DETAILED IMPROVEMENT PLAN

Page: 1

Road Name: Gotu-Merti 01C (10Km) **County:** ISIOLO **From:** 20+000 **To:** 21+000

| | | |

Quantity Assessment	Gotu-Merti 01C (10Km)	#	#	County: ISIOLO	From: 20+000	To: 21+000 pg 2

Chainage:	20+000	20+200	20+400	20+600	20+800	21+000

Input Measurements: — **Free Clearance Width for Calculating areas**

	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings				
Bush Clearing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Grass Cutting						m						m						m						m						m
Grubbing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Tree and stump removal	0					m	0					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).

Cross Section Sketch — -

Measurements for small cut to fill: — **Height of Cut / Differences in Levels for calculating volumes**

	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)				
Height of cut < 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm
Height of cut > 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm

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

Existing Roads	0					cm	0					cm	0					cm	0					cm	0					cm
Sloping						cm						cm						cm						cm						cm

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

Quantities: — **Quantities**

									Total this page
Bush Clearing	400	m2	400	m2	400	m2	400	m2	400	**2,000**
Grass Cutting		m2		m2		m2		m2		
Grubbing	0	m2	0	m2	0	m2	0	m2	0	**0**
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	**0**

Quantities

									Total this page
Height of cut < 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Height of cut > 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Embankment/Fill		m3 (insitu)		m3 (insitu)		m3 (insitu)	459	m3 (insitu)	918	**1,377**
Drains full re-construction	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	**1,208**
Reshaping by Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Towed Grader/Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Equipment Based Method		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		

Data Collected by: **Name:** …… **Date:** ……**Signature:** ……

DETAILED IMPROVEMENT PLAN

Road Name: Gotu-Merti 01C (10Km) **County:** ISIOLO **From:** 21+000 **To:** 22+000

Chain-age		(kilometres)	21 + 0				21 + 100				21 + 200				21 + 300				21 + 400				21 + 500				21 + 600				21 + 700				21 + 800				21 + 900				22 + 0
		(metres)																																								
Road form.		Subgrade	LS	LS	LS	LS	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG
		Cross section	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Earth-works		Method: RES, ETL or FILL	FILL	FILL	FILL	FILL	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES
		Choice of reshaping: L, T or E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
		Volume of ETL or Fill (m3/m)																																							
Gra-vel	Total	Thickness (cm,comp.)																																							
		Source (quarry No.)																																							
		Longitudinal gradient (in %)	2				6				1				0				0				0				-2				-1				0				-2			
Mitre drains	Total	Number left =	1								1								1								1								1							
	10	Number right =					1								1								1								1								1			
Catch water	Total	Length of drain left =																																							
	0	Length of drain right =																																							
Culverts		Chainage (m) = New line	21+020 N								21+200 N																															
	N																																								
	Ex	= Existing line																																							
	CD	= Cross drainage	CD								CD																														
	AC/D	= Access culvert/ drift																																							
	L/R	= Left/ right																																							
	Length (m)	Ø 450mm																																							
		Ø 600mm																																							
		Ø 900mm	8								8																														
	Ramp	Earth fill (m3)																																							
		H. Concrete (m3)	IV								IV																														
Head-walls		Inlet (Material/Type)	I								I																														
		Outlet (Material/Type)	I								I																														
Scour Checks	HC	= Material this sheet/ Spacing left (m) =					15																																		
	3	Spacing right (m) = =Total No. this sheet					15																																		
Additional Instruction as per Reference							RG-RED GRAVEL																																		

Chainage:	21+000	21+200	21+400	21+600	21+800	22+000

Input Measurements: — **Free Clearance Width for Calculating areas**

	21+000 Aver. (m)	21+000 1 to 4 readings*)	21+200	21+400	21+600	21+800 Aver. (m)	21+800 1 to 4 readings
Bush Clearing	11	11 0 0 0	11 11 0 0 0	11 11 0 0 0	11 11 0 0 0	11	11 0 0 0
Grass Cutting							
Grubbing	11	11 0 0 0	11 11 0 0 0	11 11 0 0 0	11 11 0 0 0	11	11 0 0 0
Tree and stump removal	0		0	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).

