



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
OFFICE OF THE SECRETARY
Bonifacio Drive, Port Area Manila



MAY 26 2025

MEMORANDUM

FOR : MANUEL M. BONOAN
Secretary
This Department

This refers to the Memorandum dated March 27, 2025 of **DPWH NCR Regional Director LORETA M. MALALUAN, CESO IV**, endorsing the request for the approval of the Modification of Dennis E. Sandoval, District Engineer, North Manila District Engineering Office, of the project under FY 2025 General Appropriation Act (GAA), to wit;

As per GAA/Original			As Modified		
Project Description					
UACS No. 310103101726000 Project ID: P00900368LZ					
OO1: Ensure Safe and Reliable National Road System			OO1: Ensure Safe and Reliable National Road System		
Asset Preservation - Preventive Maintenance - Tertiary Roads			Asset Preservation - Preventive Maintenance - Tertiary Roads		
H. Lopez Blvd. K0006 + 949.00 - K0007 + 421.00			H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00		
Physical Target	Unit Cost (P'000)	Allocation	Physical Target	Unit Cost (P'000)	Allocation
CW1 - Preventive Maintenance of Road: Asphalt Overlay 2.220 lane km	P21,734.23 / lane km	P 48,250,000.00	CW1 - Preventive Maintenance of Road: Asphalt Overlay 1.888 lane km	P 25,556.14 / lane km <i>51.0M/km.</i>	P 48,250,000.00
EAO	-	P 1,750,000.00	EAO	-	P 1,750,000.00
Total :		P50,000,000.00	Total :		P50,000,000.00
Justifications provided by the requesting Implementing Office: <i>This overlay unit cost is higher than average.</i>					
- Change in physical target is based on the actual specifications of the proposed project, which includes a measured length of 472 lineal meters and incorporates four (4) lanes, along with re-blocking works necessary due to the prevailing site conditions. - Change in Station Limits is due to use of outdated Straight-Line Diagram as reference for the LRP Station Limits during program preparation.					
Attached are the following supporting documents: - FY 2025 DPWH Infrastructure Program (Based on GAA), Project Modification Request Form, BP 202, Geo-tagged photos, GIS Map, Straight Line Diagram (SLD), Certificate of Availability of Funds/Allotment, Certificate of Reasonableness of Cost Estimate (CRCE), Program of Works with Detailed Unit Price Analysis, and DED Plans.					

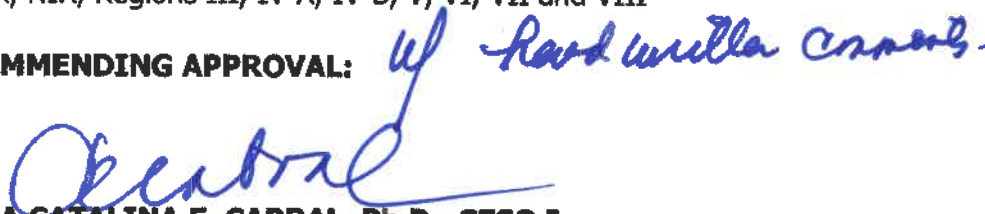
Having complied with all the documentary requirements under Department Order No. 23, Series of 2023 and the other supplemental guidelines, we are respectfully requesting that the abovementioned project under FY 2025 GAA be modified.

For the Secretary's favorable consideration


NERIE D. BUENO, CESO III

Assistant Secretary for Regional Operations
In NCR, NIR, Regions III, IV-A, IV-B, V, VI, VII and VIII

RECOMMENDING APPROVAL:


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

Undersecretary for Planning and
Public-Private Partnership Service


ROBERTO R. BERNARDO, CESO I

Undersecretary for Regional Operations
In NCR, NIR, Regions III, IV-A, IV-B, V, VI, VIII and VIII

APPROVED/DISAPPROVED:


MANUEL M. BONOAN
Secretary

3.3 KCS/NDB/RRB
Project ID: P00900368LZ

Department of Public Works and Highways
Office of the Secretary



WIN5F08553



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
OFFICE OF THE SECRETARY
Bonifacio Drive, Port Area Manila



MAY 26 2025

MEMORANDUM

FOR : MANUEL M. BONOAN
Secretary
This Department

This refers to the Memorandum dated March 27, 2025 of **DPWH NCR Regional Director LORETA M. MALALUAN, CESO IV**, endorsing the request for the approval of the Modification of Dennis E. Sandoval, District Engineer, North Manila District Engineering Office, of the project under FY 2025 General Appropriation Act (GAA), to wit;

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EAO	-	P 1,750,000.00	EAO	-	P 1,750,000.00
	Total :	P50,000,000.00		Total :	P50,000,000.00

Justifications provided by the requesting Implementing Office:

- Change in physical target is based on the actual specifications of the proposed project, which includes a measured length of 472 lineal meters and incorporates four (4) lanes, along with re-blocking works necessary due to the prevailing site conditions.
- Change in Station Limits is due to use of outdated Straight-Line Diagram as reference for the LRP Station Limits during program preparation.

Attached are the following supporting documents:

- FY 2025 DPWH Infrastructure Program (Based on GAA), Project Modification Request Form, BP 202, Geo-tagged photos, GIS Map, Straight Line Diagram (SLD), Certificate of Availability of Funds/Allotment, Certificate of Reasonableness of Cost Estimate (CRCE), Program of Works with Detailed Unit Price Analysis, and DED Plans.

Having complied with all the documentary requirements under Department Order No. 23, Series of 2023 and the other supplemental guidelines, we are respectfully requesting that the abovementioned project under FY 2025 GAA be modified.

For the Secretary's favorable consideration


NERIE D. BUENO, CESO III

Assistant Secretary for Regional Operations
In NCR, NIR, Regions III, IV-A, IV-B, V, VI, VII and VIII

RECOMMENDING APPROVAL:


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

 Undersecretary for Planning and
Public-Private Partnership Service  


ROBERTO R. BERNARDO, CESO I

Undersecretary for Regional Operations
In NCR, NIR, Regions III, IV-A, IV-B, V, VI, VIII and VIII

APPROVED/DISAPPROVED:


MANUEL M. BONOAN
Secretary 

OS/06/24 3.3 KCS/NDB/RRB
Project ID: P00900368LZ 

Project Modification Evaluation Form

Date of Evaluation: _____

UACS:	310103101726000	Project ID:	P00900368LZ	Fund Source:	FY 2025 GAA, R.A. 12116
Region:	NCR	Implementing Office:	North Manila District Engineering Office	Appropriations (Php):	P50,000,000
Programs/ Activities / Projects (P/A/P):	001: Ensure Safe and Reliable National Road System				
Name of Project (as per GAA):	FROM	H. Lopez Blvd. K0006 + 949.00 - K0007 + 421.00			
Name of Project (as Modified):	TO	H. Lopez Blvd. K0007 + 473.33 - K0007 + 945.00			

- A. Implementing Office Justification for Modification:** Change in physical target is based on the actual specifications of the proposed project, which includes a measures length of 472 lineal meters and incorporates four (4) lanes, along with re-blocking works necessary due to the prevailing site conditions.
Change in station limits is due to use of outdated Straight-Line Diagram as reference for the LRP Station limits during program preparation.

A.1 ☒ Certificate of Reasonableness of Cost Estimate by **DE DENNIS E. SANDOVAL / RD LORETA M. MALALUAN** dated: **April 25, 2025**

B. PER PLANNING SERVICE EVALUATION

B.1 ☒ **PROJECT MODIFICATION ON PROJECT DESCRIPTION**

B.1.1 ☐ Typographical Error/s

B.1.2 ☐ Change in Location (for non-existent locations only)

B.1.3 ☒ Change in Station Limits

B.1.4 ☐ Addition/ Deletion of Word/s

B.2 ☒ **PROJECT MODIFICATION/ADJUSTMENTS ON PROJECT COMPONENTS**

B.2.1 ☒ Change in Targets

B.2.2 ☐ Change in Scope of Work

B.2.3 ☐ Change in Component Amount

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

B.2.3.2 ☐ Deletion of Component

B.2.3.2 ☐ Movement of Funds between Components

C. RELEASE OF FUNDS CLASSIFICATION

C.1 ☐ GAAAO

C.2 ☒ For Issuance of SARO (FISARO)

C.2.1 ☐ DPWH Initiatives (D.I.)

C.2.2 ☒ Non-DPWH Initiatives (C.I.)

C.2.3 ☐ Others (such as TRIP, etc)

☒ **Certificate of Availability of Funds/ Allotment**

signed by: **MELANIE M. UNTALAN**

date: **April 24, 2025**

D. RESULTANT AFTER MODIFICATION

D.1 ☐ Additional Project Component/s

D.2 Component/s:

COMP	Type Of Work (TOW)	Unit Cost	TARGET	Unit of Measure	Increase / Decrease (%)		
					Unit Cost (FROM/TO)	Unit Cost (BOC/TO)	Target
CW1	Preventive Maintenance of Road: Asphalt Overlay	25,556,144.07	1.888	lane-km	17.58%	-35.06%	-14.95%
CW2							
CW3							

see attached Project Modification Component Detail Matrix (PMCDM)

E. AS EVALUATED

E.1 ☒ ALLOWED as per the GAA Provisions

E.2 ☐ NOT ALLOWED as per the GAA Provisions

E.3 Remarks (to be filled out by Planning Service):

Evaluated By:

ALEX G. BOTE

Director, Planning Service

Noted By:

CONSTANTE A. LEANES, JR., CESO III

Assistant Secretary, Planning Service and the Legislative Liaison Office

F. Approving Authority as per latest Approved Guidelines on Modification of Allotment under the GAA

F.1 ☒ Secretary

F.2 ☐ Undersecretary for Operations

☒ Recommended for Approval

Remarks:

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

By: **DRWH - OSEC**
Control No. **20-07075**
IDTS No. **06660**

MAY 22 2025

Project Modification Component Detail Matrix
(attachment to the Project Modification Evaluation Form)

UACS:	310103101726000	Project ID:	P00900368LZ	Fund Source:	FY 2025 GAA, R.A. 12116
Region:	NCR	Implementing Office:	North Manila District Engineering Office	Appropriations (Php):	₱50,000,000

Comp.	Component Amount (Php)		Type of Work		Detailed Scope of Work	
	FROM	TO	FROM	TO	FROM	TO
CW1	48,250,000	48,250,000	Preventive Maintenance of Road: Asphalt Overlay	Preventive Maintenance of Road: Asphalt Overlay	Asphalt Overlay 100mm with minor corrections	Asphalt Overlay 100mm with minor corrections
CW2						
CW3						
EAO	1,750,000	1,750,000				

COMP	Unit Cost			TARGET			Unit of Measure
	FROM	BOC	TO	FROM	BOC	TO	
CW1	21,734,234.23	39,351,425.15	25,556,144.07	2.22	1.23	1.89	lane-km
CW2							
CW3							
EAO							

COMP	Increase / Decrease (%)		
	Unit Cost (FROM/TO)	Unit Cost (BOC/TO)	Target
CW1	17.58%	-35.06%	-14.95%
CW2			
CW3			
EAO			

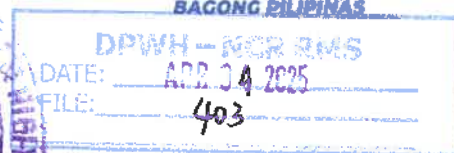
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Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NATIONAL CAPITAL REGION
2nd Street, Port Area, Manila



BAGONG PILIPINAS



March 31, 2025

MEMORANDUM

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

THRU : Undersecretary **ROBERTO R. BERNARDO, CESO I**
For Regional Operations in NCR, NIR,
Regions III, IV-A, IV-B, V, VI, VII and VIII

SUBJECT : Request for Modification of Project under FY 2025 GAA

We are respectfully forwarding the memorandum dated March 26, 2025 of **District Engineer DENNIS E. SANDOVAL**, North Manila District Engineering Office, this Region, requesting the modification of the project included in the FY 2025 General Appropriations Act (GAA), R.A. 12116, to wit:

As per GAA/Original			As Modified		
Project Description					
UACS No. 310103101726000 Project ID: P00900368LZ					
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	Total :	P50,000,000.00		Total :	P50,000,000.00
Justifications:					
- Change in physical target is based on the actual specifications of the proposed project, which includes a measured length of 472 lineal meters and incorporates four (4) lanes, along with re-blocking works necessary due to the prevailing site conditions. - Change in Station Limits is due to use of outdated Straight-Line Diagram as reference for the LRP Station Limits during program preparation.					

The following documents are attached for ready reference:

1. FY 2025 DPWH Infrastructure Program (Based on GAA)
2. Project Modification Request Form
3. BP 202
4. Geo-tagged photos
5. GIS Map
6. Straight Line Diagram (SLD)
7. Certificate of Availability of Funds/Allotment
8. Certificate of Reasonableness of Cost Estimate (CRCE)
9. Program of Works with Detailed Unit Price Analysis
10. DED Plans

Early favorable response to expedite project implementation is highly appreciated.


LORETA M. MALALUAN, CESO IV
Regional Director

NCR.1 JED / RMM



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan, Manila



March 26, 2025

MEMORANDUM

FOR : **Regional Director LORETA M. MALALUAN, CESO IV**
National Capital Region

THRU : **Division Chief LIBERATO R. MERCADO**
Planning and Design Division
National Capital Region

SUBJECT : **Request for Modification**

Respectfully submitted are the documents needed for the request of modification on the physical target and station limit for the proposed FY 2025 Infrastructure Program under the 1st Congressional District City of Manila, to wit:

<i>As per GAA /Original</i>	<i>As Modified</i>
Preventive Maintenance – Tertiary Roads - H. Lopez Blvd. K0006 + 949.00 - K0007 + 421.00	Preventive Maintenance – Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00
Station Limit : K0006 + 949.00 - K0007 + 421.00	Station Limit : K0007 + 473.00 - K0007 + 945.00
Location : Manila City	Location : Manila City
Allocation : P 50,000,000.00	Allocation : P 50,000,000.00
Physical Target : 2.22 ln.km.	Physical Target : 1.888 ln.km.
Scope of Work : Asphalt Overlay	Scope of Work : Asphalt Overlay

Favorable consideration on this request is greatly appreciated.


DENNIS E. SANDOVAL

 District Engineer
North Manila District Engineering Office

Enclosed:

1. *Modification Request Form (DPWH-QMSP-03-01 Rev 01)*
2. *Certificate of Availability of Funds (CAF)*
3. *Annual Infrastructure Program based on GAA FY 2025*
4. *Geotagged Photos*
5. *GIS Map*
6. *Program of Works*
7. *Detailed Unit Price Analysis (DUPA)*
8. *Plan (Cover Page, Summary of Quantities, SLD)*

NCR.10.1  ASM



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan, Manila



March 26, 2025

MEMORANDUM

FOR : **Regional Director LORETA M. MALALUAN, CESO IV**
National Capital Region

THRU : **Division Chief LIBERATO R. MERCADO**
Planning and Design Division
National Capital Region

SUBJECT : **Request for Modification**

Respectfully submitted are the documents needed for the request of modification on the physical target and station limit for the proposed FY 2025 Infrastructure Program under the 1st Congressional District City of Manila, to wit:

<i>As per GAA /Original</i>	<i>As Modified</i>
Preventive Maintenance – Tertiary Roads - H. Lopez Blvd. K0006 + 949.00 - K0007 + 421.00	Preventive Maintenance – Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00
Station Limit : K0006 + 949.00 - K0007 + 421.00	Station Limit : K0007 + 473.00 - K0007 + 945.00
Location : Manila City	Location : Manila City
Allocation : P 50,000,000.00	Allocation : P 50,000,000.00
Physical Target : 2.22 In.km.	Physical Target : 1.888 In.km.
Scope of Work : Asphalt Overlay	Scope of Work : Asphalt Overlay

Favorable consideration on this request is greatly appreciated.

DENNIS E. SANDOVAL

District Engineer

North Manila District Engineering Office

Enclosed:

1. *Modification Request Form (DPWH-QMSP-03-01 Rev 01)*
2. *Certificate of Availability of Funds (CAF)*
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6. *Program of Works*
7. *Detailed Unit Price Analysis (DUPA)*
8. *Plan (Cover Page, Summary of Quantities, SLD)*

NCR.10.1 ASM

Modification Request Form

DPWH-QMSP-03-01 Rev 01

A. GENERAL

1. REGION

National Capital Region

2. DEO

North Manila District Engineering Office

3. LEGISLATIVE DISTRICT

Manila City 1st Legislative District

B. ORIGINAL PROJECT

4. UACS (Unified Account Code Structure as defined in GAA)

310103101726000

5. Project Id

P00900368LZ

6. Project Category

001: Ensure Safe and Reliable National Road System

7. Sub-Program (P/A/P)

Asset Preservation - Preventive Maintenance - Tertiary Roads

8. Operating Unit

Central Office

9. Type of Work (Enter Details for all Components below)

Component ID	Type of Work
CW1	Preventive Maintenance of Road: Asphalt Overlay

10. PROJECT DESCRIPTION (as recorded in GAA)

H. Lopez Blvd. K0006 + 949.00 - K0007 + 421.00

11. ALLOTMENT (P'000) (as recorded in GAA)

P 50,000.00

12. PHYSICAL TARGET (Enter Details for all Components below)

Component ID	Target	Target Unit
CW1	2.22	Lane Km

13. UNIT COST (Enter Details for all Components below)

Component ID	Component Cost (P'000)	Target Unit Cost (P'000/Target Unit)
CW1	P 48,250.00	P 21,734.23/ln.km.
EA0	P 1,750.00	

C. PROPOSED REVISED PROJECT

18. Operating Unit (Change subject to DBM approval)

Central Office

19. Type of Work (Enter Details for all Components below)

Component ID	Type of Work
CW1	Preventive Maintenance of Road: Asphalt Overlay

20. PROJECT DESCRIPTION (of the revised project)

H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

21. REVISED ESTIMATED COST (P'000) (Equal to, or lower than GAA allotment)

P 50,000.00

22. CAF (To be obtained from Financial Management office)

☒ YES

23. PHYSICAL TARGET (Enter Details for all Components below)

Component ID	Target	Target Unit
CW1	1.888	Lane Km

24. UNIT COST (Enter Details for all Components below)

Component ID	Component Cost (P'000)	Target Unit Cost (P'000/Target Unit)
CW1	P 48,250.00	P 25,556.14/ln.km.
EA0	P 1,750.00	

Modification Request Form

14. PROJECT WORK LOCATION (Must be defined in strict accordance with DO 65 Series 2014)

H. Lopez Blvd. K0006 + 949.00 - K0007 + 421.00

Start X 120.963805 End X 120.962162

Start Y 14.631912 End Y 14.6235484

15. ROAD CLASSIFICATION (if applicable)

Tertiary

16. IMPLEMENTING OFFICE (Record the Implementing Office of the original project)

DPWH - North Manila District Engineering Office

17. PROJECT IMPLEMENTATION PLAN (PIP)

Planned Start Date

Planned End Date

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 and MVUC)

H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

Start X 120.963805 End X 120.962162

Start Y 14.631912 End Y 14.6235484

26. ROAD CLASSIFICATION (if applicable)

Tertiary

27. IMPLEMENTING OFFICE (Record the Implementing Office of the proposed revised project)

DPWH - North Manila District Engineering Office

28. PROJECT IMPLEMENTATION PLAN (PIP)

Planned Start Date

Planned End Date

May 01, 2025

August 28, 2025

29. OVERLAP?

☒ NO ☐ YES

30. UNDER WARRANTY?

☒ NO ☐ YES

D. ATTACHMENTS & JUSTIFICATIONS

31. PROJECT IMPACT ANALYSIS ATTACHED? (For Flood Control Projects)

☐ NO ☐ YES ☒ N/A

32. TECHNICAL JUSTIFICATION (Explain in detail in Bullet point format; minimum of 2 points)

- Change in physical target is based on the actual specifications of the proposed project, which includes a measured length of 472 lineal meters and incorporates four (4) lanes, along with re-blocking works necessary due to the prevailing site conditions.
- Change in Station Limits is due to use of outdated Straight-Line Diagram as reference for the LRP Station Limits during program preparation.

33. PHOTOS SUBMITTED

☐ NO ☒ YES

34. A MAP OF THE PROPOSED PROJECT WORK LOCATION SUBMITTED

☐ NO ☒ YES

35. PREPARED BY:

Name:

DARWIN K. DIMAANO

Position:

Engineer II

Office:

DPWH - North Manila District Engineering Office

Date:

3/26/2025

36. REVIEWED BY DISTRICT OFFICE (If Required)

Name:

ARLENE S. MENDOZA

Position:

OIC-Chief of Planning Section

Date:

3/26/2025

38. REVIEWED BY REGIONAL OFFICE

Name:

LIBERTE B. MERCADO

Position:

Chief of Planning Division

Date:

37. RECOMMENDED BY DISTRICT OFFICE (If Required)

Name:

DENNIS E. SANDOVAL

Name:

LORITA M. MALACAL

Modification Request Form

Position:	District Engineer	Position:	Regional Director
Date:	3/26/2025	Date:	

UACS (Unified Account Code Structure as defined in GAA)

310103101726000

Project Id

P00900368L2

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
☐ Typographical error on Project Description ☐ Addition/Deletion of Words	☐ Overlapping Sections ☒ Change in Station Limits ☒ Change in Physical Target	☐ No such Barangay ☐ No such City or Municipality	☐ Change in (IO), requiring a change in the (OU)	☐ No change or decrease in unit cost ☒ 20% or less increase in unit cost ☐ > 20% increase in unit cost

Reviewed by Office of the Undersecretary for Operations

Name: BENIGNA C. LAFORTEZA

Signature: 

Position: Project Manager I

Date:

41. DPWH PLANNING SERVICE

Category of Modification (please check the appropriate)	☐ Category A – Typographical Error; Addition/Deletion of Words ☒ Category B – Change in Station Limits; Change in Target ☐ Category C – Change in Location, due to non-existing location ☐ Category D – Change in Operating Unit (requires DBM approval) ☐ Modification does not comply with as per GAA Provisions
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Reviewed by Planning Service*

Name: AVIGAIL L. MENDIOLA

Signature: 

Position: Regional Coordinator

Date: 05 Mar. 2025

Name: PETER PAUL R. CORTEZ

Signature: 

Position: Chief of Programming Division

Date:

*Please refer to the Request Evaluation Form (DPWH-QMSP-03-02 Rev 01) for the complete details of evaluation

ANNEX A: Project Work Location Details for National Roads

[illegible]

PROPC FOR NEW OR EXPANDED LOCALLY-FUNDED PROJECT

1. Proposal/Project Name	Preventive Maintenance – Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00				
2. Implementing Department/Agency	NCR - North Manila District Engineering Office				
3. Priority Ranking No.					
4. Categorization	☒ New	☒ Infrastructure			
	☐ For Issuance of MYCA				
	☐ Expanded/Revised	☐ Non-Infrastructure			
5. NEDA Project ID:					
6. Total Proposal Cost:	₱50,000,000.00				
7. Description:	Asphalt Overlay				
8. Purpose	To improve the riding surface of the roads and for the safety of motorists and pedestrians				
9. Beneficiaries:	Local Communities, Local Government Unit				
10. Implementation Periods:	ORIGINAL Start Date: May 01, 2025 Finish date: August 29, 2025 REVISD Start Date: Finish date: 				
11. Pre-Requisites:	Approving Authorities	Reviewed/Approved			
		Yes	No	Not Applicable	Remarks
	NEDA Board	☐	☐	☐	
	NEDA Board-ICC	☐	☐	☐	
	DPWH Certification	☒	☐	☐	
	DPWH MOA	☐	☐	☐	
	DPWH Costing	☒	☐	☐	
	DENR Clearance	☐	☐	☐	
	RDC Consultation	☒	☐	☐	
	CSO Consultation	☐	☐	☐	
	List of Locations	☐	☐	☐	
	List of Beneficiaries	☐	☐	☐	
	Others (please specify)				

12. Financial (in P'000) and Physical Details**12.1 PAP ATTRIBUTION BY EXPENSE CLASS**

PAP (A)	2023 (B)	2024 (C)	2025 (D)
Asphalt Overlay		₱ -	₱ 50,000.00
GRAND TOTAL			₱ 50,000.00

12.2 PHYSICAL TARGETS

Physical Accomplishments (A)	TARGETS		
	2023 (B)	2024 (C)	2025 (D)
Ln. Km.			1.888

12.3. TOTAL PROJECT COST

Expense Class	Total Project Cost
Personnel Services (PS)	
Maintenance and Other Operating Expenses (MOOE)	
Financial Expenses (FINEX)	
Capital Outlay (CO)	P 50,000.00
GRAND TOTAL	P 50,000.00

12.4. REQUIREMENTS FOR OPERATING COST OF INFRASTRUCTURE PROJECT

For Infrastructure projects, show the estimated ongoing operating costs to be included in Forward Estimates

PAP (A)	2025 (B)	2026 (C)
Asphalt Overlay		
GRAND TOTAL		

12.5. COSTING BY COMPONENT(S)

COMPONENTS (A)	PS (B)	MOOE (C)	CO (D)	FINEX (E)	TOTAL (F)
Roads			P 50,000.00		P50,000.00
GRAND TOTAL					P50,000.00

12.6. LOCATION OF IMPLEMENTATION

Location (A)	PS (B)	MOOE (C)	CO (D)	FINEX (E)	TOTAL (F)
Region : NCR			P50,000.00		P50,000.00
District : I					
Municipality : Manila					
GRAND TOTAL					P50,000.00

Prepared By:	Certified Correct:	Approved:	Date:
 CECILIA C. BATALLA Budget Officer	 ARLENE S. MENDOZA Planning Officer	 MELANIE M. UNTALAN Chief Accountant	 DENNISE. SANDOVAL Head of Agency
			26/03/2025 DAY/MO/YEAR



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan, Manila



April 24, 2025

CERTIFICATION OF AVAILABILITY OF ALLOTMENT

This is to certify that the amount of **Forty-Nine Million Five Hundred Thousand Pesos & 00 /100 only (P49,500,000.00)** intended for the **Asset Preservation - Preventive Maintenance - Tertiary Roads – H. Lopez Blvd. K0006 + 949.00 - K0007 + 421.00**. Released under **SR2025-04-012872** dated **April 22, 2025** under **RA 12116** is still available to date.


MELANIE M. UNTALAN
Accountant III
Chief, Finance Section

NOTED:


DENNIS E. SANDOVAL
District Engineer

NCR.10.4 cmc/mmu



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan, Manila



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MELANIE M. MONTALAN
Accountant III
Chief, Finance Section

NOTED:

DENNIS E. SANDOVAL
District Engineer

NCR.10.4 cmc/mmw



Republic Of The Philippines

DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

Bonifacio Drive, Port Area, Manila

SUB-ALLOTMENT ADVICE

CY 2025

The District Engineer

Regional Office NCR - North Manila DEO
Nagtahan, Manila

Sub-Allotment No. : SR2025-04-012872

Date : April 22, 2025

Fund : 01101101 - Regular Agency Fund - General Fund - New General Appropriations - Specific Budgets of National Government Agencies

Legal Basis : FY 2025 RA 12116 Regular 2025 CURRENT

You are hereby authorized to incur obligations not exceeding the amount indicated in accordance with SARO issued by the DBM. Obligation & disbursement must be in accordance w/ generally accepted accounting & auditing rules & regulations & the sole responsibility of the Implementing Office. The allotment herein released shall be valid for obligation until December 31, 2025

P.P.A. Code	Expense Class	Expense Object Code	Particulars	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Total
310103101726000.EAD	CO	50604030-0 1	18-001-01-00000-PREXC-01.3 101 ASSET PRESRV'N PROG	0.00	1,250,000.00	0.00	0.00	1,250,000.00
310103101726000.PC	CO	50604030-0 1	18-001-01-00000-PREXC-01.3 101 ASSET PRESRV'N PROG	0.00	48,250,000.00	0.00	0.00	48,250,000.00

Special Allotment: SARO-BMB-A-25-0009037

*** FORTY NINE MILLION FIVE HUNDRED THOUSAND PESOS ***

Capital Outlay - Asset Preservation Program - Preventive Maintenance - Tertiary Roads
Release of funds for H. Lopez Blvd. K0006 + 949.00 - K0007 + 421.00 - P50M. Per memorandum of Undersecretary Maria Catalina E. Cabral, Ph.D., CESO I duly approved by Secretary Manuel M. Boncan dated April 15, 2025.

