|

For Reshaping: Difference in Level between Exist. Camber and Side Drain for calculating volumes

| | | | | | | | | | | |
|----------------|----|--|----|--|----|--|----|----|----|----|
| Existing Roads | 24 | | 20 | | 21 | | 27 | cm | 22 | cm |
|----------------|----|--|----|--|----|--|----|----|----|----|

Quantities Total this page

| | | | | | | | | | | |
|-----------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------|
| Bush Clearing | 1600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | 8,000 |
| Grass Cutting | | m2 | | m2 | | m2 | | m2 | | 0 |
| Grubbing | 1,000 | | 1,000 | m2 | 1,000 | m2 | 1,000 | m2 | 1,000 | 5,000 |
| Tree and Stump Removal | | No. | 0 | No. | 0 | No. | 0 | No. | 0 | 0 |
| Height of cut < 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Height of cut > 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Embankment | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Drains full re-construction | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Reshaping by Labour | 280.8 | m3 (insitu) | 324 | m3 (insitu) | 313 | m3 (insitu) | 248 | m3 (insitu) | 302 | 1,469 |
| By Towed Grader / Labour | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| By Equipment Based Meth. | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |

Quantities verified and accepted by the Contractor Name: Date: Signature:
 For the Employer Name: Date: Signature:

| Road Improvement Plan | | County | | Tharaka Nithi | | From: 3+000 | | To: 4+000 | | Page: 4 | |
|------------------------------|------------------------|--|----------|---------------|-------|-------------|-------|-----------|-------|---------|-------|
| Chain- age | Road form. | (kilometres) | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | (metres) | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| Earthworks / Reshaping | Gravel | Subgrade | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | Cross section | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| Improved Subgrade | Total | Method: RES, ETL or Fill | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | Choice of reshaping: L, T or E | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| Total | 1800 | Volume of ETL or Fill (m3/m) | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | Thickness (cm,comp.) | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| Total | 2200 | Source (quarry No.) | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | Thickness (cm,comp.) | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| Total | 2200 | Source (quarry No.) | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | Thickness (cm,comp.) | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| Longitudinal gradient (in %) | | 3+100 | | 3+200 | | 3+300 | | 3+400 | | 3+400 | |
| Mitre drains | Total | Number left = | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | Number right = | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| Catch water | Total | Length of drain left = | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | Length of drain right = | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| Culverts | N/Ex | Chainage (m) New / Existing line | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | = Cross drainage | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | = Access culvert/drift | | 3+100 | | 3+200 | | 3+300 | | 3+400 | | |
| | = Left/right | | 3+100 | | 3+200 | | 3+300 | | 3+400 | | |
| | Length (m) | | Ø 450 mm | | 3+100 | | 3+200 | | 3+300 | | 3+400 |
| Ramp | 0 | Ø 600mm | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | Ø 900 mm | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| Earth fill (m3) | Ramp | Haunch Type | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | Inlet (Material/Type) | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| Head- walls | T4=6 T2=1 | Outlet (Material/Type) | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | = Material this sheet/ Spacing left (m) = | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| Scour Checks | SM 0 | Spacing right (m) = =Total No. this sheet | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |
| | | Additional instruction as per Reference | | 3+100 | | 3+200 | | 3+300 | | 3+400 | |

| | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|
| Chainage: | 3+000 | 3+200 | 3+400 | 3+600 | 3+800 | 4+000 |
|-----------|-------|-------|-------|-------|-------|-------|

| Measurements for Clearing: | #REF! | Free Clearance Width for Calculating areas | | | | | | | | | | | | Aver. (m) | 1 to 4 readings* | | | | | | |
|------------------------------|-------|--|---|--|--|--|---|---|---|---|--|--|--|-----------|------------------|---|---|--|--|--|---|
| Bush Clearing | 8 | 8 | 8 | | | | m | 8 | 8 | 8 | | | | m | 8 | 8 | 8 | | | | m |
| Grass Cutting | | | | | | | m | | | | | | | m | | | | | | | m |
| Grubbing | 7 | 7 | 7 | | | | m | 7 | 7 | 7 | | | | m | 7 | 7 | 7 | | | | m |
| #REF! Tree and Stump Removal | | | | | | | m | 0 | | | | | | m | 0 | | | | | | m |

Note: The user is free to select the number of reading required according to the site conditions. (min. 1 max. 4 for each section).

