



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



August 15, 2024

MEMORANDUM

TO : **KHADAFFY D. TANGGOL**
Regional Director
DPWH-CAR
Engineer's Hill, Baguio City

ATTENTION : **RUBY A. UYAM**
District Engineer
Lower Kalinga District Engineering Office
Bulanao, Tabuk City, Kalinga

Transmitted herewith are the **APPROVED** requests for the **modification** of hereunder stated projects:

1. OO1: Ensure Safe and Reliable National Road System - Asset Preservation - Preventive Maintenance - Tertiary Roads Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105 - - - **P125,000,000.00**
2. OO1: Ensure Safe and Reliable National Road System - Asset Preservation - Preventive Maintenance - Tertiary Roads Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 - **K0516** + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga - - - **P150,000,000.00**

Please be reminded that all approved modifications **shall be posted in the DPWH website within five (5) days** from its approval. Failure to comply with this requirement shall be dealt with accordingly.


REY PETER B. GILLE, D.M.

Assistant Secretary for Regional Operations
in CAR, Regions I, II, IX, X, XI, XII, and XIII

2.3 mksa/AVS/RPBG/ERP

Project Modification of Allotment under the GAA Request Evaluation Form

Date of Evaluation: 08/05/2024

P/A/P 1 (001, 002, CSSP, LP):	Appropriation Source:	FY 2024 GAA
ORGANIZATIONAL OUTCOME 1 : Ensure Safe and Reliable National Road System	UACS:	310103101367000
P/A/P 2 (Program):	Project ID:	P00804227LZ
Asset Preservation Program	Region:	Cordillera Administrative Region
P/A/P 3 (Sub-Program):	Implementing Office:	Lower Kalinga District Engineering Office
Preventive Maintenance - Tertiary Roads	Appropriation (Php):	125,000,000

ame of Project per GAA:

Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105
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Implementing Office
A Justification for Modification:

- The correct physical target for the given station limits based on GAA (K0508+645 -K0513+1105) is 10.982 lane km.
- From the corrected physical target of 10.982 lane km. is modified to 6-.93154 lane km.
- The decrease in the physical target/increase in the unit cost is brought about by the introduction/inclusion of other features of roads particularly Item 624(8)-Solar LED Street Light, Pavement Milling and Pavement Re blocking.
- The project-is-a 2 lane/50mm thick asphalt overlay and also includes Solar Pavement Studs and Thermoplastic Pavement Markers
- The utilization of the prevailing construction cost of materials necessary for the completion of all pertinent scopes of work contributed to the variance in unit cost thereon causing a decrease in' the target length of the proposed asphalt overlay.

A.1 ☒ Certificate of Reasonableness of Cost Estimate approved by: RD Khadaffy D. Tanggol dated: June 08, 2024

B. PER PLANNING SERVICE EVALUATION

B.1 ☒ PROJECT MODIFICATION ON PROJECT DESCRIPTION

- B.1.1 ☐ Typographical Error/s

B.1.3 ☒ Change in Station Limits
- B.1.2 ☐ Change in Location (for non-existent locations only)

B.1.4 ☐ Addition/ Deletion of Word/s

B.2 ☒ PROJECT MODIFICATION/ADJUSTMENTS ON PROJECT COMPONENTS

- B.2.1 ☒ Change in Targets

B.2.3 ☐ Change in Component Amount
- B.2.2 ☐ Change in Scope of Work

B.2.3.1 ☐ Addition of Component (including excess amount)

B.2.3.2 ☐ Deletion of Component

B.2.3.3 ☐ Movement of Funds between Components

C. RESULTANT AFTER MODIFICATION

- C.1 ☐ Additional Project Component/s
- C.2 ☐ Component/s:

COMP	SCOPE OF WORK		TARGET		INCREASE/ DECREASE (%)	
	FROM	TO	FROM	TO	Unit Cost	Target
CW1	Preventive Maintenance of Road: Asphalt Overlay	Preventive Maintenance of Road: Asphalt Overlay	21.768 lane km	6.932 lane km	214.02%	-68.16%
CW2	-	-	-	-	-	-
CW3	-	-	-	-	-	-
CW4	-	-	-	-	-	-

D. AS EVALUATED

- D.1 ☒ ALLOWED as per the GAA Provisions
- D.2 ☐ NOT ALLOWED as per the GAA Provisions
- D.3 Remarks (to be filled-up by Planning Service):

- Increase in Unit cost is evaluated and reviewed by the Bureau of Construction (BOC) per memorandum dated 03 July 2024 of Director Allan Borromeo.
- The original Php 125,000,000.00 estimated cost was reduced to Php 124,992,71546 resulting to an excess of Php 7,284.54

Evaluated By:


ALEX G. BOTE
Director, Planning Service

Noted By:


CONSTANTE A. LLANES JR., CESO III
Assistant Secretary, Planning Service and the Legislative Liaison Office

E. Approving Authority as per latest Approved Guidelines in Modification of Allotment under the GAA

- E.1 ☒ Secretary
- E.2 ☐ Undersecretary for Operations

☒ Recommended for Approval

☐ Remarks:


MARIA CATALINA E. CABRAL, Ph.D., CESO I
Undersecretary for Planning and PPP Services

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



July 17, 2024

MEMORANDUM

FOR : **MANUEL M. BONOAN**
Secretary
This Department

This refers to the memorandum dated April 16, 2024, of **DPWH CAR Regional Director KHADAFFY D. TANGGOL**, endorsing the request of **District Engineer RUBY A. UYAM, Lower Kalinga District Engineering Office**, for the **modification** of the project under FY 2024 GAA, to wit;

As per GAA/Original			As Modified		
Project Description					
UACS No. 310103101367000 Project ID: P00804227LZ OO1: Ensure Safe and Reliable National Road System - Asset Preservation - Preventive Maintenance - Tertiary Roads Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105			OO1: Ensure Safe and Reliable National Road System - Asset Preservation - Preventive Maintenance - Tertiary Roads Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105		
Type of Work/ Physical Target	Unit Cost	Allocation	Type of Work/ Physical Target	Unit Cost	Estimated Cost
CW1- Preventive Maintenance of Road: Asphalt Overlay/ 21.768 Lane Kilometers	₱ 5,541,391.03/ Lane Kilometers	₱ 120,625,000.00	CW1- Preventive Maintenance of Road: Asphalt Overlay / 6.93154 Lane Kilometers	₱ 17,401,286.79/ Lane Kilometers <i>₱ 34.8 M/km</i>	₱ 120,617,715.46
EAO	—	₱ 4,375,000.00	EAO	—	₱ 4,375,000.00
			EXCESS		₱ 7,284.54
Total:		₱ 125,000,000.00	Total:		₱ 125,000,000.00

Excess - Return to TC w/n 30 days after approval hereof

AG-EO - 202407-02848

Justification:

The project is to be modified in view of the following:

- The correct physical target for the given station limits based on GAA (K0508+645 – K0513+1105) is 10.982 lane km.
- From the corrected physical target of 10.982 lane km. is modified to 6.93154 lane km.
- The decrease in the physical target/increase in the unit cost is brought about by the introduction/inclusion of other features of roads particularly Item 624(8)-Solar LED Street Light, Pavement Milling and Pavement Reblocking.
- The project is a 2 lane/50mm thick asphalt overlay and also includes Solar Pavement Studs and Thermoplastic Pavement Markers
- The utilization of the prevailing construction cost of materials necessary for the completion of all pertinent scopes of work contributed to the variance in unit cost thereon causing a decrease in the target length of the proposed asphalt overlay.
- The unit cost has also been evaluated and reviewed by the Bureau of Construction (BOC). The original Php 125,000,000.00 estimated cost was reduced to Php 124,992,715.46 resulting in an excess of Php 7,284.54
- The derived unit cost is based on the approved Program of Work (POW) with Detailed Unit Price Analysis (DUPA)

Attached are the following supporting documents: Approved Program of Works (POW) with Detailed Unit Price Analysis (DUPA), Detailed Engineering Design (DED), Certificate of Availability of Funds (CAF), BP 202, Geotagged photos, GIS Map and Certification of No overlapping (Certified by the District Engineer, Planning & Design, Construction and Maintenance Division Chief).

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


REY PETER B. GILLE, D.M.

Assistant Secretary for Regional Operations
in CAR, Regions I, II, IX, X, XI, XII and XIII

RECOMMENDING APPROVAL:


MARIA CATALINA E. CABRAL, Ph.D., CESO-I

Undersecretary for Planning
and Public-Private Partnership Services


EUGENIO R. PIPO, JR.

Undersecretary for Regional Operations
in CAR, Regions I, II, IX, X, XI, XII, and
XIII

APPROVED/~~DISAPPROVED~~:


MANUEL M. BONOAN

Secretary

Department of Public Works and Highways
Office of the Secretary



WIN4XW00131



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
LOWER KALINGA DISTRICT ENGINEERING OFFICE
Bulanao, Tabuk City, Kalinga, Cordillera Administrative Region



July 08, 2024

MEMORANDUM

FOR : KHADAFFY D. TANGGOL
Regional Director

THRU : ARNOLD O. DACWAG
OIC-Chief, Planning & Design Division

**SUBJECT : Resubmission of Modification of Preventive Maintenance Project
along National Roads of Lower Kalinga District Engineering Office**

We are respectfully submitting the pertinent documents of the following projects subject for modification reflecting the changes as per evaluation of Bureau of Construction dated June 03, 2024, to wit:

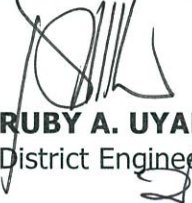
	Original Submission	As Evaluated by BOC
Project ID	P00804227LZ	
Project Title	Asset Preservation Program-Preventive Maintenance - Tertiary Roads - Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105	
Type of Work	CW1: Preventive Maintenance of Road: Asphalt Overlay	
Physical Target:	8.13557 Lane Kilometer	
Allocation	CW1 - ₱ 120,625,000.00 EAO - ₱ 4,375,000.00	CW1 - ₱ 120,617,715.46 EAO - ₱ 4,375,000.00 Excess - ₱ 7,284.54

	Original Submission	As Evaluated by BOC
Project ID	P00804228LZ	
Project Title	Asset Preservation Program-Preventive Maintenance - Tertiary Roads - Malalao Nat'l RD (Agbannawag-Malalao-Bulo Sect) Road, K0514 + 000 -K0516 + 000, K0512 + 716 - K0513 + 000, K0516 + 415 - K0520 + 000, Tabuk City, Kalinga	
Type of Work	CW1: Preventive Maintenance of Road: Asphalt Overlay	
Physical Target:	8.03063 Lane Kilometer	
Allocation	CW1 - ₱ 144,750,000.00 EAO - ₱ 5,250,000.00	CW1 - ₱ 144,384,330.87 EAO - ₱ 5,250,000.00 Excess - ₱ 365,669.13

	Original Submission	As Evaluated by BOC
Project ID	P00802251LZ	
Project Title	Asset Preservation Program-Preventive Maintenance - Tertiary Roads - Rizal Natl Rd (Liwan West-Babalag-Macutay Sect) - K0522 + (-569) - K0522 + 088	
Type of Work	CW1: Preventive Maintenance of Road: Asphalt Overlay	
Physical Target:	0.92692 Lane Kilometer	
Allocation	CW1 - ₱ 11,760,000.00 EAO - ₱ 240,000.00	CW1 - ₱ 11,948,793.33 EAO - ₱ 240,000.00 Excess - ₱ 51,206.67

Attached is a copy evaluation of the evaluation of the Bureau of Construction, for your ready reference.

For your favorable consideration.


RUBY A. UYAM
District Engineer

CAR 15.1 MAE/ABN/EMJE



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
CORDILLERA ADMINISTRATIVE REGION
Engineer's Hill, Baguio City



April 16, 2024

MEMORANDUM

FOR : MANUEL M. BONOAN
Secretary

THRU : EUGENIO R. PIPO, JR.
Undersecretary for Regional Operations
CAR, Regions I, II, IX, X, XI, XII, and XIII

SUBJECT : Request for Modification of the Project: ORGANIZATIONAL OUTCOME 1: Ensure Safe and Reliable National Road System - Asset Preservation - Preventive Maintenance – Tertiary Roads- Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105, Tabuk City, Kalinga, under the FY 2024 General Appropriations Act.

We are respectfully forwarding the Memorandum dated April 5, 2024 from District Engineer Ruby A. Uyam, Lower Kalinga District Engineering Office, regarding the modification of the above project in the amount of **One Hundred Twenty Five Million Pesos (Php 125,000,000.00)** as indicated below:

	FROM	TO
Project ID	P00804227LZ	
Project Title	Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105, Tabuk City, Kalinga	Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105, Tabuk City, Kalinga
Type of Work	CW1- Preventive Maintenance of Road: Asphalt Overlay	CW1- Preventive Maintenance of Road: Asphalt Overlay
Physical Target	CW1- 21.768 Lane Kilometers	CW1- 6.93154 Lane Kilometer
Allocation	CW1- Php 120,625,000.00 EAO- Php 4,375,000.00	CW1- Php 120,617,715.46 EAO- Php 4,375,000.00
		EXCESS – Php 7,284.54

The supporting documents based on D.O No. 23, series of 2023 are attached for your ready reference.

For the consideration of the Secretary.


KHADAFFY D. TANGGOL
Regional Director

CAR.1 RBP/EFD/JWC/ABM



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
CENTRAL OFFICE



July 3, 2024

MEMORANDUM

FOR : **Undersecretary EUGENIO R. PIPO, JR.**
Regional Operations in CAR, Regions I, II, IX, X, XI, XII and XIII

SUBJECT : **Request for the Approval of Modification of the Project under FY2024 GAA:**

Organizational Outcome 1: Ensure Safe and Reliable National Road System – Asset Preservation Program– Preventive Maintenance – Tertiary Roads

1. P00802254LZ: Balbalan – Pinukpuk Rd – K0516+200 – K0518+939, K0519+053 – K0519+759, Pinukpuk, Kalinga
2. P00804227LZ: Bulanao – Paracelis Rd, K0508+645 – K0513+1105, Tabuk City, Kalinga

Organizational Outcome 1: Ensure Safe and Reliable National Road System – Asset Preservation Program – Preventive Maintenance – Secondary Roads

3. P00804225LZ: Mt. Province Bdry – Calanan – Pinukpuk – Abbut Rd (Calanan – Pinukpuk Section), K0512+000 – K0513+398, K0514+000 -K0515+000, K0515+265 – K0518+000, Tabuk City, Kalinga

Organizational Outcome 1: Ensure Safe and Reliable National Road System – Asset Preservation Program – Preventive Maintenance – Tertiary Roads

4. P00804228LZ: Malalao National Road (Agbannawag – Malalao – Bulu Section), K0514+000 – K0516+000, K0512+716 – K0513+000, K516+415 – K0520+000, Tabuk City, Kalinga
5. P00802251LZ: Rizal National Road (Liwan West – Babalag – Macutay Sect), K0522+(-569) – K0522+(-092.871), Rizal, Kalinga

Forwarded herewith are the results of the evaluation for the above-mentioned requests, which was resubmitted to this Office per Memorandum dated June 7, 2024 (**Annex "A"**).

The requested amount of **P517,139,000.00** (inclusive of EAO) for the five (5) asphalt overlay projects was reduced to **P513,962,380.54** (inclusive of EAO) due to corrections made on the utilization of manpower, rental rate of equipment and utilization of material component. Likewise, the items of work involved and corresponding quantities were based

on the approved Program of Works (POW), Detailed Engineering Design Plan, and other pertinent documents, duly approved by the District Engineer, DPWH - Lower Kalinga District Engineering Office.

PROJECT NO.1

The requested amount of **P80,139,000.00** (inclusive of EAO) for the 6.884 lane kilometer of Balbalan – Pinukpuk Rd – K0516+200 – K0518+939, K0519+053 – K0519+759, Pinukpuk, Kalinga, as submitted, was reduced to **P77,625,407.10** (inclusive of EAO) due to the corrections made on the productivity output, manpower components, rental rate of equipment and material component. Likewise, the items of work involved and corresponding quantities were based on the approved Program of Works (POW), Detailed Engineering Design Plan, and other pertinent documents, duly approved by the District Engineer, DPWH - Lower Kalinga District Engineering Office.

SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part B	Other General Requirements	P 249,616.23	0.33%
Part C	Earthworks	P 24,712.67	0.03%
Part D	Subbase and Base Course	P 12,240.42	0.02%
Part E	Surface Course	P 72,644,932.74	96.98%
Part G	Drainage and Slope Protection Structures	P 1,977,015.79	2.64%
Grand Total		P 74,908,517.85	100.00%

Cost per lane kilometer = $\frac{P72,644,932.74}{6.884 \text{ lane km}} = \text{P10,552,721.20 /lane km}$
 Of Asphalt Overlay
 (Part E only)

The estimated cost of **P10,552,721.20** per lane kilometer is due to the design requirements as reflected in the Approved Detailed Engineering Design Plan for the asphalt overlay, which involves the provision of 0.28 meter thick reblocking of concrete pavement, Bituminous Concrete Surface Wearing Course, Hot-Laid; 50mm thick and Emulsified Asphalt, which accounts to **96.98%** of the total project cost, aggregate subbase course, and reflectorized thermoplastic pavement markings, coupled with recent price escalation and hauling of construction materials at 127.26 km away from the project. Hence, the evaluated cost is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.

PROJECT NO.2

The requested amount of **P125,000,000.00** (inclusive of EAO) for the 6.93154 lane kilometer of Bulanao – Paracelis Rd, K0508+645 – K0513+1105, Tabuk City, Kalinga, as submitted, was reduced to **P124,800,928.42** (inclusive of EAO) due to the corrections made on the productivity output, manpower components, rental rate of equipment and material component. Likewise, the items of work involved and corresponding quantities were based on the approved Program of Works (POW), Detailed Engineering Design Plan, and other pertinent documents, duly approved by the District Engineer, DPWH - Lower Kalinga District Engineering Office.

SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part B	Other General Requirements	P 463,361.06	0.38%
Part C	Earthworks	P 806,993.70	0.67%
Part D	Base and Subbase Course	P 563,239.62	0.47%
Part E	Surface Course	P 72,735,474.07	60.40%
Part H	Miscellaneous Structures	P 45,863,827.48	38.08%
Grand Total		P 120,432,895.93	100.00%

Cost per lane kilometer = $\frac{P\ 72,735,474.07}{6.93154\ \text{lane km}} = \mathbf{P10,493,407.54 / \text{lane km}}$
 Of Asphalt Overlay
 (Part E only)

The estimated cost of **P10,493,407.54** per lane kilometer is due to the design requirements as reflected in the Approved Detailed Engineering Design Plan for the asphalt overlay, which involves the provision of 0.28 meter thick reblocking of concrete pavement, Bituminous Concrete Surface Wearing Course, Hot-Laid; 50mm thick and Emulsified Asphalt, which accounts to **60.40%** of the total project cost, aggregate subbase course, and miscellaneous structures such as reflectorized thermoplastic pavement markings and solar LED street light which accounts to **38.08%** of the total project cost, coupled with recent price escalation and hauling of construction materials at 127.26 km away from the project. Hence, the evaluated cost is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.

PROJECT NO.3

The requested amount of **P150,000,000.00** (inclusive of EAO) for the 8.13557 lane kilometer of Mt. Province Bdry – Calanan – Pinukpuk – Abbut Rd (Calanan – Pinukpuk Section) K0512+000 – K513+398, K0514+000 – K515+000, K0515+265 – K0518+000, Tabuk City,

Request for Modification of the Project: 1. Organizational Outcome 1: Ensure Safe and Reliable National Road System – Asset Preservation – Preventive Maintenance Tertiary Roads – Balbalan – Pinukpuk Rd – K0516+200 – K0518+939, K0519+053 – K0522+7590 2. Organizational Outcome 1: Ensure Safe and Reliable National Road System – Asset Preservation – Preventive Maintenance Tertiary Roads – Bulanao – Paracelis Rd, K0508+645 – K0513+1105 3. Organizational Outcome 1: Ensure Safe and Reliable National Road System – Asset Preservation – Preventive Maintenance Secondary Roads – Mt. Province Bdry – Calanan – Pinukpuk – Abbut Rd (Calanan – Pinukpuk Section) K0512+000 – K513+398, K0514+000 – K515+000, K0515+265 – K0518+000, Tabuk City, Kalinga 4. Organizational Outcome 1: Ensure Safe and Reliable National Road System – Asset Preservation – Preventive Maintenance Tertiary Roads – Malalao Nat'l Rd (Agbannawag – Malalao – Bulu Sect), K0514+000 – K0516+000, K0512+716 – K0513+000, K516+415 – K0520+000, Tabuk City, Kalinga 5. Organizational Outcome 1: Ensure Safe and Reliable National Road System – Asset Preservation – Preventive Maintenance Tertiary Roads – Rizal Nat'l Rd (Liwan West – Babalag – Macutay Sect), nK0522+(-569) – K0522+(-092.871)

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Kalinga, as submitted, was reduced to **P149,723,434.31** (inclusive of EAO) due to the corrections made on the productivity output, manpower components, equipment components, and material component. Likewise, the items of work involved and corresponding quantities were based on the approved Program of Works (POW), Detailed Engineering Design Plan, and other pertinent documents, duly approved by the District Engineer, DPWH - Lower Kalinga District Engineering Office.

SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part B	Other General Requirements	P 358,459.29	0.25%
Part C	Earthworks	P 994,976.43	0.69%
Part D	Base and Subbase Course	P 590,310.74	0.41%
Part E	Surface Course	P 84,257,886.91	58.31%
Part H	Miscellaneous Structures	P 58,281,480.74	40.34%
Grand Total		P 144,483,114.11	100.00%

Cost per lane kilometer = $\frac{P84,257,886.91}{8.13557 \text{ lane km}}$ = **P10,356,728.16 /lane km**
Of Asphalt Overlay
(Part E only)

The estimated cost of **P10,356,728.16** per lane kilometer is due to the design requirements as reflected in the Approved Detailed Engineering Design Plan for the asphalt overlay, which involves the provision of 0.28 meter thick reblocking of concrete pavement, Bituminous Concrete Surface Wearing Course, Hot-Laid; 50mm thick and Emulsified Asphalt, which accounts to **58.31%** of the total project cost, aggregate subbase course, and miscellaneous structures such as reflectorized thermoplastic pavement markings and solar LED street light which accounts to **40.34%** of the total project cost, coupled with recent price escalation and hauling of construction materials at 122.26 km away from the project. Hence, the evaluated cost is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.

PROJECT NO.4

The requested amount of **P150,000,000.00** (inclusive of EAO) for the 8.03063 lane kilometer of Malalao Nat'l Rd (Agbannawag – Malalao – Bulu Sect) Road, K0514+000 – K0516+000, K0512+716 – K0513+000, K516+415 – K0520+000, Tabuk City, Kalinga as submitted, was reduced to **P149,844,012.31** (inclusive of EAO) due to the corrections made on the productivity output, manpower components, and material component. Likewise, the items of work and corresponding quantities were based on the approved Program of Works

(POW), Detailed Engineering Design Plan, and pertinent documents, duly approved by the District Engineer, DPWH Lower Kalinga District Engineering Office.

SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part B	Other General Requirements	P 429,404.25	0.30%
Part C	Earthworks	P 1,323,187.20	0.92%
Part D	Base and Subbase Course	P 423,784.73	0.29%
Part E	Surface Course	P 85,521,822.13	59.14%
Part H	Miscellaneous Structures	P 56,901,273.57	39.35%
Grand Total		P 144,599,471.88	100.00%

Cost per lane kilometer = $\frac{P85,521,822.13}{8.03063 \text{ lane km}}$ = **P10,649,453.67 /lane km**
 Of Asphalt Overlay
 (Part E only)

The estimated cost of **P10,649,453.67** per lane kilometer is due to the design requirements as reflected in the Approved Detailed Engineering Design Plan for the asphalt overlay, which involves the provision of 0.28 meter thick reblocking of concrete pavement, Bituminous Concrete Surface Wearing Course, Hot-Laid; 50mm thick and Emulsified Asphalt, which accounts to **59.14%** of the total project cost, aggregate subbase course, and miscellaneous structures such as reflectorized thermoplastic pavement markings and solar LED street light which accounts to **39.35%** of the total project cost, coupled with recent price escalation and hauling of construction materials at 127.22 km away from the project. Hence, the evaluated cost is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.

PROJECT NO.5

The requested amount of **P12,000,000.00** (inclusive of EAO) for the 0.9262 lane kilometer of Rizal Nat'l Rd (Liwan West – Babalag – Macutay Sect) – K0522+(-569) – K0522+(-092.871), Rizal, Kalinga as submitted, was reduced to **P11,968,598.40** (inclusive of EAO) due to the corrections made on the productivity output, manpower components, and material component. Likewise, the items of work and corresponding quantities were based on the approved Program of Works (POW), Detailed Engineering Design Plan, and other pertinent documents, duly approved by the District - Engineer, DPWH Lower Kalinga District Engineering Office.

SCOPE OF WORK

ITEM NO.	DESCRIPTION	AMOUNT (Total Cost)	PERCENT WEIGHT (%)
Part B	Other General Requirements	P 146,857.40	1.24%
Part C	Earthworks	P 248,923.62	2.13%
Part D	Base and Subbase Course	P 42,914.00	0.37%
Part E	Surface Course	P 11,057,835.86	94.28%
Part H	Miscellaneous Structures	P 232,695.55	1.98%
Grand Total		P 11,729,226.43	100.00%

Cost per lane kilometer = $\frac{P11,057,835.56}{0.9262 \text{ lane km}}$ = **P11,938,928.81 /lane km**
 Of Asphalt Overlay
 (Part E only)

The estimated cost of **P11,938,928.81** per lane kilometer is due to the design requirements as reflected in the Approved Detailed Engineering Design Plan for the asphalt overlay, which involves the provision of 0.28 meter thick reblocking of concrete pavement, Bituminous Concrete Surface Wearing Course, Hot-Laid; 50mm thick and Emulsified Asphalt, which accounts to **94.28%** of the total project cost, aggregate subbase course, and miscellaneous structures such as reflectorized thermoplastic pavement markings and internally illuminated (solar) pavement levelled marker/stud flush type-bi-directional, coupled with recent price escalation and hauling of construction materials at 107.00 km away from the project. Hence, the evaluated cost is considered reasonable as the Unit Costs of the items of work involved are within the range of the prevailing cost of the Department.

ALLAN S. BORRROMEO, CESO III
 Director, Bureau of Construction

CC: Undersecretary ADOR G. CANLAS, CESO IV, for Technical Services and Information Management Service (IMS)
 Assistant Secretary REY PETER B. GILLE, D.M., For Regional Operations in CAR, Regions I, II, IX, X, XI, XII and XIII
 Regional Director KHADAFFY D. TANGGOL, DPWH-Cordillera Administrative Region



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
LOWER KALINGA DISTRICT ENGINEERING OFFICE
Bulanao, Tabuk City, Kalinga, Cordillera Administrative Region



April 15, 2024

MEMORANDUM

FOR : KHADAFFY D. TANGGOL
Regional Director

THRU : ANGELITA B. MABITAZAN
Chief, Planning & Design Division

SUBJECT : Modification CY 2024 GAA – Asset Preservation - Preventive Maintenance - Tertiary Roads - Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105, under the FY 2024 General Appropriations Act

May we submit for review and evaluation the Modification of the project stated below:

FROM	TO
Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105	Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105
Physical Target: 21.768 Lane Kilometer Amount : ₱ 125,000,000.00	Physical Target: 6.93154 Lane Kilometer Amount : ₱ 125,000,000.00

Attached are all Supporting documents based on D.O No. 37, series of 2018 for your ready reference.

For your favorable consideration.


RUBY A. UYAM
District Engineer

CAR 15.1 MAE/ABN/EMJE

CHECKLIST
PROJECT MODIFICATION

Implementing Office : **Lower Kalinga DEO**

Project Name/Location : **ORGANIZATIONAL OUTCOME 1 : Ensure Safe and Reliable National Road System-Asset Preservation Program-Preventive Maintenance - Tertiary Roads-Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105**

Project ID : **P00804227LZ**
Project Allocation : **₱125,000,000.00**

UACS Code : **310103101367000**

- ☒ 1. Modification Request Form
- ☒ 2. AIP
- ☒ 3. Certificate of Availability of Funds
- ☒ 4. Supporting Data & Analysis
 - ☒ a. Road Condition (RBIA Latest Official Database)
 - ☒ b. Traffic Volume Capacity Ratio (for Widening Projects)
 - ☒ c. Bridge Condition (BMS Latest Official Database)
 - ☒ d. Hydraulic & Hydrologic Analysis (for New/Replacement Bridges)
 - ☒ e. RSM Forms (for Road Slips)
 - ☒ f. Project Impact Analysis (for Flood Control Projects)
 - ☒ g. Master Plan (for Flood Control Projects)
- ☒ 5. BP 202
- ☒ 6. Geotagged Photos
 - ☒ a. Hard Copy
 - ☒ b. Electronic Copy
 - ☒ c. Plotted in the GIS Map
- ☒ 7. Certificate of No Overlapping (Certified by DE, Construction and Maintenance Division Chiefs)
- ☒ 8. ROW Clearance
 - ☒ a. District Engineer
 - ☒ b. LGU
- ☒ 9. Environmental Clearances
 - ☒ a. Not Within a "No Build Zone" (MGB)
 - ☒ b. Tree Cutting Permit (If Applicable-EMB)
 - ☒ c. CNC/ECC/EIA (EMB)
- ☒ 10. Social Clearance (not within a Declared Heritage/Cultural Site-NCCA)
- ☒ 11. Certificate of Reasonableness (for Projects with Changes in Unit Cost)
- ☒ 12. Project Details
 - ☒ a. POW
 - ☒ b. DUPA
 - ☒ c. Plans
 - ☒ 1. Coverpage
 - ☒ 2. Summary of Quantities
 - ☒ 3. Cross Section Showing Changes (if Applicable)
 - ☒ d. Materials Source Map
- ☒ 13. Certificate of Local Government Unit

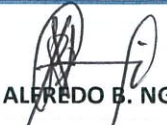
Checked by:


FERLINDA F. DOLIENTE
Engineer III
Chief, Planning Section

A. GENERAL					
1. REGION Cordillera Administrative Region		2. DEO Lower Kalinga District Engineering Office		3. LEGISLATIVE DISTRICT KALINGA (LONE DISTRICT)	
B. ORIGINAL PROJECT			C. PROPOSED REVISED PROJECT		
4. UACS (Unified Account Code Structure as defined in GAA) 310103101367000					
5. Project Id P00804227LZ					
6. Project Category OO1: Ensure Safe and Reliable National Road System					
7. Sub-Program (P/A/P) Asset Preservation - Preventive Maintenance - Tertiary Roads					
8. Operating Unit Central Office			18. Operating Unit (Change subject to DBM approval) Central Office		
9. Type of Work (Enter Details for all Components below)			19. Type of Work (Enter Details for all Components below)		
Component ID	Type of Work		Component ID	Type of Work	
CW1	Preventive Maintenance of Road: Asphalt Overlay		CW1	Preventive Maintenance of Road: Asphalt Overlay	
10. PROJECT DESCRIPTION (as recorded in GAA) Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105			20. PROJECT DESCRIPTION (of the revised project) Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105		
11. ALLOTMENT (P'000) (as recorded in GAA) 125,000			21. REVISED ESTIMATED COST (P'000) (Equal to, or lower than GAA allotment) 125,000		22. CAF (To be obtained from Financial Management office) <input checked="" type="checkbox"/> YES
12. PHYSICAL TARGET (Enter Details for all Components below)			23. PHYSICAL TARGET (Enter Details for all Components below)		
Component ID	Target	Target Unit	Component ID	Target	Target Unit
CW1	21.768	Lane Km	CW1	6.93154	Lane Km
13. UNIT COST (Enter Details for all Components below)			24. UNIT COST (Enter Details for all Components below)		
Component ID	Component Cost (P'000)	Target Unit Cost (P'000/Target Unit)	Component ID	Component Cost (P'000)	Target Unit Cost (P'000/Target Unit)
CW1	120,625	5,541.391	CW1	120,617.71546	17,401.28679
EAO	4,375		EAO	4,375	
				EXCESS	7.28454

14. PROJECT WORK LOCATION (Must be defined in strict accordance with DO 65 Series 2014) Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105, Tabuk City, Kalinga				25. PROJECT WORK LOCATION (Must be defined in strict accordance with DO 65 Series 2014. Also complete "ANNEX A" for National Road projects under OO-1) Bulanao-Paracelis Rd, K0508 + 645 - K0513 + 1105, Tabuk City, Kalinga			
Start X	121.53510	End X	121.5633857	Start X	121.53510	End X	121.55355
Start Y	17.361980	End Y	17.35240060	Start Y	17.361980	End Y	17.326070
15. ROAD CLASSIFICATION (if applicable) Tertiary				26. ROAD CLASSIFICATION (if applicable) Tertiary			
16. IMPLEMENTING OFFICE (Record the Implementing Office of the original project) Lower Kalinga District Engineering Office				27. IMPLEMENTING OFFICE (Record the Implementing Office of the proposed revised project) Lower Kalinga District Engineering Office			
17. PROJECT IMPLEMENTATION PLAN (PIP)				28. PROJECT IMPLEMENTATION PLAN (PIP)			
Planned Start Date		Planned End Date		Planned Start Date		Planned End Date	
25/02/2024		19/12/2024		06/05/2024		28/02/2024	
				29. OVERLAP? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES		30. UNDER WARRANTY? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	