Prepared by:

Certified as to
Availability of Funds

Recommending Approval

APPROVED:

PAUL JOHN V. BENAFLORENDA

DOROTHY S. DELIZO

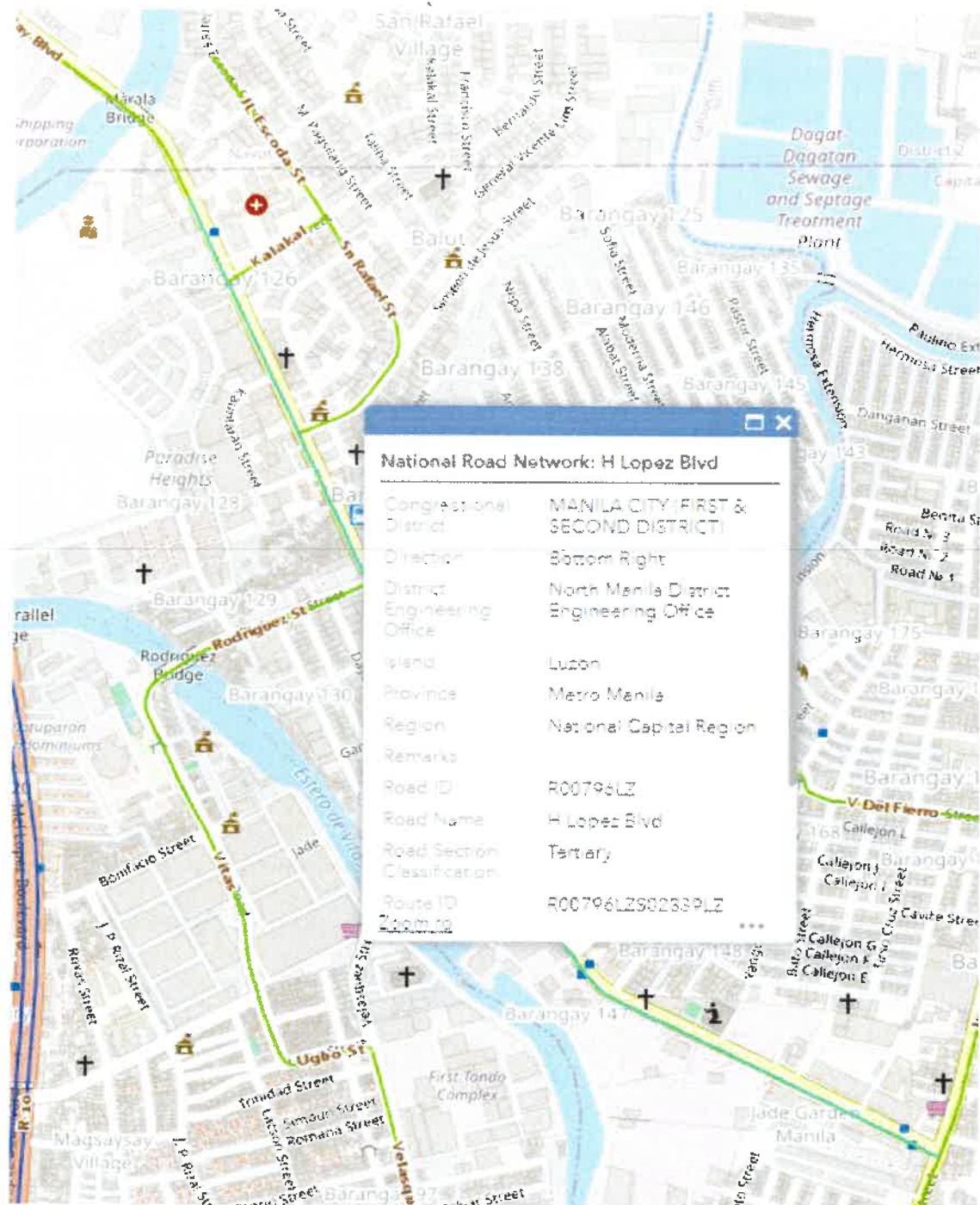
DEBORAH B. STA. MARIA, CHIEF
BUDGET DIVISION

GENEVEVE E. CUARESMA
DIRECTOR IV, FS

Date/Time Printed April 23, 2025 07:58:22 AM

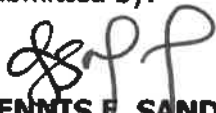
Page 1 of 1
No. 396503

Preventive Maintenance Tertiary Roads - H. Lopez Blvd. R0007 + 473.00 - K0007 + 945.00



ARCGIS MAP

Submitted by:


DENNIS E. SANDOVAL
 District Engineer

Preventive Maintenance Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00



H. Lopez Blvd.	
LRP START:	Start
COORDINATES:	14.631912, 120.963805
DATE TAKEN:	January 16, 2025

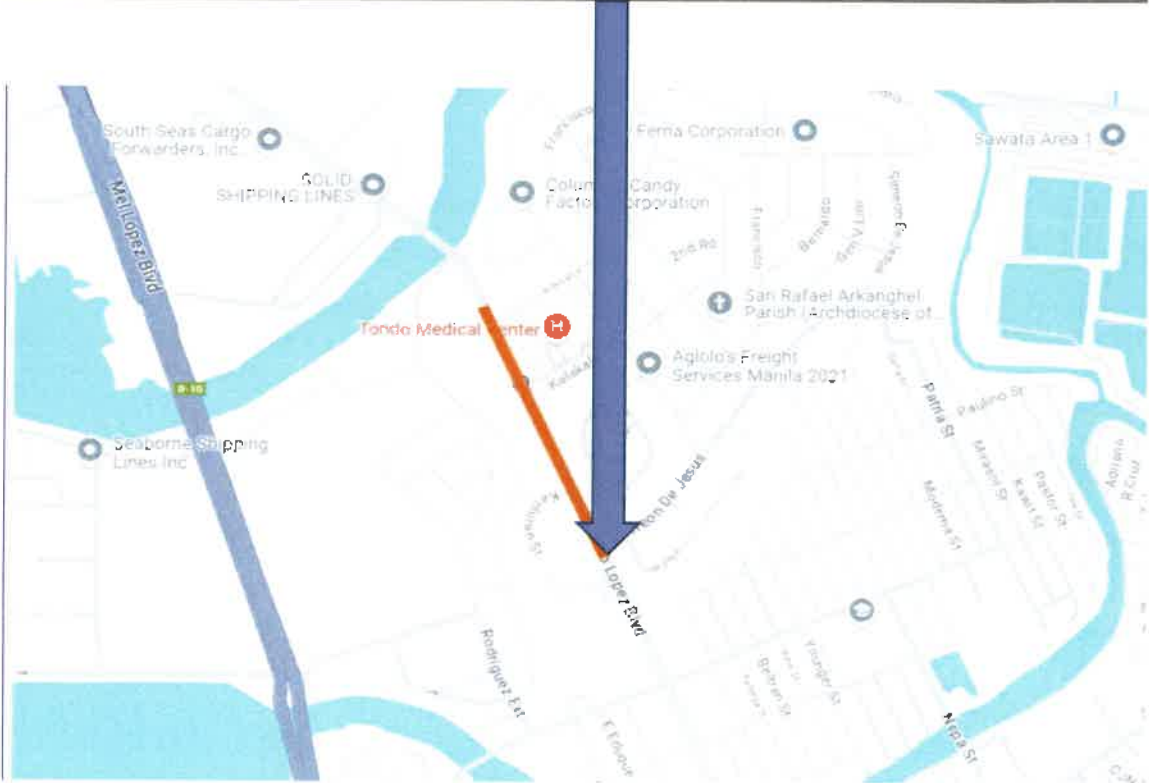


179 Honorio Lopez Blvd, Tondo, Manila, Metro Manila, Philippines

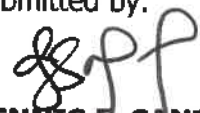
January 16, 2025

Latitude 14.6319118

Longitude 120.9638050



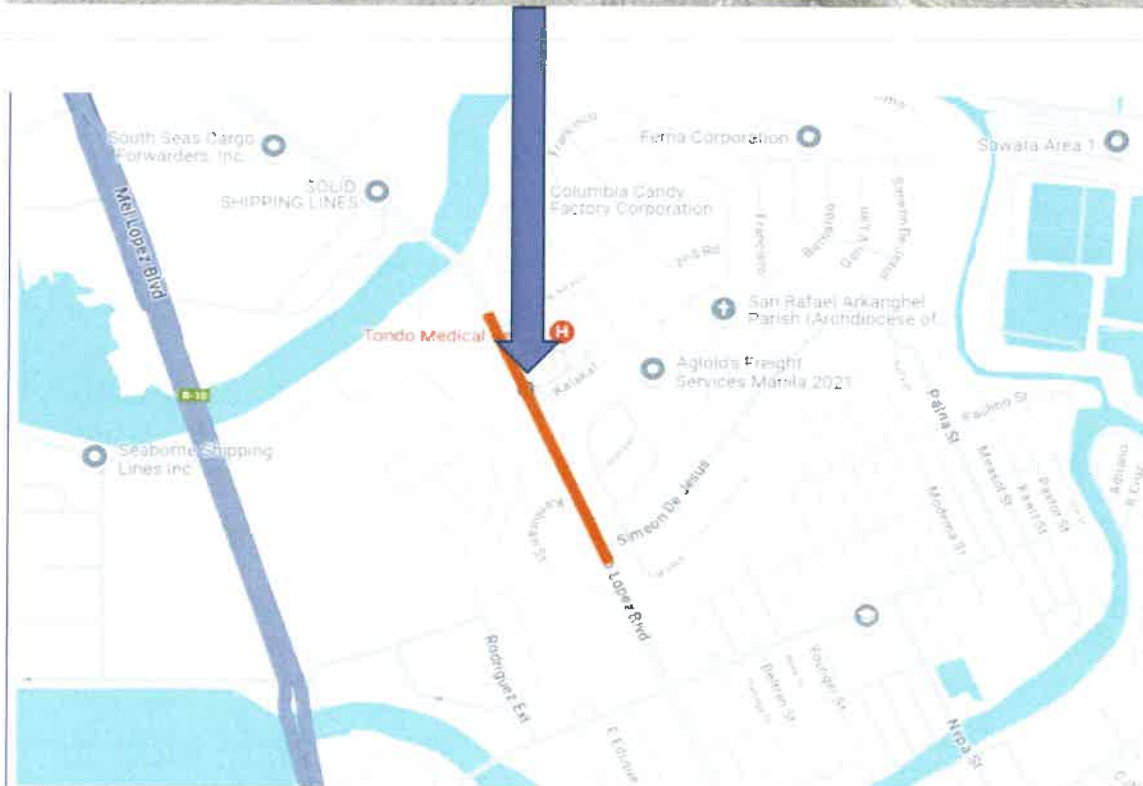
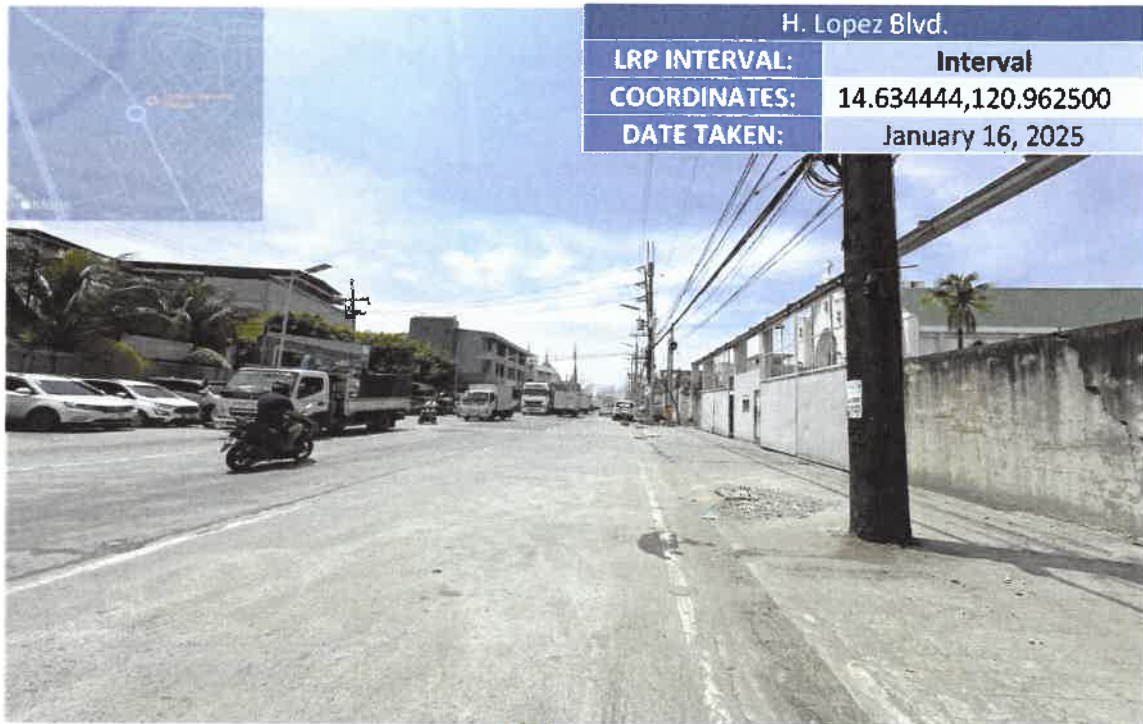
Submitted by:



DENNIS E. SANDOVAL

District Engineer

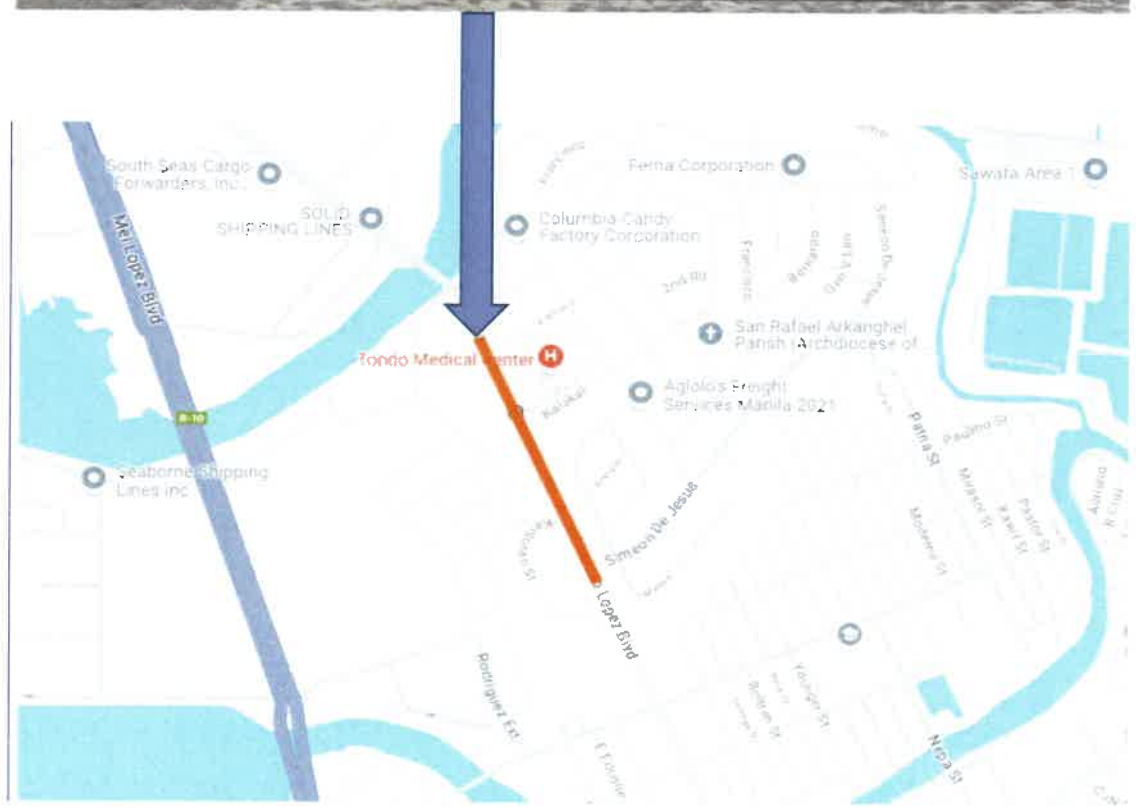
Preventive Maintenance Tertiary Roads - H. Lopez Blvd. KJ007 + 473.00 - K0007 + 945.00



Submitted by:

[Signature]
DENNIS E. SANDOVAL
 District Engineer-4

Preventive Maintenance Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00



Submitted by:


DENNIS E. SANDOVAL
District Engineer



25 APR 2025

Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
National Capital Region
Nagtahan Street, Sta. Mesa, Manila

CERTIFICATE OF REASONABLENESS OF COST ESTIMATE

Project : Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00
Station Limits : K0007+473.00 -- K0007+945.00
Location : Manila City

SCOPE OF WORK

A. ROADS

ITEM No.	DESCRIPTION	AMOUNT (Total Cost)	Percent (Weight)
Part A	Facilities of the Engineer	177,643.81	0.368%
Part B	Other General Requirements	1,012,494.32	2.098%
Part C	Earthwork	873,540.23	1.810%
Part D	Subbase and Base Course	104,560.41	0.217%
Part E	Surface Courses	45,084,943.58	93.441%
Part G	Drainage and Slope Protection Structures	863,667.33	1.790%
Part H	Miscellaneous Structures	132,899.64	0.275%
TOTAL		48,249,749.32	100.00%
SAY		48,250,000.00	

Cost per lane-km: Php 48,250,000.00 = Php 25,556,144.07/lane-km
1.888 lane-km

The derivation of unit cost per **lane kilometer** is based on the area required from the Detailed Engineering Design Plans in conformance with the design criteria/requirements. Items relevant to the **asphalt overlay** are incorporated in derivation of unit cost.

As shown in the table above, the project involves voluminous quantities for Surface Courses which attains a total percentage of **93.44%** or **₱ 45,084,943.58** of the total project work cost.

Hence, it is reasonable as to the unit cost of the items of work involved which are within the prevailing cost of the Department.


DENNIS E. SANDOVAL

District Engineer

North Manila District Engineering Office

Concurred by:


LORETA M. MALALUAN, CESO IV
Regional Director



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
National Capital Region
Nagtahan Street, Sta. Mesa, Manila

25 APR 2025

CERTIFICATE OF REASONABLENESS OF COST ESTIMATE

Project : Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00
Station Limits : K0007+473.00 – K0007+945.00
Location : Manila City

SCOPE OF WORK

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DENNIS E. SANDOVAL
District Engineer
North Manila District Engineering Office

Concurred by:


LORETA M. MALALUAN, CESO IV
Regional Director

STRAIGHT LINE DIAGRAM OF HONORIO LOPEZ STREET

LIMIT : JUAN LUNA STREET TO NIMED BOUNDARY L = 1925.0 M
SECTION ID NO. : S02339LZ ROAD ID NO. : R00794LZ
DISTRICT I

LEGEND :
36"Ø RCPC
PROPOSED FY 2025

K0007 + 790.00 C 1,779.00
K0007 + 798.20 C 1,778.20

K0007 + 765.80 C 1,745.80

K0007 + 698.40 C 1,678.40

K0007 + 647.20 C 1,627.20

K0007 + 621.80 C 1,601.80
K0007 + 619.50 C 1,599.50

K0007 + 610.80 C 1,590.80
K0007 + 604.60 C 1,584.60

K0007 + 587.80 C 1,567.80
K0007 + 586.30 C 1,566.30

PREVENTIVE MAINTENANCE -
TERTIARY ROADS - H. LOPEZ BLVD.
K0007 + 473.00 TO K0007 + 945

KAUNLARAN

KALAKAL

C 1,781.30 K0007 + 801.30
C 1,775.90 K0007 + 795.90

C 1,767.50 K0007 + 787.50
C 1,763.10 K0007 + 783.10

C 1,750.90 K0007 + 770.90
C 1,745.00 K0007 + 765.00

C 1,727.00 K0007 + 747.00
C 1,723.70 K0007 + 743.70

C 1,709.80 K0007 + 729.80
C 1,706.10 K0007 + 726.10

C 1,692.00 K0007 + 712.00
C 1,687.10 K0007 + 707.10
C 1,684.50 K0007 + 704.50
C 1,681.70 K0007 + 701.70

C 1,676.10 K0007 + 696.10
C 1,669.90 K0007 + 689.90
C 1,663.90 K0007 + 683.90
C 1,657.90 K0007 + 677.90

C 1,643.50 K0007 + 663.50
C 1,638.00 K0007 + 658.00

C 1,629.50 K0007 + 649.50
C 1,623.20 K0007 + 643.40
C 1,618.80 K0007 + 638.80

C 1,603.50 K0007 + 623.50
C 1,601.00 K0007 + 621.00
C 1,594.50 K0007 + 614.50
C 1,589.90 K0007 + 609.90
C 1,584.70 K0007 + 604.70
C 1,585.30 K0007 + 605.30

C 1,573.50 K0007 + 563.50
C 1,572.20 K0007 + 562.20
C 1,567.70 K0007 + 567.70

C 1,548.30 K0007 + 568.30
C 1,545.60 K0007 + 565.60

TERTIARY / FIRST DISTRICT / APPROACH (0+1,078) TO NIMED BOUNDARY (0+1,925)

4 LANE

PREPARED BY:

DARWIN K. DIMAANO
DISTRICT REIA COORDINATOR

EVALUATED BY:

ARLENE S. MENDOZA
OIC - CHIEF, PLANNING AND DESIGN SECTION

VALIDATED BY:

KRISTIAN BADE MONTEREY
DISTRICT REIA COORDINATOR

STRAIGHT LINE DIAGRAM OF HONORIO LOPEZ STREET

LIMIT : JUAN LUNA STREET TO NIMED BOUNDARY L = 1925.0 M
SECTION ID NO. : 802359LZ ROAD ID NO. : R00794LZ
DISTRICT I

LEGEND :
36"Ø RCPC
PROPOSED FY 2025

K0007 + 545.10 C 1,525.10
K0007 + 540.00 C 1,520.00
K0007 + 539.00 C 1,519.00

K0007 + 529.00 C 1,509.00

K0007 + 515.50 C 1,495.50

K0007 + 509.20 C 1,489.20
K0007 + 507.30 C 1,487.30

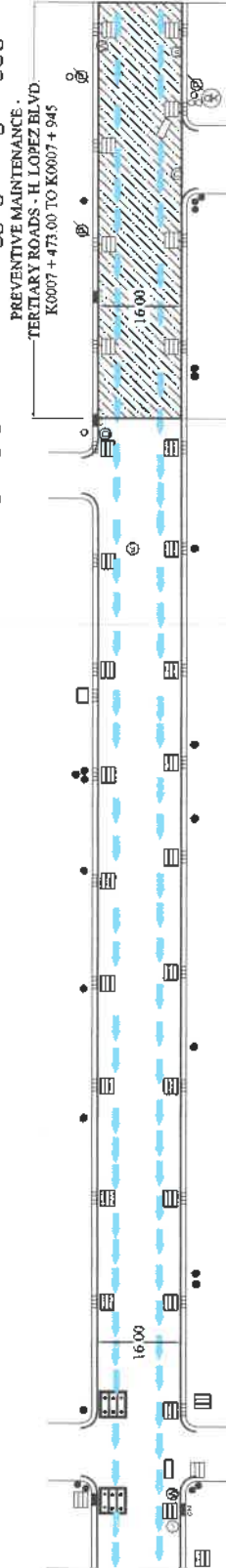
K0007 + 469.50 C 1,449.50
K0007 + 467.00 C 1,447.00

K0007 + 458.20 C 1,438.20

K0007 + 386.30 C 1,366.30
K0007 + 384.30 C 1,364.30

K0007 + 364.70 C 1,344.70

K0007 + 338.70 C 1,318.70



RODRIGUEZ

SIMON DE JESUS ST.

C 1,528.20 K0007 + 548.20
C 1,524.00 K0007 + 544.00

C 1,517.30 K0007 + 537.30
C 1,513.10 K0007 + 533.10
C 1,510.10 K0007 + 530.10

C 1,505.90 K0007 + 525.90

C 1,500.50 K0007 + 520.50

C 1,497.50 K0007 + 517.50
C 1,494.00 K0007 + 514.00

C 1,488.00 K0007 + 508.00

C 1,476.70 K0007 + 496.70

C 1,467.20 K0007 + 487.20

C 1,462.40 K0007 + 482.40

C 1,453.00 K0007 + 473.00

C 1,448.80 K0007 + 468.80

C 1,428.40 K0007 + 448.40
C 1,425.00 K0007 + 445.00

C 1,405.00 K0007 + 425.00

C 1,400.00 K0007 + 420.00

C 1,390.70 K0007 + 410.70

C 1,387.20 K0007 + 407.20
C 1,384.80 K0007 + 404.80

C 1,376.50 K0007 + 396.50

C 1,369.00 K0007 + 399.00

C 1,346.80 K0007 + 366.80
C 1,343.70 K0007 + 363.70

C 1,332.60 K0007 + 352.60

C 1,325.00 K0007 + 345.00

C 1,303.30 K0007 + 323.30

C 1,287.00 K0007 + 307.00

C 1,283.30 K0007 + 303.30

C 1,283.70 K0007 + 283.70
C 1,282.00 K0007 + 282.00
C 1,259.00 K0007 + 279.00

C 1,248.50 K0007 + 268.50
C 1,247.70 K0007 + 267.70

C 1,242.80 K0007 + 262.80

C 1,239.70 K0007 + 259.70

C 1,233.60 K0007 + 253.60

TERTIARY / FIRST DISTRICT : APPROACH (0+1,078) TO NIMED BOUNDARY (0+1,925) -

4 LANE

PREPARED BY:

DARWIN K. DIMAANO
DISTRICT RBIA COORDINATOR

EVALUATED BY:

ARLENE S. MENDOZA
OIC - CHIEF, PLANNING AND DESIGN SECTION

VALIDATED BY:

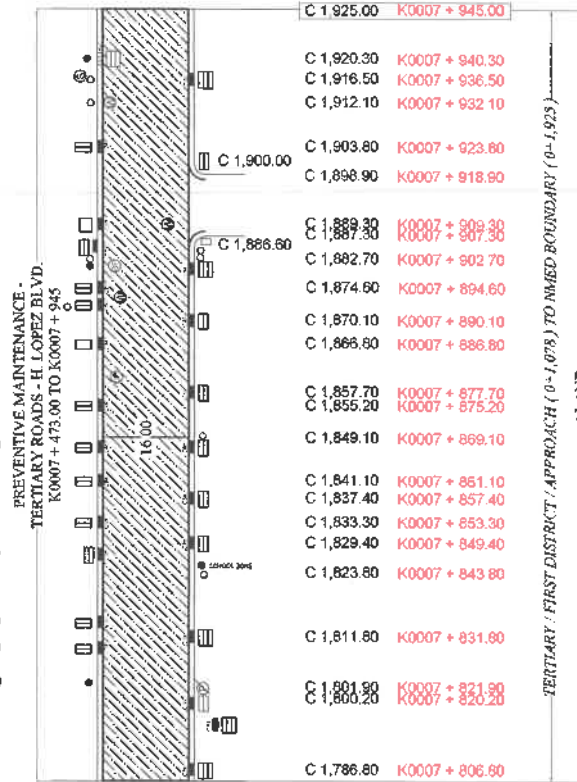
KRISTIAN P. Y. MONTEREY
DISTRICT RBIA COORDINATOR

STRAIGHT LINE DIAGRAM OF HONORIO LOPEZ STREET

LIMIT : JUAN LUNA STREET TO NMED BOUNDARY L = 1925.0 M
SECTION ID NO. : S02339LZ ROAD ID NO. : R00794LZ
DISTRICT 1

LEGEND : 36"Ø RPC
PROPOSED FY 2025

K0007 + 903.50	C 1,883.50
K0007 + 884.10	C 1,874.10
K0007 + 880.40	C 1,860.40
K0007 + 867.40	C 1,847.40
K0007 + 847.20	C 1,827.20
K0007 + 834.50	C 1,814.50
K0007 + 829.50	C 1,809.60
K0007 + 823.10	C 1,803.10



VALIDATED BY:

EVALUATED BY:

PREPARED BY:

KRISTIAN PAUL Y. MONTEREY
DISTRICT RBIA COORDINATOR

ARLENE S. MENDOZA
DISTRICT RBIA COORDINATOR

DARWIN K. DIMAANO
DISTRICT RBIA COORDINATOR



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

EXECUTIVE SUMMARY

UACS / SUB PROGRAM :
PROJECT COMPONENT ID :
ALLOCATION : P 50,000,000.00
ABC COST : P 48,249,749.32
SOURCE OF FUND :
NAME OF PROJECT : Preventive Maintenance - Tertiary Roads - H. Lopez Blvd.
K0007 + 473.00 - K0007 + 945.00
SCOPE OF WORK : Asphalt Overlay

DESCRIPTION OF WORKS TO BE DONE

PART A	:	FACILITIES FOR THE ENGINEER	0.37%
PART B	:	OTHER GENERAL REQUIREMENTS	2.39%
PART C	:	EARTHWORK	1.81%
PART D	:	SUBBASE AND BASE COURSE	0.22%
PART E	:	SURFACE COURSES	93.16%
PART G	:	DRAINAGE AND SLOPE PROTECTION STRUCTURES	1.78%
PART H	:	MISCELLANEOUS STRUCTURES	0.27%
			100.00%

PROJECT LIMIT : K0007 + 473.00 - K0007 + 945.00
PROJECT LOCATION : Tondo, Manila
PROJECT DURATION : 120 C.D.
PROJECT LENGTH : 472.00 l.m.


DENNIS E. SANDOVAL
District Engineer



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

C E R T I F I C A T I O N

This is to certify that the detailed engineering survey and design for the project: **Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00** in the amount of **Php 50,000,000.00** had been conducted in accordance with the prescribed agency standards and specifications, detail of which are stated in the General Notes appearing on plan.

This is to certify further that the detailed engineering outputs appearing on the summary of quantities on Plan and Program of Works are adequate for the procurement at hand.

The Plans, Program of Works and Back-up Computation for the aforementioned project are signed by the responsible persons involved in the respective assigned activities, duly checked, and approved by the undersigned to attest the technical integrity of the project.

This certification is issued this _____ day of _____, 2025, for whatever legal purpose this may serve.



ARLENE S. MENDOZA

QC-Chief - Planning & Design Section



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

C E R T I F I C A T I O N

This is to certify that there is no obstruction / problem regarding the Road - Right of Way for the project:

Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

Certified by:


ARLENE S. MENDOZA

OTC-Chief - Planning & Design Section

Noted by:


DENNIS E. SANDOVAL
 District Engineer



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

NAME OF PROJECT : **Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00**

LOCATION : **Tondo, Manila**

CONSTRUCTION METHODOLOGY

Removal of Existing Structures and Obstruction

The Contractor shall perform the work described above, within and adjacent to the roadway, as shown on the Plans or as directed by the Engineer. All existing culverts and other drainage structure in use by traffic shall not be removed until satisfactory arrangements have been made to accommodate traffic. All pipes shall be carefully removed and every precaution taken to avoid breakage or damaged. All concrete pavement, base course, sidewalks, curbs, gutters etc., designated for removal, shall be demolish and dispose.

Emulsified Asphalt

Immediately before applying the tack coat, the full width of the surface to be treated shall be cleaned of loose and foreign materials by means of a power broom or power blower, supplemented as necessary by hand sweeping. Where required by the Engineer, immediately prior to the application of the tack coat, the surface shall be lightly sprayed with water but not saturated. Bituminous material shall be applied by means of a pressure distributor at the temperature of the material being used. The rate of application of the Emulsified Asphalt shall be within the range of 0.2 to 0.7 liter/sq.m. The exact application rate for the type of the bituminous material to be ordered by the Engineer shall be based on the condition of the existing bituminous or cement concrete surface.

Excavation

This project Shall consist of roadway and structure excavation. When there is evidence of discrepancies on the actual elevations that show on the Plans, a pre-construction survey shall be undertaken by the Contractor under the control of the Engineer to serve as basis for the computation of the actual volume of the excavated materials. All excavations shall be finished to reasonable smooth and uniform surfaces. Prior to excavation, all necessary clearing in the area shall have been performed.

Embankment

Roadway embankment shall be placed in horizontal layers not exceeding 200mm, loose measurement and shall be compacted as specified before the next layer is placed. However, thicker layer maybe placed if vibratory roller with high compactive effort is used provided that density requirement is attained. As the compaction of each layer progresses, continuous leveling and manipulating will be required to assume uniform density. Water shall be added or removed, if necessary, in order to obtain the required density.

Aggregate Subbase Course

The existing surface shall be graded and finished before placing the subbase material. The aggregate subbase material shall be placed at a uniform mixture on a prepared subgrade in a quantity which will provide the required compacted thickness. When more than one layer is required, each layer shall be shaped and compacted before the succeeding layer is placed. When the required thickness is 150mm or less, the material may be spread and compacted in one layer. The moisture content of subbase material shall be, if necessary, be adjusted prior to compaction by watering with approved sprinklers mounted on trucks or by drying out, as required in order to obtain the required compaction. Compaction of each layer shall continue until a field density of at least 100 percent of the maximum dry density determined in accordance with AASHTO T 180, Method D has been achieved. In-place density determination shall be made in accordance with AASHTO T 191.

Portland Cement Pavement

The Contractor shall be responsible for the quality control of all materials during the handling, blending, and mixing and placement operations. They shall perform all sampling, testing and inspection necessary to assure quality control of the component materials and the concrete, and shall be responsible for determining the gradation of fine and coarse aggregates and for testing the concrete mixture for slump, air content, water-cement ratio and temperature.

Equipment

Equipment and tools necessary for handling materials and performing all parts of the work shall be approved by the Engineer as to design, capacity and mechanical condition. Concrete may be mixed at the Site of construction or at a central plant, or wholly or in part in truck mixers. Truck mixers used for mixing and hauling concrete and truck agitators used for hauling central-mixed concrete, shall conform to the requirements of AASHTO M 157. The concrete shall be placed with an approved paver designed to spread, consolidate, screed and float finish the freshly placed concrete in one complete pass of the machine. The finishing machine shall be equipped with at least two (2) oscillating type transverse screed.

Joints

Joints shall be constructed of the type and dimensions, and at the locations required by the Plans or Special Provisions. All joints shall be protected from the intrusion of injurious foreign material until sealed.

Curing

Immediately after the finishing operations have been completed and the concrete has sufficiently set, the entire surface of the newly placed concrete shall be cured with the methods such as Cotton or Burlap Mats, Waterproof Paper, Straw Curing, Impervious Membrane Method, and White Polyethylene Sheet.

Sealing Joints

Joints shall be sealed with asphalt sealant soon after completion of the curing period and before the pavement is opened to traffic.

Tolerance in Pavement Thickness

Joints shall be sealed with asphalt sealant soon after completion of the curing period and before the pavement is opened to traffic.

Reinforcing Steel

This shall consist of furnishing, bending, fabricating and placing of steel reinforcement of the type, size, shape and grade required. Steel reinforcement shall be stored above the surface of the ground upon platforms, skid, or other supports and shall be protected as far as practicable from mechanical injury and surface deterioration caused by exposure to conditions producing rust. All reinforcing bars requiring bending shall be cold-bent to the shapes shown on the Plans. Splices shall be staggered as far as possible, and lapped splices shall be placed in contact and wired together.

Structural Concrete

This shall consist of furnishing, placing, and finishing concrete in all structures except pavements. Class A concrete are the important parts of the structure included are slabs, beams, girders, columns, arch ribs, box culverts, reinforced abutments, retaining walls, and reinforced footings. As work progresses, at least one (1) sample consisting of three (3) concrete cylinder test specimens, 150 x 300mm, shall be taken from each seventy-five (75) cu.m. of each class of concrete or fraction thereof placed each day. Installation of DPWH and COA Billboards shall be installed throughout the duration of the project.

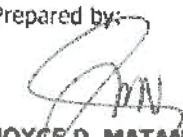
Thermoplastic Material

The materials shall be melted in accordance with the manufacturer's instruction in a heater fitted with a mechanical stirrer to give a smooth consistency to the thermoplastic and such the local overheating shall be avoided. The molten material shall be used as expeditiously as possible and for thermoplastics which have natural resin binders or otherwise sensitive to prolonged heating, the materials shall not be maintained in a molten condition for more than 4 hours.

Laying of center lines, lane lines and edges lines shall be applied by approved mechanical means and shall be laid in regular alignment. Other markings may be applied by hand. After transfer to the laying apparatus the materials shall be maintained within the temperature range specified by the manufacturer and stirred to maintain the right consistency for laying.

The project will run on a 120 C.D. calendar days with a proper traffic management plan and an occupational safety and health program.

Prepared by:

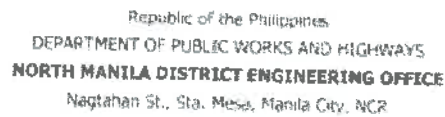

JOYCE D. MATANGUIHAN

Engineer II

Submitted by:


ARLENE S. MENDOZA

Ofc-Chief - Planning & Design Section



COMPUTATION OF CALENDAR DAYS

[illegible]

CALENDAR DAYS	=	46.23
Say	≈	47 C.D.

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graph LR
    47((47)) -- "Turning & Removal of PCTP for Reducing  
13 C.D." --> 60((60))
    60 -- "Rebarcing  
30 C.D." --> 90((90))
    90 -- "Fabrication & Installation of Membrane Cover  
40 C.D." --> 120((120))
  
```

APPROVED

DENNIS E. SANDOVAL
District Engineer



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

PROGRAM OF WORKS/BUDGET COST

FORM POW-2015-01-00

Project : Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

Project ID :
Location : Tondo, Manila
Station Limits : K0007 + 473.00 - K0007 + 945.00
Appropriation : 50,000,000.00
Source of Fund :
Project Description : Asphalt Overlay

Net Length : (a) Road 472.00 l.m.
(b) Bridge
(c) Others
Target Start Date :
Total Project Duration : 120 C.D.
No. of Pre-Determined :
Unworkable Days :

DESCRIPTION OF WORKS TO BE DONE		QUANTITY	UNIT	AS SUBMITTED		AS EVALUATED	
				% TOTAL	TOTAL DIRECT COST	% TOTAL	TOTAL DIRECT COST
PART A	FACILITIES FOR THE ENGINEER	(PLS. SEE FORM POW-2015-01C-00)					
PART B	OTHER GENERAL REQUIREMENTS	(PLS. SEE FORM POW-2015-01C-00)		0.37%	140,987.15		
Project Component ID	PROJECT COMPONENT DESCRIPTION			2.39%	918,150.07		
PART C	EARTHWORK	(PLS. SEE FORM POW-2015-01C-00)					
PART D	SUBBASE AND BASE COURSE	(PLS. SEE FORM POW-2015-01C-00)		1.81%	693,285.89		
PART E	SURFACE COURSES	(PLS. SEE FORM POW-2015-01C-00)		0.22%	82,984.45		
PART G	DRAINAGE AND SLOPE PROTECTION STRUCTURES	(PLS. SEE FORM POW-2015-01C-00)		93.16%	35,781,701.25		
PART H	MISCELLANEOUS STRUCTURES	(PLS. SEE FORM POW-2015-01C-00)		1.78%	585,450.26		
				0.27%	105,475.91		

EQUIPMENT:

DESCRIPTION	REQUIRED
(PLS. SEE FORM POW-2015-01B-00)	

BREAKDOWN OF EXPENDITURES:

	AS SUBMITTED	AS EVALUATED
1. Labor	729,932.13	
2. Materials	36,074,034.16	
3. Rental of Equipment	1,604,068.69	
4. Provisional Sum / Daywork		
5. OCM and Profit	7,544,107.21	
6. Value Added Tax (5%)	2,297,607.13	
7. EAO, 3.50 %	1,750,000.00	
8. RROW Acquisition		
9. Physical Reserved (Contingency)		
10. TOTAL ESTIMATED COST	49,999,749.32	

	AS SUBMITTED	AS EVALUATED
A. Total Direct Cost	38,408,034.98	
B. OCM and Profit	7,544,107.21	
C. Value Added Tax (5%)	2,297,607.13	
D. Total Construction Cost	48,249,749.32	
E. Eng'g & Administrative Overhead, 3.50 %	1,750,000.00	
F. RROW Acquisition		
G. Physical Reserved (Contingency)		
H. TOTAL ESTIMATED COST	49,999,749.32	

Preparation and Submission:

Prepared by:

JOYCE D. MATANGUTHAN
Engineer II

Checked / Submitted by:

REY Y. CASTILLO
Engineer II

Evaluation:

Reviewed as to Unit Cost:

ARLENE S. MENDOZA
OIC-Chief, Planning & Design Section

Approval:

Recommending Approval:

DENRYL CAESAR S. CORTUNA
Assistant District Engineer

Approved:

DENNIS E. SANDOVAL
District Engineer



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00
Tondo, Manila

FORM A8C-2015-02-00

SUMMARY OF APPROVED BUDGET FOR THE CONTRACT

ITEM NO.	DESCRIPTION		ESTIMATED DIRECT COST	TOTAL MARK-UP		Contract Duration : 120 C.D.		
				%	VALUE	VAT	TOTAL INDIRECT COST	TOTAL COST
PART A	FACILITIES FOR THE ENGINEER	As Evaluated						
		As Submitted	140,987.15	20.00%	28,197.43	8,459.23	36,656.66	177,643.81
PART B	OTHER GENERAL REQUIREMENTS	As Evaluated						
		As Submitted	918,150.07	5.02%	46,130.23	48,214.02	94,344.25	1,012,494.32
(Project ID)								
(Project Component ID - Description)								
PART C	EARTHWORK	As Evaluated						
		As Submitted	693,285.89	20.00%	138,657.18	41,597.16	180,254.34	873,540.23
PART D	SUBBASE AND BASE COURSE	As Evaluated						
		As Submitted	82,984.45	20.00%	16,596.89	4,979.07	21,575.96	104,560.41
PART E	SURFACE COURSES	As Evaluated						
		As Submitted	35,781,701.25	20.00%	7,156,340.25	2,146,902.08	9,303,242.33	45,084,943.58
PART G	DRAINAGE AND SLOPE PROTECTION STRUCTURES	As Evaluated						
		As Submitted	685,450.26	20.00%	137,090.05	41,127.02	178,217.07	863,667.33
PART H	MISCELLANEOUS STRUCTURES	As Evaluated						
		As Submitted	105,475.91	20.00%	21,095.18	6,328.55	27,423.73	132,899.64
TOTAL OF (PROJECT ID)		As Evaluated						
		As Submitted	37,348,897.76		7,469,779.55	2,240,933.88	9,710,713.43	47,059,611.19
TOTAL		As Evaluated						
		As Submitted	38,408,034.98		7,544,107.21	2,297,607.13	9,841,714.34	48,249,749.32

Preparation and Submission:

Prepared by:

JOYCE D. MATANGUTHAN
Engineer II

Checked by:

REY Y. CASTILLO
Engineer II

Evaluation:

Submitted by:

ARLENE S. MENDOZA
OIC-Chief, Planning & Design Section

Approval:

Recommending Approval:

DENRYL CAESAR S. CORTUNA
Assistant District Engineer

Approved:

DENRIS B. SANDOVAL
District Engineer



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

D.O. No. 197, Series of 2016

Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

Tondo, Manila

APPROVED BUDGET FOR THE CONTRACT

Stations : K0007 + 473.00 - K0007 + 945.00
Length : 472.00 l.m.

Contract Duration 120 C.D.

ITEM NO.	DESCRIPTION		QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN PERCENT		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
						OCM	PROFIT	%	VALUE				
PART A	FACILITIES FOR THE ENGINEER												
A.1 (13)	Construction of Field Office for the Engineer	AS EVALUATED											
		AS SUBMITTED	1.00	l.s	140,987.15	12%	8%	20%	28,197.43	8,459.23	36,656.66	177,643.81	177,643.81
	TOTAL OF PART A	AS EVALUATED											
		AS SUBMITTED			140,987.15				28,197.43	8,459.23	36,656.66	177,643.81	
PART B	OTHER GENERAL REQUIREMENTS												
B.5	Project Billboard/ Signboard (DPWH Billboard)	AS EVALUATED											
		AS SUBMITTED	2.00	each	8,016.08	12%	8%	20%	1,603.22	480.97	2,084.19	10,100.27	5,050.14
B.5	Project Billboard/ Signboard (COA Billboard)	AS EVALUATED											
		AS SUBMITTED	2.00	each	13,438.14	12%	8%	20%	2,687.63	806.29	3,493.92	16,932.06	8,466.03
B.7 (2)	Occupational Safety and Health Program	AS EVALUATED											
		AS SUBMITTED	1.00	l.s	206,998.79		8%	6%	16,559.90	11,177.93	27,737.83	234,736.62	234,736.62
B.8 (2)	Traffic Management	AS EVALUATED											
		AS SUBMITTED	1.00	l.s	315,993.54		8%	8%	25,279.48	17,063.65	42,343.13	358,336.67	358,336.67
B.9	Mobilization/ Demobilization	AS EVALUATED											
		AS SUBMITTED	1.00	l.s	373,703.52					18,685.18	18,685.18	392,388.70	392,388.70
	TOTAL OF PART B	AS EVALUATED											
		AS SUBMITTED			918,150.07				46,130.23	48,214.02	94,344.25	1,012,494.32	
(Project ID)													
(Project Component ID - Description)													
PART C	EARTHWORK												
101(1)	Removal of Structures and Obstruction	AS EVALUATED											
		AS SUBMITTED	1.00	l.s	138,353.78	12%	8%	20%	27,670.76	8,301.23	35,971.99	174,325.77	174,325.77
101(3)06	Removal of Actual Structures / Obstruction (PCCP, Unreinforced, 0.30m thk)	AS EVALUATED											
		AS SUBMITTED	2070.00	sq.m	554,932.11	12%	8%	20%	110,986.42	33,295.93	144,282.35	699,214.46	337.76

Prepared and Submission:

Prepared by:

JOYCE D. MATANGUIHAN
Engineer II

Checked by:

REV Y. CASTILLO
Engineer II

Evaluation:

Submitted by:

ARLENE S. MENDOZA
PIC-Chief, Planning & Design Section



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

D.O. No. 197, Series of 2016

Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

Tondo, Manila

APPROVED BUDGET FOR THE CONTRACT

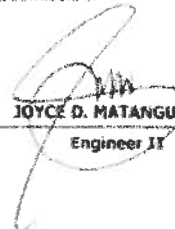
Stations: K0007 + 473.00 - K0007 + 945.00
Length: 472.00 i.m.

Contract Duration: 120 C.D.

ITEM NO.	DESCRIPTION		QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN PERCENT		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
						OCM	PROFIT	%	VALUE				
	TOTAL OF PART C	AS EVALUATED											
		AS SUBMITTED			693,285.89				138,657.18	41,597.16	180,254.34	873,540.23	
PART D	SUBBASE AND BASE COURSE												
200(1)	Aggregate Subbase Course	AS EVALUATED											
		AS SUBMITTED	103.50	cu.m	82,984.45	12%	8%	20%	16,596.89	4,979.07	21,575.96	104,560.41	1,010.25
	TOTAL OF PART D	AS EVALUATED											
		AS SUBMITTED			82,984.45				16,596.89	4,979.07	21,575.96	104,560.41	
PART E	SURFACE COURSES												
302(2)	Emulsified Asphalt	AS EVALUATED											
		AS SUBMITTED	14,969.50	sq.m	737,935.76	12%	8%	20%	147,587.16	44,276.15	191,863.31	929,799.09	62.10
310(1)	Bituminous Concrete Surface Wearing Course, Hot Laid (50mm)	AS EVALUATED											
		AS SUBMITTED	7,439.10	sq.m	14,700,964.86	12%	8%	20%	2,940,192.97	882,057.89	3,822,250.86	18,523,215.72	2,489.98
310(2)	Bituminous Concrete Surface Binder Course, Hot Laid (50mm)	AS EVALUATED											
		AS SUBMITTED	7,484.70	sq.m	14,791,078.44	12%	8%	20%	2,958,215.69	887,464.71	3,845,680.40	18,636,758.84	2,489.98
311(1)3	Portland Cement Concrete Pavement (Unreinforced) (0.30m thick, 3 Days)	AS EVALUATED											
		AS SUBMITTED	2,070.00	sq.m	5,351,722.17	12%	8%	20%	1,110,344.43	333,103.33	1,443,447.76	6,895,169.93	3,329.30
	TOTAL OF PART E	AS EVALUATED											
		AS SUBMITTED			35,781,701.25				7,156,340.25	2,146,902.08	9,303,242.33	45,084,943.58	

Prepared and Submitted:

Prepared by:


JOYCE D. MATANGUIHAN
Engineer II

Checked by:


REY Y. CASTILLO
Engineer II

Evaluation:

Submitted by:


ARLENE S. MENDOZA
OIC-Chief, Planning & Design Section



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

Tondo, Manila

D.O. No. 197, Series of 2016

Stations : K0007 + 473.00 - K0007 + 945.00
Length : 472.00 Lm.

APPROVED BUDGET FOR THE CONTRACT

ITEM NO.	DESCRIPTION		QUANTITY	UNIT	ESTIMATED DIRECT COST	MARK-UPS IN PERCENT		TOTAL MARK-UP		VAT	TOTAL INDIRECT COST	TOTAL COST	UNIT COST
						OCM	PROFIT	%	VALUE				
PART G	DRAINAGE AND SLOPE PROTECTION STRUCTURES												
502(4)83	Concrete Covers (910mm dia.)	AS EVALUATED											
		AS SUBMITTED	99.00	each	685,450.26	12%	8%	20%	137,090.05	41,127.02	178,217.07	863,667.33	8,723.91
	TOTAL OF PART G				685,450.26				137,090.05	41,127.02	178,217.07	863,667.33	
PART H	MISCELLANEOUS STRUCTURES												
612(1)	Reflectanzed Thermoplastic Pavement Markings White	AS EVALUATED											
		AS SUBMITTED	160.60	sq.m	105,475.91	12%	8%	20%	21,095.18	6,328.55	27,423.73	132,899.64	827.52
	TOTAL OF PART H				105,475.91				21,095.18	6,328.55	27,423.73	132,899.64	
	TOTAL OF (PROJECT ID)												
		AS EVALUATED			37,348,897.76				7,469,779.55	2,240,933.88	9,710,713.43	47,059,611.19	
	GRAND TOTAL				38,408,034.98				7,544,107.21	2,297,607.13	9,841,714.34	48,249,749.32	
Prepared and Submission:													

Prepared and Submission:

Prepared by:

JOYCE D. MATANGUIHAN
Engineer II

Checked by:

REY Y. CASTILLO
Engineer II

Evaluation:

Submitted by:

ARLENE S. MENDOZA
OTC-Chief, Planning & Design Section



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NCR... MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

Tondo, Manila

FORM POW-2015-01A-00

FORM POW-2015-01A-00

ITEMIZED BREAKDOWN											
ITEM NO.	DESCRIPTION	QTY.		UNIT	DIRECT COST				TOTAL UNIT COST (DIRECT+INDIRECT)		% DIRECT COST
		As Submitted	As Evaluated		TOTAL		UNIT COST		As Submitted	As Evaluated	
					As Submitted	As Evaluated	As Submitted	As Evaluated			
PART A	FACILITIES FOR THE ENGINEER										
A.1.1 (3)	Construction of Field Office for the Engineer	1.00		ls	140,987.15		140,987.15		177,643.81		0.37%
	TOTAL OF PART A				140,987.15				177,643.81		0.37%
PART B	OTHER GENERAL REQUIREMENTS										
B.5	Project Billboard/ Signboard (DPWH Billboard)	2.00		each	8,016.08		4,008.04		5,050.14		0.02%
B.5	Project Billboard/ Signboard (COA Billboard)	2.00		each	13,438.14		6,719.07		8,466.03		0.03%
B.7 (2)	Occupational Safety and Health Program	1.00		ls.	206,998.79		206,998.79		234,736.62		0.54%
B.8 (2)	Traffic Management	1.00		ls.	315,993.54		315,993.54		358,336.67		0.82%
B.9	Mobilization/ Demobilization	1.00		ls.	373,703.52		373,703.52		392,388.70		0.97%
	TOTAL OF PART B				918,150.07						2.39%
Project ID											
PART C	EARTHWORK										
101(1)	Removal of Structures and Obstruction	1.00		ls.	138,353.78		138,353.78		174,325.77		0.36%
101(3)B6	Removal of Actual Structures / Obstruction (PCCP, unreinforced, 0.30m thick)	2,070.00		sq.m	554,932.11		268.08		337.78		1.44%
	TOTAL OF PART C				693,285.89						1.81%
PART D	SUBBASE AND BASE COURSE										
200(1)	Aggregate Subbase Course	103.50		cu.m	82,984.45		801.78		1,010.25		0.22%
	TOTAL OF PART D				82,984.45						0.22%
PART E	SURFACE COURSES										
302(2)	Emulsified Asphalt	14,969.50		sq.m	737,935.78		49.30		62.10		1.92%
310(1)c	Bituminous Concrete Surface Wearing Course, Hot Laid (50mm)	7,439.10		sq.m	14,700,964.86		1,976.18		2,489.98		38.28%
310(2)c	Bituminous Concrete Surface Binder Course, Hot Laid (50mm)	7,484.70		sq.m	14,791,078.44		1,976.18		2,489.98		38.51%
311(1)B3	Portland Cement Concrete Pavement (Unreinforced) (0.30m thick, 3 days)	2,070.00		sq.m	5,551,722.17		2,681.99		3,379.30		14.45%
	TOTAL OF PART E				35,781,701.25						93.16%
PART G	DRAINAGE AND SLOPE PROTECTION STRUCTURES										
502(4)a3	Concrete Covers (910mm dia.)	99.00		each	685,450.26		6,923.74		8,723.91		1.78%
	TOTAL OF PART G				685,450.26						1.78%
PART H	MISCELLANEOUS STRUCTURES										
612(1)	Reflectorized Thermoplastic Pavement Markings White	160.60		sq.m	105,475.91		656.76		827.52		0.27%
	TOTAL OF PART H				105,475.91						0.27%
TOTAL OF (PROJECT ID)					37,265,913.31						95.24%
GRAND TOTAL					38,408,034.98						100.00%



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

Tondo, Manila

FORM POW-2015-01C-00

DETAILED BREAKDOWN OF COMPONENT COST FOR EACH ITEM												
ITEM NO.	DESCRIPTION		%	QTY.	UNIT	DIRECT COST				TOTAL MARK-UP		5% VAT
						MATERIAL	LABOR	EQUIPMENT	TOTAL	%	VALUE	TOTAL COST
PART A THE ENGINEER												
A.1.1 (3)	Construction of Field Office for the Engineer	As Evaluated										
		As Submitted	0.37%	1.00	l.s.	97,225.63	39,783.20	3,978.32	140,987.15	20%	28,197.43	177,643.61
	TOTAL OF PART A	As Evaluated										
		As Submitted				97,225.63	39,783.20	3,978.32	140,987.15		28,197.43	177,643.61
PART B OTHER GENERAL REQUIREMENTS												
B.5	Project Billboard/ Signboard (DPWH Billboard)	As Evaluated										
		As Submitted	0.02%	2.00	each	6,294.00	1,565.52	156.56	8,016.08	20%	1,603.22	10,100.27
B.5	Project Billboard/ Signboard (COA Billboard)	As Evaluated										
		As Submitted	0.04%	2.00	each	9,994.00	3,131.04	313.10	13,438.14	20%	2,687.63	16,932.06
B.7 (2)	Occupational Safety and Health Program	As Evaluated										
		As Submitted	0.49%	1.00	l.s.	23,171.01	183,867.78	-	206,998.79	8%	16,559.90	234,736.62
B.8 (2)	Traffic Management	As Evaluated										
		As Submitted	0.74%	1.00	l.s.	136,618.50	179,375.04	-	315,993.54	8%	25,279.48	358,336.67
B.9	Mobilization/ Demobilization	As Evaluated										
		As Submitted	0.81%	1.00	l.s.	373,703.52	-	-	373,703.52		-	392,388.70
	TOTAL OF PART B	As Evaluated										
		As Submitted				549,721.03	367,959.38	469.66	918,150.07		46,130.23	1,012,494.32
(Project ID)												
(Project Component ID - Description)												
PART C EARTHWORK												
101(1)	Removal of Structures and Obstruction	As Evaluated										
		As Submitted	0.36%	1.00	l.s.	138,353.78	-	-	138,353.78	20%	27,670.76	174,325.77
101(3)b6	Removal of Actual Structures / Obstruction (PCCP, Unreinforced, 0.30m thk)	As Evaluated										
		As Submitted	1.45%	2,070.00	sq.m	-	24,506.59	530,425.52	554,932.11	20%	110,986.42	699,214.46
	TOTAL OF PART C	As Evaluated										
		As Submitted				138,353.78	24,506.59	530,425.52	693,285.89		138,657.18	873,540.23
PART D SUBBASE AND BASE COURSE												
200(1)	Aggregate Subbase Course	As Evaluated										
		As Submitted	0.22%	103.50	cu.m	67,725.23	751.62	14,507.60	82,984.45	20%	16,596.89	104,560.41
	TOTAL OF PART D	As Evaluated										
		As Submitted				67,725.23	751.62	14,507.60	82,984.45		16,596.89	104,560.41



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan St., Sta. Mesa, Manila City, NCR

Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

Tondo, Manila

FORM POW-2015-01C-00

DETAILED BREAKDOWN OF COMPONENT COST FOR EACH ITEM												
ITEM NO.	DESCRIPTION		%	QTY.	UNIT	DIRECT COST			TOTAL	TOTAL MARK-UP		5% VAT
						MATERIAL	LABOR	EQUIPMENT		%	VALUE	TOTAL COST
PART E	SURFACE COURSES											
302(2)	Emulsified Asphalt	As Evaluated										
		As Submitted	1.93%	14,969.50	sq.m	668,537.87	15,976.29	53,421.62	737,935.78	20%	147,587.16	929,799.09
310(1)c	Bituminous Concrete Surface Wearing Course, Hot Laid (50mm)	As Evaluated										
		As Submitted	38.39%	7,439.10	sq.m	14,182,644.15	62,293.02	456,027.69	14,700,964.86	20%	2,940,197.97	18,523,215.72
310(2)c	Bituminous Concrete Surface Binder Course, Hot Laid (50mm)	As Evaluated										
		As Submitted	38.63%	7,484.70	sq.m	14,769,580.55	62,674.86	458,823.03	14,791,078.44	20%	2,958,215.69	18,636,758.84
311(1)f3	Portland Cement Concrete Pavement (Unreinforced) (0.30m thick, 3 days)	As Evaluated										
		As Submitted	14.50%	2,070.00	sq.m	5,451,013.80	70,106.93	30,601.44	5,551,722.17	20%	1,110,344.43	6,995,169.93
	TOTAL OF PART E	As Evaluated										
		As Submitted				34,573,776.37	211,051.10	998,873.78	35,781,701.25		7,156,340.25	45,084,943.58
PART G	DRAINAGE AND SLOPE PROTECTION STRUCTURES											
502(4)a3	Concrete Covers (910mm dia.)	As Evaluated										
		As Submitted	1.79%	99.00	each	560,136.06	79,491.06	45,823.14	685,450.26	20%	137,090.05	863,667.33
	TOTAL OF PART G	As Evaluated										
		As Submitted				560,136.06	79,491.06	45,823.14	685,450.26		137,090.05	863,667.33
PART H	MISCELLANEOUS STRUCTURES											
612(1)	ReflectORIZED Thermoplastic Pavement Markings White	As Evaluated										
		As Submitted	0.28%	160.60	sq.m	89,096.06	6,389.18	9,990.67	105,475.91	20%	21,095.18	132,899.64
	TOTAL OF PART H	As Evaluated										
		As Submitted				89,096.06	6,389.18	9,990.67	105,475.91		21,095.18	132,899.64
	TOTAL OF (PROJECT ID)	As Evaluated										
		As Submitted				35,427,087.50	322,189.55	1,599,620.71	37,348,897.76		7,469,779.55	47,059,611.19
	TOTAL	As Evaluated										
		As Submitted				36,074,034.16	729,932.13	1,604,068.69	38,408,034.98		7,544,107.21	48,249,749.32

Name of Project: Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

DURATION: 120 C.D.

ITEM NO.	DESCRIPTION	QUANTITY	OUTPUT PER HOUR	WORKERS	NO. OF PERSONNEL	NO. OF DAYS	MAN-DAYS	SAFETY HELMET	SAFETY SHOES	SAFETY GLOVES	SAFETY VEST	RAIN COATS	DUST/ GAS MASK	EYE GOGGLE	BODY HARNESS	RUBBER BOOTS
PART C	EARTHWORKS															
10111	Removal of Structures and Obstruction	1,073.00	15.00	Foreman Skilled Laborer Unskilled Laborer	1 2 2	8.94 8.94 8.94	8.94 17.88 17.88	8.94 17.88 17.88	8.94 17.88 17.88	8.94 17.88 17.88	8.94 17.88 17.88	2.68 5.36 5.36	8.94 17.88 17.88			
10113b6	Removal of Actual Structures - Obstruction (DCCP, Unreinforced, 0.30m thk.)	2,070.00	30.67	Foreman Skilled Laborer Unskilled Laborer	1 2 2	8.44 8.44 8.44	8.44 16.88 16.88	8.44 16.88 16.88	8.44 16.88 16.88	8.44 16.88 16.88	8.44 16.88 16.88	5.06 5.06 5.06	16.88 16.88 16.88			
PART D	SUB-BASE AND BASE COURSES															
20011	Aggregate Sub-base Course	103.50	50.00	Foreman Skilled Laborer Unskilled Laborer	1 2 2	0.26 0.26 0.26	0.26 0.52 0.52	0.26 0.52 0.52	0.26 0.52 0.52	0.26 0.52 0.52	0.26 0.52 0.52	0.08 0.16 0.16	0.26 0.52 0.52			
PART E	SURFACE COURSES															
30212	Emulsified Asphalt	14,969.50	430.00	Foreman Skilled Laborer Unskilled Laborer	1 3 3	4.35 4.35 4.35	4.35 13.05 13.05	4.35 13.05 13.05	4.35 13.05 13.05	4.35 13.05 13.05	4.35 13.05 13.05	1.31 3.92 3.92	4.35 13.05 13.05			
31011c	Bituminous Concrete Surface Wearing Course, Hot Laid (50mm)	7,439.10	171.30	Foreman Skilled Laborer Unskilled Laborer	3 4 8	5.43 5.43 5.43	5.43 21.72 43.44	5.43 21.72 43.44	5.43 21.72 43.44	5.43 21.72 43.44	5.43 21.72 43.44	1.63 6.52 13.03	5.43 21.72 43.44			
31012c	Bituminous Concrete Surface Binder Course, Hot Laid (50mm)	7,484.70	171.30	Foreman Skilled Laborer Unskilled Laborer	3 4 8	5.46 5.46 5.46	5.46 21.84 43.68	5.46 21.84 43.68	5.46 21.84 43.68	5.46 21.84 43.68	5.46 21.84 43.68	1.64 6.55 13.10	5.46 21.84 43.68			
311105	Portland Cement Concrete Pavement (Unreinforced) (0.30m thick, 3 days)	2,070.00	53.67	Foreman Skilled Laborer Unskilled Laborer	1 4 12	4.82 4.82 4.82	4.82 19.28 57.84	4.82 19.28 57.84	4.82 19.28 57.84	4.82 19.28 57.84	4.82 19.28 57.84	1.45 5.78 17.35	4.82 19.28 57.84			
PART G	DRAINAGE AND SLOPE PROTECTION STRUCTURES															
5024m3	Concrete Covers (910mm dia.)	99.00	1.00	Foreman Skilled Laborer Unskilled Laborer	1 2 4	12.38 12.38 12.38	12.38 24.76 49.52	12.38 24.76 49.52	12.38 24.76 49.52	12.38 24.76 49.52	12.38 24.76 49.52	3.71 7.43 14.86	12.38 24.76 49.52			
PART D	MISCELLANEOUS WORKS															
61211	Reflectorized Thermoplastic Pavement Markings White	160.60	25.00	Foreman Skilled Laborer Unskilled Laborer	1 2 6	0.80 0.80 0.80	0.80 1.60 4.80	0.80 1.60 4.80	0.80 1.60 4.80	0.80 1.60 4.80	0.80 1.60 4.80	0.24 0.48 1.44	0.80 1.60 4.80			
	A. TOTAL PERSONNEL/MANDAYS				59		387.71	387.71	387.71	387.71	387.71	116.32	387.71			
	B. SERVICE LIFE, DAYS							730	365	3	365	730	1	60	730	365
	C. PURCHASE COST, Php							380	1600	44	170	900	39.2	160	5500	770
	D. UNIT COST/MAN-DAY (C/H)							0.52	4.38	14.67	0.47	1.23	39.20	2.77	4.79	2.11
	E. DIRECT COST FOR PPE'S (D x A (Man-days))							201.64	1698.17	5687.71	182.22	143.07	15198.23	0.00	0.00	0.00
	F. SAFETY OFFICER/PRACTITIONER (PART TIME) @ Php15,000.00 MONTH/AS PER D.O. 56, S2005, consider at least 4 hours per week)															23,111.01
	G. HEALTH PERSONNEL (FULL TIME) @ Php 8,400.00 MONTH/AS PER D.O. 56, S2005)															117,963.62
	H. TOTAL DIRECT COST (E + F + G)															65,924.16
	I. LOCOM 10% OF F)															206,998.79
	J. PROFIT (6% OF F)															
	K. VAT (5% OF E + H + I)															16,559.90
	L. TOTAL COST (E + H + I + J)															111,77.93
																234,736.62

Note: Assumed Rain Coats usage, 30% of man-days

Prepared by:

JOYCE D. MATAANGUBAN
Engineer II

Checked by:

REY Y. CASTILLO
Engineer II

Submitted by:

ARLENE S. MENDOZA
OIC, Chief, Planning & Design Section



Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

FORM POW-2015-01B-00

MINIMUM EQUIPMENT REQUIREMENT							
No.	Equipment Description	Capacity	Number of Equipment	No.	Equipment Description	Capacity	Number of Equipment
1	Water Truck, All Makes	16000 L	1	26			
2	Asphalt Distributor	5 T	1	27			
3	Power Broom, 2.0 m wide		1	28			
4	Asphalt Paver	80 Hp	1	29			
5	Pneumatic Tire Roller	10 m.t.	1	30			
6	Tandem Steel Roller, CC421	10.1 m.t.	1	31			
7	Cargo Truck	10 T, 270 Hp	1	32			
8	Cargo Truck/Delivery Truck, All Models	5 T	1	33			
9	Applicator Machine		1	34			
10	Kneading Machine		1	35			
11	Concrete Vibrator		1	36			
12	Bar Cutter		1	37			
13	Bar Bender		1	38			
14	Welding Machine		1	39			
15	Backhoe (Crawler Mounted)	(0.80 m3, 50 HP)	1	40			
16	Dump Truck	(12 cu.m., 290 HP)	1	41			
17	Concrete Saw, Blade (14" Blade ϕ w/ 3/4" cutting depth)	7.5 HP	1	42			
18	Vibratory Roller	(125 HP)	1	43			
19	Concrete Screeder		1	44			
20				45			
21				46			
22				47			
23				48			
24				49			
25				50			
SUB-TOTAL			19	SUB-TOTAL			
TOTAL							19

Prepared by:

JOYCE D. MATANGUIHAN
Engineer II

Checked by:

REY Y. CASTILLO
Engineer II

Submitted by:

ARLENE S. MENDOZA
DIO Chief, Planning & Design Section



Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

FORM POW-2015-01B-00

MINIMUM MANPOWER REQUIREMENT					
No.	Manpower Description	Quantity	No.	Manpower Description	Quantity
1	Project Engineer	1	26		
2	Materials Engineer	1	27		
3	Safety Practitioner	1	28		
4	Health Personnel	1	29		
5	Construction Foreman	1	30		
6	Skilled Laborers	10	31		
7	Unskilled Laborers	15	32		
8			33		
9			34		
10			35		
11			36		
12			37		
13			38		
14			39		
15			40		
16			41		
17			42		
18			43		
19			44		
20			45		
21			46		
22			47		
23			48		
24			49		
25			50		
SUB-TOTAL		30	SUB-TOTAL		
TOTAL					30

Prepared by:

JOYCE D. MATANGUIHAN
Engineer II

Checked by:

REY Y. CASTILLO
Engineer II

Submitted by:

ARLENE S. MENDOZA
OIC, Chief, Planning & Design Section



Name of Project: Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00

Location: Tondo, Manila

DETAILED ESTIMATE

PART A - FACILITIES FOR THE ENGINEER

A.1.1 (3) Construction of Field Office for the Engineer

(Rocks)gs)
Area = 5.00 x 8.00 = 40.00 sq.m.
Qty. = 1.00 1.5.

PART B - OTHER GENERAL REQUIREMENTS

B.5 Project Billboard / Signboard (DPWH Billboard)

Qty. = 2.00 each

B.5 Project Billboard / Signboard (COA Billboard)

Qty. = 2.00 each

B.7 (2) Occupational Safety and Health Program

Qty. = 1.00 1.5.

B.8 (2) Traffic Management

Qty. = 1.00 1.5.

B.9 Mobilization / Demobilization

Qty. = 1.00 1.5.

PART C - EARTHWORK

103(1) Removal of Structures and Obstruction

(Cutting of Concrete Pavement)

Qty. = 1.00 1.5.

K0007+	524.00	K0007+	551.00 =	27.00	width =	8.00
K0007+	524.00	K0007+	528.50 =	4.50	width =	4.00
K0007+	533.00	K0007+	546.50 =	13.50	width =	4.00
K0007+	537.50	K0007+	560.00 =	22.50	width =	4.00
K0007+	555.50	K0007+	582.50 =	27.00	width =	4.00
K0007+	551.00	K0007+	573.50 =	22.50	width =	4.00
K0007+	560.00	K0007+	587.00 =	27.00	width =	4.00
K0007+	578.00	K0007+	596.00 =	18.00	width =	8.00
K0007+	605.00	K0007+	632.00 =	27.00	width =	4.00
K0007+	636.50	K0007+	659.00 =	22.50	width =	4.00
K0007+	645.50	K0007+	668.00 =	22.50	width =	4.00
K0007+	681.50	K0007+	708.50 =	27.00	width =	4.00
K0007+	726.50	K0007+	744.50 =	18.00	width =	4.00
K0007+	753.50	K0007+	767.00 =	13.50	width =	4.00
K0007+	771.50	K0007+	794.00 =	22.50	width =	8.00
K0007+	807.50	K0007+	825.50 =	18.00	width =	4.00
K0007+	830.00	K0007+	852.50 =	22.50	width =	4.00
K0007+	857.00	K0007+	889.00 =	27.00	width =	4.00
K0007+	888.50	K0007+	902.00 =	13.50	width =	8.00
K0007+	893.00	K0007+	915.50 =	22.50	width =	4.00
K0007+	924.50	K0007+	942.50 =	18.00	width =	4.00

Qty. = ((27.00+8.00) + (4.50+4.00) + (13.50+4.00) + (22.50+4.00) + (27.00+4.00) + (22.50+4.00) + (27.00+4.00) + (18.00+8.00) + (27.00+4.00) + (22.50+4.00) + (22.00+4.00) + (18.00+4.00) + (13.50+4.00) + (22.50+4.00) + (22.50+4.00) + (18.00+4.00)) (7.00) + (22.50+8.00) + (18.00+4.00) + (22.50+4.00) + (27.00+4.00) + (13.50+8.00) + (22.50+4.00) + (18.00+4.00)) (7.00)

Qty. = 1073.00 1.m x P77.14 = P82,771.22 /1s.

b. (Lifting / Hoisting of RCMH Cover)
Output: 4.00 pcs/hr
No. of Cover / MH: 3.00 pcs
No. of Manhole: 33.00 units

Qty. = 99.00 pcs x P561.44 = P55,582.56 /1s.

TOTAL = P138,353.78 /1s.



DETAILED ESTIMATE

216.00	
18.00	
54.00	
90.00	
108.00	
90.00	
108.00	
144.00	
108.00	
90.00	
108.00	
72.00	
54.00	
180.00	
72.00	
90.00	
108.00	
108.00	
90.00	
72.00	
2070.00	
2070.00	m²

PART G • DRAINAGE AND SLOPE PROTECTION STRUCTURES

502(4)23 Concrete Covers (910mm dia.)
(1.50 x 0.40 x 0.20m thk)

# of Mantles:	33.00	units
# of Covers per Mantle:	3.00	pcs

$$\text{Qty} = (33.00)(3.00) = 99.00$$

Qty = 99.00 each

PART H - MISCELLANEOUS STRUCTURES

612(1) ReflectORIZED Thermoplastic Pavement Markings White

a. Eckie Line

[illegible]

b. Latent Line

Start	End	width	factor	qty	
K0007 +	945.00	472.00	-	472.00	
473.00 K0007 +	472.00	0.15	x	3.00	
					70.80
Total				=	160.64
				say	160.60 m ²

PREPARED BY:

BOYCE D. MATANGUIAN

CHECKED BY:

REVIEWED/SUBMITTED BY:

RECOMMENDING APPROVAL:

ARLENE S. MENDOZA
CIO, Chief, Planning & Design Section

DENRY CAESAR S. CORTUNA
Assistant District Engineer

APPROVED:

DENNIS E. SANDOVAL
District Engineer

District 12:47560



Name of Project: Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00
Location: Tondo, Manila

DETAILED ESTIMATE

101(3)b6 Removal of Actual Structures / Obstruction (0.30m thick, PCCP, Unreinforced)

Start End

K0007 + 473.00 - K0007 + 945

K0007+	524.00	K0007+	551.00	=	27.00	X	8.00	=	216.00
K0007+	524.00	K0007+	528.50	=	4.50	X	4.00	=	18.00
K0007+	533.00	K0007+	546.50	=	13.50	X	4.00	=	54.00
K0007+	537.50	K0007+	560.00	=	22.50	X	4.00	=	90.00
K0007+	555.50	K0007+	582.50	=	27.00	X	4.00	=	108.00
K0007+	551.00	K0007+	573.50	=	22.50	X	4.00	=	90.00
K0007+	560.00	K0007+	587.00	=	27.00	X	4.00	=	108.00
K0007+	578.00	K0007+	596.00	=	18.00	X	8.00	=	144.00
K0007+	605.00	K0007+	632.00	=	27.00	X	4.00	=	108.00
K0007+	636.50	K0007+	659.00	=	22.50	X	4.00	=	90.00
K0007+	645.50	K0007+	668.00	=	22.50	X	4.00	=	90.00
K0007+	681.50	K0007+	708.50	=	27.00	X	4.00	=	108.00
K0007+	726.50	K0007+	744.50	=	18.00	X	4.00	=	72.00
K0007+	753.50	K0007+	767.00	=	13.50	X	4.00	=	54.00
K0007+	771.50	K0007+	794.00	=	22.50	X	8.00	=	180.00
K0007+	807.50	K0007+	825.50	=	18.00	X	4.00	=	72.00
K0007+	830.00	K0007+	852.50	=	22.50	X	4.00	=	90.00
K0007+	857.00	K0007+	884.00	=	27.00	X	4.00	=	108.00
K0007+	898.50	K0007+	902.00	=	13.50	X	8.00	=	108.00
K0007+	893.00	K0007+	915.50	=	22.50	X	4.00	=	90.00
K0007+	924.50	K0007+	942.50	=	18.00	X	4.00	=	72.00

2070.00

Qty= 2070.00 m³

PART D - SUBBASE AND BASE COURSE

200(1) Aggregate Subbase Course

Volume = Area of CCP x Thickness

Volume of PCCP =

2070.00 X

0.05 =

103.50

103.50

Qty= 103.50 m³

PART E - SURFACE COURSES

302(2) Emulsified Asphalt

100mm thk asphalt

K0007 + 473.00 - K0007 + 945

Area of Transition

S. De Jesus St.

Kaunlaran St.

Kalokai St.

R. Nicolas St.

= 472.00 X

16.00

= 13.10 X

2.00 X

0.5

= 8.70 X

2.00 X

0.5

= 12.20 X

2.00 X

0.5

= 11.60 X

2.00 X

0.5

Area of Manholes

=

1.90 X

1.80 X

33.00

Net Area 7,484.74 m²
14,969.48 sq.m.
say 14,969.50 m²

100mm thk (X 2.00)

310(1)c Bituminous Concrete Surface Wearing Course, Hot Laid (50mm)

K0007 + 473.00 - K0007 + 945

Area of Manholes

= 472.00 X

16.00 X

1.00

= 1.90 X

1.80 X

33.00

310(2)c Bituminous Concrete Surface Binder Course, Hot Laid (50mm)
K0007 + 473.00 - K0007 + 945
Area of Transition
S. De Jesus St.
Kaunlaran St.
Kalokai St.
R. Nicolas St.

= 472.00 X

16.00

= 13.10 X

2.00 X

0.50

= 8.70 X

2.00 X

0.50

= 12.20 X

2.00 X

0.50

= 11.60 X

2.00 X

0.50

Area of Manholes

=

1.90 X

1.80 X

33.00

Net Area 7,552.80 m²
14,969.48 sq.m.
less 112.86
say 7,439.10 m²

Net Area 7,484.74 m²
14,969.48 sq.m.
less 112.86
say 7,484.70 m²

Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00
Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)

3rd Quarter, 2024

Project Billboard / Signboard

a. (DPWH Project Billboard)

Item No./Description : B.5
Unit of Measurement : each
Output per hour - As Submitted : 1.00
Output per hour - As Evaluated : 1.00

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a. Construction Foreman		1.00	2.00	171.46	342.92
b. Skilled Laborer		1.00	2.00	124.10	248.20
c. Unskilled Laborer		1.00	2.00	95.42	191.64
Sub - Total for A-As Submitted					782.76
A.2 Labor					
Sub - Total for A.2-As Evaluated					
	Name and Capacity	No. of Units	No. of Hours	Hourly Rate	Amount
B.1 Equipment					
Minor Tools (10% of Labor)					78.28
Sub - Total for B-As Submitted					78.28
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					861.04
D.1 Output per hour-As Submitted					
D.2 Output per hour-As Evaluated				1.000	
E.1 Direct Unit Cost (C.1 ÷ D.1) As Submitted					
E.2 Direct Unit Cost (C.2 ÷ D.2)-As Evaluated					861.04
	Name and Specifications	Unit	Quantity	Unit Cost	Amount
F.1 Materials					
a. Tarpsaulin (4' x 8')	sq.ft.	32.00		20.00	640.00
b. Coco Lumber	sq.ft.	41.00		35.00	1,435.00
c. Assorted Common Wire Nails	kg.	1.00		107.00	107.00
d. Marine Plywood (4' x 8' x 1/2")	pc.	1.00		965.00	965.00
Sub - Total for F-As Submitted					3,147.00
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					4,008.04
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted				12%	480.96
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted				8%	320.64
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted				5%	240.48
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					
K.2 Total Unit Cost-As Evaluated					5,050.13

PREPARED BY:

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OIC-Chief Planning and Design Section

Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00
Tondo, Manila

Item No./Description : A.1.1 (3) Construction of Field Office for the Engineer
Unit of Measurement : ls.
Output per hour - As Submitted : 1.00
Output per hour - As Evaluated : (40 sq.m)

DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter, 2024

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a. Construction Foreman		1.00	40.00	171.46	6,858.40
b. Skilled Laborer		2.00	40.00	124.10	9,928.00
c. Unskilled Laborer		6.00	40.00	95.82	22,996.80
Sub - Total for A.1-As Submitted					39,783.20
A.2 Labor					
Sub - Total for A.2-As Evaluated					
B.1 Equipment	Name and Capacity	No. of Units	No. of Hours	Hourly Rate	Amount
Minor Tools (10% of Labor)					3978.32
Sub - Total for B.1-As Submitted					3,978.32
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					43,761.52
D.1 Output per hour-As Submitted					40.00
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 ÷ D.1) As Submitted					1,094.04
E.2 Direct Unit Cost (C.2 ÷ D.2)-As Evaluated					
F.1 Materials	Name and Specifications	Unit	Quantity	Unit Cost	Amount
a. Coco Lumber 5" x 5" x 12'		bd.ft.	100.00	35.00	3,500.00
b. Coco Lumber 5" x 5" x 10'		bd.ft.	60.00	35.00	2,100.00
c. Coco Lumber 2" x 6" x 12'		bd.ft.	110.00	35.00	3,850.00
d. Coco Lumber 2" x 5" x 18'		bd.ft.	120.00	4,200.00	
e. Coco Lumber 2" x 3" x 14'		bd.ft.	210.00	35.00	7,350.00
f. Coco Lumber 2" x 8" x 14'		bd.ft.	105.00	35.00	3,675.00
g. Coco Lumber 2" x 4" x 12'		bd.ft.	380.00	35.00	13,300.00
h. Coco Lumber 2" x 4" x 14'		bd.ft.	56.00	35.00	1,960.00
i. Coco Lumber 2" x 3" x 10'		bd.ft.	310.00	35.00	10,850.00
j. Coco Lumber 2" x 3" x 12'		bd.ft.	150.00	35.00	5,250.00
k. Coco Lumber 2" x 3" x 14'		bd.ft.	140.00	35.00	4,900.00
l. Marine Plywood 1/2" x 4" x 8'		sq.ft.	12.00	965.00	11,580.00
m. Marine Plywood 1/4" x 4" x 8'		sq.m.	22.00	664.00	14,608.00
n. Gauge 26 x 8 corr. G/Sheat		kg.	40.00	160.00	6,400.00
o. C.W. Nails		kg.	20.00	107.00	2,140.00
p. Roofing Nails			5.00	120.00	600.00
q. Miscellaneous (1% of Material Cost)					962.65
Sub - Total for F.1-As Submitted					97,225.63
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)- As Submitted					140,987.15
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted				12%	69,184.6
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted				8%	11,278.97
I.2 Contractor's Profit (CP)-As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted				8%	8459.22
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					177,643.80
K.2 Total Unit Cost-As Evaluated					

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)

3rd Quarter, 2024

Item No./Description B.5 Project Billboard / Signboard
Unit of Measurement each
Output per hour - As Submitted 1.00
Output per hour - As Evaluated 1.00

Designation					
No. of Person	No. of Hours	Hourly Rate	Amount		
A.1 Labor					
a. Construction Foreman	1.00	4.00	685.84		
b. Skilled Laborer	1.00	4.00	496.40		
c. Unskilled Laborer	1.00	4.00	383.28		
Sub - Total for A.1-As Submitted					
1,565.52					
A.2 Labor					
Sub - Total for A.2-As Evaluated					
B.1 Equipment					
Notes: (Specifications)					
Tarpsaulin : White, 8ft x 8ft.					
Resolution : 70 dpi					
Font : Helvetica					
Font Size : Main Information - 3"					
Font Size : Sub Information - 1"					
Font Color : Black					
Minor Tools (10% of Labor)					
Sub - Total for B.1-As Submitted					
156.55					
Equipment					
Sub - Total for B.2-As Evaluated					
Sub - Total (A.1 + B.1)-As Submitted					
1,722.07					
C.2 Total (A.2 + B.2)-As Evaluated					
D.1 Output per hour-As Submitted					
1.000					
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 + D.1) As Submitted					
1,722.07					
E.2 Direct Unit Cost (C.2 + D.2)-As Evaluated					
F.1 Materials					
Name and Specifications					
Unit	Quantity	Unit Cost	Amount		
a. Tarpsaulin (8' x 8')	64.00	20.00	1,280.00		
c. Coco Lumber	48.00	35.00	1,680.00		
d. Assorted Common Wire Nails	1.00	107.00	107.00		
d. Marine Plywood (8 x 8' x 1/2')	2.00	965.00	1,930.00		
Sub - Total for F.1-As Submitted					
4,997.00					
F.2 Materials					
Sub - Total for F.2-As Evaluated					
Sub - Total (E.1 + F.1)-As Submitted					
6,719.07					
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted					
12%					
806.29					
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted					
8%					
537.53					
I.2 Contractor's Profit (CP)-As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted					
5%					
403.14					
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					
8,466.03					
K.2 Total Unit Cost-As Evaluated					

PREPARED BY:

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Engineer II

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Preventive Maintenance - Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00
Tondo, Manila

Item No./Description : 8.7 (2) Occupational Safety and Health Program
Unit of Measurement : 13.
Output per hour : 1.00

DETAILED UNIT PRICE ANALYSIS (DUPA)

3rd Quarter, 2024

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1. Labor					
	Safety Officer (Full Time)	1.00	86.00	1371.67	117,963.62
	Health Personnel (Full Time)	1.00	86.00	766.56	65,924.16
	Sub - Total for A.1. - As Submitted				183,887.78
A.2. Labor					
	Sub - Total for A.2. - As Evaluated				
	Name and Capacity	No. of Units	Quantity	Daily Rate	Amount
B.1. Equipment					
	Sub - Total for B.1. - As Submitted				0.00
B.2. Equipment					
	Sub - Total for B.2. - As Evaluated				0.00
C.1. Total (A + B) - As Submitted					183,887.78
C.2. Total (A + B) - As Evaluated					0.00
D.1. Output per hour - As Submitted					0.00
D.2. Output per hour - As Evaluated				1.00	
E.1. Direct Unit Cost (C + D) - As Submitted					183,887.78
E.2. Direct Unit Cost (C + D) - As Evaluated					
F.1. Materials	Name and Specifications	Unit	Quantity	Unit Cost	Amount
	Safety Helmet	man-day	387.71	0.52	201.61
	Safety Shoes	man-day	387.71	4.35	1,688.17
	Safety Gloves	man-day	387.71	14.67	5,687.71
	Safety Vest	man-day	387.71	0.47	182.22
	Rain Coats (Optional if necessary)	man-day	116.32	1.23	143.07
	Dusk / Gas Mask	man-day	387.71	39.20	15,198.23
	Sub - Total for F.1. - As Submitted				23,111.01
F.2. Materials					
	Sub - Total for F.2. - As Evaluated				0.00
G.1. Direct Unit Cost (E + F) - As Submitted					206,998.79
G.2. Direct Unit Cost (E + F) - As Evaluated					
H.1. Overhead, Contingencies & Miscellaneous (OCM) - As Submitted				12%	
H.2. Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated					
I.1. Contractor's Profit (CP) - As Submitted				8%	16,559.93
I.2. Contractor's Profit (CP) - As Evaluated					
J.1. Value Added Tax (VAT) - As Submitted				5%	111,779.3
J.2. Value Added Tax (VAT) - As Evaluated					
K.1. Total Unit Cost - As Submitted					234,736.62
K.2. Total Unit Cost - As Evaluated					

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter, 2024

Item No./Description : B.B (2) Traffic Management

Unit of Measurement : 15.

Output per hour : 1.00

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1. Labor					
	a. Traffic Aide	2.00	936.00	95.82	179,375.04
A.2. Labor	Sub - Total for A.1. - As Submitted				179,375.04
	Sub - Total for A.2. - As Evaluated				
	Name and Capacity	No. of Units	Quantity	Daily Rate	Amount
B.1. Equipment					
	Sub - Total for B.1. - As Submitted				0.00
B.2. Equipment					
	Sub - Total for B.2. - As Evaluated				0.00
C.1. Total (A + B) - As Submitted					0.00
C.2. Total (A + B) - As Evaluated					179,375.04
D.1. Output per hour - As Submitted					0.00
D.2. Output per hour - As Evaluated					0.00
E.1. Direct Unit Cost (C + D) - As Submitted					179,375.04
E.2. Direct Unit Cost (C + D) - As Evaluated					0.00
			=	1.00	
			=		
F.1. Materials	Name and Specifications	Unit	Quantity	Unit Cost	Amount
	b. (Steel Barrier with Wiremesh Enclosure - Rental)	each	50.00	1,950.81	97,540.50
	Advance Warning Signs (1800x600mm, Sign Number T1-1 - Road work ahead) (120 C.D)	each	2.00	20.01	4,802.40
	Advance Warning Signs (1200x600mm, Sign Number T1-3 - Road machinery ahead) (120 C.D)	each	2.00	13.77	3,304.80
	Advance Warning Signs (900x600mm, Sign Number T1-5 - workmen ahead) (120 C.D)	each	2.00	11.22	2,692.80
	Advance Warning Signs (1800x600mm, Sign Number T2-15 - End Roadwork) (120 C.D)	each	2.00	20.01	4,802.40
	Road Conditions and Hazard Signs (900x600mm, Sign Number T1-10 - Traffic Hazard Ahead) (120 C.D)	each	2.00	9.96	2,390.40
	Lane and Road Closure Signs (1800x300mm, Sign Number T2-4 - Lane Closed) (120 C.D)	each	2.00	11.14	2,673.60
	28" Plastic, Rubber, Synthetic Rubber Reflective Stripped Traffic Core - Rental (120 C.D)	each	47.00	0.89	5,019.60
	Barricade Flasher Light (120 C.D)	each	15.00	7.44	13,392.00
	Sub - Total for F.1. - As Submitted				136,618.50
F.2. Materials					0.00
	Sub - Total for F.2. - As Evaluated				0.00
G.1. Direct Unit Cost (E + F) - As Submitted					315,993.54
G.2. Direct Unit Cost (E + F) - As Evaluated					
H.1. Overhead, Contingencies & Miscellaneous (OCM) - As Submitted				12%	
H.2. Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated					
I.1. Contractor's Profit (CP) - As Submitted				8%	25279.48
I.2. Contractor's Profit (CP) - As Evaluated					
J.1. Value Added Tax (VAT) - As Submitted				5%	17063.65
J.2. Value Added Tax (VAT) - As Evaluated					
K.1. Total Unit Cost - As Submitted					358,336.67
K.2. Total Unit Cost - As Evaluated					

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter, 2024

Item No. / Description : B.9 Mobilization/Demobilization FORM-POW-2015-01D-00

Unit of Measurement: : I.S.
Output per hour - As Submitted : 1.00
Output per hour - As Evaluated :

	Designation	No. of Person/s	No. of Hour/s	Hourly Rate	Amount (Php)
A.1	Labor				
	Sub - Total for A.1 - As Submitted				
A.2	Labor				
	Sub - Total for A.2 - As Evaluated				
B.1	Equipment	No. of Unit/s	No. of Hour/s	Rate/Hour	Amount (Php)
	Dump Truck (10 m ³)	2	8.00	1,420.00	28,720.00
	Water Truck/Pump	1	8.00	2,450.00	19,600.00
	Low-Bed Trailer	1	192.00	2,500.00	483,000.00
	Asphalt Paver				
	Tandem Steel Roller				
	Pneumatic Tie Roller				
	Asphalt Distributor				
	Vibrator Roller				
	Concrete/Pavement Breaker				
Backhoe					
	Sub - Total for B.1 - As Submitted				522,320.00
B.2	Equipment				
C.1	Sub - Total for B.2 - As Evaluated				
	Total (A.1 + B.1) - As Submitted				522,320.00
	Total (A.1 + B.1) - As Evaluated				
	Output per hour - As Submitted				1.00
	Output per hour - As Evaluated				
	Direct Unit Cost (C.1 ÷ D.1) - As Submitted				522,320.00
E.2	Direct Unit Cost (C.1 + D.1) - As Evaluated				
F.1	Name & Specification	Unit	Quantity	Unit Cost	Amount (Php)
	Materials				
	Mobilization/Demobilization (1% of Direct Cost+2 Billboard)				37,370,351.98
	Note E.1 and E.2 Should not exceed 1% of Direct Cost of Civil Works				373,703.52
	Sub - Total for F.1 - As Submitted				373,703.52
F.2	Materials				
G.1	Sub - Total for F.2 - As Evaluated				
	Direct Unit Cost (E.1 + F.1) - As Submitted				373,703.52
	Direct Unit Cost (E.2 + F.2) - As Evaluated				
	Overhead, Contingencies & Miscellaneous (OCM) - As Submitted			0%	
	Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated			0%	
	Contractor's Profit (CP) - As Submitted				
	Contractor's Profit (CP) - As Evaluated				
	Value Added Tax (VAT) - As Submitted				
	Value Added Tax (VAT) - As Evaluated			5%	18,485.18
	Total Unit Cost - As Submitted				392,388.70
K.2	Total Unit Cost - As Evaluated				

Prepared by:


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DETAILED UNIT PRICE ANALYSIS (DUPA)

3rd Quarter, 2024

Item No./Description
Unit of Measurement
Output per hour - As Submitted
Output per hour - As Evaluated

B.8 (2)
each
1.00
Traffic Management
b. [Steel Barrier with Wiremesh Enclosure - Rental]

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a.	Construction Foreman	1.00	4.00	171.46	685.84
b.	Skilled Laborer	1.00	4.00	124.10	496.40
c.	Unskilled Laborer	2.00	4.00	95.82	766.56
	Sub - Total for A.1-As Submitted				1,948.80
A.2 Labor					
	Sub - Total for A.2-As Evaluated				
	Name and Capacity	No. of Units	No. of Hours	Hourly Rate	Amount
B.1 Equipment					
a.	Welding Machine - gas/diesel driven (300 Ampere, 48 HP) Minor Tools (10% of Labor)	1.00	1.00	371.00	371.00
	Sub - Total for B.1-As Submitted				194.88
B.2 Equipment					565.88
	Sub - Total for B.2-As Evaluated				
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					2,514.68
D.1 Output per hour-As Submitted					
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 ÷ D.1) As Submitted					
E.2 Direct Unit Cost (C.2 ÷ D.2) As Evaluated					
	Name and Specifications	Unit	Quantity	Unit Cost	Amount
F.1 Materials					
a.	G.I. Pipe Schedule 40, Dia. 1" (Leg)	pc	0.20	1,152.00	230.40
b.	16mm Dia. RSB (hook)	kg.	0.53	58.00	30.74
c.	G.I. Pipe Schedule 40, Dia. 1 1/2"	pc	2.00	1,859.00	3,718.00
d.	6mm MS Plate (Base Plate)	kg.	5.99	63.00	377.37
e.	Wiremesh 2' x 2'	sq.m.	1.60	580.00	928.00
f.	Plain G.I. Sheet, Gauge 16 - 4x8	sq.m.	1.60	746.53	1,194.45
g.	4mm x 25mm Flat Bar	kg	11.55	63.00	727.65
h.	Welding Rod	kg.	0.18	182.00	32.76
	Sub - Total for F.1-As Submitted				7,239.37
F.2 Materials					
	Sub - Total for F.2-As Evaluated				
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					9,754.05
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted					
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted					
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted					
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					
K.2 Total Unit Cost-As Evaluated				20% Rental	1,950.81

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)

3rd Quarter, 2024

Advance Warning Signs (Road Work Ahead)
(11-1) 1800x600mm)

Item No./Description

Unit of Measurement : each
Output per hour - As Submitted : 1.00
Output per hour - As Evaluated

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a. Construction Foreman		1.00	1.00	171.46	171.46
b. Skilled Laborer		1.00	1.00	124.10	124.10
c. Unskilled Laborer		1.00	1.00	95.82	95.82
Sub - Total for A.1-As Submitted					391.38
A.2 Labor					
Sub - Total for A.2-As Evaluated					
	Name and Capacity	No. of Units	No. of Hours	Hourly Rate	Amount
B.1 Equipment					
a. Cargo Truck/Delivery Truck (5T), All Models		1.00	0.25	783.00	195.75
a. Welding Machine - gas/diesel driven (300 Ampere, 48 HP)		1.00	0.50	371.00	185.50
Minor Tools (10% of Labor)					39.14
Sub - Total for B.1-As Submitted					420.39
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					811.77
D.1 Output per hour-As Submitted			1.000		
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 + D.1) As Submitted					811.77
E.2 Direct Unit Cost (C.2 + D.2)-As Evaluated					
	Name and Specifications	Unit	Quantity	Unit Cost	Amount
F.1 Materials					
a. 2"x2"x2.33 Angular Bar (6m)		kgs	41.98	88.00	3,694.24
b. Bolt with nuts and washer (M5 x 25mm)		kgs	6.60	36.00	237.60
c. 1 1/2"x10"x3/16" Flat Bar		kgs	2.685	63.00	169.16
d. Welding Rod		kgs	0.21	182.00	38.22
e. 3mm Aluminum Sheet Backing (1800mm x 600 mm)		pc	1.00	16,960.00	16,960.00
Sub - Total for F.1-As Submitted					21,099.22
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					21,910.99
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted					
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP) -As Submitted					
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted					
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted				Daily Rental Rate	20.01
K.2 Total Unit Cost-As Evaluated					

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)

3rd Quarter, 2024
Advance Warning Signs
(T1-3, 1200x600mm)
(Road Machinery Ahead)

Item No./Description

Unit of Measurement : each
Output per hour - As Submitted : 1.00
Output per hour - As Evaluated : 1.00

Designation		No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a.	Construction Foreman	1.00	1.00	171.46	171.46
b.	Skilled Laborer	1.00	1.00	124.10	124.10
c.	Unskilled Laborer	1.00	1.00	95.82	95.82
Sub - Total for A.1-As Submitted					391.38
A.2 Labor					
Sub - Total for A.2-As Evaluated					
B.1 Equipment					
Name and Capacity		No. of Units	No. of Hours	Hourly Rate	Amount
a.	Cargo Truck/Delivery Truck (5T), All Models	1.00	0.25	783.00	195.75
a.	Welding Machine - gas/diesel driven (300 Ampere, 48 HP)	1.00	0.50	371.00	185.50
Minor tools (10% of Labor)					39.14
Sub - Total for B.1-As Submitted					420.39
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					811.77
C.2 Total (A.2 + B.2)-As Evaluated					
D.1 Output per hour-As Submitted			1.00		
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 ÷ D.1) As Submitted					811.77
E.2 Direct Unit Cost (C.2 ÷ D.2)-As Evaluated					
Name and Specifications					
F.1 Materials					
a.	2"x2"x2.33 Angular Bar (6m)	kg	27.984	88.00	2,462.59
b.	Bolt with nuts and washer (M5 x 25mm)	kg	6.60	36.00	237.60
c.	1 1/2"x10"x3/16" Flat Bar	kg	1.790	63.00	112.77
d.	Welding Rod	kg	0.153	182.00	27.85
e.	3mm Aluminum Sheet Backing (1200mm x 600 mm)	pc	1.00	11,429.00	11,429.00
Sub - Total for F.1-As Submitted					14,269.81
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 ÷ F.1)-As Submitted					15,081.56
G.2 Direct Unit Cost (E.2 ÷ F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted					
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted					
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted					
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted				Daily Rental Rate	13.77
K.2 Total Unit Cost-As Evaluated					

PREPARED BY:

JOYCE D. MATANGUIHAN
Engineer II

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ARIENE S. MENDOTA
OIC-Chief, Planning and Design Section

DETAILED UNIT PRICE ANALYSIS (DUPA)

3rd Quarter, 2024
Advance Warning Signs
(11-5, 900 x 600mm)
(Workmen Ahead)

Item No./Description

Unit of Measurement : each
Output per hour - As Submitted : 1.00
Output per hour - As Evaluated

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1	Labor				
a.	Construction Foreman	1.00	1.00	171.46	171.46
b.	Skilled Laborer	1.00	1.00	124.10	124.10
c.	Unskilled Laborer	1.00	1.00	95.82	95.82
	Sub - Total for A.1-As Submitted				391.38
A.2	Labor				
	Sub - Total for A.2-As Evaluated				
	Name and Capacity	No. of Units	No. of Hours	Hourly Rate	Amount
B.1	Equipment				
a.	Cargo Truck/Delivery Truck (5T) All Models	1.00	0.25	783.00	195.75
a.	Welding Machine - gas/diesel driven (300 Ampere, 48 HP)	1.00	0.50	371.00	185.50
	Minor tools (10% of Labor)				39.14
	Sub - Total for B.1-As Submitted				420.39
B.2	Equipment				
	Sub - Total for B.2-As Evaluated				
C.1	Total (A.1 + B.1)-As Evaluated				
C.2	Total (A.2 + B.2)-As Submitted				811.77
D.1	Output per hour-As Submitted				
D.2	Output per hour-As Evaluated				
E.1	Direct Unit Cost (C.1 ÷ D.1) As Submitted				811.77
E.2	Direct Unit Cost (C.2 ÷ D.2)-As Evaluated				
	Name and Specifications	Unit	Quantity	Unit Cost	Amount
F.1	Materials				
a.	2"x2"x2.33 Angular Bar (6m)	kgs	27.984	68.00	2,462.59
b.	Bolt with nuts and washer (M5 x 25mm)	kgs	5.28	36.00	190.08
c.	1 1/2"x10"x3/16" Flat Bar	kgs	1.3430	63.00	84.61
d.	Welding Rod	kgs	0.153	182.00	27.85
e.	3mm Aluminum Sheet Backing (900mm x 600 mm)	pc	1.00	8,710.00	8,710.00
	Sub - Total for F.1-As Submitted				11,475.13
F.2	Materials				
	Sub - Total for F.2-As Evaluated				
G.1	Direct Unit Cost (E.1 + F.1)-As Submitted				12,286.90
G.2	Direct Unit Cost (E.2 + F.2)-As Evaluated				
H.1	Overhead, Contingencies & Miscellaneous (OCM)-As Submitted				
H.2	Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated				
I.1	Contractor's Profit (CP)-As Submitted				
I.2	Contractor's Profit (CP) -As Evaluated				
J.1	Value Added Tax (VAT)-As Submitted				
J.2	Value Added Tax (VAT)-As Evaluated				
K.1	Total Unit Cost-As Submitted			Daily Rental Rate	11.22
K.2	Total Unit Cost-As Evaluated				

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)

Item No./Description : 3rd Quarter, 2024 (End Roadwork)
Unit of Measurement : Advance Warning Signs
Output per hour - As Submitted : each
Output per hour - As Evaluated : 1.00 (12-16, 1800 x 600mm)

Item No./Description	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a. Construction Foreman		1.00	1.00	171.46	171.46
b. Skilled Laborer		1.00	1.00	124.10	124.10
c. Unskilled Laborer		1.00	1.00	95.82	95.82
Sub - Total for A.1-As Submitted					391.38
A.2 Labor					
Sub - Total for A.2-As Evaluated					
B.1 Equipment	Name and Capacity	No. of Units	No. of Hours	Hourly Rate	Amount
a. Cargo Truck/Delivery Truck (5T): All Models		1.00			
a. Welding Machine - gas/diesel driven (300 Ampere, 48 HP)		1.00	0.25	783.00	195.75
Minor Tools (10% of Labor)			0.50	371.00	185.50
Sub - Total for B.1 -As Submitted					39.14
B.2 Equipment					420.39
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					811.77
D.1 Output per hour-As Submitted					
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 + D.1) As Submitted					
E.2 Direct Unit Cost (C.2 ÷ D.2)-As Evaluated					811.77
F.1 Materials	Name and Specifications	Unit	Quantity	Unit Cost	Amount
a. 2"x2"x2.33 Angular Bar (6m)		kgs	41.98	83.00	3,694.24
b. Bolt with nuts and washer (M5 x 25mm)		kgs	6.60	34.00	237.60
c. 1 1/2"x10"x3/16" Flat Bar		kgs	2.685	63.00	169.16
d. Welding Rod		kgs	0.21	182.00	38.22
e. 3mm Aluminum Sheet Backing (1800mm x 600 mm)		pc	1.00	16,960.00	16,960.00
Sub - Total for F.1-As Submitted					21,099.22
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					21,910.99
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted					
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted					
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted					
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					
K.2 Total Unit Cost-As Evaluated				Daily Rental Rate	20.01

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DETAILED UNIT PRICE ANALYSIS (DUPA)

3rd Quarter, 2024

Advance Warning Signs
(11-10, 1200 x 900mm)

(Traffic Hazard Ahead)

Item No./Description

Unit of Measurement

Output per hour - As Submitted

Output per hour - As Evaluated

each
1.00

Designation		No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a.	Construction Foreman	1.00	1.00	171.46	171.46
b.	Skilled Laborer	1.00	1.00	124.10	124.10
c.	Unskilled Laborer	1.00	1.00	95.82	95.82
Sub - Total for A.1-As Submitted					391.38
A.2 Labor					
Sub - Total for A.2-As Evaluated					
B.1 Equipment					
Name and Capacity		No. of Units	No. of Hours	Hourly Rate	Amount
a.	Cargo Truck/Delivery Truck (5T), All Models	1.00	0.25	783.00	195.75
a.	Welding Machine - gas/diesel driven (300 Ampere, 48 HP)	1.00	0.50	371.00	185.50
Minor Tools (10% of Labor)					39.14
Sub - Total for B.1-As Submitted					420.39
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
Sub Total (A.1 + B.1)-As Submitted					811.77
Sub Total (A.2 + B.2)-As Evaluated					
Output per hour-As Submitted			1.000		
Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 + D.1) As Submitted					811.77
E.2 Direct Unit Cost (C.2 + D.2)-As Evaluated					
Name and Specifications		Unit	Quantity	Unit Cost	Amount
F.1 Materials					
a.	2"x2"x2.33 Angular Bar (6m)	kg	27.984	88.00	2,462.59
b.	Bolt with nuts and washer (M5 x 25mm)	kg	6.60	36.00	237.60
c.	1 1/2"x10 xs/16" Flat Bar	kg	1.790	63.00	112.77
d.	Welding Rod	kg	0.153	182.00	27.95
e.	3mm Aluminum Sheet Backing (1200mm x 900 mm)	pc	1.00	7,250.00	7,250.00
Sub - Total for F.1-As Submitted					10,090.81
F.2 Materials					
Sub - Total for F.2-As Evaluated					
Sub Direct Unit Cost (E.1 + F.1)-As Submitted					10,902.58
Sub Direct Unit Cost (E.2 + F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted					
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted					
I.2 Contractor's Profit (CP)-As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted					
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					
K.2 Total Unit Cost-As Evaluated				Daily Rental Rate	9.9%

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)

3rd Quarter, 2024

426(S)a1 Advance Warning Signs (Lane and Road Closure)
(12-4.m 1800 x 300mm)

Item No./Description

Unit of Measurement
Output per hour - As Submitted
Output per hour - As Evaluated

each
1.00

Designation		No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor	a. Construction Foreman	1.00	1.00	171.46	171.46
	b. Skilled Laborer	1.00	1.00	124.10	124.10
	c. Unskilled Laborer	1.00	1.00	95.82	95.82
	Sub - Total for A.1-As Submitted				391.38
A.2 Labor					
	Sub - Total for A.2-As Evaluated				
Name and Capacity		No. of Units	No. of Hours	Hourly Rate	Amount
B.1 Equipment	a. Cargo Truck/Delivery Truck (5T). All Models	1.00	0.25	783.00	195.75
	a. Welding Machine - gas/diesel driven (300 Ampere, 48 HP)	1.00	0.50	371.00	185.50
	Minor Tools (10% of Labor)				39.14
	Sub - Total for B.1-As Submitted				420.39
B.2 Equipment					
	Sub - Total for B.2-As Evaluated				
C.1 Total (A.1 + B.1)-As Evaluated					
C.2 Total (A.2 + B.2)-As Evaluated					811.77
D.1 Output per hour-As Submitted				1.000	
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 + D.1) As Submitted					
E.2 Direct Unit Cost (C.2 + D.2)-As Evaluated					811.77
Name and Specifications		Unit	Quantity	Unit Cost	Amount
F.1 Materials	a. 2"x2"x2.33 Angular Bar (6m)	kgs	41.980	88.00	3,694.24
	b. Bolt with nuts and washer (M5 x 25mm)	kgs	6.60	36.00	237.60
	c. 1 1/2"x10"x3/16" Flat Bar	kgs	2.485	63.00	169.16
	d. Welding Rod	kgs	0.21	182.00	38.22
	e. 3mm Aluminum Steel Backing (1200mm x 900 mm)	pc	1.00	7,250.00	7,250.00
	Sub - Total for F.1-As Submitted				11,389.22
F.2 Materials					
	Sub - Total for F.2-As Evaluated				
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					12,200.99
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted					
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted					
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted					
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted				Daily Rental Rate	11.14
K.2 Total Unit Cost-As Evaluated					

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter, 2024

Reflective Stripped Traffic Cone (28" high plastic, Synthetic Rubber)

Item No./Description

Unit of Measurement : each
Output per hour - As Submitted : 1.00
Output per hour - As Evaluated :

Designation		No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
Sub - Total for A.1-As Submitted					
A.2 Labor					
Sub - Total for A.2-As Evaluated					
Name and Capacity					
B.1 Equipment		No. of Units	No. of Hours	Hourly Rate	Amount
Sub - Total for B.1-As Submitted					
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					
D.1 Output per hour-As Submitted					
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 ÷ D.1) As Submitted					
E.2 Direct Unit Cost (C.2 ÷ D.2)-As Evaluated					
Name and Specifications					
F.1 Materials		Unit	Quantity	Unit Cost	Amount
a. 28" Reflective Stripped Traffic Cone (Plastic Rubberized Synthetic)	each		1.00	650.00	650.00
Sub - Total for F.1 -As Submitted					
F.2 Materials					650.00
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					650.00
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted					
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted					
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted					
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted				Daily Rental Rate	0.89
K.2 Total Unit Cost-As Evaluated					

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter, 2024
Barricade Flasher Light

Item No./Description

Unit of Measurement : each
Output per hour - As Submitted : 1.00
Output per hour - As Evaluated :

Designation		No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
Sub - Total for A.1-As Submitted					
A.2 Labor					
Sub - Total for A.2-As Evaluated					
Name and Capacity					
B.1 Equipment		No. of Units	No. of Hours	Hourly Rate	Amount
Sub - Total for B.1-As Submitted					
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					
D.1 Output per hour-As Submitted			1,000		
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 + D.1) As Submitted					
E.2 Direct Unit Cost (C.2 + D.2)-As Evaluated					
Name and Specifications					
F.1 Materials		Unit	Quantity	Unit Cost	Amount
a. Flashing Lamps (Barricade Flasher Light)	each		1.00	1,340.00	1,340.00
Sub - Total for F.1-As Submitted					
F.2 Materials					1,340.00
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					1,340.00
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted					
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted					
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted					
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					
K.2 Total Unit Cost-As Evaluated				Daily Rental Rate	7.44

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Tondo, Manila

Item No./Description : 101(1) Removal of Structures and Obstruction
Unit of Measurement : l.m.
Output per hour - As Submitted : 15.00
Output per hour - As Evaluated :

DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter, 2024

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a. Construction Foreman		1.00	1.00	171.46	171.46
b. Unskilled Laborer		2.00	1.00	95.82	191.64
Sub - Total for A.1-As Submitted					363.10
A.2 Labor					
Sub - Total for A.2-As Evaluated					
	Name and Capacity	No. of Units	No. of Hours	Hourly Rate	Amount
B.1 Equipment					
a. Water Truck (16000L, 360 HP)		1.00	0.10	2,450.00	245.00
b. Concrete Saw, Blade (14" Blade ϕ w/ 3/4" cutting depth, 7.5 HP)		1.00	1.00	32.64	32.64
Minor Tools (10% of Labor)					36.31
Sub - Total for B.1-As Submitted					313.95
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					677.05
C.2 Total (A.2 + B.2)-As Evaluated					
D.1 Output per hour-As Submitted					
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 + D.1) As Submitted					
E.2 Direct Unit Cost (C.2 + D.2)-As Evaluated					
	Name and Specifications	Unit	Quantity	Unit Cost	Amount
F.1 Materials					
a. Concrete Saw (Diamond Blade 14")		pc.	1.00	32.00	32.00
Rate of Usage : 250.00 meter/blade					
Unit Cost of Blade: P 8,000.00					
Sub - Total for F.1-As Submitted					32.00
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					77.14
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted					
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted					
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted					
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					
K.2 Total Unit Cost-As Evaluated					

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DETAILED UNIT PRICE ANALYSIS (DUPA)

3rd Quarter, 2024

Item No./Description : 101(1) Removal of Structures and Obstruction
Unit of Measurement : ls. a. (Cutting of Concrete Pavement)
Output per hour : 1.00

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1. Labor					
	Sub - Total for A.1. - As Submitted				0.00
A.2. Labor					
	Sub - Total for A.2. - As Evaluated				
	Name and Capacity	No. of Units	No. of Days	Daily Rate	Amount
B.1. Equipment					
	Sub - Total for B.1. - As Submitted				0.00
B.2. Equipment					
	Sub - Total for B.2. - As Evaluated				0.00
C.1. Total (A + B) - As Submitted					0.00
C.2. Total (A + B) - As Evaluated					0.00
D.1. Output per hour - As Submitted				1.00	
D.2. Output per hour - As Evaluated					
E.1. Direct Unit Cost (C + D) - As Submitted					
E.2. Direct Unit Cost (C + D) - As Evaluated					
F.1. Materials	Name and Specifications	Unit	Quantity	Unit Cost	Amount
	Cutting of Concrete Pavement	lm.	1.0/3.00	77.14	82.71.22
	Lifting / Hoisting of RCWH Cover (Replacement)	pc	99.00	561.44	55,582.56
	Sub - Total for F.1. - As Submitted				138,353.78
F.2. Materials					
	Sub - Total for F.2. - As Evaluated				0.00
G.1. Direct Unit Cost (E + F) - As Submitted					138,353.78
G.2. Direct Unit Cost (E + F) - As Evaluated					
H.1. Overhead, Contingencies & Miscellaneous (OCM) - As Submitted					
H.2. Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated				12%	16607.45
I.1. Contractor's Profit (CP) - As Submitted					
I.2. Contractor's Profit (CP) - As Evaluated				8%	11068.30
J.1. Value Added Tax (VAT) - As Submitted					
J.2. Value Added Tax (VAT) - As Evaluated				5%	8301.23
K.1. Total Unit Cost - As Submitted					
K.2. Total Unit Cost - As Evaluated					174,325.76

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DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter, 2024

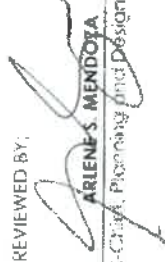
Item No./Description		pc	Removal of Structures and Obstruction (Replacement of KC Manhole)
Unit of Measurement		pc	(Lifting/Hoisting)
Output per hour		4.00	

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1. Labor	Lifting / Hoisting of RCMH Cover (Replacement)				
	Skilled	1.00	1.00	124.10	124.10
	Unskilled	2.00	1.00	95.82	191.64
	Sub - Total for A.1. - As Submitted				315.74
A.2. Labor					
	Sub - Total for A.2. - As Evaluated				
	Name and Capacity	No. of Units	No. of Days	Daily Rate	Amount
B.1. Equipment					
	Boom Truck	1.00	1.00	1,930.00	1,930.00
	Sub - Total for B.1. - As Submitted				1,930.00
B.2. Equipment					
	Sub - Total for B.2. - As Evaluated				
C.1. Total (A + B) - As Submitted					0.00
C.2. Total (A + B) - As Evaluated					2,245.74
D.1. Output per hour - As Submitted				4.00	0.00
D.2. Output per hour - As Evaluated					
E.1. Direct Unit Cost (C + D) - As Submitted					561.44
E.2. Direct Unit Cost (C + D) - As Evaluated					
F.1. Materials	Name and Specifications	Unit	Quantity	Unit Cost	Amount
	Sub - Total for F.1. - As Submitted				0.00
F.2. Materials					
	Sub - Total for F.2. - As Evaluated				0.00
G.1. Direct Unit Cost (E + F) - As Submitted					561.44
G.2. Direct Unit Cost (E + F) - As Evaluated					
H.1. Overhead, Contingencies & Miscellaneous (OCM) - As Submitted					
H.2. Overhead, Contingencies & Miscellaneous (OCM) - As Evaluated					
I.1. Contractor's Profit (CP) - As Submitted					
I.2. Contractor's Profit (CP) - As Evaluated					