Cross Section Sketch | - | - | - | - | -

Measurements for small cut to fill: — **Height of Cut / Differences in Levels for calculating volumes**

	21+000 Aver. (m)	21+000 1 to 4 readings*)	21+200	21+400	21+600	21+800 Aver. (m)	21+800 1 to 4 readings*)
Height of cut < 0.25m	0	0	0	0 0 0	0 0 0	0	0 0
Height of cut > 0.25m	0	0	0	0 0 0	0 0 0	0	0 0

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

Existing Roads	0	0	0	0	0	0
Sloping						

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

Quantities: — **Quantities**

	21+000	21+200	21+400	21+600	21+800	Total this page
Bush Clearing	400 m2	400 m2	400 m2	400 m2	400 m2	**2,000**
Grass Cutting	m2	m2	m2	m2	m2	
Grubbing	0 m2	0 m2	0 m2	0 m2	0 m2	**0**
Tree and stump removal	0 No.	0 No.	0 No.	0 No.	0 No.	**0**

Quantities

	21+000	21+200	21+400	21+600	21+800	Total this page
Height of cut < 0.25m	0 m3 (insitu)	0 m3 (insitu)	0 m3 (insitu)	0 m3 (insitu)	0 m3 (insitu)	**0**
Height of cut > 0.25m	0 m3 (insitu)	0 m3 (insitu)	0 m3 (insitu)	0 m3 (insitu)	0 m3 (insitu)	**0**
Embankment/Fill	459 m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	**459**
Drains full re-construction	242 m3 (insitu)	242 m3 (insitu)	242 m3 (insitu)	242 m3 (insitu)	242 m3 (insitu)	**1,208**
Reshaping by Labour	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	
By Towed Grader/Labour	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	
By Equipment Based Method	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	

Data Collected by: **Name:** …… **Date:** ……**Signature:** ……

DETAILED IMPROVEMENT PLAN

Page: 3

Road Name: Gotu-Merti 01C (10Km) **County:** ISIOLO **From:** 22+000 **To:** 23+000

Chain-age		(kilometres)	22 +				22 +				22 +				22 +				22 +				22 +				22 +				22 +				22 +				22 +				23 +
		(metres)	0				100				200				300				400				500				600				700				800				900				0
Road form.		Subgrade	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG
		Cross section	A	A	A	A	A	A	A	A	A	A	A	A	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	A	A	A	A	A	A	A	A	A	A
Earth-works		Method: RES, ETL or FILL	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES
		Choice of reshaping: L, T or E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
		Volume of ETL or Fill (m3/m)																																								
Gra-vel	Total	Thickness (cm,comp.)																																								
		Source (quarry No.)																																								
		Longitudinal gradient (in %)	-2				-3				-2				-2				-2				-1				-1				-2				-2				-2				
Mitre drains	Total	Number left =	1								1								1								1								1								
	10	Number right =					1								1								1								1								1				
Catch water	Total	Length of drain left =																																								
	0	Length of drain right =																																								
Culverts		Chainage (m)																																								
	N	= New line																																								
	Ex	= Existing line																																								
	CD	= Cross drainage																																								
	AC/D	= Access culvert/ drift																																								
	L/R	= Left/ right																																								
	Length (m)	Ø 450mm																																								
		Ø 600mm																																								
		Ø 900mm																																								
	Ramp	Earth fill (m3)																																								
		H. Concrete (m3)																																								
Head-walls		Inlet (Material/Type)																																								
		Outlet (Material/Type)																																								
Scour Checks	HC	= Material this sheet/ Spacing left (m) =																																								
	0	Spacing right (m) = =Total No. this sheet																																								
Additional Instruction as per Reference																																									

Quantity Assessment	Gotu-Merti 01C (10Km)	#	#	County: ISIOLO	From: 22+000	To: 23+000 pg	4

Chainage:	22+000	22+200	22+400	22+600	22+800	23+000

Input Measurements: — **Free Clearance Width for Calculating areas**

	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings				
Bush Clearing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Grass Cutting						m						m						m						m						m
Grubbing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Tree and stump removal	0					m						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).