Estimated measurements for small cut to fill: Height of Cut for calculating volumes

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------|---|--|--|--|--|----|----|--|--|--|--|----|---|--|--|--|--|----|----|--|--|--|--|----|----|--|--|--|--|----|
| Height of cut < 0.25m | 3 | | | | | cm | 13 | | | | | cm | 9 | | | | | cm | 13 | | | | | cm | 10 | | | | | cm |
|-----------------------|---|--|--|--|--|----|----|--|--|--|--|----|---|--|--|--|--|----|----|--|--|--|--|----|----|--|--|--|--|----|

For Reshaping: Difference in Level between Exist. Camber and Side Drain for calculating volumes

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|----|--|--|--|--|--|----|--|--|--|--|--|----|--|--|--|--|--|----|--|--|--|----|----|--|--|--|--|----|
| Existing Roads | 21 | | | | | | 24 | | | | | | 29 | | | | | | 20 | | | | cm | 33 | | | | | cm |
|----------------|----|--|--|--|--|--|----|--|--|--|--|--|----|--|--|--|--|--|----|--|--|--|----|----|--|--|--|--|----|

Quantities Total this page

| | | | | | | | | | | |
|------------------------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-------|
| Bush Clearing | 1600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | 8,000 |
| Grass Cutting | | m2 | | m2 | | m2 | | m2 | | 0 |
| Grubbing | 1,000 | | 1,000 | m2 | 1,000 | m2 | 1,000 | m2 | 1,000 | 5,000 |
| Tree and Stump Removal | | No. | 0 | No. | 0 | No. | 0 | No. | 0 | 0 |

| | | | | | | | | | | |
|-----------------------------|-------|-------------|-----|-------------|-----|-------------|-----|-------------|-----|-------|
| Height of cut < 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Height of cut > 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | 7 | m3 (insitu) | 5 | 12 |
| Embankment | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Drains full re-construction | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Reshaping by Labour | 313.2 | m3 (insitu) | 281 | m3 (insitu) | 227 | m3 (insitu) | 324 | m3 (insitu) | 184 | 1,328 |
| By Towed Grader / Labour | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| By Equipment Based Meth. | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |

Quantities verified and accepted by the Contractor Name: Date: Signature:
 For the Employer Name: Date: Signature:

| | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|
| Chainage: | 4+000 | 4+200 | 4+400 | 4+600 | 4+800 | 5+000 |
|-----------|-------|-------|-------|-------|-------|-------|

| Measurements for Clearing: | | Free Clearance Width for Calculating areas | | | | | | | | | | | | | | | | | | | |
|------------------------------|--|--|---|---|--|-----------|---|---|---|------------------|---|---|---|---|--|---|---|---|---|--|---|
| | | 1 to 4 readings* | | | | Aver. (m) | | | | 1 to 4 readings* | | | | | | | | | | | |
| Bush Clearing | | 8 | 8 | 8 | | m | 8 | 8 | 8 | | m | 8 | 8 | 8 | | m | 8 | 8 | 8 | | m |
| Grass Cutting | | | | | | m | | | | | m | | | | | m | | | | | m |
| Grubbing | | 7 | 7 | 7 | | m | 7 | 7 | 7 | | m | 7 | 7 | 7 | | m | 7 | 7 | 7 | | m |
| #REF! Tree and Stump Removal | | | | | | m | 0 | | | | m | 0 | | | | m | 0 | | | | m |

Note: The user is free to select the number of reading required according to the site conditions. (min. 1 max. 4 for each section).

| Estimated measurements for small cut to fill: | | Height of Cut for calculating volumes | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---------------------------------------|--|--|--|----|----|--|--|--|----|---|--|--|--|----|---|--|--|--|----|----|--|--|--|----|
| Height of cut < 0.25m | | 23 | | | | cm | 13 | | | | cm | 9 | | | | cm | 7 | | | | cm | 11 | | | | cm |

| For Reshaping: | | Difference in Level between Exist. Camber and Side Drain for calculating volumes | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|--|--|--|--|--|----|--|--|--|--|---|--|--|--|--|----|--|--|--|--|----|----|--|--|--|----|
| Existing Roads | | 20 | | | | | 19 | | | | | 9 | | | | | 21 | | | | | cm | 20 | | | | cm |

| Quantities | | | | | | | | | | Total this page |
|-----------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-----------------|
| Bush Clearing | 1600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | 8,000 |
| Grass Cutting | | m2 | | m2 | | m2 | | m2 | | 0 |
| Grubbing | 1,000 | | 1,000 | m2 | 1,000 | m2 | 1,000 | m2 | 1,000 | 5,000 |
| Tree and Stump Removal | | No. | 0 | No. | 0 | No. | 0 | No. | 0 | 0 |
| Height of cut < 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Height of cut > 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Embankment | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Drains full re-construction | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Reshaping by Labour | 324 | m3 (insitu) | 335 | m3 (insitu) | 443 | m3 (insitu) | 313 | m3 (insitu) | 324 | 1,739 |
| By Towed Grader / Labour | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| By Equipment Based Meth. | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |

Quantities verified and accepted by the Contractor

Name:

Date:

Signature:

For the Employer

Name:

Date:

Signature:

| | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|
| Chainage: | 5+000 | 5+200 | 5+400 | 5+600 | 5+800 | 6+000 |
|-----------|-------|-------|-------|-------|-------|-------|

| Measurements for Clearing: | | #REF! 1 to 4 readings* | | | | Free Clearance Width for Calculating areas | | | | Aver. (m) 1 to 4 readings* | | | | | | |
|------------------------------|--|------------------------|---|---|--|--|---|---|---|----------------------------|---|---|---|---|--|---|
| Bush Clearing | | 8 | 8 | 8 | | m | 8 | 8 | 8 | | m | 8 | 8 | 8 | | m |
| Grass Cutting | | | | | | m | | | | | m | | | | | m |
| Grubbing | | 7 | 7 | 7 | | m | 7 | 7 | 7 | | m | 7 | 7 | 7 | | m |
| #REF! Tree and Stump Removal | | | | | | m | 0 | | | | m | 0 | | | | m |