D. ATTACHMENTS & JUSTIFICATIONS	
31. PROJECT IMPACT ANALYSIS ATTACHED? (For Flood Control Projects) <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES <input type="checkbox"/> N/A	
32. TECHNICAL JUSTIFICATION (Explain in detail in Bullet point format; minimum of 2 points) Decrease in physical target for CW1 - Preventive Maintenance of Road: Asphalt Overlay from 27.768 Lane Kilometers to 6.93154 Lane Kilometers due to the following: <ol style="list-style-type: none"> The correct physical target for the given station limits based on GAA (K0508+645 – K0513+1105) is 10.982 lane km. From the corrected physical target of 10.982 lane km. is modified to 6.93154 lane km. The decrease in the physical target/increase in the unit cost is brought about by the introduction/inclusion of other features of roads particularly Item 624(8)-Solar LED Street Light, Pavement Milling and Pavement Reblocking. The project is a 2 lane/50mm thick asphalt overlay and also includes Solar Pavement Studs and Thermoplastic Pavement Markers The utilization of the prevailing construction cost of materials necessary for the completion of all pertinent scopes of work contributed to the variance in unit cost thereon causing a decrease in the target length of the proposed asphalt overlay. The unit cost has also been evaluated and reviewed by the Bureau of Construction (BOC). The original Php 125,000,000.00 estimated cost was reduced to Php 124,992,715.46 resulting in an excess of Php 7,284.54 The derived unit cost is based on the approved Program of Work (POW) with Detailed Unit Price Analysis (DUPA) <p>See also the attached evaluation of the Bureau of Construction on the unit cost of similar type projects. Attached are the following supporting documents: Approved Program of Works (POW) with Detailed Unit Price Analysis (DUPA), Detailed Engineering Design (DED), Certificate of Availability of Funds (CAF), BP 202, Geotagged photos, Certificate of Reasonableness, SLD, and GIS Map.</p>	
33. PHOTOS SUBMITTED <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	
34. A MAP OF THE PROPOSED PROJECT WORK LOCATION SUBMITTED <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	

35. PREPARED BY:**Name:**
ALFREDO B. NGAO-I**Position:**

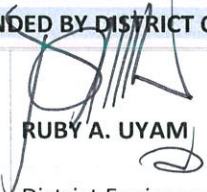
Engineer II

Office:Lower Kalinga District Engineering
Office**Date:****36. REVIEWED BY DISTRICT OFFICE (If Required)****38. REVIEWED BY REGIONAL OFFICE****Name:**
EUGENE MICHAEL A. ESPITA**Name:**
ANGELITA B. MABITAZAN**Position:**

OIC-Chief, Planning & Design Section

Position:

Chief, Planning and Design Division

Date:**Date:****37. RECOMMENDED BY DISTRICT OFFICE (If Required)****39. RECOMMENDED BY REGIONAL OFFICE****Name:**
RUBY A. UYAM**Name:**
KHADAFFY D. TANGGOL**Position:**

District Engineer

Position:

Regional Director

Date:**Date:**

UACS (Unified Account Code Structure as defined in GAA)

310103101367000

Project Id

P00804227LZ

40. DPWH OFFICE OF THE UNDERSECRETARIES FOR OPERATIONS**Primary Reason for Request (based on Category of Modification): (choose one)**

Category A	Category B	Category C	Category D	Impact
<input type="checkbox"/> Typographical error on Project Description	<input type="checkbox"/> Overlapping Sections <input type="checkbox"/> Change in Station Limits <input type="checkbox"/> Change in Physical Target	<input type="checkbox"/> No such Barangay <input type="checkbox"/> No such City or Municipality	<input type="checkbox"/> Change in (IO), requiring a change in the (OU)	<input type="checkbox"/> No change or decrease in unit cost <input type="checkbox"/> 20% or less increase in unit cost <input type="checkbox"/> > 20% increase in unit cost

Reviewed by Office of the Undersecretary for Operations

Name:	Engr. MANUEL L. SINGSON	Engr. ANTONIO V. SOBREVINAS, JR.
Signature		
Position:	Project Manager I	Project Manager III
Date:	7/18/24	7/17/24

41. DPWH PLANNING SERVICE

Category of Modification (please check the appropriate)	<input type="checkbox"/> Category A – Typographical Error <input type="checkbox"/> Category B – Change in Station Limits <input type="checkbox"/> Category C – Change in Location, due to non-existing location <input type="checkbox"/> Category D – Change in Operating Unit (requires DBM approval) <input type="checkbox"/> Modification does not comply with DBM Categories
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Reviewed by Planning Service

Name:	ANNA ANDREA M. NOCHE	Name:	PETER PAUL R. CORTEZ
Signature		Signature:	
Position:	Regional Coordinator	Position:	OIC - Chief of Programming Division
Date:	8/5/24	Date:	

ANNEX A: Project Work Location Details for National Roads

Component ID	Section ID	Start Limit LRP + Disp	End Limit LRP + Disp	Start Chainage	End Chainage	Length (m)	Type of Work	Detail Scope of Work	Target Unit	Physical Target
P00804227LZ - CW1	S00578LZ	K0508 + 645	K0513 + 1105	9769	15211	5442	Preventive Maintenance of Road: Asphalt Overlay	Asphalt Overlay 50mm with Correction, Solar Studs, Pavement Markings	Lane Kilometer	6.93154