Cross Section Sketch	-	-	-	-	-

Measurements for small cut to fill: — **Height of Cut / Differences in Levels for calculating volumes**

	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)				
Height of cut < 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm
Height of cut > 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm
For Reshaping :	**Difference in Level between Exist. Camber and Side Drain for calculating volumes**																													
Existing Roads	0					cm	0					cm	0					cm	0					cm	0					cm
Sloping						cm						cm						cm						cm						cm

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

Quantities: — **Quantities**

										Total this page
Bush Clearing	400	m2	400	m2	400	m2	400	m2	400	**2,000**
Grass Cutting		m2		m2		m2		m2		
Grubbing	0	m2	0	m2	0	m2	0	m2	0	**0**
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	**0**

Quantities

										Total this page
Height of cut < 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Height of cut > 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Embankment/Fill		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		**0**
Drains full re-construction	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	**1,208**
Reshaping by Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Towed Grader/Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Equipment Based Method		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		

Data Collected by: **Name:** …… **Date:** ……**Signature:** ……

DETAILED IMPROVEMENT PLAN

Road Name: Gotu-Merti 01C (10Km) **County:** ISIOLO **From:** 23+000 **To:** 24+000

Chain-age		(kilometres)	23 +				23 +				23 +				23 +				23 +				23 +				23 +				23 +				23 +				23 +				24 +
		(metres)	0				100				200				300				400				500				600				700				800				900				0
Road form.		Subgrade	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG
		Cross section	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Earth-works		Method: RES, ETL or FILL	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	ETL	ETL	ETL	ETL	ETL	ETL	ETL	ETL	ETL	ETL	ETL	ETL	RES	RES	RES	RES	ETL	ETL	ETL	ETL
		Choice of reshaping: L, T or E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
		Volume of ETL or Fill (m3/m)																																									
Gra-vel	Total	Thickness (cm,comp.)																																									
		Source (quarry No.)																																									
		Longitudinal gradient (in %)	3				5				-3				4				5				0				1				1				1				1				
Mitre drains	Total	Number left =	1								1								1								1								1								
	10	Number right =					1								1								1								1								1				
Catch water	Total	Length of drain left =																																									
	0	Length of drain right =																																									
Culverts	N	Chainage (m) = New line										23+260 N							23+380 N																									
	Ex	= Existing line																																									
	CD	= Cross drainage										CD							CD																									
	AC/D	= Access culvert/ drift																																									
	L/R	= Left/ right																																									
	Length (m)	Ø 450mm																																									
		Ø 600mm																																									
		Ø 900mm										8							16																									
	Ramp	Earth fill (m3)																																									
		H. Concrete (m3)										IV							IV																									
Head-walls		Inlet (Material/Type)										I							I																									
		Outlet (Material/Type)										I							I																									
Scour Checks	HC	= Material this sheet/ Spacing left (m) =					20												20																									
	5	Spacing right (m) = =Total No. this sheet					20												20																									
Additional Instruction as per Reference																																										

Quantity Assessment	Gotu-Merti 01C (10Km)	#	#	County: ISIOLO	From: 23+000	To: 24+000 pg	5

Chainage:	23+000	23+200	23+400	23+600	23+800	24+000

Input Measurements: — **Free Clearance Width for Calculating areas**

	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings				
Bush Clearing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Grass Cutting						m						m						m						m						m
Grubbing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Tree and stump removal	0					m	0					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).

Cross Section Sketch	-	-	-	-	-

Measurements for small cut to fill: — **Height of Cut / Differences in Levels for calculating volumes**

	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)				
Height of cut < 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm
Height of cut > 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm
For Reshaping :	**Difference in Level between Exist. Camber and Side Drain for calculating volumes**																													
Existing Roads	0					cm	0					cm	0					cm	0					cm	0					cm
Sloping						cm						cm						cm						cm						cm

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

Quantities: — **Quantities**

										Total this page
Bush Clearing	400	m2	400	m2	400	m2	400	m2	400	**2,000**
Grass Cutting		m2		m2		m2		m2		
Grubbing	0	m2	0	m2	0	m2	0	m2	0	**0**
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	**0**

	Quantities									**Total this page**
Height of cut < 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Height of cut > 0.25m	0	m3 (insitu)	0	m3 (insitu)	324	m3 (insitu)	162	m3 (insitu)	162	**648**
Embankment/Fill		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
Drains full re-construction	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	**1,208**
Reshaping by Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Towed Grader/Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Equipment Based Method		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		

Data Collected by: **Name:** …… **Date:** ……**Signature:** ……

DETAILED IMPROVEMENT PLAN

Page: 5

Road Name: Gotu-Merti 01C (10Km) **County:** ISIOLO **From:** 24+000 **To:** 25+000

