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

August 03, 2020

MEMORANDUM

FOR : **MARK A. VILLAR**
Secretary
This Department

This refers to the memorandum dated 10 June 2020 of **DPWH Region XI Director ALLAN S. BORROMEO** requesting for the approval of the Modification of the hereunder project covered by CY 2020 General Appropriation Act (GAA), to wit;

As per GAA/Original			***As Modified***		
Project Description					
UACS No. 310206100044000 **Project ID : P00401383MN** OO1: Ensure Safe and Reliable National Road System - Network Development - Construction of Flyovers/ Interchanges/ Underpasses/ Long Span Bridges Flyover along Davao-Cotabato Road- Junction Maa Road, Package 1, Davao City			OO1: Ensure Safe and Reliable National Road System - Network Development - Construction of Flyovers/ Interchanges/ Underpasses/ Long Span Bridges Flyover along Davao-Cotabato Road- Junction Maa Road, Package 1, Davao City		
Type of Work/ Physical Target	**Unit Cost**	**Allocation**	**Type of Work/ Physical Target**	**Unit Cost**	**Estimated Cost**
CW1 – Construction of Flyover 5,532.300 sq.m.	₱ 34,886.03/ sq.m.	₱ 193,000,000.00	CW1 – Construction of Flyover - sq.m.	- sq.m.	-
			CW2 – Reconstruction to Concrete Pavement 2.555 lane km	₱ 37,650,,849.84/ lane km	₱ 96,197,921.35
			CW3 – Road Widening 1.153 lane km	₱ 40,970,765.98/ lane km	₱ 47,239,293.18
			CW4 – Off-Carriageway Improvement: Flaring of Intersections/ Improvement of Intersections 1.000 Number of Intersection	₱ 49,562,785.47/ Number of Intersection	₱ 49,562,785.47
ROW Acquisition 6,230.000 sq.m.	₱ 32,102.73/ sq.m.	₱200,000,000.00	ROW Acquisition 6,230.000 sq.m.	₱ 32,102.73/ sq.m.	₱ 200,000,000.00
EAO	-	₱7,000,000.00	EAO	-	₱7,000,000.00
	Total	**₱ 400,000,000.00**		**Total**	**₱ 400,000,000.00**

Justification:

Modification of original civil works components into three new project components (CW2: Reconstruction to Concrete Pavement, CW3: Road Widening and CW4: Off-Carriageway Improvement: Flaring of Intersections / Improvement of Intersections) to prioritize first the working area and at the same time, provide access/detour roads before the construction of the flyover bridge shall go on full operation/implementation.