J.1. Value Added Tax (VAT) - As Submitted					
J.2. Value Added Tax (VAT) - As Evaluated					
K.1. Total Unit Cost - As Submitted					
K.2. Total Unit Cost - As Evaluated					

PREPARED BY:


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DETAILED UNIT PRICE ANALYSIS (DUPA)

Item No./Description
Unit of Measurement
Output per hour - As Submitted
Output per hour - As Evaluated

101(3)b6
sq.m.
30.67

3rd Quarter, 2024
Removal of Actual Structures / Obstruction (RCCP, Unreinforced, 0.30m thk)

Designation		No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor	a. Construction Foreman	1.00	1.00	171.46	171.46
	b. Unskilled Laborer	2.00	1.00	95.82	191.64
	Sub - Total for A.1-As Submitted				363.10
A.2 Labor					
Sub - Total for A.2-As Evaluated					
B.1 Equipment	Name and Capacity		No. of Units	Hourly Rate	Amount
	a. Backhoe (Crawler Mounted, 0.80 m3, 50 HP)	1.00	1.50	2,724.80	4,087.20
	b. Payloader (1.50 cu.m., 110 HP)	1.00	1.50	1,733.00	2,599.50
	c. Dump Truck (12 cu.m., 290 HP)	1.00	0.80	1,420.00	1,136.00
	Minor Tools (10% of Labor)				36.31
	Note: Disposal Area (within 3km)				
Sub - Total for B.1-As Submitted					7,859.01
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					8,222.11
D.1 Output per hour-As Submitted					
D.2 Output per hour-As Evaluated				30.67	
E.1 Direct Unit Cost (C.1 ÷ D.1) As Submitted					
E.2 Direct Unit Cost (C.2 ÷ D.2)-As Evaluated					268.08
Name and Specifications		Unit	Quantity	Unit Cost	Amount
F.1 Materials					
Sub - Total for F.1-As Submitted					0.00
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					268.08
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted				12%	32.17
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted				8%	21.45
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted				5%	16.09
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					337.79
K.2 Total Unit Cost-As Evaluated					

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DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter, 2024

Item No./Description
Unit of Measurement
Output per hour - As Submitted
Output per hour - As Evaluated

200(1)
C.U.M.
50.00

Aggregate Subbase Course

Designation		No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor	a. Construction Foreman	1.00	1.00	171.46	171.46
	b. Unskilled Laborer	2.00	1.00	95.82	191.64
Sub - Total for A.1-As Submitted					363.10
A.2 Labor					
Sub - Total for A.2-As Evaluated					
Name and Capacity		No. of Units	No. of Hours	Hourly Rate	Amount
B.1 Equipment	a. Motorized Riad Grader (140Hp) G710A	1.00	1.50	2,173.00	3,259.50
	a. Vibratory Roller (125 HP)	1.00	1.50	1,846.00	2,769.00
	b. Water Truck (16000L, 360 HP)	1.00	0.40	2,450.00	980.00
Sub - Total for B.1-As Submitted					7,008.50
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
Sub - Total (A.1 + B.1)-As Submitted					
Sub - Total (A.2 + B.2)-As Evaluated					7,371.60
Output per hour-As Submitted				50.00	
Output per hour-As Evaluated					
Direct Unit Cost (C.1 ÷ D.1) As Submitted					
Direct Unit Cost (C.2 ÷ D.2)-As Evaluated					147.43
Name and Specifications		Unit	Quantity	Unit Cost	Amount
F.1 Materials	a. Aggregate Sub-base Course (with 15% Shrinkage Factor)	C.U.M.	1.15	569.00	654.35
					654.35
Sub - Total for F.1-As Submitted					
F.2 Materials					
Sub - Total for F.2-As Evaluated					
Sub - Total Unit Cost (E.1 + F.1)-As Submitted					801.78
Sub - Total Unit Cost (E.2 + F.2)-As Evaluated					
Overhead, Contingencies & Miscellaneous (OCM)-As Submitted				12%	96.21
Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
Contractor's Profit (CP)-As Submitted				8%	64.14
Contractor's Profit (CP)-As Evaluated					
Value Added Tax (VAT)-As Submitted				5%	48.11
Value Added Tax (VAT)-As Evaluated					
Total Unit Cost-As Submitted					1,010.24
Total Unit Cost-As Evaluated					

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CHECKED BY/REVIEWED BY:

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter, 2024

Item No./Description : 302(2) Emulsified Asphalt
Unit of Measurement : sq.m.
Output per hour - As Submitted : 430.00
Output per hour - As Evaluated :

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a. Construction Foreman		1.00	1.00	171.46	171.46
b. Unskilled Laborer		3.00	1.00	95.82	287.46
Sub - Total for A.1-As Submitted					458.92
A.2 Labor					
Sub - Total for A.2-As Evaluated					
B.1 Equipment	Name and Capacity	No. of Units	No. of Hours	Hourly Rate	Amount
a. Asphalt Distributor (10ft wide, 5 tons, 3000 usg, 100 HP)		1.00	1.50	936.00	1,404.00
b. Power Broom (2.0m wide)		1.00	1.00	130.54	130.54
Sub - Total for B.1-As Submitted					1,534.54
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					1,993.46
C.2 Total (A.2 + B.2)-As Evaluated					
D.1 Output per hour-As Submitted					
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 ÷ D.1) As Submitted					4.64
E.2 Direct Unit Cost (C.2 ÷ D.2)-As Evaluated					
F.1 Materials	Name and Specifications	Unit	Quantity	Unit Cost	Amount
a. Asphalt Emulsified Asphalt Cationic SS-1 (with 5% Wastage)		sq.m.	1.05	42.53	44.66
Sub - Total for F.1-As Submitted					44.66
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					49.30
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted				17%	5.92
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted				8%	3.94
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted				5%	2.96
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					62.12
K.2 Total Unit Cost-As Evaluated					

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUFA)
3rd Quarter, 2024

Item No./Description : 310(1)c Bituminous Concrete Surface Wearing Course, Hot Laid (50mm)
Unit of Measurement : sq.m.
Output per hour - As Submitted : 171.30
Output per hour - As Evaluated :

Designation		No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a.	Construction Foreman	1.00	1.00	171.46	171.46
b.	Skilled Laborer	4.00	1.00	124.10	496.40
c.	Unskilled Laborer	8.00	1.00	95.82	766.56
Sub - Total for A.1-As Submitted					1,434.42
A.2 Labor					
Sub - Total for A.2-As Evaluated					
B.1 Equipment					
Name and Capacity		No. of Units	No. of Hours	Hourly Rate	Amount
a.	Asphalt Paver (80Hp)	1.00	1.50	1,833.00	2,749.50
b.	Pneumatic Tire Roller (10m.t., 107 HP)	1.00	1.50	561.00	841.50
c.	Tandem Steel Roller (11 m.t., 134 HP)	1.00	1.50	2,061.00	3,091.50
d.	Water Truck (16000L, 360 HP)	1.00	1.50	2,450.00	3,675.00
Minor Tools (10% of Labor)				143.44	
Sub - Total for B.1-As Submitted					10,500.94
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					11,935.36
D.1 Output per hour-As Submitted			171.30		
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 ÷ D.1) As Submitted					
E.2 Direct Unit Cost (C.2 ÷ D.2)-As Evaluated					69.68
F.1 Materials					
Name and Specifications		Unit	Quantity	Unit Cost	Amount
a.	Bituminous Concrete Surface Course (t=0.05m) (with 5% Wastage)	m.t.	0.123	15,500.00	1,906.50
Sub - Total for F.1-As Submitted					1,906.50
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					1,976.18
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted				12%	237.14
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted				8%	158.09
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted				5%	18.57
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					2,489.99
K.2 Total Unit Cost-As Evaluated					

PREPARED BY:

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DETAILED UNIT PRICE ANALYSIS (DUPA)

Item No./Description 310(2)c Bituminous Concrete Surface Binder Course, Hot Told (t=50 mm)
Unit of Measurement sq.m.
Output per hour - As Submitted 171.30
Output per hour - As Evaluated

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a. Construction Foreman		1.00	1.00	171.46	171.46
b. Skilled Laborer		4.00	1.00	124.10	496.40
c. Unskilled Laborer		8.00	1.00	95.82	766.56
Sub - Total for A.1-As Submitted					1,434.42
A.2 Labor					
Sub - Total for A.2-As Evaluated					
	Name and Capacity	No. of Units	No. of Hours	Hourly Rate	Amount
B.1 Equipment					
a. Asphalt Paver (80Hp)		1.00	1.50	1,833.00	2,749.50
b. Pneumatic Tire Roller (10m.t., 107 HP)		1.00	1.50	561.00	841.50
c. Tandem Steel Roller (11 m.L., 134 HP)		1.00	1.50	2,061.00	3,091.50
d. Water Truck (16000L, 360 HP)		1.00	1.50	2,450.00	3,675.00
Minor Tools (10% of Labor)					143.44
Sub - Total for B.1-As Submitted					10,500.94
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					11,935.36
D.1 Output per hour-As Submitted				171.30	
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 ÷ D.1) As Submitted					69.68
E.2 Direct Unit Cost (C.2 ÷ D.2)-As Evaluated					
	Name and Specifications	Unit	Quantity	Unit Cost	Amount
F.1 Materials					
a. Bituminous Concrete Surface Course (t=0.05m) [with 5% Wastage]		m.t.	0.123	15,500.00	1,906.50
Sub - Total for F.1 -As Submitted					1,906.50
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					1,976.18
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted				12%	237.14
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP) -As Submitted				8%	158.09
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted				5%	118.57
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					2,489.99
K.2 Total Unit Cost-As Evaluated					

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CHECKED BY/REVIEWED BY:

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Tondo, Manila

Item No./Description
Unit of Measurement
Output per hour - As Submitted
Output per hour - As Evaluated

311(1)J3
sq.m.
53.67

DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter, 2024
Portland Cement Concrete Pavement (Unreinforced, t=0.30m, 3 days)

Designation		No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a.	Construction Foreman	1.00	1.00	171.46	171.46
b.	Skilled Laborer	4.00	1.00	124.10	496.40
c.	Unskilled Laborer	12.00	1.00	95.82	1,149.84
Sub - Total for A.1-As Submitted					1,817.70
A.2 Labor					
Sub - Total for A.2-As Evaluated					
B.1 Equipment					
Name and Capacity		No. of Units	No. of Hours	Hourly Rate	Amount
a.	Concrete Vibrator (Flexible Shaft Type 2" Head ϕ with 5 Amperes Gasoline)	2.00	1.00	57.17	114.34
b.	Concrete Screeder	1.00	1.00	545.00	545.00
c.	Concrete Saw, Blade (14" Blade ϕ w/ 3/4" cutting depth, 7.5 HP)	1.00	1.00	32.64	32.64
d.	Bar Cutter	1.00	0.10	105.47	10.55
Minor Tools (5% of Labor)					90.89
Sub - Total for B.1-As Submitted					793.42
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					2,611.12
C.2 Total (A.2 + B.2)-As Evaluated					
D.1 Output per hour-As Submitted					
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 + D.1)-As Submitted					
E.2 Direct Unit Cost (C.2 + D.2)-As Evaluated					53.67
F.1 Materials					
Name and Specifications		Unit	Quantity	Unit Cost	Amount
a.	Reinforcing Steel Bar (Grade 60)	kg	0.5500	58.00	31.90
b.	Curing Compound	lit.	0.2900	77.00	22.33
c.	Asphalt Sealant	al.	0.1800	50.00	9.00
d.	Ready Mix Concrete (3500 Psi $\pm$ 3days)	c.c.m.	0.30000	8,379.00	2,513.70
e.	Steel Form (300mm width)	l.m.	0.4600	65.00	29.90
f.	Concrete Saw (Diamond Blade)	pc.	0.00015	8,000.00	1.20
g.	G.I Pipe Schedule 40 (2" 1 50mm dia)	l.m	0.00940	2,399.00	22.55
h.	Grease	lit.	0.00940	294.00	2.76
Sub - Total for F.1-As Submitted					2,603.34
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					2,681.99
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted				12%	321.84
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted				8%	214.56
I.2 Contractor's Profit (CP)-As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted				5%	160.92
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					3,379.31
K.2 Total Unit Cost-As Evaluated					

PREPARED BY:

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Tondo, Manila

DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter, 2024

Item No./Description : 502(4)a3
Unit of Measurement : each
Output per hour - As Submitted : 1.00
Output per hour - As Evaluated :

Designation		No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a.	Construction Foreman	1.00	1.00	171.46	171.46
b.	Skilled Laborer	2.00	1.00	124.10	248.20
c.	Laborer	4.00	1.00	95.82	383.28
Sub - Total for A.1-As Submitted					802.94
A.2 Labor					
Sub - Total for A.2-As Evaluated					
B.1 Equipment					
Name and Capacity					
a.	One Bagger Mixer	1.00	0.50	172.00	86.00
b.	Bar Cutter	1.00	0.50	105.47	52.74
c.	Concrete Vibrator (Flexible Shaft type 2" Head with 5 Amperes Gas)	1.00	0.50	57.17	28.58
d.	Welding Machine (gas/diesel driven 300 amp., 48 HP)	1.00	0.25	371.00	92.75
e.	Water Truck	1.00	0.05	2,450.00	122.50
	Minor Tools (10% of Labor)				80.29
Sub - Total for B.1-As Submitted					462.86
B.2 Equipment					
Sub - Total for B.2-As Evaluated					
Sub - Total (A.1 + B.1)-As Submitted					
Sub - Total (A.2 + B.2)-As Evaluated					
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					
D.1 Output per hour-As Submitted					
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 ÷ D.1) As Submitted					
E.2 Direct Unit Cost (C.2 ÷ D.2)-As Evaluated					
=					1.00
F.1 Materials					
Name and Specifications					
a.	Portland Cement	bag	1.14	266.00	303.24
b.	Fine Aggregate (Sand)	c.u.m.	0.05	1,800.00	90.00
c.	Gravel 3/4 (MAS 20mm)	c.u.m.	0.10	2,680.00	268.00
d.	Reinforcing Steel Bars, Grade 40	kgs	23.00	56.00	1,288.00
e.	#16 GI Tie Wire (2% of RSB)	kgs	0.50	108.00	54.00
f.	MS Plate, Plain 6mm x 200mm Flat Bar 3.8m	kgs	35.80	63.00	2,255.40
g.	MS Plate, Plain 6mm x 100mm Flat Bar 3.8m	kgs	17.90	63.00	1,127.70
h.	1/2" Phenolic Board - 2 Uses	pcs	0.30	1,750.00	262.50
i.	Welding Rod	kgs	0.05	182.00	9.10
Sub - Total for F.1-As Submitted					5,657.94
F.2 Materials					
Sub - Total for F.2-As Evaluated					
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					6,923.74
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted					
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
12%					
830.85					
I.1 Contractor's Profit (CP)-As Submitted					
I.2 Contractor's Profit (CP) -As Evaluated					
8%					
553.90					
J.1 Value Added Tax (VAT)-As Submitted					
J.2 Value Added Tax (VAT)-As Evaluated					
5%					
415.42					
K.1 Total Unit Cost-As Submitted					
K.2 Total Unit Cost-As Evaluated					8,723.91

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Item No./Description : 612(1)
Unit of Measurement : sq.m.
Output per hour - As Submitted : 25.00
Output per hour - As Evaluated

DETAILED UNIT PRICE ANALYSIS (DUPA)
3rd Quarter 2024

Reflectorized Thermoplastic Pavement Markings White

	Designation	No. of Person	No. of Hours	Hourly Rate	Amount
A.1 Labor					
a.	Construction Foreman	1.00	1.00	171.46	171.46
b.	Mason	2.00	1.00	124.10	248.20
c.	Laborer	6.00	1.00	95.82	574.92
	Sub - Total for A.1-As Submitted				994.58
A.2 Labor					
	Sub - Total for A.2-As Evaluated				
B.1 Equipment	Name and Capacity	No. of Units	No. of Hours	Hourly Rate	Amount
a.	Cargo Truck / Delivery Truck (5T). All Models	1.00	1.50	783.00	1,174.50
b.	Applicator Machine	1.00	1.00	93.75	93.75
c.	Kneading Machine	1.00	1.000	187.50	187.50
	Minor Tools (10% of Labor)				99.46
	Sub - Total for B.1-As Submitted				1,555.21
B.2 Equipment					
	Sub - Total for B.2-As Evaluated				
C.1 Total (A.1 + B.1)-As Submitted					
C.2 Total (A.2 + B.2)-As Evaluated					2,549.79
D.1 Output per hour-As Submitted			25.00		
D.2 Output per hour-As Evaluated					
E.1 Direct Unit Cost (C.1 + D.1) As Submitted					101.99
E.2 Direct Unit Cost (C.2 + D.2)-As Evaluated					
F.1 Materials	Name and Specifications	Unit	Quantity	Unit Cost	Amount
a.	Thermoplastic Paint (White)	bags	0.325	1,370.00	445.25
b.	Glass Beads	bags	0.033	980.00	32.34
c.	Primer (WHITE)	lit	0.120	220.00	26.40
d.	LPG (50 kg)	kg	0.004	4,600.00	18.40
e.	LPG (12 kg)	kg	0.002	1,104.00	2.21
f.	Consumine	kg	0.125	30.00	3.75
	Consumables (5% materials cost)				26.42
	Sub - Total for F.1-As Submitted				554.77
F.2 Materials					
	Sub - Total for F.2-As Evaluated				
G.1 Direct Unit Cost (E.1 + F.1)-As Submitted					656.76
G.2 Direct Unit Cost (E.2 + F.2)-As Evaluated					
H.1 Overhead, Contingencies & Miscellaneous (OCM)-As Submitted				12%	78.81
H.2 Overhead, Contingencies & Miscellaneous (OCM)-As Evaluated					
I.1 Contractor's Profit (CP)-As Submitted				8%	52.54
I.2 Contractor's Profit (CP) -As Evaluated					
J.1 Value Added Tax (VAT)-As Submitted				5%	39.41
J.2 Value Added Tax (VAT)-As Evaluated					
K.1 Total Unit Cost-As Submitted					827.52
K.2 Total Unit Cost-As Evaluated					

PREPARED BY:

JOYCE D. MATANGUIHAN
Engineer II

CHECKED BY/REVIEWED BY:

ARLENE S. MENDOZA
OIC-Chief Planning and Design Section



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NATIONAL CAPITAL REGION
NORTH MANILA DISTRICT ENGINEERING OFFICE
OFFICE OF THE DISTRICT ENGINEER
Nagtahan, Sta. Mesa, Manila

C.Y. 2025 PROJECT
DETAILED ENGINEERING DESIGN PLAN FOR
PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD.
K0007 + 473.00 - K0007 + 945.00

SECTION :
LOCATION : TONDO, MANILA
STATION LIMIT : K0007 + 473.00 - K0007 + 945.00
NET LENGTH : 472.00 L.M.
ROAD SECTION/ BRIDGE I.D. :

SUBMITTED.


ARLENE S. MENDOZA
OIC - CHIEF PLANNING AND DESIGN SECTION
DATE

RECOMMENDED


DENRYL CAESAR S. CORTUNA
ASSISTANT DISTRICT ENGINEER
DATE

APPROVED.


DENNIS E. SANDOVAL
DISTRICT ENGINEER
DATE

1. STANDARD SPECIFICATION

ALL WORKS SHALL COMPLY WITH THE FOLLOWING STANDARD SPECIFICATIONS FOR HIGHWAYS, BRIDGES AND AIRPORTS REVISED 2013 SPECIAL PROVISIONS AND SUPPLEMENTA, SPECIFICATIONS RELATING TO THE PROJECT CONDITIONS OF THE CONTRACT, AND FOR WORKS OF TELEENGINEERS CONSTRUCTION 2ND EDITION, PREPARED BY U.S. ARMY ASCE GOVERN.

2. DIMENSIONS

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE TO FACE UNLESS OTHERWISE SPECIFIED.
CONTAINS BE TAILOR-CONTROL, PORTS AND CONNECTIONS ARE MEASURED IN METERS

3. ALIGNMENT AND GRADE

NO ALTERATION OF CHANGES IN ALIGNMENT AND GRADE SHALL BE MADE UNLESS
 FIRST AND SECOND CONDITIONS OF WARRANTY AND ONLY UPON WRITTEN ORDER BY
 THE ENGINEERS AND APPROVED BY THE AGENCY AUTHORITY CONCERNED.

4. REMOVAL OF EXISTING STRUCTURES AND OBSTRUCTIONS

2. A. 1954-55 S.A. COMPTON, JR. 2. 4. 55. 19. REQUISITIONING AND
STANDARDIZATION OF TRAVERS VOLUME 1 OF THE STANFORD SPECIFICATION
FOR THE 1954-55 S.A. COMPTON, JR. 2. 4. 55. 19.

REMOVAL OF EXISTING LINES SUCH AS WATER MAINS IRRIGATION CANALS IS
RECOMMENDED FOR AND TRUCKS, NEETS THAT MAY CAUSE OBSTRUCTIONS TO THE
CONSTRUCTION OF THE HIGHWAY SHALL BE RELOCATED BY THE EARTH OWNER
TRANSFERRED EXTREME PRECAUTIONS SHALL BE TAKEN TO PREVENT DAMAGE TO
SHALL BE TO THE RESIDENT OF THE CONSTRUCTION

5. SURFACE COURSES

A BROWNING TACK COAT

APPLY A MINIMUM MATERIAL FOR TACK THAT SHALL RESIST THE PASSING OF A 100 LB. WEIGHT TACK TEST. THE TACK COAT SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

1. BROWNING TACK COAT MATERIAL SHALL BE APPLIED TO SURFACES WITH A COAT OF 0.05 INCH THICKNESS. TACK COAT SHALL BE APPLIED WHEN THE WEATHER IS DRY WITHIN THE 48 HOURS PRIOR TO TACKING MATERIAL. SHALL BE SPREAD BY MEANS OF PRESSURE DISTRIBUTOR OR LESS THAN 100 LBS CAPAC TO MINUTELY ON ONE INCH OF SURF WITH AN INCH OR LESS. THE LOAD PRODUCED ON THE ROAD SURFACE WILL BE EQUAL TO THE WEIGHT PER CWT OF THE MATERIAL. FURTHER, AROUND THE TACK COAT SHALL BE WITHIN OF THE SURFACE TO BE TACKED SHALL BE 1/4 INCH OF SURF AND FORTH ON MATERIALS BY MEANS OF A POWER BROOM OR POWER BLOWER.

2. BROWNING TACK COAT SHALL BE APPLIED IN THE RATE OF APPLICATION SHALL BE 1/4 INCH OF SURF WITHIN OF THE SURFACE TO BE TACKED. THE RATE OF APPLICATION SHALL BE 1/4 INCH OF SURF WITHIN OF THE SURFACE TO BE TACKED. THE RATE OF APPLICATION SHALL BE 1/4 INCH OF SURF WITHIN OF THE SURFACE TO BE TACKED. THE RATE OF APPLICATION SHALL BE 1/4 INCH OF SURF WITHIN OF THE SURFACE TO BE TACKED.

[illegible]

6. CONSTRUCTION STAKES

THE CONCENTRATION OF RESPIRABLE PARTICLES AND DEPOSABLE PARTICLES IN THE
ATMOSPHERE IN THE PRESENCE OF A STABLE INVERSION LAYER. THE STABLE INVERSION LAYER
IS ASSUMED TO BE A BOUNDARY LAYER OF AIR OF FINITE DEPTH. THE PARTICLES ARE
ASSUMED TO BE OF A SINGLE SIZE AND TO BE IN A STATE OF MOTION. THE
RESULTS OF THE CALCULATIONS ARE GIVEN IN THE FORM OF A GRAPH OF
CONCENTRATION VERSUS HEIGHT. THE GRAPH SHOWS THAT THE CONCENTRATION OF
PARTICLES IN THE STABLE INVERSION LAYER IS HIGH AND THAT IT DECREASES
RAPIDLY WITH HEIGHT. THE CONCENTRATION OF PARTICLES IN THE FREE
ATMOSPHERE IS LOW AND IT INCREASES WITH HEIGHT.

ON THE CORRELATION OF COMPLETION STAGES FOR A GIVEN PRACTICE, THE LEVEL OF THE COMPLETION OF AN INDIVIDUAL, THE CORRELATION BETWEEN THE COMPLETION OF A PRACTICE AND THE CORRELATION BETWEEN THE COMPLETION OF A PRACTICE AND OTHER PRACTICES, AND THE CORRELATION BETWEEN THE COMPLETION OF A PRACTICE AND OTHER PRACTICES.

IN THE CASE OF CHANGES IN CHARGE POSITION ON WHICH THE CHARGE
TRIGGER IS APPLIED THE CONTROLLER SHALL COORDINATE WITH THE ENGINEER
AND WILL TAKE THE NECESSARY MEASURES TO PREVENT ANY OF THE FOLLOWING
ALTERNATIVE CHARGE POSITIONS

7. STANDARD DRAWING

THE NC DSSB DRAWING CONTAINED IN THE CDW STANDARD FOR ROAD SH-4.

8. QUANTITY

[illegible]

NO.	SHEET CONTENTS	NO.	SHEET CONTENTS
1	COVER PAGE	13	TYPICAL SECTION OF CONCRETE SIDEWALK
2	GENERAL NOTES		TYPICAL SECTION
	BILL OF QUANTITIES		DETAIL OF CONCRETE CURB GUTTER
	TABLE OF CONTENTS	14	TWO LANE PAVEMENT TYP. PLAN
3	TOPOGRAPHIC MAP		PLAN / DET. SECTIONS
	LOCATION MAP		BAR SPACING ALONG CURVES DET.
	VICINITY MAP		DET. OF JOINT IN RIGID PAVEMENT
4	SITE DISPOSAL MAP		STANDARD PORTLAND CEMENT
	SOURCE MAP		CONCRETE PAVEMENT
	CONTOUR MAP	15	STANDARD PAVEMENT MARKINGS AND ROAD SIGN DETAIL
	ROAD NETWORK DIAGRAM	16	TRAFFIC MANAGEMENT PLAN TRAFFIC MANAGEMENT DETAILS
5	GENERAL NOTES	17	DPWH STANDARD PROJECT BILLBOARD
6	LOCATION MAP		ISOMETRIC VIEW
	PLAN		ORIENTATION
	LEGEND		TYPICAL FRAME ELEVATION
7	LOCATION MAP		FRONT ELEVATION (OPTION 1)
	PLAN		FRONT ELEVATION (OPTION 2)
	LEGEND	18	SAFETY ROADS AND DEVICES
8	LOCATION MAP		DETAILS OF STEEL BARRIER
	PLAN		COA BILLBOARD
	LEGEND		
9	LOCATION MAP		
	PLAN		
	LEGEND		
10	LOCATION MAP		
	ROAD SAFETY PLAN		
	LEGEND		
11	LOCATION MAP		
	ROAD SAFETY PLAN		
	LEGEND		
12	DET. OF RCMH COVER		
	EDGE LINE		
	LANE LINE MARKINGS		

ITEM NO.	DESCRIPTION	QTY.	UNIT
PART A	FACILITIES FOR THE ENGINEER		
A.1.1 (3)	Construction of Field Office for the Engineer	1.00	I.s.
PART B	OTHER GENERAL REQUIREMENTS		
B.5	Project Billboard/ Signboard (DPWH Billboard)	2.00	each
B.5	Project Billboard/ Signboard (COA Billboard)	2.00	each
B.7 (2)	Occupational Safety and Health Program	1.00	I.s.
B.8 (2)	Traffic Management	1.00	I.s.
B.9	Mobilization/ Demobilization	1.00	I.s.
PART C	EARTHWORK		
101(1)	Removal of Structures and Obstruction	1.00	I.s.
101(3)b6	Removal of Actual Structures / Obstruction (PCCP, Unreinforced, 0.30m thk)	2,070.00	sq.m
PART D	SUBBASE AND BASE COURSE		
200(1)	Aggregate Subbase Course	103.50	cu.m
PART E	SURFACE COURSES		
302(2)	Emulsified Asphalt	14,969.50	sq.m
310(1)c	Bituminous Concrete Surface Wearing Course, Hot Laid (50mm)	7,439.10	sq.m
310(2)c	Bituminous Concrete Surface Binder Course, Hot Laid (50mm)	7,484.70	sq.m
311(1)f3	Portland Cement Concrete Pavement (Unreinforced) (0.30m thick, 3 days)	2,070.00	sq.m
PART G	DRAINAGE AND SLOPE PROTECTION STRUCTURES		
502(4)a3	Concrete Covers (910mm dia.)	99.00	each
PART H	MISCELLANEOUS STRUCTURES		
612(1)	Reflectorized Thermoplastic Pavement Markings White	160.60	sq.m

THIS SITE



TOPOGRAPHIC MAP

3 SCALE NTS



LOCATION MAP

3 SCALE NTS

END OF
PROJECT
K0007 + 945.00



START OF
PROJECT
K0007 + 473.00



VICINITY MAP

3 SCALE NTS



REPUBLIC OF THE PHILIPPINES
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NORTH MANILA DISTRICT ENGINEERING OFFICE
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Taguig City, Sta. Mesa Manila

PROJECT NAME AND LOCATION
**PREVENTIVE MAINTENANCE -
TERTIARY ROADS - H. LOPEZ BLVD.
K0007 + 473.00 - K0007 + 945.00**

SHEET CONTENTS
**LOCATION MAP
PLAN
PROFILE
LEGEND**

DESIGNED BY
JONATHAN C. CASINO JR.
CHECKED BY
JOYCE D. MATANGUIHAN

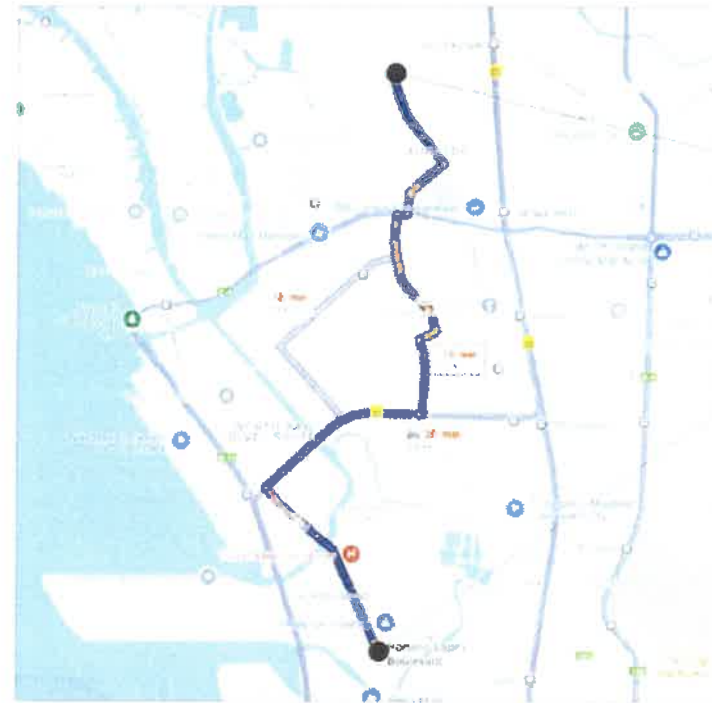
REVIEWED BY
REY Y. CASTILLO
ENGINEER

SUBMITTED BY
ARLENE S. MENDOZA
DISTRICT PLANNING AND DESIGN SECTION

RECOMMENDED BY
DENRYL CAESAR S. CORTUNA
DISTRICT ENGINEER

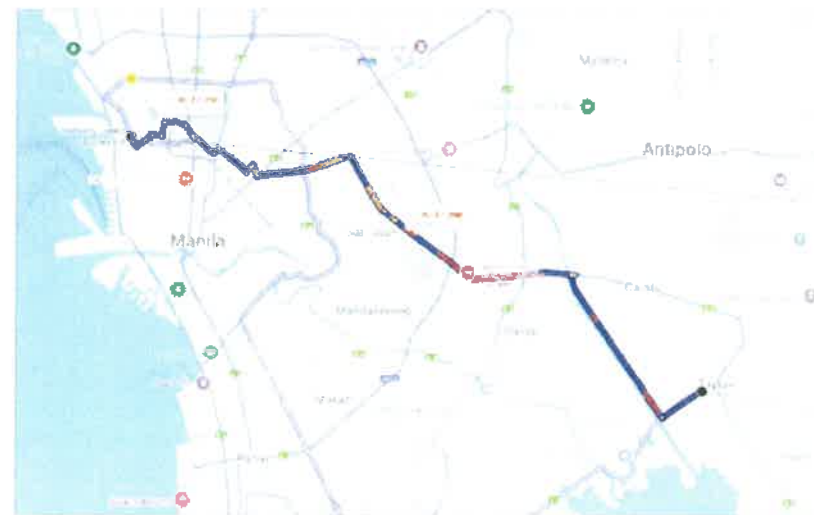
APPROVED BY
DENNIS E. SANDOVAL
DISTRICT ENGINEER

SHEET NO.
3
18



1 SITE DISPOSAL MAP

4 SCALE NTS



2 SOURCE MAP

4 SCALE NTS

BENCHMARK

BM GM-55 IS IN TONDO MANILA, AT THE INTERSECTION OF MORIONES AND STA MARIA STREET ON TOP OF THE S PORTION OF THE FIRST CONCRETE STEP OF THE STAIRWAY LEADING TO THE BANDSTAND 0.21 METER ABOVE THE STREET MARK IS A 5/8 INCH DIAMETER BRASS ROD EMBEDDED IN THE STEP AND PROTRUDING ABOUT 5MM FROM WASHOUT SURFACE

LEGEND

- PRIMARY ROADS
- SECONDARY ROADS
- TERTIARY ROADS



3 CONTOUR MAP

4 SCALE NTS



4 ROAD NETWORK DIAGRAM

4 SCALE NTS

Administrative Boundary		Encircling Features	
Provincial Boundary		Wall/Fence	
City and Municipal Boundary		Buildings	
Approximate Barangay Boundary		Independent Building (More than 15m in Height)	
Roads		Other Independent Building/Houses	
Highway		Abandoned House	
Toll Gate		Landmarks	
More than 2.0m in Width		Monument	
Road Under Construction		Water Tank	
Less than 2.0m in Width		Storage Tank	
Footpath		Radio Tower	
Sidewalk		Tower	
Road Island		Power Transmission Line	
Bridge - Grade Separation (More than 2.0m in Width)		Power Plant Sub-Station	
Bridge (Less than 2.0m in Width)		Lighthouse	
Pedestrian Overpass		Airport - Airfield	
Road Underpass		Airport Beacon	
Road Underpass (Culvert)		Gas Station	
Route Marker (National - Provincial)		Helipad	
Railways		Water Supply/Sewerage	
Railway (Single Track - Double Track)		Pipeline	
Railway Under Construction		Control Points	
Bridge - Grade Separation		Horizontal Control Station	± PMG-1
Railway Underpass		Control Point	± 155.95
Railway Underpass (Culvert)		Bench Mark	± 4.241
Railway Station		Direct Leveling Point	± 37.2
Water Area		Spot Height by Photogrammetry	± 69.0
More than 2.0m in Width		Land Use	
Less than 2.0m in Width		Railway	
Indefinite (More than 2.0m in Width)		Cemetery	
Indefinite (Less than 2.0m in Width)		Vegetation Boundary	
Channel - Causeway (More than 2.0m in Width)		Boundary of Cultivated Area	
Channel - Causeway (Less than 2.0m in Width)		Broad Leaf Tree - Area	
Lake - Pond - Shoreline		Broad Leaf Tree	
Falls		Grass Field	
Weir		Swamp - Marsh	
Dam		Coconut	
Shipway		Paddy Field	
Flood Gate		Up and Field	
Kiosk/Anchorage		Saltwater	
Pier/Jetty		Mangrove	
Breakwater		Contours	
Fishpan		Index Contour	
Wreck		Intermediate Contour	
Salt Bed		Supplementary Contour	
Face of Slope		Depression	
Concrete Retainment			



REPUBLIC OF THE PHILIPPINES
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Nagtahan, Sta. Mesa, Manila

PROJECT NAME AND LOCATION
PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD. K0007 + 473.00 - K0007 + 945.00

SHEET CONTENTS
LOCATION MAP
PLAN
PROFILE
LEGEND

DESIGNED BY
JONATHAN C. CASINO JR.
CHECKED BY
JOYCE D. MATANGUIHAN

REVIEWED BY
REY Y. CASTILLO
ENGINEER

SUBMITTED BY
ARLENE S. MENDOZA
PROJECT MANAGER AND SUPERVISOR

RECOMMENDED BY
DENRIL CAESAR S. CORTUNA
ASSISTANT DISTRICT ENGINEER

APPROVED BY
DENNIS J. SANDOVAL
DISTRICT ENGINEER



LOCATION MAP

SITE **PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD.**
K0007 + 473.00 - K0007 + 945.00



LEGEND

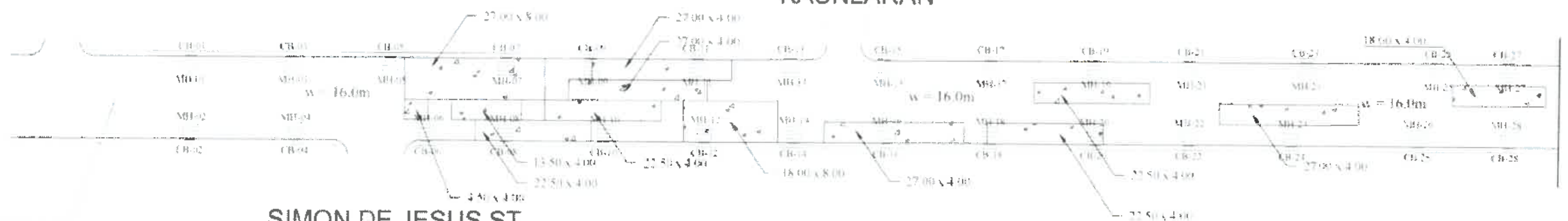
REPLACEMENT
OF EXISTING
MANHOLE COVER
(1.50 x 0.40 x 0.20)
REBLOCKING

EXISTING CURB
AND GUTTER
EXISTING
CATCHBASIN

K0007 + 467.00 C 1,447.00
 K0007 + 458.20 C 1,438.20

K0007 + 619.50 C 1,589.50
 K0007 + 610.80 C 1,590.80

KAUNLARAN



SIMON DE JESUS ST.

BLG. OF PROJECT
K0007 + 473.00

C 1,453.00	C 1,467.20	C 1,488.03	C 1,497.00	C 1,505.90	C 1,513.00	C 1,510.10	C 1,505.90	C 1,528.20	C 1,548.30	C 1,545.60	C 1,567.70	C 1,585.30	C 1,603.50	C 1,623.20	C 1,643.50	C 1,661.90	C 1,684.50	C 1,681.70	C 1,709.90	C 1,706.10	C 1,723.70
K0007 + 473.00	K0007 + 487.20	K0007 + 508.00	K0007 + 517.00	K0007 + 525.90	K0007 + 533.00	K0007 + 530.10	K0007 + 525.90	K0007 + 548.20	K0007 + 568.30	K0007 + 565.60	K0007 + 587.70	K0007 + 605.30	K0007 + 623.50	K0007 + 643.40	K0007 + 663.50	K0007 + 681.90	K0007 + 704.50	K0007 + 701.70	K0007 + 729.90	K0007 + 726.10	K0007 + 743.70

P L A N

1:500 SCALE



REPUBLIC OF THE PHILIPPINES
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 NATIONAL CAPITAL REGION
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 Nagtahan Sta. Mesa, Manila

PROJECT NAME AND LOCATION
PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD.
K0007 + 473.00 - K0007 + 945.00

SHEET CONTENTS
 LOCATION MAP
 PLAN
 LEGEND

DESIGNED BY
JONATHAN C. CASINO JR.
 PREPARED BY
JOYCE D. MATANGUIRAN

APPROVED BY
REY Y. CASTILLO
 ENGINEER

SUBMITTED BY
ARLENE S. MENDOZA
 DISTRICT ENGINEER

RECOMMENDED BY
DENRY CAESAR S. CORTUNA
 DISTRICT ENGINEER

APPROVED BY
JENNIE SANDOVAL
 DISTRICT ENGINEER

SHEET NO. 6
 SHEET NO. 18



LOCATION MAP

SITE
PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD.
K0007 + 473.00 - K0007 + 945.00



LEGEND

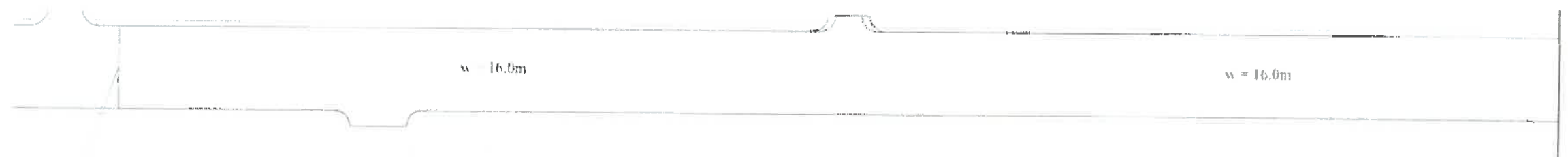
PROPOSED ASPHALT
t=100mm

EXISTING CURB
AND GUTTER

K0007 + 467.00 C 1.447.00
K0007 + 458.20 C 1.438.20

K0007 + 619.50 C 1.599.50
K0007 + 610.80 C 1.590.80

KAUNLARAN



SIMON DE JESUS ST.

REMARKS
K0007 + 473.00

C 1.453.00 K0007 + 473.00

C 1.497.00 K0007 + 517.00

C 1.510.10 K0007 + 530.10

P L A N

1
8 SCALE 1:500



REPUBLIC OF THE PHILIPPINES
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NATIONAL CAPITAL REGION
NORTH MANILA DISTRICT ENGINEERING OFFICE
OFFICE OF THE DISTRICT ENGINEER
NATIONAL SIDE DRIVE, Manila

PROJECT NAME AND LOCATION

PREVENTIVE MAINTENANCE -
TERTIARY ROADS - H. LOPEZ BLVD.
K0007 + 473.00 - K0007 + 945.00

SHEET CONTENTS

LOCATION MAP
PLAN
LEGEND

PREPARED BY
JONATHAN C. CASINO JR.
ENGINEER

JOYCE D. AMANGUIHAN
ENGINEER

REVIEWED BY
REY Y. CASTILLO
ENGINEER

SUBMITTED BY
ARLENE S. MENDOZA
ENGINEER

RECOMMENDED BY
DENRYL CAESAR S. CORTUNA
ENGINEER

APPROVED BY
DENNIS E. SANDOVAL
DISTRICT ENGINEER

REVISION

SHEET NO.

8

18



LOCATION MAP

SITE **PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD.**
K0007 + 473.00 - K0007 + 945.00



END OF PROJECT
K0007 + 945.00



KALAKAL

C 1,750.90 K0007 + 770.90

C 1,763.10 K0007 + 783.10

C 1,887.30 K0007 + 907.30

C 1,898.90 K0007 + 918.90

C 1,925.00 K0007 + 945.00

P L A N

1:500



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NATIONAL CAPITAL REGION
NORTH MANILA DISTRICT ENGINEERING OFFICE
OFFICE OF THE DISTRICT ENGINEER
Nagpartian St., Alibon, Manila

PROJECT NAME AND LOCATION
**PREVENTIVE MAINTENANCE -
TERTIARY ROADS - H. LOPEZ BLVD.
K0007 + 473.00 - K0007 + 945.00**

SHEET CONTENTS
**LOCATION MAP
PLAN
LEGEND**

DESIGNED BY
JONATHAN C. CASINO JR.

PREPARED BY
JOYCE D. MATANGUIHAN

REVIEWED BY
REY V. CASTILLO

SUBMITTED BY

ARZENE S. BENDOZA

APPROVED BY

DENRYL CAESAR S. CORTUNA

APPROVED BY

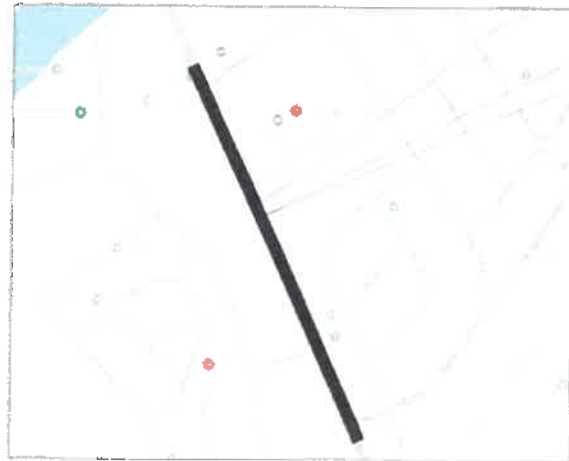
DENNIS E. SANDOVAL

SHEET NO.

9

SHEET NO.

18



LOCATION MAP

**SITE PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD.
K0007 + 473.00 - K0007 + 945.00**



K0007 + 467.00 C 1.447 00
K0007 + 458.20 C 1.438 20



K0007 + 619.50 C 1.599 50
K0007 + 610.80 C 1.590 80
KAUNLARAN

ISIC OF PROJECT
K0007 - 473.00

C 1.453.00 K0007 + 473.00

SIMEON DE JESUS ST.

C 1.497.00 K0007 + 517.00

C 1.510.10 K0007 + 530.10

ROAD SAFETY PLAN

10 SCALE 1:500

LEGEND

- EXISTING CURB AND GUTTER
- PROPOSED EDGE LINE
- PROPOSED LANE LINE

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS NORTH MANILA DISTRICT ENGINEERING OFFICE OFFICE OF THE DISTRICT ENGINEER Nagtahan, Sta. Mesa, Manila	PROJECT NAME AND LOCATION PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD. K0007 + 473.00 - K0007 + 945.00	SHEET CONTENTS LOCATION MAP ROAD SAFETY PLAN LEGEND	DESIGNED BY <i>[Signature]</i> JONATHAN C. CASIÑO JR. ASSISTANT ENGINEER	REVIEWED BY <i>[Signature]</i> REY Y. CASTILLO ENGINEER	SUBMITTED BY <i>[Signature]</i> MARILYN S. MENDOZA ENGINEER PLANNING AND DESIGN SECTION	RECOMMENDED BY <i>[Signature]</i> DENRI L. CAESAR S. CORTUNA ASSISTANT DISTRICT ENGINEER	APPROVED BY <i>[Signature]</i> DENNIS E. SANDOVAL DISTRICT ENGINEER	SET NO. 10	SHEET NO. 18
	DATE: _____								

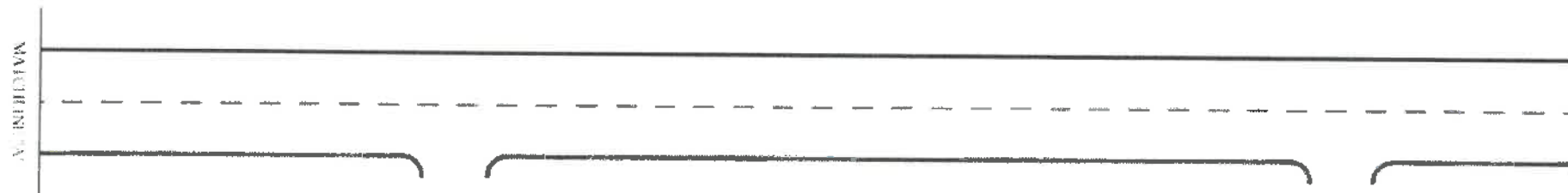


LOCATION MAP

SITE
PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD.
K0007 + 473.00 - K0007 + 945.00



END OF PROJECT
K0007 + 945.00



KALAKAL

C 1,763.10 K0007 + 783.10
C 1,750.90 K0007 + 770.90

R. NICASIO

C 1,898.90 K0007 + 918.90
C 1,887.30 K0007 + 907.30
C 1,925.00 K0007 + 945.00

ROAD SAFETY PLAN

1:1 SCALE 1:1200

LEGEND

- EXISTING CURB AND GUTTER
- PROPOSED EDGE LINE
- PROPOSED LANE LINE



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NATIONAL CAPITAL REGION
NORTH MANILA DISTRICT ENGINEERING OFFICE
OFFICE OF THE DISTRICT ENGINEER
Ruguean St. Alala, Manila

PROJECT NAME AND LOCATION
**PREVENTIVE MAINTENANCE -
TERTIARY ROADS - H. LOPEZ BLVD.
K0007 + 473.00 - K0007 + 945.00**

SHEET CONTENTS
LOCATION MAP
ROAD SAFETY PLAN
LEGEND

DESIGNED BY
JONATHAN C. CASINO JR.

PREPARED BY
JOYCE D. MATANGULAN

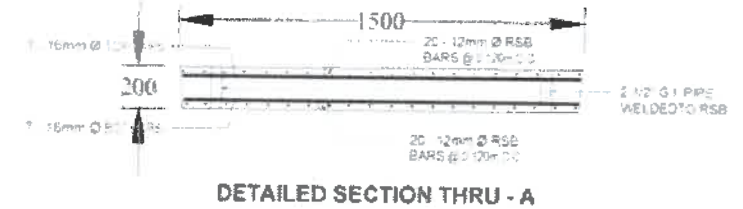
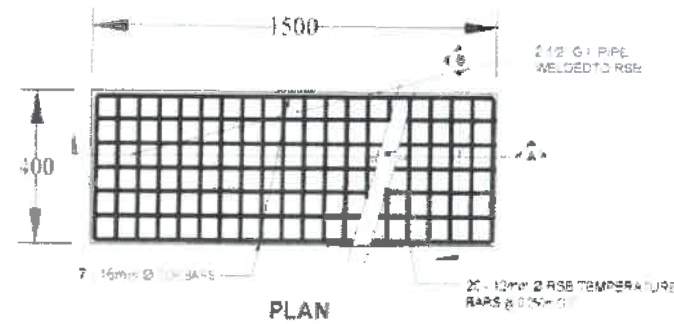
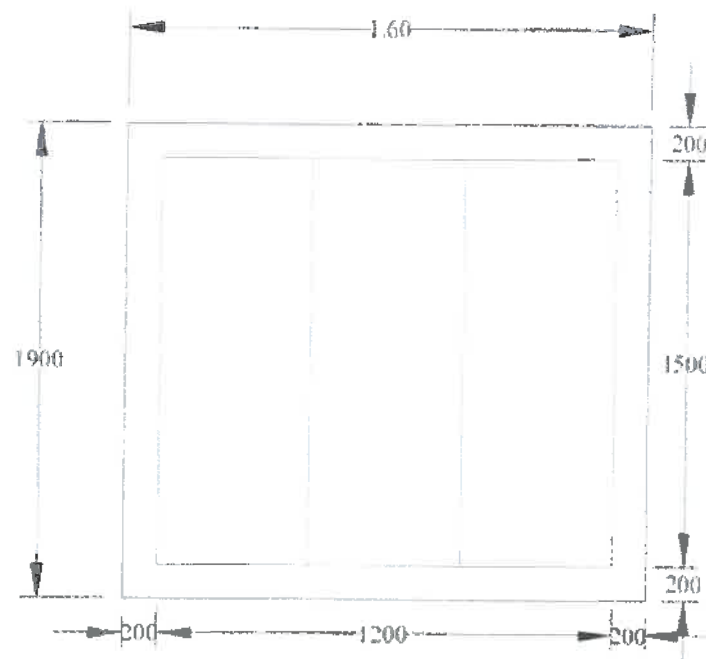
REVIEWED BY
REY Y. CASTILLO

SUBMITTED BY
ARLENE S. MENDOZA

REVIEWED BY
DENRYL CAESAR S. CORTUNA

APPROVED BY
DENNIS E. SANDOVAL

SHEET NO.
11
18



1 DETAILS OF MH COVER 1.50m X 1.40m
SCALE 1:20 METERS



2 EDGE LINE
SCALE 1:40 METERS



3 LANE LINE MARKINGS
SCALE 1:50 METERS

NOTES:

- 1 MATERIAL AND CONSTRUCTION REQUIREMENTS SHALL CONFORM TO DPWH STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES 2004
- 2 USE OF MONOFILAMENT POLYPYRENE (D.O. NO. 95 SERIES OF 2005) AS ADDITIVE TO CONCRETE MIX
- 3 SIDEWALK WIDTH OF 1.50 M SHALL BE MINIMUM PEDESTRIAN ACCESSIBLE ROUTE FREE OF VERTICAL AND HORIZONTAL OBSTRUCTIONS DRAINAGE COVERS JUNCTION BOXES, CABLE VAULTS, PULL BOXES AND OTHER APPURTENANCES WITHIN THE SIDEWALK MUST HAVE SLIP RESISTANT SURFACE AND BE FLUSH WITH THE SURFACE AND MATCH GRADE OF THE SIDEWALK
- 4 FULL WIDTH CONCRETE SIDEWALK MAY BE PERMITTED WHEN CONSTRUCTED FOR THE ENTIRE BLOCK
- 5 SIDEWALK SHALL HAVE A MINIMUM THICKNESS OF 150 MM IF MOUNTABLE CURB IS USED OR IF SIDEWALK IS INTENDED AS PORTION OF DRIVEWAY OTHERWISE SIDEWALK SHALL HAVE A MINIMUM THICKNESS OF 100 MM
- 6 JOINTS LEGEND
 - A 100 MM EXPANSION JOINTS (FULL DEPTH PREFORMED JOINT FILLER)
 - B 5 MM SAW CUT JOINTS 40 MM DEEP (WITHIN 96 HRS) MAXIMUM 1500 MM CENTER
 - C 5 MM SAW CUT JOINTS 40 MM DEEP (WITHIN 12 HRS) MAXIMUM 9000 MM CENTER
 - D 100 MM EXPANSION JOINT FOR 36000 MM MAXIMUM LENGTH OF RUN OF SIDEWALK (FULL DEPTH PREFORMED JOINT FILLER)

NOTE: IN CASE THE REQUIRED DIAMETER OF 36mm AS CITED ABOVE IS NOT COMMERCIALY AVAILABLE SMALLER DOWEL BAR CAN BE USED WITH ADJUSTMENT IN BAR SPACING AS SHOWN IN TABLE 1.2

TABLE 1.2

AS PER D.O. 40, s. 2014

SUBSTITUTE

THICKNESS OF PCCP (mm)	SIZE OF DOWEL BAR (mm)	SPACING (mm)	SIZE OF DOWEL BAR (mm)	SPACING (mm)
280	36	300	32	250
			28	190
			25	150
			32	230
290	36	295	28	170
			25	140
			32	210
300	36	274	28	160
			25	130
			32	200
310	36	265	28	150
			25	120
			32	190
320	36	238	28	140
			25	110
			32	180
330	36	223	26	130
			25	110
			32	170
340	36	209	28	130
			25	100

NOTES:

- 1 MATERIAL AND CONSTRUCTION REQUIREMENTS SHALL CONFORM TO DPWH STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES 2004
- 2 USE OF MONOFILAMENT POLYPYRENE SYNTHETIC FIBERS (D.O. NO. 95 SERIES OF 2005) AS ADDITIVE TO CONCRETE MIX
- 3 CONCRETE CURB AND GUTTER SHALL BE CONSIDERED IN THE DESIGN OF PAVED ROADS IF THE FUNCTION IS TO FACILITATE THE CHANNELING OF THE SURFACE WATER RUN-OFF THUS PREVENTING THE EROSION OF THE SHOULDERS AND SLOPE
- 4 MINIMUM CURB INLET INTERVAL (D) 100 METERS IN FLOODED AREAS
- 5 MINIMUM CURB INLET INTERVAL (D) 200 METERS IN OTHER AREAS

NOTE: ALL TRANSVERSE JOINTS SHALL BE PROVIDED WITH DOWEL BARS IN ACCORDANCE WITH DEPARTMENT ORDER 40 SERIES OF 2014 RE PRESCRIBING MINIMUM DESIGN STANDARD FOR PORTLAND CEMENT CONCRETE PAVEMENT (PCCP) IN ARTERIAL AND SECONDARY NATIONAL ROADS AND ACCESS ROADS LEADING TO PORTS AS STATED BELOW

TABLE 1.1

SPACING OF DOWEL BARS
(DIAMETER = 36mm/ LENGTH = 600mm)

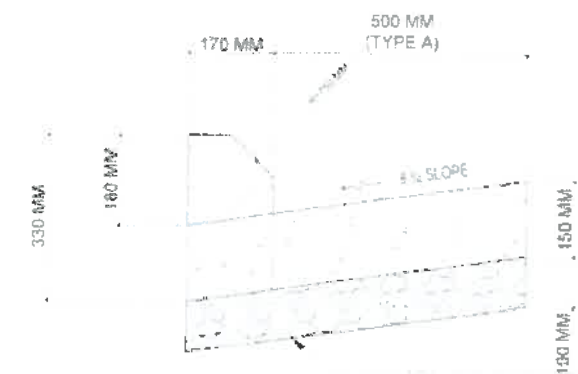
SLAB DEPTH, T (mm)	SPACING (mm)
280	300
290	295
300	274
310	265
320	238
330	223
340	209



1 TYPICAL SECTION OF CONCRETE SIDEWALK

1
13 SCALE

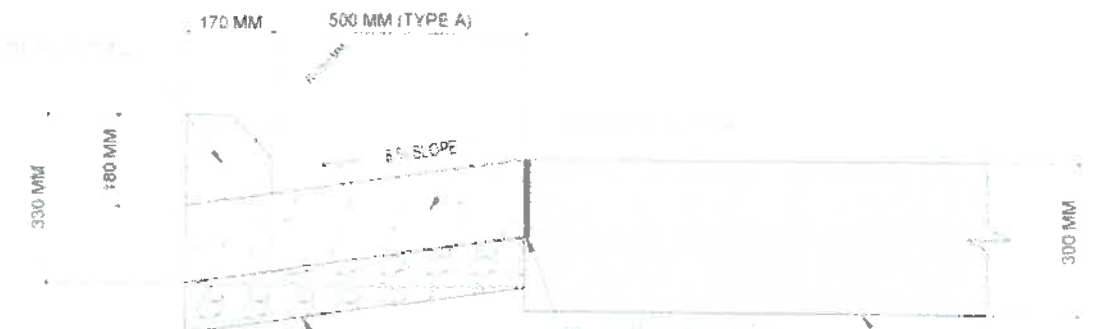
1:100 mts



2 DETAIL OF CONCRETE CURB & GUTTER

2
13 SCALE

1:100 mts

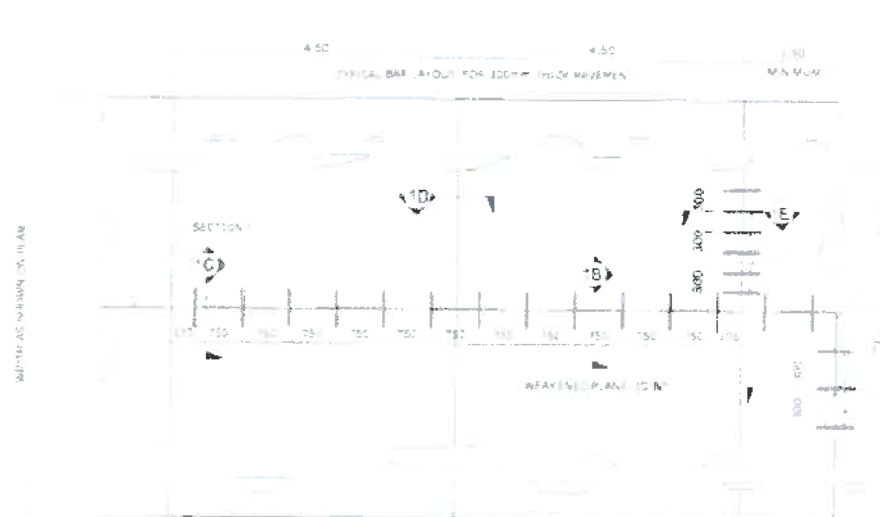


3 TYPICAL SECTION

3
13 SCALE

1:100 mts

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS NATIONAL CAPITAL REGION NORTH MANILA DISTRICT ENGINEERING OFFICE OFFICE OF THE DISTRICT ENGINEER Naylayan Sta. Mesa, Manila	PROJECT NAME AND LOCATION PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD. K0007 + 473.00 - K0007 + 945.00	SHEET CONTENTS TYPICAL SECTION OF CONCRETE SIDEWALK DETAIL OF CONCRETE CURB & GUTTER TYPICAL SECTION	DESIGNED BY JONATHAN C. CASINO JR.	CHECKED BY JOYCE D. NAVANGUHAN	IN CHARGE REY Y. CASTILLO	SUBMITTED BY ARLENE S. MENDOZA	RECOMMENDED BY DENAYL CAESAR S. CORTUNA	APPROVED BY DENNIS E. SANDOVAL	SHEET NO. 13	SHEET NO. 18
	DATE: _____									



1 TWO LANE PAVEMENT TYP. PLAN

14 SCALE



3 1B DETAIL SECTION

14 SCALE



4 1C DETAIL SECTION

14 SCALE



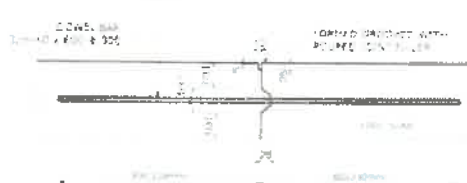
5 1D DETAIL SECTION

14 SCALE



6 1E DETAIL SECTION

14 SCALE

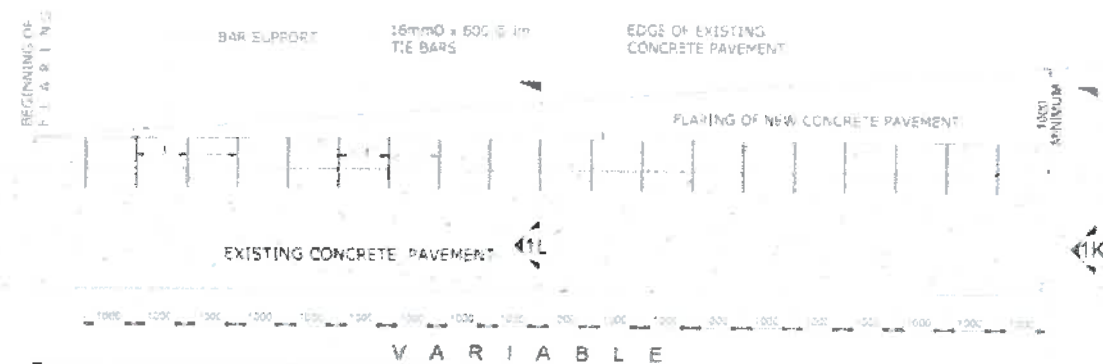


7 1F DETAIL SECTION

14 SCALE

NOTE:

TRANSVERSE CONTACT JOINT WHICH OCCURS AT LOCATION OF WEAKENED PLANE POINT SHOULD BE 0.50 M. FROM THE WEAKENED PLANE POINT. THE JOINT SHOULD BE KEPT OPEN WITH THE BARS.



2 PLAN (SHOWING FLARING OF EXISTING)

14 SCALE

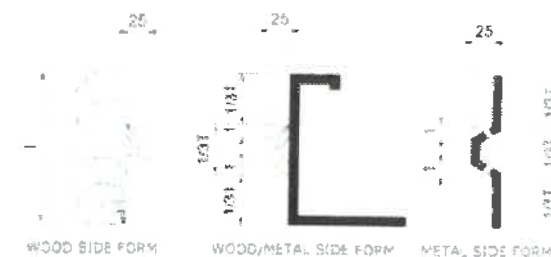
DEFORMED TIE BAR
16mm x 700 @ 750 (300)

LONGITUDINAL JOINT



9 BAR SPACING ALONG CURVES DET.

14 SCALE

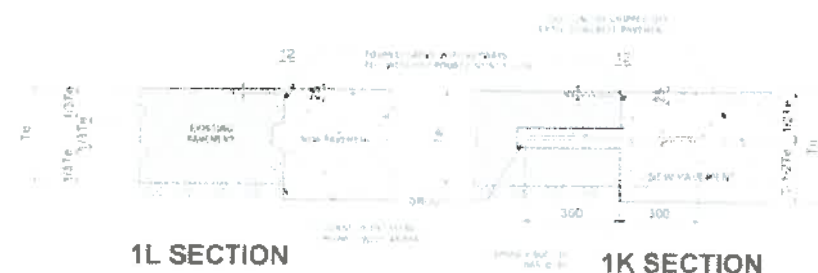


10 DETAIL OF JOINT IN RIGID PAVEMENT

14 SCALE

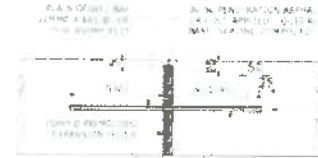
8 SECTION

14 SCALE



11 STANDARD PORTLAND CEMENT CONCRETE PAVEMENT

14 SCALE



12 DETAIL OF EXPANSION JOINT (DOWELLED) AT CERTAIN INTERSECTIONS AND STRUCTURES

14 SCALE

GENERAL NOTES:

1. MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR HIGHWAYS BRIDGES AND AIRPORTS 2012.
2. CONSTRUCTION JOINTS SHALL BE FORMED WHEN CONCRETE ON ONE SIDE OF THE JOINT IS 90% SET WHEN ALLOWED TO SET BEFORE POURING ON THE OTHER SIDE.
3. AT CONSTRUCTION JOINTS (LONGITUDINAL OR TRANSVERSE) CARE SHOULD BE TAKEN THAT NO CONCRETE FROM THE SET SURFACE OF OVERLAP AND PORTION OF THE FIRST SLAB.
4. THE BARS SHOULD BE DEFORMED TIE BARS. ALL DOWEL BARS SHALL BE SMOOTH END TYPE. BARS FREE FROM ANY OTHER DEFECTS WHICH MIGHT AFFECT THEIR PERFORMANCE.
5. TYPE OF WEAKENED PLANE JOINT TO BE USED SHALL BE AS SPECIFIED IN THE PLANS OR ONLY ONE TYPE SHALL BE USED FOR THE WHOLE PROJECT.
6. MATERIAL FOR THE METAL SIDE FORM SHALL BE BRAND NEW SHEET METAL GAUGE NO. 18 TO 20 BLACK IRON FREE FROM RUST AND OILS.
7. AT EACH SUCCESSIVE DOWEL JOINTS (LONGITUDINAL OR TRANSVERSE) SHALL BE PROVIDED DEPOSEL OR AFTER AN EXPANSION JOINT.
8. THE SPACING OF DOWEL JOINTS (LONGITUDINAL OR TRANSVERSE) SHALL BE SPACED WITH 30 M. PENETRATION ASPHALT (PEN. 100) OR APPLIED LIQUID COMPOUND AFTER THE CONCRETE HAS BEEN CURED AND BEFORE FINISHING PAVEMENT TO TRAVEL. PENETRATION ASPHALT OR LIQUID COMPOUND SHOULD BE APPLIED IN SUCH MANNER THAT BUILDING UP WILL BE ELIMINATED. THIS PROVIDES A SMOOTH FINISH SURFACE.
9. ALL TRANSVERSE JOINTS EXCEPT CONSTRUCTION JOINTS SHALL BE CONTINUOUS FROM EDGE TO EDGE.
10. ALL LONGITUDINAL JOINTS SHALL MEET AT INTERSECTIONS WITH V-GAPS OR OFFSET.
11. ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
12. WIDE STOPPAGE OF WORK ALONG CURVES.
13. DRILLING OF HOLES ON EXISTING PAVEMENT AND OTHER STRUCTURES SHALL BE PERFORMED USING POWER TOOL. THE HOLES SHALL BE PROPERLY CLEANED BEFORE ANY TIE BAR INSTALLATION AND INSTALLATION OF DOWELS OR TIE BARS.

WHERE:

IN A THICKNESS OF EXISTING PAVEMENT
THICKNESS OF NEW PAVEMENT



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NATIONAL CAPITAL REGION
NORTH MANILA DISTRICT ENGINEERING OFFICE
OFFICE OF THE DISTRICT ENGINEER
Nagpartian 3da Mass Manila

PROJECT NAME AND LOCATION
PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD. K0007 + 473.00 - K0007 + 945.00

SHEET CONTENTS
TWO LANE PAVEMENT TYP. PLAN
DETAIL SECTION
BAR SPACING ALONG CURVES DET.
DETAIL OF JOINT IN RIGID PAVEMENT
DETAIL OF EXPANSION JOINT (DOWELLED) AT CERTAIN INTERSECTIONS AND STRUCTURES
STANDARD PORTLAND CEMENT CONCRETE PAVEMENT

DESIGNED BY
JONATHAN C. CASINO JR.
CHECKED BY
JOYCE D. MATANGUIHAN

REVIEWED BY
REY Y. CASTILLO
APPROVED BY
ARLENE S. MENDOZA

REVIEWED BY
REY Y. CASTILLO
APPROVED BY
ARLENE S. MENDOZA

REVIEWED BY
REY Y. CASTILLO
APPROVED BY
ARLENE S. MENDOZA

REVIEWED BY
REY Y. CASTILLO
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ARLENE S. MENDOZA

REVIEWED BY
REY Y. CASTILLO
APPROVED BY
ARLENE S. MENDOZA

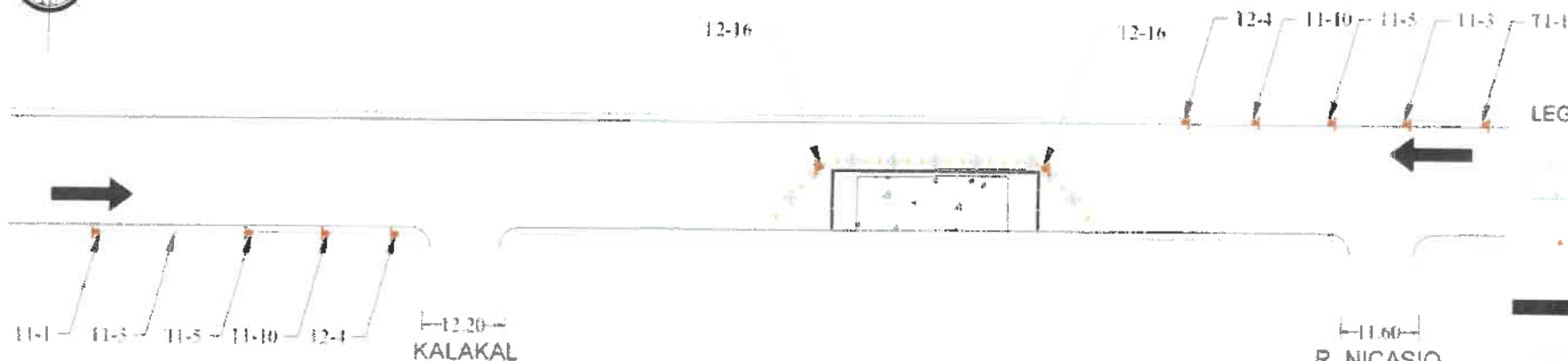




LOCATION MAP

SITE

PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD. K0007 + 473.00 - K0007 + 945.00



LEGEND

- WORK AREA
- TRAFFIC CONES (27 PCS.)
- STEEL BARRIERS (27 PCS.)
- BARRICADE FLASHER LIGHT (9 PCS.)
- TRAFFIC FLOW

NOTE:

DIMENSION 'D' - A DISTANCE EXPRESSED IN METERS EQUAL TO THE APPROACH SPEED OF TRAFFIC IN KILOMETER PER HOUR (V=60kph)

ROADWORK AHEAD

T1-1

ROADWORK AHEAD

SIGN NO. SIZE

LETTER

BACKGROUND

Line 1 - Black 200DM
Line 2 - Black 160DM

ROAD CLOSED

T2-4

ROADWORK AHEAD

SIGN NO. SIZE

LETTER

BACKGROUND

Black 140 EN

Yellow Reflectonized

TRAFFIC HAZARD AHEAD

T1-10

TRAFFIC HAZARD AHEAD

SIGN NO. SIZE

LETTER

BACKGROUND

Line 1 - Black 200DM
Line 2 - Black 160DM

ROAD MACHINERY AHEAD

T1-3

ROAD MACHINERY AHEAD

SIGN NO. SIZE

LETTER

BACKGROUND

Line 1 - Black 200DM
Line 2 - Black 160DM

Yellow Reflectonized



T1-5

WORKMEN AHEAD

SIGN NO. SIZE

LETTER

BACKGROUND

Red / Orange
- Flourescent for day use
- Reflectonized by night use

END ROADWORK

T2-16

END ROADWORK

SIGN NO. SIZE

LETTER

BACKGROUND

Line 1 - Black 200DM
Line 2 - Black 160DM

Yellow Reflectonized

TRAFFIC MANAGEMENT PLAN AND DETAILS

16 SCALE

NTS



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NATIONAL CAPITAL REGION
NORTH MANILA DISTRICT ENGINEERING OFFICE
OFFICE OF THE DISTRICT ENGINEER
Nagtahan Sta. Mesa Manila

PROJECT NAME AND LOCATION

PREVENTIVE MAINTENANCE -
TERTIARY ROADS - H. LOPEZ BLVD.
K0007 + 473.00 - K0007 + 945.00

SHEET CONTENT

TRAFFIC MANAGEMENT PLAN AND
DETAILS

DRAWN BY
JONATHAN C. CASINO JR.

CHECKED BY
JOYCE D. MATRANGUIHAN

REVIEWED BY

REY Y. CASTILLO
ENGINEER

SUBMITTED BY

ARLENE S. MENDOZA
DISTRICT PLANNING AND DESIGN SECTION

RECOMMENDED BY

DENRYL CAESAR S. CORTUNA
ASSISTANT DISTRICT ENGINEER

APPROVED BY

DENISE E. SANDOVAL
DISTRICT ENGINEER

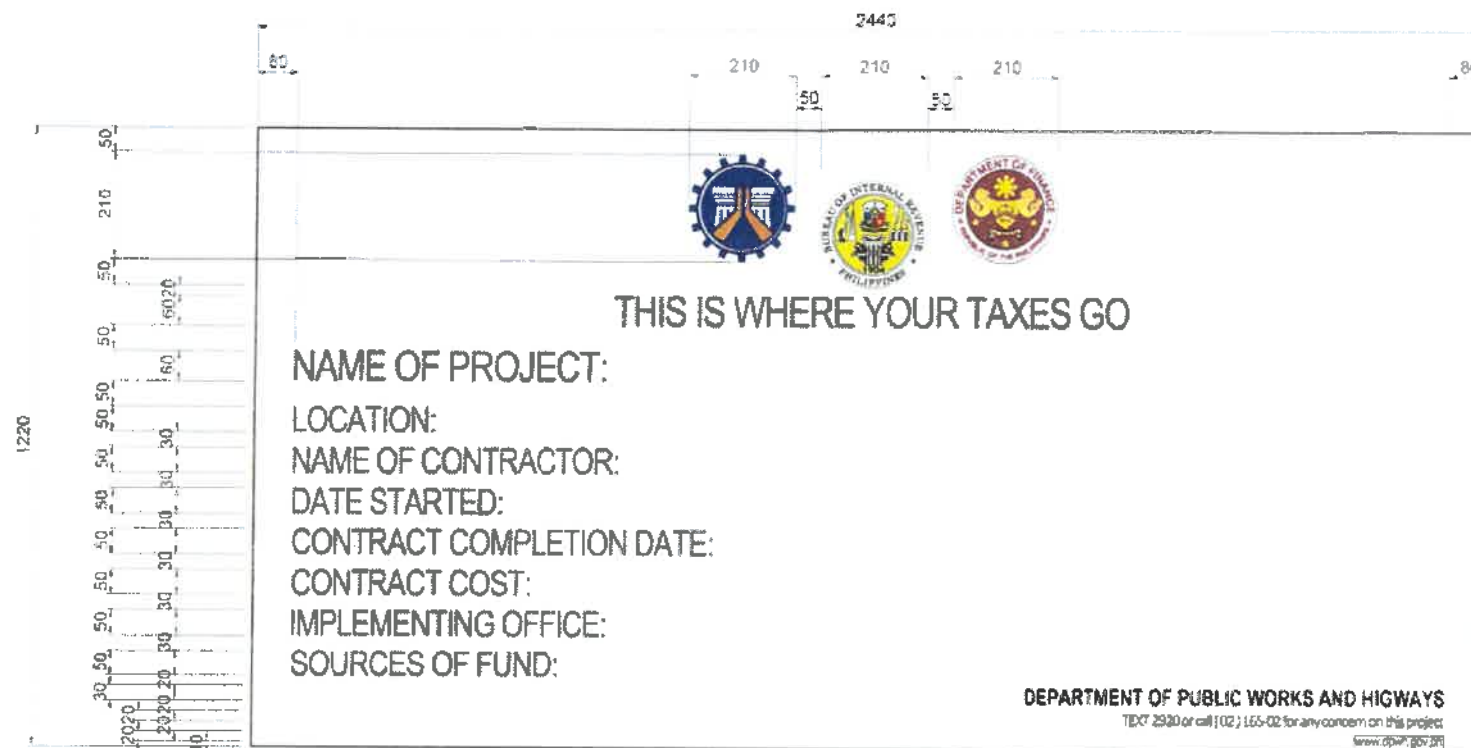
SHEET NO.

16

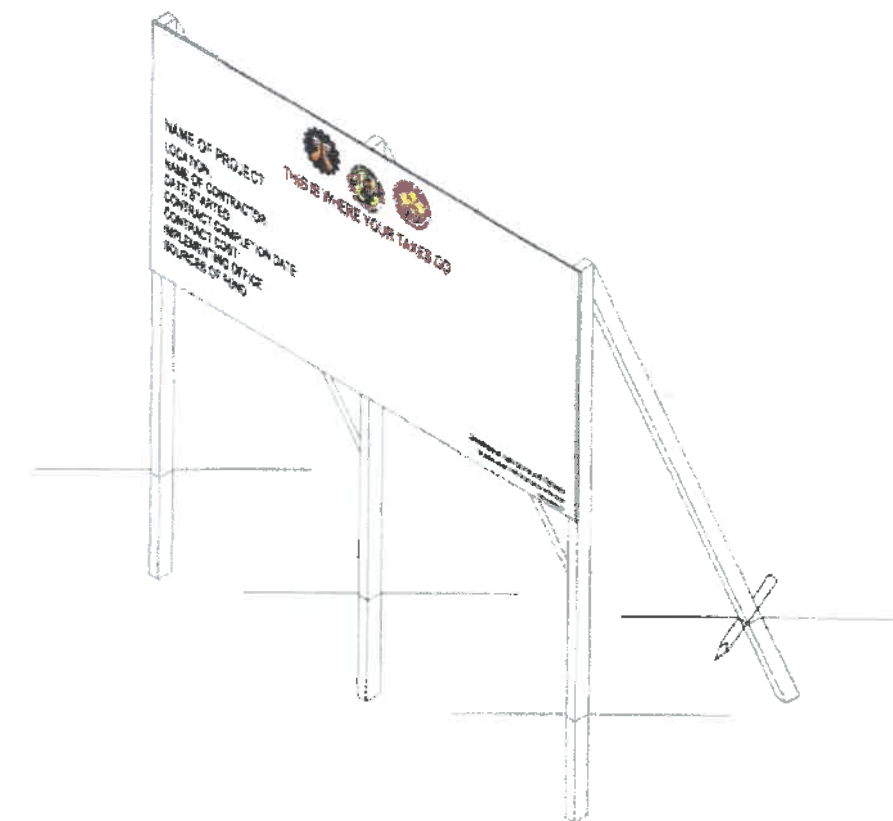
TOTAL SHEETS

18

PROJECT BILLBOARD



1 DPWH STANDARD PROJECT BILLBOARD
 SCALE 1:10 METERS

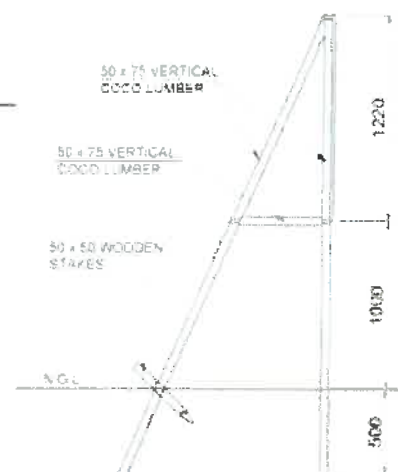


2 ISOMETRIC VIEW
 SCALE 1:10 METERS

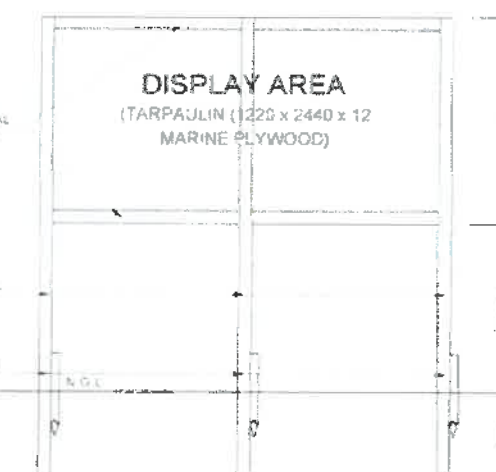
NOTES:
 1. LAYOUT OF PROJECT BILLBOARD IS BASED ON D.O. 11 SERIES OF 2022 FOR SOURCE OF FUND STATE IF DPWH REGULAR BUDGET, PRIORITY DEVELOPMENT ASSISTANCE FUND (PDAF), DAR BUDGET, CALAMITY FUND, MIVUC FUND, ETC.
 2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED



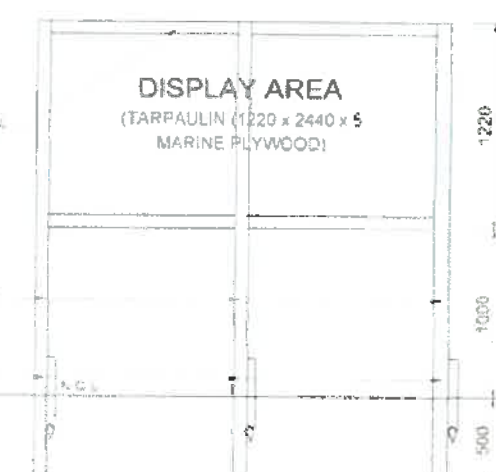
TRAFFIC DIRECTION



4 TYPICAL FRAME ELEVATION
 SCALE 1:10 METERS



5 FRONT ELEVATION (OPTION 1)