Chain-age	(kilometres)		24 + 0				24 + 100				24 + 200				24 + 300				24 + 400				24 + 500				24 + 600				24 + 700				24 + 800				24 + 900				25 + 0
	(metres)																																							
Road form.	Subgrade		RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RS	RS	RS	RS	RS	RS	RS	RS	RS	RS	RS
	Cross section		A	A	A	A	A	A	A	A	E	E	E	E	E	E	E	E	E	E	E	E	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Earth-works	Method: RES, ETL or FILL		RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	FILL	FILL	FILL	FILL	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES
	Choice of reshaping: L, T or E		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	Volume of ETL or Fill (m3/m)																																								
Gra-vel	Total	Thickness (cm,comp.)																																							
		Source (quarry No.)																																							
Longitudinal gradient (in %)			2				0				1				1				-1				0				-1				1				0				-1			
Mitre drains	Total	Number left =	1								1								1								1								1							
	10	Number right =					1								1								1								1								1			
Catch water	Total	Length of drain left =																																							
	0	Length of drain right =																																							
Culverts	N	Chainage (m) = New line																																							
	Ex	= Existing line																																							
	CD	= Cross drainage																																							
	AC/D	= Access culvert/ drift																																							
	L/R	= Left/ right																																							
	Length (m)	Ø 450mm																																							
		Ø 600mm																																							
		Ø 900mm																																							
	Ramp	Earth fill (m3)																																							
		H. Concrete (m3)																																							
Head-walls	Inlet (Material/Type)																																								
	Outlet (Material/Type)																																								
Scour Checks	HC	= Material this sheet/ Spacing left (m) =																																							
	0	Spacing right (m) = =Total No. this sheet																																							
Additional Instruction as per Reference																															RS-RED SOIL										

Quantity Assessment | **Gotu-Merti 01C (10Km)** | # | # | **County:** ISIOLO | **From:** 24+000 | **To:** 25+000 | pg 6

Chainage:	**24+000**						**24+200**						**24+400**						**24+600**						**24+800**						**25+000**
Input Measurements:	Aver. (m)	1 to 4 readings*)											**Free Clearance Width for Calculating areas**												Aver. (m)	1 to 4 readings					
Bush Clearing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	
Grass Cutting						m						m						m						m						m	
Grubbing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	
Tree and stump removal	0					m	0					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).

Cross Section Sketch	-	-	-	-

Measurements for small cut to fill:	Aver. (m)	1 to 4 readings*)											**Height of Cut / Differences in Levels for calculating volumes**												Aver. (m)	1 to 4 readings*)					
Height of cut < 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm	
Height of cut > 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm	
For Reshaping :	**Difference in Level between Exist. Camber and Side Drain for calculating volumes**																														
Existing Roads	0					cm	0					cm	0					cm	0					cm	0					cm	
Sloping						cm						cm						cm						cm						cm	

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

Quantities:	**Quantities**								**Total this page**
Bush Clearing	400	m2	400	m2	400	m2	400	m2	400	**2,000**
Grass Cutting		m2		m2		m2		m2		
Grubbing	0	m2	0	m2	0	m2	0	m2	0	**0**
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	**0**

	Quantities								**Total this page**
Height of cut < 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Height of cut > 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	162	m3 (insitu)	0	**162**
Embankment/Fill		m3 (insitu)		m3 (insitu)	189	m3 (insitu)		m3 (insitu)		**189**
Drains full re-construction	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	**1,208**
Reshaping by Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Towed Grader/Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Equipment Based Method		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		

Data Collected by: **Name:** …… **Date:** ……**Signature:** ……

DETAILED IMPROVEMENT PLAN

Road Name: Gotu-Merti 01C (10Km) **County:** ISIOLO **From:** 25+000 **To:** 26+000

Chain-age	(kilometres)		25 + 0				25 + 100				25 + 200				25 + 300				25 + 400				25 + 500				25 + 600				25 + 700				25 + 800				25 + 900				26 + 0
	(metres)																																								
Road form.	Subgrade		RS	RS	RS	RS	RS	RS	RS	RS	RS	RS	RS	RS	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG	RG
	Cross section		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	E	E	E	E	E	E	E	E	E	E	E	E	A	A	A	A	A	A	A	A
Earth-works	Method: RES, ETL or FILL		RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	ETL	ETL	ETL	ETL	ETL	ETL	ETL	ETL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL
	Choice of reshaping: L, T or E		E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
	Volume of ETL or Fill (m3/m)																																								
Gra-vel	Total	Thickness (cm,comp.)																																							
		Source (quarry No.)																																							
Longitudinal gradient (in %)			-1				-2				-2				-1				0				-2				-1				-1				-2				-3			
Mitre drains	Total	Number left =	1								1								1								1								1							
	10	Number right =					1								1								1								1								1			
Catch water	Total	Length of drain left =																																							
	0	Length of drain right =																																							
Culverts		Chainage (m) = New line																																					25+910 N			
	N																																								
	Ex	= Existing line																																							
	CD	= Cross drainage																																					CD			
	AC/D	= Access culvert/ drift																																							
	L/R	= Left/ right																																							
	Length (m)	Ø 450mm																																							
		Ø 600mm																																							
		Ø 900mm																																					16			
	Ramp	Earth fill (m3)																																							
		H. Concrete (m3)																																					IV			
Head-walls	Inlet (Material/Type)																																					I			
	Outlet (Material/Type)																																					I			
Scour Checks	HC	= Material this sheet/ Spacing left (m) =																																							
	0	Spacing right (m) = =Total No. this sheet																																							
Additional Instruction as per Reference																																								

Quantity Assessment	Gotu-Merti 01C (10Km)	#	#	County: ISIOLO	From: 25+000	To: 26+000 pg 7

Chainage:	25+000	25+200	25+400	25+600	25+800	26+000

Input Measurements: — **Free Clearance Width for Calculating areas**

	25+000 Aver. (m)	25+000 1 to 4 readings*)	25+200	25+400	25+600	25+800 Aver. (m)	25+800 1 to 4 readings
Bush Clearing	11	11 0 0 0	11 11 0 0 0	11 11 0 0 0	11 11 0 0 0	11	11 0 0 0
Grass Cutting							
Grubbing	11	11 0 0 0	11 11 0 0 0	11 11 0 0 0	11 11 0 0 0	11	11 0 0 0
Tree and stump removal	0		0	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).

Cross Section Sketch — -

Measurements for small cut to fill: — **Height of Cut / Differences in Levels for calculating volumes**

	25+000 Aver. (m)	25+000 1 to 4 readings*)	25+200	25+400	25+600	25+800 Aver. (m)	25+800 1 to 4 readings*)
Height of cut < 0.25m	0	0	0	0 0 0	0 0 0	0	0 0
Height of cut > 0.25m	0	0	0	0 0 0	0 0 0	0	0 0

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

	25+000	25+200	25+400	25+600	25+800
Existing Roads	0 cm	0 cm	0 cm	0 cm	0 cm
Sloping	cm	cm	cm	cm	cm

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

Quantities: — **Quantities**

	25+000	25+200	25+400	25+600	25+800	Total this page
Bush Clearing	400 m2	400 m2	400 m2	400 m2	400 m2	**2,000**
Grass Cutting	m2	m2	m2	m2	m2	
Grubbing	0 m2	0 m2	0 m2	0 m2	0 m2	**0**
Tree and stump removal	0 No.	0 No.	0 No.	0 No.	0 No.	**0**

Quantities

	25+000	25+200	25+400	25+600	25+800	Total this page
Height of cut < 0.25m	0 m3 (insitu)	0 m3 (insitu)	0 m3 (insitu)	0 m3 (insitu)	0 m3 (insitu)	**0**
Height of cut > 0.25m	0 m3 (insitu)	0 m3 (insitu)	0 m3 (insitu)	324 m3 (insitu)	0 m3 (insitu)	**324**
Embankment/Fill	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	378 m3 (insitu)	**378**
Drains full re-construction	242 m3 (insitu)	242 m3 (insitu)	242 m3 (insitu)	242 m3 (insitu)	242 m3 (insitu)	**1,208**
Reshaping by Labour	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	
By Towed Grader/Labour	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	
By Equipment Based Method	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	m3 (insitu)	

Data Collected by: **Name:** …… **Date:** ……**Signature:** ……

DETAILED IMPROVEMENT PLAN

Page: 7

Road Name: Gotu-Merti 01C (10Km) **County:** ISIOLO **From:** 26+000 **To:** 27+000

