



Republic of the Philippines  
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

COMPUTATION OF HAULING COST - AGGREGATES

Implementing Office: DPWH Bukidnon 1st District Engineering Office  
Address: San Victorios St., Malaybalay City, Bukidnon  
Project Name: Construction of Classrooms, Tag-Illanao Elementary School, City of Malaybalay, Bukidnon

Project Location: City of Malaybalay, Bukidnon

MATERIAL :	Sand & Gravel		
UNIT :	cu.m.		
Material's Source :	=	Pulangi River Quarry, Brgy. Nabag-o, Valencia City, Bukidnon	
Hauling Diistance :	=	25.10 km	
Less	=	3.00 km	(Free Hauling for the First 3 km)
Hauling Diistance :	=	22.10 km	
		Flat (Paved)	Rolling (Paved)
		14.37 km	6.63 km
			Mountainous (UnPaved)
			1.11 km
CYCLE TIME :			
A.	Without Load		
where:			
distance	=	14.37 km.	6.63 km.
velocity	=	55 km./hr.	40 km./hr.
		14.365 km.	6.63 km.
time	=	55 km./hr.	40 km./hr.
	=	0.260 hr.	0.16575 hr.
Total Time	=	0.470 hr.	0.0442 hr.
B.	With Load		
where:			
distance	=	14.365 km.	6.63 km.
velocity	=	35 km./hr.	30 km./hr.
		14.365 km.	6.63 km.
time	=	35 km./hr.	30 km./hr.
	=	0.410 hr.	0.221 hr.
Total Time	=	0.705 hr.	0.0736667 hr.
C.	Allowance for Delay		
	=	[ A + B ]	x
	=	[ 0.46995 + 0.7047 ]	x
	=	6.600 min.	10.00%
	=	0.110 hr.	10.00%
D.	Allowance for Manuever		
	=	15.00 min.	
	=	0.250 hr.	
E.	Total Cycle Time		
Total	=	A + B + C + D	
	=	0.460 + 0.700 + 0.110 + 0.25	
Total Cycle Time, T =		1.5200 hr.	
Using Dump Truck:			
Capacity of DT :	=	10 cu.m. of Aggregates	
Rental Rate of Dump Truck per hour	=	1,420.00	
	=	1.5200 x 1,420.00	
P	=	2,158.40	
P	=	215.84 Cost Per cu.m.	(HAULING COST ONLY)

Prepared by:

Checked/Submitted by:

**MICHAEL ANGELO Y. CHATTO**

Engineer II

Planning and Design Section, DPWH Bukidnon 1st DEO

**KAREEN KATE Q. AJERO**

Acting Chief

Planning and Design Section, DPWH Bukidnon 1st DEO