- Additional three (3) new project components and costs (CW2: Reconstruction to Concrete Pavement, CW3: Road Widening and CW4: Off-Carriageway Improvement: Flaring of Intersections / Improvement of Intersections) were due to the following:
  - There is a need to prepare first the area for the construction of the flyover bridge by acquiring the RROW in order that it can be used as a working area (indicated in the attached Google Map) during the construction of the bridge where heavy and large construction equipment can freely move around. The project is located within the urban center where large commercial establishments, universities and residential subdivisions are situated, therefore, there is a need to first acquire enough space or road right-of-way (RROW) prior to the implementation of the project;
  - The construction of service roads is also necessary and is a priority in order that it can be utilized as access/detour roads (indicated in the Google Map) when construction of the flyover shall go on a full operation. Full closure of the road section for the flyover is not possible, hence, the City Transport and Management Office (CTTMO) requested for a right-turning one-lane road each for vehicles going to and coming from Ma-a Road (recommended traffic scheme attached);
  - The existing utility facilities such as electrical and water pipe lines are located at the center island (indicated in the attached Google Map) therefore the flyover bridge structure cannot be implemented not unless these utilities shall be transferred. Based on the series of coordination meetings conducted with Davao Light, PLDT and Davao City Water District, their request is for DPWH to acquire RROW first in order for them to relocate their utility facilities at the farthest side of our RROW limit. This is a priority also because of the need to clear the area from aerial and underground utilities prior to the construction of the bridge; and
  - **The construction of the entire 4-lane flyover (405 lm) including improvement of approaches and ROW acquisition needs a huge allocation, hence, requires substantial amount to construct/complete the entire flyover. An amount of P 600 Million under CY 2020 (VIILP) is allocated for same project and would involve construction of portion of the substructure of the flyover.** Hence, the said P 400 Million is proposed to be utilized for road improvement to complement the construction of substructure and ensure smooth implementation of the project.
- The new three (3) project components (CW2: Reconstruction to Concrete Pavement, CW3: Road Widening and CW4: Off-Carriageway Improvement: Flaring of Intersections / Improvement of Intersections) have considerable cost due to the following:
  - CW2: Reconstruction to Concrete Pavement:
    a. Designed carriageway has variable widths from 10m to 13.4m;
    b. The Portland Cement Concrete Pavement (PCCP) used in the design was of 7-day concrete instead of the usual 14 or 28-day since the road section is located within a highly urbanized area;
    c. Project includes considerable drainage structures. Drainage works involve RCPC and manholes of different sizes (610mm, 910mm, 1220mm, 1520mm) and concrete, clay, plastic and fiber pipe or high density polyethylene pipe (HDPE) for the outfall (600mm, 900mm, 1200mm and 1600mm dia). In addition, construction of drainage requires removal and restoration of affected existing pavement going to outfall; and
    d. Project also involves removal of actual structures and obstructions, provision of access road, construction of sidewalk, curb and gutter, warning signs, regulatory signs, and reflectorized thermoplastic pavement markings.
  - CW3: Road Widening:
    a. Designed carriageway has variable widths from 3.35m to 6.7m and a portion has up to 7.85m;
    b. Pavement (PCCP) used in the design was of 7-day concrete instead of the usual 14 or 28-day since the road section is located within a highly urbanized area;
    c. Project involves construction of layby (4m to 6m), construction of center island with landscaping, removal of structures and obstructions (electrical posts, center island, fence, sidewalk, curb and gutter), construction of sidewalk, curb and gutter, warning signs, regulatory signs, and reflectorized thermoplastic pavement markings; and
    d. Project includes considerable drainage structures. Drainage works involve RCPC and manholes of different sizes (610mm, 910mm, 1220mm, 1520mm) and concrete, clay, plastic and fiber pipe or high density polyethylene pipe (HDPE) for the outfall (600mm, 900mm, 1200mm and 1600mm dia). In addition, construction of drainage requires removal and restoration of affected existing pavement going to outfall.
  - CW4: Off-Carriageway Improvement: Flaring of Intersections / Improvement of Intersections:
    a. Improvement of intersection/junction involves widening of intersection including one of the legs (394m) of the intersection. It also involves insertion lanes (total width of widening including insertion lane is up to 7.2m);
    b. Project also includes reconstruction of one of the portion of the legs of the intersection (142.8m, width of up to 13.4m);

c. It also involves slope protection (grouted riprap and MSE wall) with a total length of 388.453m since improvement of intersection requires embankment fill of up to 5m since adjacent area of the intersection has a low-lying area; and
d. It includes construction of sidewalk, curb and gutter and modification of traffic lights/signals.

Based on our evaluation of the submitted documents, the request for modification of the said project is in order, hence, it is respectfully recommended to the Secretary for his consideration and approval. Please see Misc dated Sept 7, 2018 of RD, Reg. X certifying the reasonableness of CW-2, CW-3 & CW-4 of P

DIMAS S. SOGUILON, CESO I
Undersecretary for Regional Operations in Mindanao

APPROVED/~~DISAPPROVED~~:

MARK A. VILLAR
Secretary

Department of Public Works and Highways
Office of the Secretary
WIN0G03156

2.3 aap/AVS/DSS