Chain-age		(kilometres)	26 + 0				26 + 100				26 + 200				26 + 300				26 + 400				26 + 500				26 + 600				26 + 700				26 + 800				26 + 900				27 + 0
		(metres)																																						
Road form.		Subgrade	RS	RS	RS	RS	SS	SS	SS	SS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS	QS
		Cross section	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	E	E	E	E	E	E	E	E
Earth-works		Method: RES, ETL or FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES
		Choice of reshaping: L, T or E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
		Volume of ETL or Fill (m3/m)																																					
Gra-vel	Total	Thickness (cm,comp.)																																					
		Source (quarry No.)																																					
		Longitudinal gradient (in %)	3				1				1				-1				-1				-1				0				0				1				1				
Mitre drains	Total	Number left =	1								1								1								1								1							
	10	Number right =					1								1								1								1								1			
Catch water	Total	Length of drain left =																																					
	0	Length of drain right =																																					
Culverts		Chainage (m) = New line	26+010 N		26+050 N		26+130 N																																	
	N	= Existing line																																					
	CD	= Cross drainage	CD		CD		CD																																	
	AC/D	= Access culvert/ drift																																					
	L/R	= Left/ right																																					
	Length (m)	Ø 450mm																																					
		Ø 600mm																																					
		Ø 900mm	16		16		8																																	
	Ramp	Earth fill (m3)																																					
		H. Concrete (m3)	IV		IV		IV																																	
Head-walls		Inlet (Material/Type)	I		I		I																																	
		Outlet (Material/Type)	I		I		I																																	
Scour Checks	HC	= Material this sheet/ Spacing left (m) =																																					
	0	Spacing right (m) = =Total No. this sheet																																					
Additional Instruction as per Reference							SS-Silty Sand				QS-Quartzic soil																														

Chainage:	26+000	26+200	26+400	26+600	26+800	27+000

Input Measurements: — **Free Clearance Width for Calculating areas**

	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings				
Bush Clearing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Grass Cutting						m						m						m						m						m
Grubbing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Tree and stump removal	0					m	0					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).

Cross Section Sketch — -

Measurements for small cut to fill: — **Height of Cut / Differences in Levels for calculating volumes**

	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)				
Height of cut < 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm
Height of cut > 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm
For Reshaping :	**Difference in Level between Exist. Camber and Side Drain for calculating volumes**																													
Existing Roads	0					cm	0					cm	0					cm	0					cm	0					cm
Sloping						cm						cm						cm						cm						cm

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

Quantities: — **Quantities**

										Total this page
Bush Clearing	400	m2	400	m2	400	m2	400	m2	400	**2,000**
Grass Cutting		m2		m2		m2		m2		
Grubbing	0	m2	0	m2	0	m2	0	m2	0	**0**
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	**0**

	Quantities									Total this page
Height of cut < 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Height of cut > 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Embankment/Fill	378	m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		**378**
Drains full re-construction	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	**1,208**
Reshaping by Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Towed Grader/Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Equipment Based Method		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		

Data Collected by: **Name:** …… **Date:** ……**Signature:** ……

DETAILED IMPROVEMENT PLAN

Road Name: Gotu-Merti 01C (10Km) **County:** ISIOLO **From:** 27+000 **To:** 28+000

Chain-age		(kilometres)	27 + 0				27 + 100				27 + 200				27 + 300				27 + 400				27 + 500				27 + 600				27 + 700				27 + 800				27 + 900				28 + 0
		(metres)																																								
Road form.		Subgrade	RG	RG	RG	RG	RG	RG	RG	RG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG
		Cross section	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
Earth-works		Method: RES, ETL or FILL	FILL	FILL	FILL	FILL	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES
		Choice of reshaping: L, T or E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
		Volume of ETL or Fill (m3/m)																																							
Gra-vel	Total	Thickness (cm,comp.)																																							
		Source (quarry No.)																																							
		Longitudinal gradient (in %)	1				1				0				0				-1				0				1				0				0				-1			
Mitre drains	Total	Number left =	1								1								1								1								1							
	10	Number right =					1								1								1								1								1			
Catch water	Total	Length of drain left =																																							
	0	Length of drain right =																																							
Culverts		Chainage (m)																																							
	N	= New line																																							
	Ex	= Existing line																																							
	CD	= Cross drainage																																							
	AC/D	= Access culvert/ drift																																							
	L/R	= Left/ right																																							
	Length (m)	Ø 450mm																																							
		Ø 600mm																																							
		Ø 900mm																																							
	Ramp	Earth fill (m3)																																							
		H. Concrete (m3)																																							
Head-walls		Inlet (Material/Type)																																							
		Outlet (Material/Type)																																							
Scour Checks	HC	= Material this sheet/ Spacing left (m) =																																							
	0	Spacing right (m) = =Total No. this sheet																																							
Additional Instruction as per Reference																																								