Note: The user is free to select the number of reading required according to the site conditions. (min. 1 max. 4 for each section).

| Estimated measurements for small cut to fill: | | Height of Cut for calculating volumes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|----|---------------------------------------|--|--|--|----|----|--|--|--|--|----|----|--|--|--|--|----|----|--|--|--|--|----|----|--|--|--|--|----|
| Height of cut < 0.25m | 11 | | | | | cm | 24 | | | | | cm | 24 | | | | | cm | 15 | | | | | cm | 23 | | | | | cm |

| For Reshaping: | | Difference in Level between Exist. Camber and Side Drain for calculating volumes | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|----|--|--|--|--|--|----|--|--|--|--|--|----|--|--|--|--|--|----|--|--|--|--|----|----|--|--|--|--|----|
| Existing Roads | 25 | | | | | | 38 | | | | | | 30 | | | | | | 27 | | | | | cm | 10 | | | | | cm |

| Quantities | | | | | | | | | | Total this page |
|-----------------------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-----------------|
| Bush Clearing | 1600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | m2 | 1,600 | 8,000 |
| Grass Cutting | | m2 | | m2 | | m2 | | m2 | | 0 |
| Grubbing | 1,000 | | 1,000 | m2 | 1,000 | m2 | 1,000 | m2 | 1,000 | 5,000 |
| Tree and Stump Removal | | No. | 0 | No. | 0 | No. | 0 | No. | 0 | 0 |
| Height of cut < 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Height of cut > 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Embankment | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Drains full re-construction | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| Reshaping by Labour | 270 | m3 (insitu) | 130 | m3 (insitu) | 216 | m3 (insitu) | 248 | m3 (insitu) | 432 | 1,296 |
| By Towed Grader / Labour | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |
| By Equipment Based Meth. | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | 0 |

Quantities verified and accepted by the Contractor Name: Date: Signature:
 For the Employer Name: Date: Signature:

| | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|
| Chainage: | 6+000 | 6+200 | 6+400 | 6+600 | 6+800 | 7+000 |
|-----------|-------|-------|-------|-------|-------|-------|

| Measurements for Clearing: | | #REF! 1 to 4 readings* | | | | Free Clearance Width for Calculating areas | | | | Aver. (m) 1 to 4 readings* | | | | | |
|------------------------------|---|------------------------|---|--|---|--|--|--|--|----------------------------|-----|--|--|--|---|
| Bush Clearing | 8 | 8 | 8 | | m | | | | | m | 5.4 | | | | m |
| Grass Cutting | | | | | m | | | | | m | | | | | m |
| Grubbing | 7 | 7 | 7 | | m | | | | | m | | | | | m |
| #REF! Tree and Stump Removal | | | | | m | | | | | m | | | | | m |

Note: The user is free to select the number of reading required according to the site conditions. (min. 1 max. 4 for each section).

| Estimated measurements for small cut to fill: | | Height of Cut for calculating volumes | | | | | | | | | | | | | | | | |
|---|----|---------------------------------------|--|--|--|----|--|--|--|--|--|----|--|--|--|--|--|----|
| Height of cut < 0.25m | 12 | | | | | cm | | | | | | cm | | | | | | cm |

| For Reshaping: | | Difference in Level between Exist. Camber and Side Drain for calculating volumes | | | | | | | | | | | | | | | | | |
|----------------|----|--|--|--|--|--|---|--|--|--|--|--|---|--|--|--|--|--|---|
| Existing Roads | 23 | | | | | | 0 | | | | | | 0 | | | | | | 0 |

| Quantities | | | | | | | | | | Total this page |
|------------------------|-------|-----|--|-----|--|-----|--|-----|--|-----------------|
| Bush Clearing | 1600 | m2 | | m2 | | m2 | | m2 | | 1,600 |
| Grass Cutting | | m2 | | m2 | | m2 | | m2 | | |
| Grubbing | 1,000 | | | m2 | | m2 | | m2 | | 1,000 |
| Tree and Stump Removal | | No. | | No. | | No. | | No. | | |

| | | | | | | | | | |
|-----------------------------|-------|-------------|--|-------------|--|-------------|--|-------------|-----|
| Height of cut < 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | |
| Height of cut > 0.25m | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | |
| Embankment | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | |
| Drains full re-construction | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | |
| Reshaping by Labour | 291.6 | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | 292 |
| By Towed Grader / Labour | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | |
| By Equipment Based Meth. | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | | m3 (insitu) | |

Quantities verified and accepted by the Contractor Name: Date: Signature:

For the Employer Name: Date: Signature: