

DETAILED IMPROVEMENT PLAN

Road Name: LOGLOGO-KORR-KARGI		County: MARSABITI (LAISAMIS)		From: 0+000	To: 1+000		
Chain-age	(kilometres)	0 + 0				1 + 0	
	(metres)	0 + 100				0 + 200	
Road form.	Subgrade	LS	LS	LS	LS	LS	
	Cross section	A	A	A	A	A	
Earth-works	Method: RES, ETL or FILL	FILL	FILL	FILL	FILL	FILL	
	Choice of reshaping: L, T or E	VE	VE	VE	VE	VE	
	Volume of ETL or Fill (m3/m)						
Gra-vel	Total	15	15	15	15	15	
	Thickness (cm,comp.)	1	1	1	1	1	
Mitre drains	Total	16	16	16	16	16	
	Number left =						
Catch water	Total	25	25	25	25	25	
	Length of drain left =						
Culverts	N	Chainage (m) = New line				1+010N	
	Ex	= Existing line	0+020N				
	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	I	I		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		#	#	-	-	MARSABITI (L/ -										-	-	-		
Chainage:	0+000		0+200				0+400				0+600				0+800			1+000		
Input Measurements:	Free Clearance Width for Calculating areas																			
	Aver. (m) 1 to 4 readings ¹⁾												Aver. (m) 1 to 4 readings							
Bush Clearing	9	9	9	m	8	9	7	m	8	8	8	m	7	7	7	m	6.5	6.5	6.5	m
Grass Cutting				m				m				m				m				m
Grubbing	7	7	7	m	6.5	7	6	m	7	7	7	m	6	6	6	m	5	5	5	m
Tree and stump removal	0			m	0			m	0			m	0			m	0			m
¹⁾ 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 ¹⁾												Aver. (m) 1 to 4 readings ¹⁾							
Height of cut < 0.25m	0			cm	0			cm	0			cm	0			cm	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
¹⁾ 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	1,000	m2	1,200	m2	1,200	m2	1,400	m2	1,500		6,300									
Grass Cutting		m2		m2		m2		m2												
Grubbing	1,200	m2	1,300	m2	1,200	m2	1,400	m2	1,600		6,700									
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0		0									
	Quantities																	Total this page		
Height of cut < 0.25m		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)												
Height of cut > 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0		0									
Embankment		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)												
Drains full re-construction	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119		595									
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: LOG LOGO-KARGI		County: MARSABITI (LAISAMIS)		From: 1+000	To: 2+000	
Chain-age	(kilometres)	1 + 0				2 + 0
	(metres)	1 + 100				1 + 200
Road form.	Subgrade	LC	A	LC	A	
	Cross section	LC	A	LC	A	
Earth-works	Method: RES, ETL or FILL	FILL	A	FILL	A	
	Choice of reshaping: L, T or E	L/E	A	L/E	A	
	Volume of ETL or Fill (m3/m)					
Gra-vel	Total	15		15		
	810	Source (quarry No.)				
Longitudinal gradient (in %)		0		1		
Mitre drains	Total			1		
	11	Number left =		1		
Catch water	Total	25		25		
	1,000	Length of drain left =		25		
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				8		
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						

Free Clearance Width for Calculating areas

Input Measurements:	Free Clearance Width for Calculating areas																			
	Aver. (m) 1 to 4 readings ¹⁾								Aver. (m) 1 to 4 readings ¹⁾											
Bush Clearing	9	9	9	m	10	10	10	m	8.5	10	7	m	9	9	9	m	10	10	10	m
Grass Cutting				m				m				m				m				m
Grubbing	8	8	8	m	9	9	9	m	7.5	9	6	m	7	7	7	m	9	9	9	m
Tree and stump removal				m	5	5		m				m	3	3		m	1	1		m

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

Height of Cut / Differences in Levels for calculating volumes

Measurements for small cut to fill:	Height of Cut / Differences in Levels for calculating volumes																			
	Aver. (m) 1 to 4 readings ¹⁾								Aver. (m) 1 to 4 readings ¹⁾											
Height of cut < 0.25m	0	0	0	cm	0	0	0	cm	0	0	0	cm	0	0	0	cm	0	0	0	cm

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

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

¹⁾ 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	1,000	m2	800	m2	1,100	m2	1,000	m2	800	4,700
Grass Cutting		m2		m2		m2		m2		
Grubbing	1,000	m2	800	m2	1,100	m2	1,200	m2	800	4,900
Tree and stump removal	0	No.	5	No.	0	No.	3	No.	1	9

	Quantities								Total this page	
Height of cut < 0.25m		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
Height of cut > 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	0
Embankment		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
Drains full re-construction	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	595
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: LOGLOGO -KARGI		County: MARSABITI (LAISAMIS)		From: 2+000	To: 3+000								
Chain-age	(kilometres)	2 + 0		2 + 100	2 + 200	2 + 300	2 + 400	2 + 500	2 + 600	2 + 700	2 + 800	2 + 900	3 + 0
	(metres)	2 + 0		2 + 100	2 + 200	2 + 300	2 + 400	2 + 500	2 + 600	2 + 700	2 + 800	2 + 900	3 + 0
Road form.	Subgrade	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC	LC
	Cross section	A	A	A	A	A	A	A	A	A	A	A	A
Earth-works	Method: RES, ETL or FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL
	Choice of reshaping: L, T or E	U/E	U/E	U/E	U/E	U/E	U/E	U/E	U/E	U/E	U/E	U/E	U/E
	Volume of ETL or FILL (m3/m)												
Gravel	Total	15	15	15	15	15	15	15	15	15	15	15	15
	Thickness (cm,comp.)	1	1	1	1	1	1	1	1	1	1	1	1
Mitre drains	Total	1								1	1		
	Number left =	1								1	1		
Catch water	Total	25	25	25	25	25	25	25	25	25	25	25	25
	Length of drain left =	25	25	25	25	25	25	25	25	25	25	25	25
Culverts	N												
	Ex												
	CD												
	AC/D												
	L/R												
	Length (m)												
Ramp	Earth fill (m3)												
	H. Concrete (m3)												
Head-walls	Inlet (Material/Type)												
	Outlet (Material/Type)												
Scour Checks	HC												
	0												
Additional Instruction as per Reference													

Quantity Assessment # # - # **MARSABITI (LAI -** # - # -

Chainage: 2.0 2.2 2.4 2.6 2.8 3.0

Input Measurements:	Free Clearance Width for Calculating areas																			
	Aver. (m) 1 to 4 readings ¹⁾								Aver. (m) 1 to 4 readings ¹⁾											
Bush Clearing	6	6	6	m	6	6	6	m	6	6	6	m	7.5	7	8	m	7.5	7	8	m
Grass Cutting				m				m				m				m				m
Grubbing	5	5	5	m	5	5	5	m	5	5	5	m	7	7	7	m	6.5	6	7	m
Tree and stump removal	0			m	0			m	0			m	0		0	m	0		0	m

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

Measurements for small cut to fill:	Height of Cut / Differences in Levels for calculating volumes																			
	Aver. (m) 1 to 4 readings ¹⁾								Aver. (m) 1 to 4 readings ¹⁾											
Height of cut < 0.25m	0	0	0	cm	0	0	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

¹⁾ 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	1,600	m2	1,600	m2	1,600	m2	1,300	m2	1,300	7,400
Grass Cutting		m2		m2		m2		m2		
Grubbing	1,600	m2	1,600	m2	1,600	m2	1,200	m2	1,300	7,300
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	0

	Quantities								Total this page	
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)		0
Embankment		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
Drains full re-construction	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	595
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: LOGLOGO-KARGI		County: MARSABITI (LAISAMIS)		From: 3+000	To: 4+000	
Chain- age	(kilometres)	3 + 0				
	(metres)	3 + 100				
Road form.	Subgrade	LC A				
	Cross section	A				
Earth-works	Method: RES, ETL or FILL	FILL				
	Choice of reshaping: L, T or E	E				
	Volume of ETL or FILL (m3/m)	15 1				
Gra- vel	Total	810				
	Thickness (cm, comp.) Source (quarry No.)	15 1				
Longitudinal gradient (in %)		-1				
Mitre drains	Total	18				
	Number left = Number right =	1 1				
Catch water	Total	1,000				
	Length of drain left = Length of drain right =	25 25				
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		8				
Ramp	Earth fill (m3)					
	H. Concrete (m3)	IV				
Head- walls	Inlet (Material/Type)	I I				
	Outlet (Material/Type)	I I				
Scour Checks	HC	0				
	= Material this sheet/ Spacing left (m) = Spacing right (m) = =Total No. this sheet					
	Additional Instruction as per Reference					

Quantity Assessment - # - # MARSABITI (LAISA) - # - #

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

Input Measurements:	Free Clearance Width for Calculating areas																								
	Aver. (m) 1 to 4 readings ¹⁾												Aver. (m) 1 to 4 readings												
Bush Clearing	9		9	9	m	7		9	9	m	6		6	6	m	7		7	7	m	8		8	8	m
Grass Cutting					m					m					m					m					m
Grubbing	7		7	7	m	7		7	7	m	5		5	5	m	5		5	5	m	6		6	6	m
Tree and stump removal	0				m	4		4		m	1		1		m	0				m	0				m

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

0 0

Measurements for small cut to fill:	Height of Cut / Differences in Levels for calculating volumes																								
	Aver. (m) 1 to 4 readings ¹⁾												Aver. (m) 1 to 4 readings ¹⁾												
Height of cut < 0.25m	0	0	0	0	cm	0	0	0	0	cm	0	0	0	0	cm	0	0	0	0	cm	0	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

¹⁾ 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	1,000	m2	1,400	m2	1,600	m2	1,400	m2	1,200	m2	6,600
Grass Cutting		m2		m2		m2		m2		m2	
Grubbing	1,200	m2	1,200	m2	1,600	m2	1,600	m2	1,400	m2	7,000
Tree and stump removal	0	No.	4	No.	1	No.	0	No.	0	No.	5

	Quantities										Total this page
Height of cut < 0.25m		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)	
Height of cut > 0.25m	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0	m3 (insitu)	0
Embankment		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)	
Drains full re-construction	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	595
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:

Chainage: 4.0 4.2 4.4 4.6 4.8 5.0

Input Measurements:	Free Clearance Width for Calculating areas																			
	Aver. (m) 1 to 4 readings ¹⁾								Aver. (m) 1 to 4 readings ¹⁾											
Bush Clearing	7.5	8	7	m	8	8	8	m	8.5	8	9	m	9	9	9	m	9	9	9	m
Grass Cutting				m				m				m				m				m
Grubbing	6	6	6	m	7	7	7	m	7	7	7	m	8	8	8	m	8	8	8	m
Tree and stump removal	0		0	m	0		0	m	0			m	0			m	0			m

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

0 0 0 0

Measurements for small cut to fill:	Height of Cut / Differences in Levels for calculating volumes																			
	Aver. (m) 1 to 4 readings ¹⁾								Aver. (m) 1 to 4 readings ¹⁾											
Height of cut < 0.25m	0			cm	0			cm	0			cm	0			cm	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

¹⁾ 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	1,300	m2		1,200	m2		1,100	m2		1,000	m2		1,000	m2		5,600
Grass Cutting		m2			m2			m2			m2			m2		
Grubbing	1,400	m2		1,200	m2		1,200	m2		1,000	m2		1,000	m2		5,800
Tree and stump removal	0	No.		0	No.		0	No.		0	No.		0	No.		0

	Quantities									Total this page						
Height of cut < 0.25m		m3 (insitu)			m3 (insitu)			m3 (insitu)			m3 (insitu)			m3 (insitu)		
Height of cut > 0.25m	0	m3 (insitu)		0	m3 (insitu)		0	m3 (insitu)		0	m3 (insitu)		0	m3 (insitu)		0
Embankment		m3 (insitu)			m3 (insitu)			m3 (insitu)			m3 (insitu)			m3 (insitu)		
Drains full re-construction	119	m3 (insitu)		119	m3 (insitu)		119	m3 (insitu)		119	m3 (insitu)		119	m3 (insitu)		595
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:

Quantity Assessment # # # # **MARSABITI (LAI #** # # # -

Chainage: 5.0 5.2 5.4 5.6 5.8 6.0

Input Measurements:	Free Clearance Width for Calculating areas																Aver. (m) 1 to 4 readings ¹⁾								
Bush Clearing	8.5	9		8	m	8	7		9	m	7	7		7	m	7	7		7	m	7	7		7	m
Grass Cutting					m					m					m					m					m
Grubbing	7.5	8		7	m	7	6		8	m	6	6		6	m	6	6		6	m	6	6		6	m
Tree and stump removal	0				m	0				m	0				m	0				m	0				m

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

3 3 2 2 2

Measurements for small cut to fill:	Height of Cut / Differences in Levels for calculating volumes																Aver. (m) 1 to 4 readings ¹⁾				
Height of cut < 0.25m	39	38	40	cm	30			cm	35			cm	35			cm	20				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

¹⁾ 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	1,100	m2	1,200	m2	1,400	m2	1,400	m2	1,400	6,500
Grass Cutting		m2		m2		m2		m2		
Grubbing	1,100	m2	1,200	m2	1,400	m2	1,400	m2	1,400	6,500
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	0

	Quantities									Total this page
Height of cut < 0.25m		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
Height of cut > 0.25m	234	m3 (insitu)	180	m3 (insitu)	140	m3 (insitu)	140	m3 (insitu)	80	774
Embankment		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
Drains full re-construction	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	595
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:

Quantity Assessment	#	#	#	#	MARSABITI (L #					#	#	#	-
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Chainage:	6.0	6.2	6.4	6.6	6.8	7.0
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Input Measurements:	Free Clearance Width for Calculating areas												Aver. (m) 1 to 4 readings ^{*)}							
Bush Clearing	6	6	6	m	6	6	6	m	7	7	7	m	7	7	7	m	7	7	7	m
Grass Cutting				m				m				m				m				m
Grubbing	5	5	5	m	5	5	5	m	6	6	6	m	6	6	6	m	6	6	6	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).

4	5	4	5	5
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Measurements for small cut to fill:	Height of Cut / Differences in Levels for calculating volumes												Aver. (m) 1 to 4 readings ^{*)}							
Height of cut < 0.25m	40	0	0	cm	35	0	0	cm	35	0	0	cm	30	0	0	cm	30	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

*) 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	1,600	m2	1,600	m2	1,400	m2	1,400	m2	1,400	7,400
Grass Cutting		m2		m2		m2		m2		
Grubbing	1,600	m2	1,600	m2	1,400	m2	1,400	m2	1,400	7,400
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	0

	Quantities									Total this page
Height of cut < 0.25m		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
Height of cut > 0.25m	0	m3 (insitu)	30	m3 (insitu)	0	m3 (insitu)	20	m3 (insitu)	20	70
Embankment		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		
Drains full re-construction	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	595
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:

Quantity Assessment	#	#	#	#	MARSABITI (LAI	#	#	#	#	-										
Chainage:	7.0	7.2			7.4			7.6			7.8	8.0								
Input Measurements:	Free Clearance Width for Calculating areas										Aver. (m) 1 to 4 readings ^{*)}									
Bush Clearing	7	7	7	m	7	7	7	m	7	7	7	m	8	8	8	m	8	8	8	m
Grass Cutting				m				m				m				m				m
Grubbing	6	6	6	m	6	6	6	m	6	6	6	m	6.5	7	6	m	7	7	7	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).																				
	4			3			3			3										
Measurements for small cut to fill:	Height of Cut / Differences in Levels for calculating volumes										Aver. (m) 1 to 4 readings ^{*)}									
Height of cut < 0.25m	40	0	0	cm	50	0	0	cm	50	0	0	cm	50	0	0	cm	50	0	0	cm
For Reshaping :	Difference in Level between Exist. Camber and Side Drain for calculating volumes																			
Existing Roads	2			cm	1	1		cm	0			cm	0			cm	0			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	1,400	m2	1,400	m2	1,400	m2	1,200	m2	1,200	m2	6,600									
Grass Cutting		m2		m2		m2		m2		m2										
Grubbing	1,400	m2	1,400	m2	1,400	m2	1,300	m2	1,200	m2	6,700									
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	No.	0									
Quantities	Quantities										Total this page									
Height of cut < 0.25m		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)										
Height of cut > 0.25m	40	m3 (insitu)	50	m3 (insitu)	50	m3 (insitu)	70	m3 (insitu)	90	m3 (insitu)	300									
Embankment		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)										
Drains full re-construction	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	595									
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:																				

Quantity Assessment	#	#	#	#	MARSABITI (LAI #				#	#	#	-									
Chainage:	8.0				8.2				8.4				8.6			8.8			9.0		
Input Measurements:	Free Clearance Width for Calculating areas																				
	Aver. (m) 1 to 4 readings ^{*)}																Aver. (m) 1 to 4 readings				
Bush Clearing	7	7	7	m	7	7	7	m	7	7	7	m	8	8	8	m	8	8	8	m	
Grass Cutting				m				m				m				m				m	
Grubbing	6	6	6	m	6	6	6	m	6	6	6	m	7	7	7	m	7	7	7	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).																					
	3				3				4												
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	50	0	0	cm	45	0	0	cm	50	0	0	cm	50	0	0	cm	25	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	
*) 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										Quantities										Total this page
Bush Clearing	1,400	m2	1,400	m2	1,400	m2	1,200	m2	1,200	m2	1,200	m2	1,200	m2	1,200	m2	1,200	m2	1,200	m2	6,600
Grass Cutting		m2		m2		m2		m2		m2		m2		m2		m2		m2		m2	
Grubbing	1,400	m2	1,400	m2	1,400	m2	1,200	m2	1,200	m2	1,200	m2	1,200	m2	1,200	m2	1,200	m2	1,200	m2	6,600
Tree and stump removal	0	No.	0	No.	0	No.	0	No.	0	No.	0	No.	0	No.	0	No.	0	No.	0	No.	0
	Quantities										Quantities										Total this page
Height of cut < 0.25m		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)	
Height of cut > 0.25m	50	m3 (insitu)	17	m3 (insitu)	120	m3 (insitu)	160	m3 (insitu)	10	m3 (insitu)	357	m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)	
Embankment		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)	
Drains full re-construction	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	119	m3 (insitu)	595	m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)	
Reshaping by Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)	
By Towed Grader/Labour		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)	
By Equipment Based Method		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)		m3 (insitu)	
Data Collected by: Name: Date: Signature:																					

Quantity Assessment		#	#	#	#	MARSABITI (LAI #				#	#	#	#	-						
Chainage:		9.0			9.2			9.4			9.6			9.8		10.0				
Input Measurements:		Free Clearance Width for Calculating areas																		
		Aver. (m) 1 to 4 readings ¹⁾								Aver. (m) 1 to 4 readings										
Bush Clearing	7	7	7	m	7	7	7	m	7	7	7	m	7.5	8	7	m	8	8	8	m
Grass Cutting				m				m				m				m				m
Grubbing	6	6	6	m	6	6	6	m	6	6	6	m	6.5	7	6	m	7	7	7	m
Tree and stump removal	2			m	2			m	2			m	0			m	2			m
		5				4			5			3			3					
Measurements for small cut to fill:		Height of Cut / Differences in Levels for calculating volumes																		
		Aver. (m) 1 to 4 readings ¹⁾								Aver. (m) 1 to 4 readings ¹⁾										
Height of cut < 0.25m	40	0	0	cm	35	0	0	cm	30	0	0	cm	40	0	0	cm	45	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
		5				4			5			3			3					
Quantities:		Quantities										Total this page								
Bush Clearing	1,400	m2		1,400	m2		1,400	m2		1,300	m2		1,200		6,700					
Grass Cutting		m2			m2			m2			m2									
Grubbing	1,400	m2		1,400	m2		1,400	m2		1,300	m2		1,200		6,700					
Tree and stump removal	2	No.		2	No.		2	No.		0	No.		2		8					
		Quantities										Total this page								
Height of cut < 0.25m		m3 (insitu)			m3 (insitu)			m3 (insitu)			m3 (insitu)									
Height of cut > 0.25m	120	m3 (insitu)		0	m3 (insitu)		20	m3 (insitu)		4	m3 (insitu)		30		174					
Embankment		m3 (insitu)			m3 (insitu)			m3 (insitu)			m3 (insitu)									
Drains full re-construction	119	m3 (insitu)		119	m3 (insitu)		119	m3 (insitu)		119	m3 (insitu)		119		595					
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:										