Chainage:	27+000	27+200	27+400	27+600	27+800	28+000
Input Measurements:	**Free Clearance Width for Calculating areas**					
	Aver. (m) / 1 to 4 readings*)				Aver. (m) / 1 to 4 readings	
Bush Clearing	11 (11, 0, 0, 0) m	11 (11, 0, 0, 0) m	11 (11, 0, 0, 0) m	11 (11, 0, 0, 0) m	11 (11, 0, 0, 0) m	
Grass Cutting	m	m	m	m	m	
Grubbing	11 (11, 0, 0, 0) m	11 (11, 0, 0, 0) m	11 (11, 0, 0, 0) m	11 (11, 0, 0, 0) m	11 (11, 0, 0, 0) m	
Tree and stump removal	0 m	0 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).						
Cross Section Sketch	-	-	-	-	-	
Measurements for small cut to fill:	**Height of Cut / Differences in Levels for calculating volumes**					
	Aver. (m) / 1 to 4 readings*)				Aver. (m) / 1 to 4 readings*)	
Height of cut < 0.25m	0 (0) cm	0 cm	0 (0, 0) cm	0 (0, 0) cm	0 (0, 0) cm	
Height of cut > 0.25m	0 (0) cm	0 cm	0 (0, 0) cm	0 (0, 0) cm	0 (0, 0) cm	
For Reshaping :	**Difference in Level between Exist. Camber and Side Drain for calculating volumes**					
Existing Roads	0 cm	0 cm	0 cm	0 cm	0 cm	
Sloping	cm	cm	cm	cm	cm	
*) Note: The user is free to select the number of reading required according to the site conditions. (min. 1 max. 4 for each section).						

Quantities:	Quantities									Total this page
Bush Clearing	400	m2	400	m2	400	m2	400	m2	400	**2,000**
Grass Cutting		m2		m2		m2		m2		
Grubbing	0	m2	0	m2	0	m2	0	m2	0	**0**
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	**0**

	Quantities									Total this page
Height of cut < 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Height of cut > 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Embankment/Fill	189	m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		**189**
Drains full re-construction	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	**1,208**
Reshaping by Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Towed Grader/Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Equipment Based Method		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		

Data Collected by: **Name:** …… **Date:** ……**Signature:** ……

DETAILED IMPROVEMENT PLAN

Road Name: Gotu-Merti 01C (10Km) **County:** ISIOLO **From:** 28+000 **To:** 29+000

Chain-age		(kilometres)	28 + 0				28 + 100				28 + 200				28 + 300				28 + 400				28 + 500				28 + 600				28 + 700				28 + 800				28 + 900				29 + 0
		(metres)																																								
Road form.		Subgrade	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG
		Cross section	A	A	A	A	A	A	A	A	E	E	E	E	A	A	A	A	A	A	A	A	A	A	A	A	E	E	E	E	A	A	A	A	E	E	E	E	A	A	A	A	A
Earth-works		Method: RES, ETL or FILL	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES
		Choice of reshaping: L, T or E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
		Volume of ETL or Fill (m3/m)																																								
Gra-vel	Total	Thickness (cm,comp.)																																								
		Source (quarry No.)																																								
		Longitudinal gradient (in %)	-1				0				-1				1				0				1				-1				-1				-2				-2				
Mitre drains	Total	Number left =	1								1								1								1								1								
	10	Number right =					1								1								1								1								1				
Catch water	Total	Length of drain left =																																								
	0	Length of drain right =																																								
Culverts	N	Chainage (m) = New line																																								
	Ex	= Existing line																																								
	CD	= Cross drainage																																								
	AC/D	= Access culvert/ drift																																								
	L/R	= Left/ right																																								
	Length (m)	Ø 450mm																																								
		Ø 600mm																																								
		Ø 900mm																																								
	Ramp	Earth fill (m3)																																								
		H. Concrete (m3)																																								
Head-walls		Inlet (Material/Type)																																								
		Outlet (Material/Type)																																								
Scour Checks	HC	= Material this sheet/ Spacing left (m) =																																								
	0	Spacing right (m) = =Total No. this sheet																																								
Additional Instruction as per Reference																																									

Quantity Assessment	Gotu-Merti 01C (10Km)	#	#	County: ISIOLO	From: 28+000	To: 29+000 pg	10

Chainage:	28+000	28+200	28+400	28+600	28+800	29+000

Input Measurements: — **Free Clearance Width for Calculating areas**

	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings				
Bush Clearing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Grass Cutting						m						m						m						m						m
Grubbing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Tree and stump removal	0					m	0					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).

