

## Republic of the Philippines DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS OFFICE OF THE SECRETARY

Manila

May 11, 2017

## MEMORANDUM

## FOR : MARK A. VILLAR Secretary This Department

This refers to the memorandum dated 05 May 2017 of **DPWH CAR Director NERIE D. BUENO**, endorsing the request of District Engineer, **ELEHIMICON M. LORENZANA**, Ifugao 1<sup>st</sup> District Engineering Office, for the **modification** of the hereunder stated project:

Location	Project Description		Physical Target / Cost	
	<i>as per GAA</i> UACS: 292003020402291	as modified	per GAA/Original	as modified
Lagawe, Ifugao	MFO-2 Flood Management Services, Construction/ Maintenance of Flood Mitigation Structures and Drainage Systems Construction of Ibulao Flood Control, Lagawe, Ifugao	MFO-2 Flood Management Services, Construction/ Maintenance of Flood Mitigation Structures and Drainage Systems Construction of Ibulao Flood Control, Lagawe, Ifugao	1,162.00 Lm	529.00 Lm
			Unit Cost:	Unit Cost:
			P30.120T/Lm	P66.162T/Lm
	(Construction of Flood Mitigation Structure)	(Construction of Flood Mitigation Structure)	Allocation:	Estimated Cost:
			Php 35M	Php 35M

**Justification:** Decrease in physical target and increase in unit cost. The decreased in physical target is due to the change in the type of structure to be built taking into consideration design parameters, criteria and prevailing field conditions based on actual field survey.

- The water is turbulent and scouring is heavy. When flooding occurs, even boulders are carried away
  making heavy impact on the lower portion of the flood control structure. To address it, a 0.30 meter
  thick reinforced concrete cut-off wall is provided.
- The soil is unstable hence the need for deeper foundations- a depth of about 3.0 meters from the ground.
- Maximum flood water level is about 5.5 meters (Buhawit-Ibulao Bridge section) and 4.10 meters (Caba Section) above normal water level. During heavy rains, debris composed mostly of logs are carried away by the floodwater. These logs usually create heavy impacts on the structure thus a 0.15 meter thick reinforced concrete slab is provided on the slope portion above the cut-off wall. A 0.80 meter high freeboard is provided.
- A 1.5 meter wide reinforced concrete crest with key is also provided.
- The total height of the structure is 9.4 meters (Ibulao-Buhawit Section) and 8.0 meters (Caba Section).
- Embankment materials are to be hauled.

RAFAE

Senior Undersecretary

Based on our evaluation, the submitted request for modification of the said project is in order; hence, approval hereof is recommended.

ROMEO S. MOMO Undersecretary for Luzon Operations

APPROVED/DISAPPROVED:

MARK A. VILLAR Secretary



NOTE: Copies of the approved project modification regrests are forwarded to the Office of Undersecretary Maria Catalina E. Cabral, PhD, CESO I.