Cross Section Sketch — - - - -

Measurements for small cut to fill: — **Height of Cut / Differences in Levels for calculating volumes**

	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)				
Height of cut < 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm
Height of cut > 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm
For Reshaping :	**Difference in Level between Exist. Camber and Side Drain for calculating volumes**																													
Existing Roads	0					cm	0					cm	0					cm	0					cm	0					cm
Sloping						cm						cm						cm						cm						cm

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

Quantities: — **Quantities**

										Total this page
Bush Clearing	400	m2	400	m2	400	m2	400	m2	400	**2,000**
Grass Cutting		m2		m2		m2		m2		
Grubbing	0	m2	0	m2	0	m2	0	m2	0	**0**
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	**0**

	Quantities									Total this page
Height of cut < 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Height of cut > 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Embankment/Fill		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		**0**
Drains full re-construction	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	**1,208**
Reshaping by Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Towed Grader/Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Equipment Based Method		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		

Data Collected by: **Name:** …… **Date:** ……**Signature:** ……

DETAILED IMPROVEMENT PLAN

Road Name: Gotu-Merti 01C (10Km) **County:** ISIOLO **From:** 29+000 **To:** 30+000

Chain-age			(kilometres)	29 + 0				29 + 100				29 + 200				29 + 300				29 + 400				29 + 500				29 + 600				29 + 700				29 + 800				29 + 900				30 + 0
			(metres)																																								
Road form.			Subgrade	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG	LG
			Cross section	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	E	E	E	E	A	A	A	A	A	A	A	A	E	E	E	E	A	A	A	A	A
Earth-works			Method: RES, ETL or FILL	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES	RES
			Choice of reshaping: L, T or E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
			Volume of ETL or Fill (m3/m)																																								
Gra-vel	Total		Thickness (cm,comp.)																																								
			Source (quarry No.)																																								
			Longitudinal gradient (in %)	0				-1				0				-3				-1				-2				-1				-2				1				2				
Mitre drains	Total		Number left =	1								1								1								1								1								
	10		Number right =					1								1								1								1								1				
Catch water	Total		Length of drain left =																																								
	0		Length of drain right =																																								
Culverts			Chainage (m) = New line																																								
	N																																									
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	L/R		= Left/ right																																								
	Length (m)		Ø 450mm																																								
			Ø 600mm																																								
			Ø 900mm																																								
	Ramp		Earth fill (m3)																																								
			H. Concrete (m3)																																								
Head-walls			Inlet (Material/Type)																																								
			Outlet (Material/Type)																																								
Scour Checks	HC		= Material this sheet/ Spacing left (m) =																																								
	0		Spacing right (m) = =Total No. this sheet																																								
Additional Instruction as per Reference																																										

Quantity Assessment	Gotu-Merti 01C (10Km)	#	#	County: ISIOLO	From: 29+000	To: 30+000	pg 11

Chainage:	29+000	29+200	29+400	29+600	29+800	30+000

Free Clearance Width for Calculating areas

Input Measurements:	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings					Aver. (m)	1 to 4 readings					Aver. (m)	1 to 4 readings				
Bush Clearing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Grass Cutting						m						m						m						m						m
Grubbing	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m	11	11	0	0	0	m
Tree and stump removal	0					m	0					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).

Cross Section Sketch	-	-	-	-	-

Height of Cut / Differences in Levels for calculating volumes

Measurements for small cut to fill:	Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)					Aver. (m)	1 to 4 readings*)				
Height of cut < 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm
Height of cut > 0.25m	0	0				cm	0					cm	0		0		0	cm	0		0		0	cm	0		0		0	cm
For Reshaping :	**Difference in Level between Exist. Camber and Side Drain for calculating volumes**																							
Existing Roads	0					cm	0					cm	0					cm	0					cm	0					cm
Sloping						cm						cm						cm						cm						cm

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

Quantities

Quantities:										Total this page
Bush Clearing	400	m2	400	m2	400	m2	400	m2	400	**2,000**
Grass Cutting		m2		m2		m2		m2		
Grubbing	0	m2	0	m2	0	m2	0	m2	0	**0**
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	**0**

Quantities

										Total this page
Height of cut < 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Height of cut > 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	**0**
Embankment/Fill		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		**0**
Drains full re-construction	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	m3 (insitu)	242	**1,208**
Reshaping by Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Towed Grader/Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
By Equipment Based Method		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		

Data Collected by: **Name:** …… **Date:** ……**Signature:** ……