 SCALE 1:10 METERS



6 FRONT ELEVATION (OPTION 2)
 SCALE 1:10 METERS

3 ORIENTATION
 SCALE 1:10 METERS

REPUBLIC OF THE PHILIPPINES DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS NATIONAL CAPITAL REGION NORTH MANILA DISTRICT ENGINEERING OFFICE OFFICE OF THE DISTRICT ENGINEER Taguig: Sta Mesa Manila	PROJECT NAME AND LOCATION: PREVENTIVE MAINTENANCE - TERTIARY ROADS - H. LOPEZ BLVD. K0007 + 473.00 - K0007 + 945.00	SHEET CONTENTS: DPWH STANDARD PROJECT BILLBOARD ISOMETRIC VIEW PRESENTATION TYPICAL FRAME ELEVATION FRONT ELEVATION (OPTION 1) FRONT ELEVATION (OPTION 2)	CREATED: JONATHAN C. CASINO JR. DATE: 05/05/2023 CHECKED: JOYCE D. MAYANGDIHAN ENGINEER	REVIEWED: REY V. CASTILLO ENGINEER	SUBMITTED: ARLENE S. MENDOZA DISTRICT PLANNING AND DESIGN DIVISION	RECOMMENDED: DENNIS CAESAR S. CORTUNA DISTRICT ENGINEER	APPROVED: DENNIS E. SANDOVAL DISTRICT ENGINEER	SET NO. 17 SHEET NO. 18
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Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
NORTH MANILA DISTRICT ENGINEERING OFFICE
Nagtahan, Manila



March 26, 2025

MEMORANDUM

FOR : **Regional Director LORETA M. MALALUAN, CESO IV**
National Capital Region

THRU : **Division Chief LIBERATO R. MERCADO**
Planning and Design Division
National Capital Region

SUBJECT : **Request for Modification**

Respectfully submitted are the documents needed for the request of modification on the physical target and station limit for the proposed FY 2025 Infrastructure Program under the 1st Congressional District City of Manila, to wit:

<i>As per GAA /Original</i>	<i>As Modified</i>
Preventive Maintenance – Tertiary Roads - H. Lopez Blvd. K0006 + 949.00 - K0007 + 421.00	Preventive Maintenance – Tertiary Roads - H. Lopez Blvd. K0007 + 473.00 - K0007 + 945.00
Station Limit : K0006 + 949.00 - K0007 + 421.00	Station Limit : K0007 + 473.00 - K0007 + 945.00
Location : Manila City	Location : Manila City
Allocation : P 50,000,000.00	Allocation : P 50,000,000.00
Physical Target : 2.22 ln.km.	Physical Target : 1.888 ln.km.
Scope of Work : Asphalt Overlay	Scope of Work : Asphalt Overlay

Favorable consideration on this request is greatly appreciated.


DENNIS E. SANDOVAL

District Engineer
North Manila District Engineering Office

Enclosed:

1. *Modification Request Form (DPWH-QMSP-03-01 Rev 01)*
2. *Certificate of Availability of Funds (CAF)*
3. *Annual Infrastructure Program based on GAA FY 2025*
4. *Geotagged Photos*
5. *GIS Map*
6. *Program of Works*
7. *Detailed Unit Price Analysis (DUPA)*
8. *Plan (Cover Page, Summary of Quantities, SLD)*

NCR.10.1 ASM

RECEIVED BY
MARCE
3/26/25



Vital Road Condition Assessment Form



Region: National Capital Region
Section ID: S02339LZ (1.925 KM)

District: North Manila District Engineering Office
Road Name: H Lopez Blvd

Assessment Type: Asphalt From (m): .00
Carriageway Width (m): 15.90 Assessed (m): 7.95 To (m): .000 464.000
No. of Lanes: 4-lane Assessed: 2-lane Date Surveyed: 02/16/2024 Length (m): 464.00
Lane Width (m): 3.98 Assessed (m): 3.98 Rater: REAH FERRERA
Gauging Length Moved by (m): 0 Road Slip: ☐

For New Surface Change
Surface change is:
Year of surface change:

Comments: Others - COMPLETED PROJECT FY 2023 - CONCRETING WITH DRAINAGE - TWO LANE ONLY 1&2 LANE

Edge Break

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity													

Rutting 50 m gauging length (in mm)

Patches

Width	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0

Direction	Positive	Negative
Outer	Outer	Inner
Wheel	Wheel	Wheel
Palm	Palm	Palm

10	0	0	0	0
20	0	0	0	0
30	0	0	0	0
40	0	0	0	0
50	0	0	0	0

Potholes / Base Failures Number

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
	0	0	0	0	0	0	0	0	0	0	0	0	0

Surface Failures Number

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
	0	0	0	0	0	0	0	0	0	0	0	0	0

Wearing Surface

Width	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane	78	78	98	88	54	0	0	0	0	0	0	0	0
Severity(S/M)	M	M	M	M	M								

Other Items

Item	Count
Drains	None
Unsealed Shoulder	None
Sealed Shoulder	None

Cracking - Longitudinal (L)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Cracking - Crocodile (C)

Width	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Cracking - Transverse (T)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													



V. al Road Condition Assessment Form

QMS-4.1.5-10 Rev00



Region: National Capital Region
Section ID: S02339LZ (1.925 KM)

District: North Manila District Engineering Office
Road Name: H Lopez Blvd

Assessment Type: Asphalt
Carriageway Width (m): 15.90 Assessed (m): 15.90
No. of Lanes: 4-lane Assessed: 4-lane
Lane Width (m): 3.98 Assessed (m): 3.98
Gauging Length Moved by (m): 0

From (m): 0 To (m): K0006
Date Surveyed: 02/16/2024 Length (m): 62.00
Rater: REAH FERRERA
Road Slip: ☐

For New Surface Change
Surface change is:
Year of surface change:

Comments:

Edge Break

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity													

Rutting 50 m gauging length (in mm)

Direction	
Positive	Negative
Outer	Inner
Outer	Inner
Outer	Inner
Outer	Inner

Patches

Width	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0

10	0	0	0	0
20	0	0	0	0
30	0	0	0	0
40	0	0	0	0
50	0	0	0	0

Potholes / Base Failures

Number	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
	0	0	0	0	0	0	0	0	0	0	0	0	0

Surface Failures

Number	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
	0	0	0	0	0	0	0	0	0	0	0	0	0

Wearing Surface

Width	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity(S/M)													

Other Items

Item	Count
Drains	2
Unsealed Shoulder	None
Sealed Shoulder	None

Cracking - Longitudinal (L)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Cracking - Crocodile (C)

Width	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Cracking - Transverse (T)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													



V. al Road Condition Assessment Form



Region: National Capital Region
Section ID: S02339LZ (1.925 KM)

District: North Manila District Engineering Office
Road Name: H Lopez Blvd

Assessment Type:	Asphalt	From (m):	K0006	Offset	0	Distance (m)	526.00
Carriageway Width (m):	16.00	Assessed (m):	16.00	To (m):	.000		749.000
No. of Lanes:	4-lane	Assessed:	4-lane	Date Surveyed:	02/16/2024	Length (m):	223.00
Lane Width (m):	4.00	Assessed (m):	4.00	Rater:	REAH FERRERA		
Gauging Length Moved by (m):	0	Road Slip:	☐ For New Surface Change Surface change is: Year of surface change:				

Comments:

Edge Break

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity													

Rutting 50 m gauging length (In mm)

	Direction	Positive	Negative
Outer	Inner	Outer	Inner
Wheel	Wheel	Wheel	Wheel
Path	Path	Path	Path

Patches

Width	Length (m)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5		0	0	0	0	0	0	0	0	0	0	0	0	0
1.0		0	0	0	0	0	0	0	0	0	0	0	0	0
1.5		0	0	0	0	0	0	0	0	0	0	0	0	0
2.0		0	0	0	0	0	0	0	0	0	0	0	0	0

10	0	0	0	0
20	0	0	0	0
30	0	0	0	0
40	0	0	0	0
50	0	0	0	0

Potholes / Base Failures Number

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
	0	0	0	0	0	0	0	0	0	0	0	0	0

Surface Failures Number

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
	0	0	0	0	0	0	0	0	0	0	0	0	0

Wearing Surface

Width	Length (m)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5		0	0	0	0	0	0	0	0	0	0	0	0	0
1.0		0	0	0	0	0	0	0	0	0	0	0	0	0
1.5		0	0	0	0	0	0	0	0	0	0	0	0	0
2.0		0	0	0	0	0	0	0	0	0	0	0	0	0
Lane		0	0	0	0	0	0	0	0	0	0	0	0	0
Severity(S/M)														

Other Items

Item	Count
Drains	2
Unsealed Shoulder	None
Sealed Shoulder	None

Cracking - Longitudinal (L)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Cracking - Crocodile (C)

Width	Length (m)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5		0	0	0	0	0	0	0	0	0	0	0	0	0
1.0		0	0	0	0	0	0	0	0	0	0	0	0	0
1.5		0	0	0	0	0	0	0	0	0	0	0	0	0
2.0		0	0	0	0	0	0	0	0	0	0	0	0	0
Lane		0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)														

Cracking - Transverse (T)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													



Visual Road Condition Assessment Form



Region: National Capital Region
Section ID: S02339LZ (1.925 KM)

District: North Manila District Engineering Office
Road Name: H Lopez Blvd

Assessment Type: Concrete **From (m):** 0 **Distance (m):** 749.00
Carriageway Width (m): 16.00 **Assessed (m):** 16.00 **To (m):** .000 **800.000**
No. of Lanes: 4-lane **Assessed:** 4-lane **Date Surveyed:** 02/16/2024 **Length (m):** 51.00
Lane Width (m): 4.00 **Assessed (m):** 4.00 **Rater:** REAH FERRERA
Gauging Length Moved by (m): 0 **Road Slip:** ☐
Slab Length (m): 4.5

For New Surface Change
Surface change is:

Year of surface change:

Shattered Slabs (Number of Slabs)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Lane 1	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 4	0	0	0	0	0	0	0	0	0	0	0	0	0

Faulting at Transverse Joints - 10 Joints

Joint	Discontinuity	Severity
1	0 and 0	
2	0 and 0	
3	0 and 0	
4	0 and 0	
5	0 and 0	
6	0 and 0	
7	0 and 0	
8	0 and 0	
9	0 and 0	
10	0 and 0	

Spalling at Joints - 10 Joints

Joint	Width (mm)	Depth (mm)
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0

Joint Sealant - 10 Joints

Joint	Sealant (mm)
1	.00
2	.00
3	.00
4	.00
5	.00
6	.00
7	.00
8	.00
9	.00
10	.00

Wearing Surface

Lane	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Lane 1	48	0	0	0	0	0	0	0	0	0	0	0	0
Lane 2	15	0	0	0	0	0	0	0	0	0	0	0	0
Lane 3	38	0	0	0	0	0	0	0	0	0	0	0	0
Lane 4	45	0	0	0	0	0	0	0	0	0	0	0	0

Severity S

Cracking - Longitudinal (L)

Length (m)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Severity (N/W)	0	0	0	0	0	0	0	0	0	0	0	0	0

Cracking - Multiple (M)

Lane	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Lane 1	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 4	0	0	0	0	0	0	0	0	0	0	0	0	0

Severity (N)

Cracking - Transverse (T)

Length (m)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Severity (N/W)	0	0	0	0	0	0	0	0	0	0	0	0	0

Other Items

Item	Count
Drains	2
Unsealed Shoulder	None
Sealed Shoulder	None



Visual Road Condition Assessment Form

QMS-4.1.5-10 Rev00



Region: National Capital Region

District: North Manila District Engineering Office

Section ID: S02339LZ (1.925 KM)

Road Name: H Lopez Blvd

Number of Cracked Slabs

100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0	0	0	0	0	0	0	0	0	0	0	0	0



Visual Road Condition Assessment Form

QMS-4.1.5-10 Rev00



Region: National Capital Region
Section ID: S02339LZ (1.925 KM)

District: North Manila District Engineering Office
Road Name: H Lopez Blvd

		LRP	Offset	Distance (m)
Assessment Type:	Concrete Not Assessable		0	800.00
Carriageway Width (m):	16.00		.000	802.000
No. of Lanes:	4-lane			
		Date Surveyed: 02/16/2024	Length (m):	2.00
		Rater: REAH FERRERA		

Comments: Segment less than 50 meters



Visual Road Condition Assessment Form

QMS-4.1.5-10 Rev00



Region: National Capital Region
Section ID: S02339LZ (1.925 KM)

District: North Manila District Engineering Office
Road Name: H Lopez Blvd

		LRP	Offset	Distance (m)
Assessment Type:	Concrete Not Assessable	From (m):	0	802.00
Carriageway Width (m):	15.40	To (m):	.000	872.000
No. of Lanes:	4-lane	Date Surveyed: 02/16/2024	Length (m):	70.00
		Rater:	REAH FERRERA	

Comments: Bridge - H LOPEZ BRIDGE



Visual Road Condition Assessment Form



Region: National Capital Region
Section ID: S02339LZ (1.925 KM)

District: North Manila District Engineering Office
Road Name: H Lopez Blvd

Assessment Type:	Concrete	From (m):	0	Distance (m)	872.00
Carriageway Width (m):	16.00	Assessed (m):	16.00	To (m):	.000
No. of Lanes:	4-lane	Assessed:	4-lane	Date Surveyed:	02/16/2024
Lane Width (m):	4.00	Assessed (m):	4.00	Length (m):	57.00
Gauging Length Moved by (m):	0	Rater:	REAH FERRERA		
Slab Length (m):	4.5	Road Slip:	☐ For New Surface Change Surface change is: Year of surface change:		
Comments:					

Shattered Slabs (Number of Slabs)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Lane 1	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 4	0	0	0	0	0	0	0	0	0	0	0	0	0

Faulting at Transverse Joints - 10 Joints

Joint	Discontinuity (mm)
1	0 and 0
2	0 and 0
3	0 and 0
4	0 and 0
5	0 and 0
6	0 and 0
7	0 and 0
8	0 and 0
9	0 and 0
10	0 and 0

Spalling at Joints - 10 Joints

Joint	Width (mm)	Length (m)
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0

Joint Sealant - 10 Joints

Joint	Sealant (mm)
1	.00
2	.00
3	.00
4	.00
5	.00
6	.00
7	.00
8	.00
9	.00
10	.00

Wearing Surface

Lane	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Lane 1	45	0	0	0	0	0	0	0	0	0	0	0	0
Lane 2	38	0	0	0	0	0	0	0	0	0	0	0	0
Lane 3	50	0	0	0	0	0	0	0	0	0	0	0	0
Lane 4	48	0	0	0	0	0	0	0	0	0	0	0	0

Severity M

Cracking - Longitudinal (L)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Cracking - Multiple (M)

Lane	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Lane 1	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 4	0	0	0	0	0	0	0	0	0	0	0	0	0

Severity (N)

Cracking - Transverse (T)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Other Items

Item	Count
Drains	2
Unsealed Shoulder	None
Sealed Shoulder	None



Visual Road Condition Assessment Form

QMS-4.1.5-10 Rev00



Region: National Capital Region

District: North Manila District Engineering Office

Section ID: S02339LZ (1.925 KM)

Road Name: H Lopez Blvd

Number of Cracked Slabs

100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0	0	0	0	0	0	0	0	0	0	0	0	0



Visual Road Condition Assessment Form

QMS-4.1.5-10 Rev00



Region: National Capital Region
Section ID: S02339LZ (1.925 KM)

District: North Manila District Engineering Office
Road Name: H Lopez Blvd

Assessment Type:	Asphalt	From (m):	0	Distance (m)	929.00
Carriageway Width (m):	16.00	Assessed (m):	16.00	To (m):	K0007 980.000 ✓
No. of Lanes:	4-lane	Assessed:	4-lane	Date Surveyed:	02/16/2024 Length (m): 51.00
Lane Width (m):	4.00	Assessed (m):	4.00	Rater:	REAH FERRERA
Gauging Length Moved by (m):	0	Road Slip:	☐	For New Surface Change Surface change is: Year of surface change:	
Comments:					

Edge Break

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity													

Rutting 50 m gauging length (in mm)

Direction	
Positive	Negative
Outer Wheel Path	Inner Wheel Path
Outer Wheel Path	Inner Wheel Path

Patches

Width (m)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0

10	0	0	0	0
20	0	0	0	0
30	0	0	0	0
40	0	0	0	0
50	0	0	0	0

Potholes / Base Failures Number

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
	0	0	0	0	0	0	0	0	0	0	0	0	0

Surface Failures Number

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
	0	0	0	0	0	0	0	0	0	0	0	0	0

Wearing Surface

Width (m)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity(S/M)													

Other Items

Item	Count
Drains	2
Unsealed Shoulder	None
Sealed Shoulder	None

Cracking - Longitudinal (L)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Cracking - Crocodile (C)

Width (m)	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Cracking - Transverse (T)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													



Visual Road Condition Assessment Form



Region: National Capital Region
Section ID: S02339LZ (1.925 KM)

District: North Manila District Engineering Office
Road Name: H Lopez Blvd

Assessment Type: Asphalt
Carriageway Width (m): 16.00 Assessed (m): 16.00
No. of Lanes: 4-lane Assessed: 4-lane
Lane Width (m): 4.00 Assessed (m): 4.00
Gauging Length Moved by (m): 0

LRP: K0007
Offset: 0
Distance (m): 980.00
From (m): 0 To (m): 1,078.000
Date Surveyed: 02/16/2024 Length (m): 98.00
Rater: REAH FERRERA
Road Slip: ☐

For New Surface Change
Surface change is:

Year of surface change:

Comments:

Edge Break

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity													

Rutting 50 m gauging length (in mm)

Patches

Direction	
Positive	Negative
Outer Inner	Inner Outer
Wheel/Wheel	Wheel/Wheel
Walk	Walk

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0

10	0	0	0	0
20	0	0	0	0
30	0	0	0	0
40	0	0	0	0
50	0	0	0	0

Potholes / Base Failures Number

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
	0	0	0	0	0	0	0	0	0	0	0	0	0

Surface Failures Number

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
	0	0	0	0	0	0	0	0	0	0	0	0	0

Wearing Surface

Other Items

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity(S/M)													

Item	Count
Drains	2
Unsealed Shoulder	None
Sealed Shoulder	None

Cracking - Longitudinal (L)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Cracking - Crocodile (C)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
1.0	0	0	0	0	0	0	0	0	0	0	0	0	0
1.5	0	0	0	0	0	0	0	0	0	0	0	0	0
2.0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Cracking - Transverse (T)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													



Visual Road Condition Assessment Form



Region: National Capital Region
Section ID: S02339LZ (1.925 KM)

District: North Manila District Engineering Office
Road Name: H Lopez Blvd

Assessment Type:	Concrete	From (m):	0	Distance (m)	1,078.00
Carriageway Width (m):	16.00	Assessed (m):	16.00	To (m):	1,925.000
No. of Lanes:	4-lane	Assessed:	4-lane	Date Surveyed:	02/16/2024
Lane Width (m):	4.00	Assessed (m):	4.00	Length (m):	847.00
Gauging Length Moved by (m):	0	Rater:	REAH FERRERA		
Slab Length (m):	4.5	Road Slip:	☐ For New Surface Change Surface change is: Year of surface change:		
Comments:					

Shattered Slabs (Number of Slabs)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Lane 1	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 4	0	0	0	0	0	0	0	0	0	0	0	0	0

Faulting at Transverse Joints - 10 Joints

Joint	Severity (mm)
1	0 and 0
2	0 and 0
3	0 and 0
4	0 and 0
5	0 and 0
6	0 and 0
7	0 and 0
8	0 and 0
9	0 and 0
10	0 and 0

Spalling at Joints - 10 Joints

Joint	Width (mm)	Length (mm)
1	0	0
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	0	0
8	0	0
9	0	0
10	0	0

Joint Sealant - 10 Joints

Joint	Sealant (mm)
1	.00
2	.00
3	.00
4	.00
5	.00
6	.00
7	.00
8	.00
9	.00
10	.00

Wearing Surface

Lane	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Lane 1	98	78	98	89	78	78	85	98	25	0	0	0	0
Lane 2	100	85	98	78	45	75	88	98	15	0	0	0	0
Lane 3	78	78	78	78	78	78	98	87	35	0	0	0	0
Lane 4	98	78	78	100	98	78	78	85	18	0	0	0	0
Severity	M	M	M	M	M	M	M	M	M				

Other Items

Item	Score
Drains	None
Unsealed Shoulder	None
Sealed Shoulder	None

Cracking - Longitudinal (L)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													

Cracking - Multiple (M)

Lane	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Lane 1	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 2	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 3	0	0	0	0	0	0	0	0	0	0	0	0	0
Lane 4	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N)													

Cracking - Transverse (T)

	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
Length (m)	0	0	0	0	0	0	0	0	0	0	0	0	0
Severity (N/W)													



Visual Road Condition Assessment Form

QMS-4.1.5-10 Rev00



Region: National Capital Region

District: North Manila District Engineering Office

Section ID: S02339LZ (1.925 KM)

Road Name: H Lopez Blvd

Number of Cracked Slabs

100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
0	0	0	0	0	0	0	0	0	0	0	0	0

STRAIGHT LINE DIAGRAM OF HONORIO LOPEZ STREET

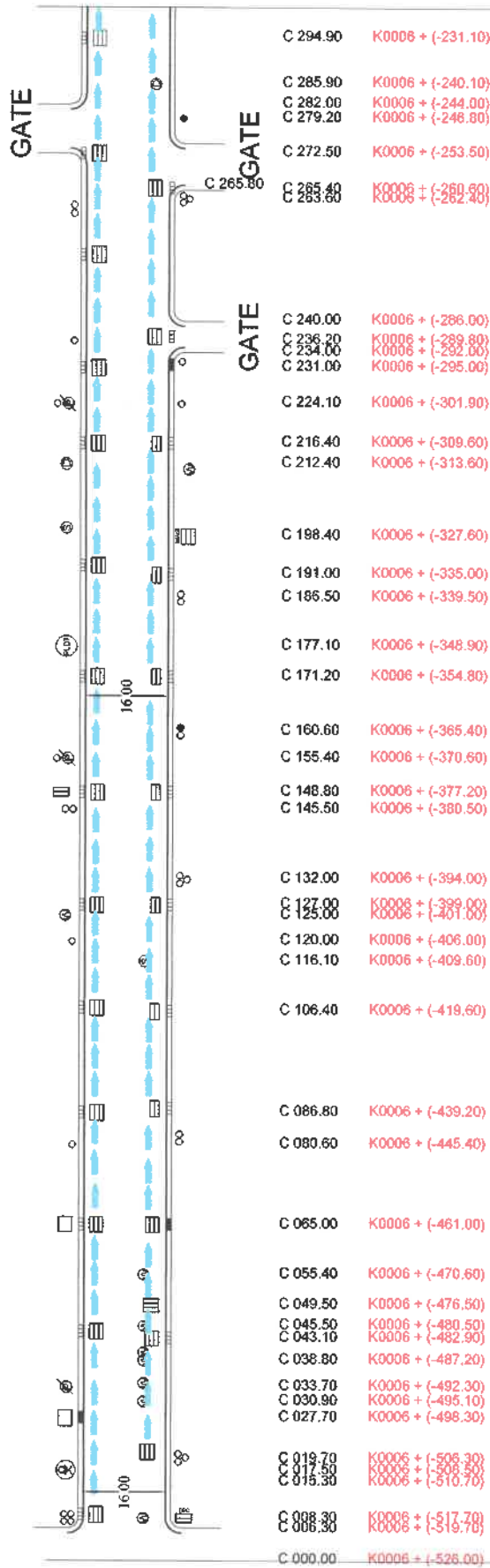
LIMIT : JUAN LUNA STREET TO NMEED BOUNDARY L = 1925.0 M

SECTION ID NO. : S02339LZ ROAD ID NO. : R00794LZ

DISTRICT II

LEGEND : 36"Ø RCPC

K0006 + (-251.6)	C 274.40
K0006 + (-264.1)	C 261.90
K0006 + (-273.1)	C 252.90
K0006 + (-289.0)	C 237.00
K0006 + (-294.4)	C 231.60
K0006 + (-314.6)	C 211.40
K0006 + (-326.0)	C 200.00
K0006 + (-333.3)	C 182.70
K0006 + (-418.9)	C 107.10
K0006 + (-438.4)	C 087.60
K0006 + (-444.1)	C 081.90
K0006 + (-481.6)	C 044.40
K0006 + (-485.6)	C 040.40
K0006 + (-491.5)	C 034.50
K0006 + (-504.8)	C 021.20



TERTIARY / SECOND DISTRICT / JUAN LUNA (0+000) TO SUNOG APOG BRIDGE (0+800)

2 LANE

STRAIGHT LINE DIAGRAM OF HONORIO LOPEZ STREET

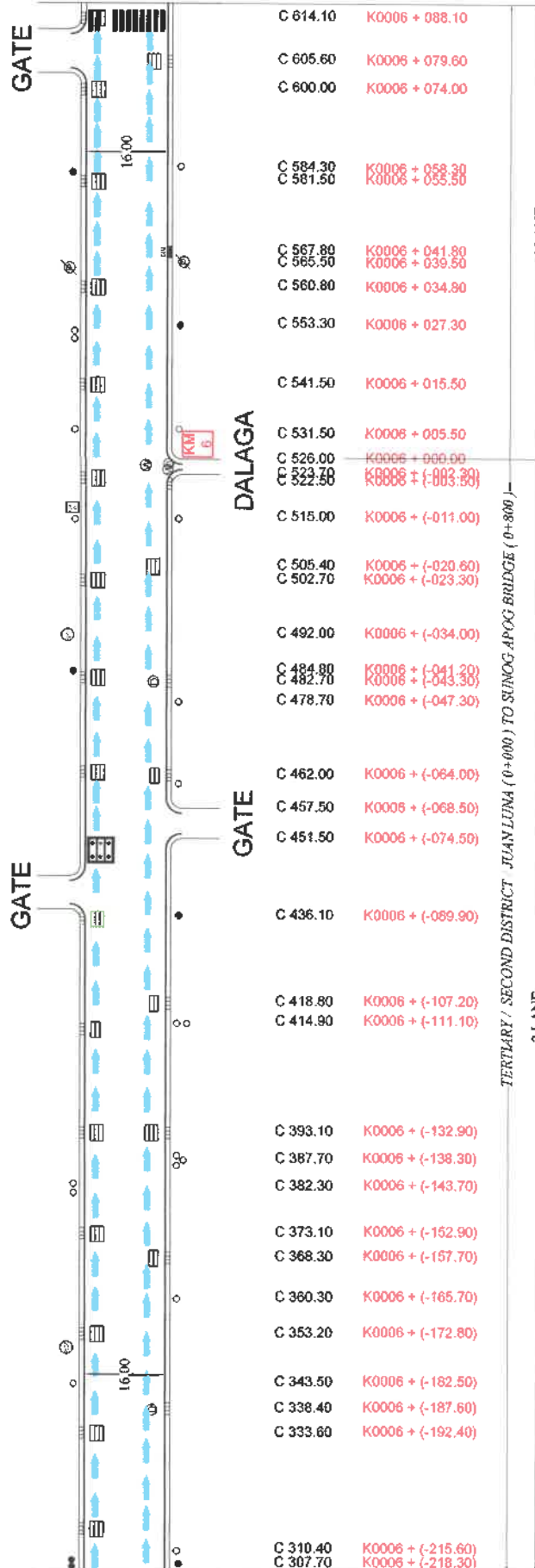
LIMIT : JUAN LUNA STREET TO NIMED BOUNDARY L = 1925.0 M

SECTION ID NO. : S02339LZ ROAD ID NO. : R00794LZ

DISTRICT II

LEGEND : 36"Ø RCPC

K0006 + 086.00	C 612.00
K0006 + 077.30	C 603.30
K0006 + 057.8	C 583.80
K0006 + 038.70	C 564.70
K0006 + 025.70	C 551.70
K0006 + (-001.5)	C 524.50
K0006 + (-003.0)	C 523.00
K0006 + (-009.3)	C 516.70
K0006 + (-103.80)	C 422.2
K0006 + (-081.9)	C 444.10
K0006 + (-088.5)	C 437.50
K0006 + (-090.5)	C 435.50
K0006 + (-112.4)	C 413.60
K0006 + (-175.4)	C 350.60
K0006 + (-211.4)	C 314.60
K0006 + (-219.2)	C 306.80



STRAIGHT LINE DIAGRAM OF HONORIO LOPEZ STREET

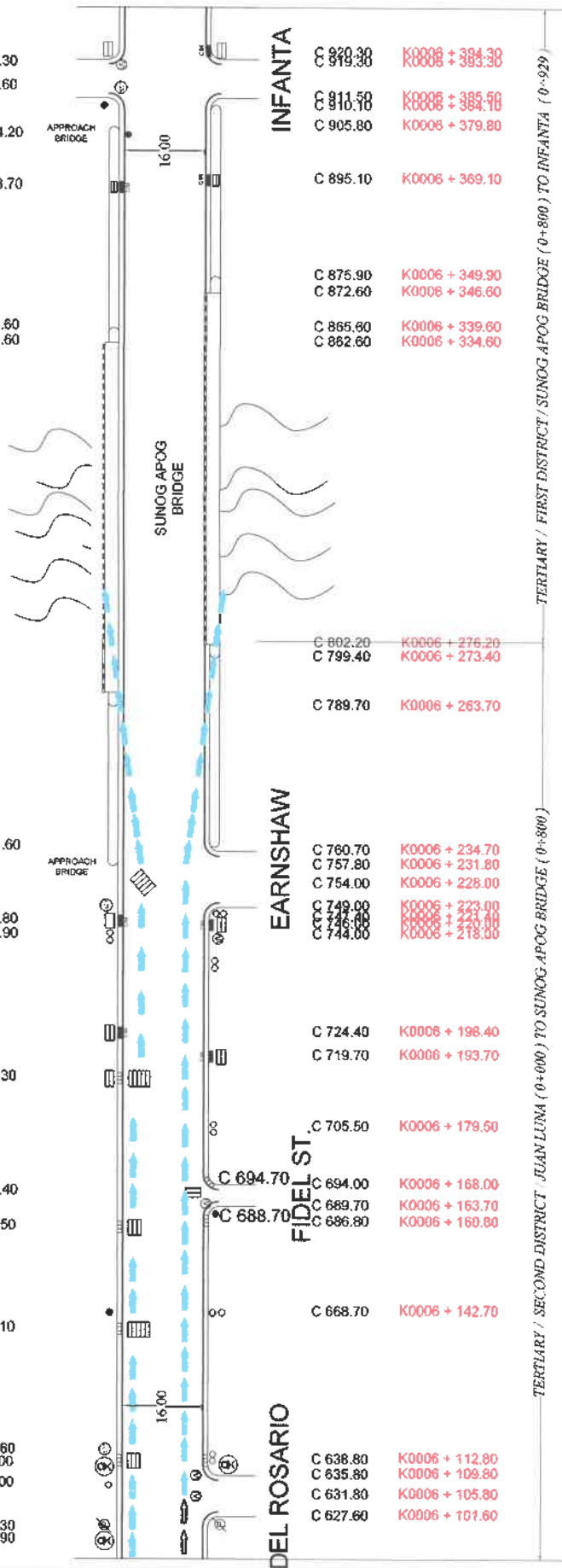
LIMIT : JUAN LUNA STREET TO NNEED BOUNDARY L = 1925.0 M

SECTION ID NO. : S02339LZ ROAD ID NO. : R00794LZ

DISTRICT II

LEGEND :
36"Ø RCPC

K0006 + 392.30	C 918.30
K0006 + 387.60	C 913.60
K0006 + 378.20	C 904.20
K0006 + 367.70	C 893.70
K0006 + 339.60	C 885.60
K0006 + 336.60	C 862.60
K0006 + 235.60	C 761.60
K0006 + 220.80	C 746.80
K0006 + 217.90	C 743.90
K0006 + 189.30	C 715.30
K0006 + 166.40	C 692.40
K0006 + 159.50	C 685.50
K0006 + 139.10	C 665.10
K0006 + 114.60	C 640.60
K0006 + 112.00	C 638.00
K0006 + 108.00	C 634.00
K0006 + 99.30	C 625.30
K0006 + 96.90	C 622.90



4 LANE

STRAIGHT LINE DIAGRAM OF HONORIO LOPEZ STREET

LIMIT : JUAN LUNA STREET TO NMED BOUNDARY L = 1925.0 M

SECTION ID NO. : S02339LZ ROAD ID NO. : R00794LZ

DISTRICT :

LEGEND
36"Ø RCPC

K0007 + 227.10 C 1,207.10

K0007 + 205.60 C 1,185.60

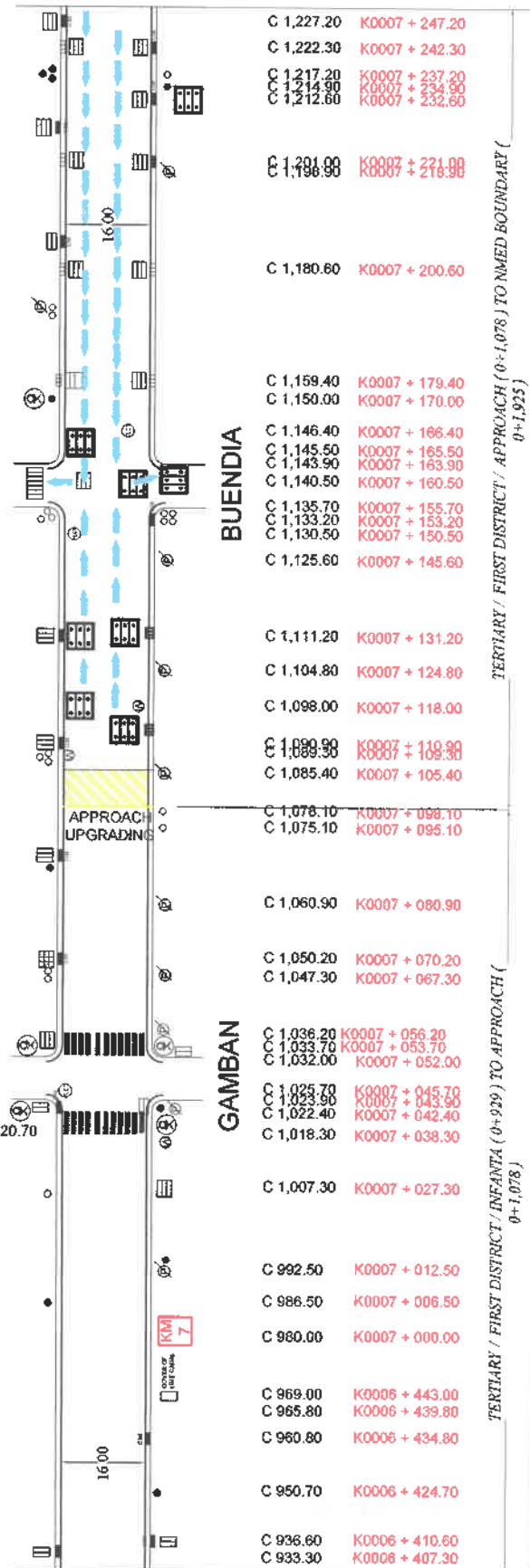
K0007 + 193.60 C 1,173.60

K0007 + 089.70 C 1,069.70
K0007 + 087.50 C 1,067.50

K0007 + 058.70 C 1,048.70

K0007 + 041.70 C 1,021.70
K0007 + 040.70 C 1,020.70

K0006 + 408.5 C 934.60



STRAIGHT LINE DIAGRAM OF HONORIO LOPEZ STREET

LIMIT : JUAN LUNA STREET TO NMED BOUNDARY L = 1925.0 M

SECTION ID NO. : S02336/LZ ROAD ID NO. : R00794/LZ

DISTRICT I

LEGEND :
36"Ø RCPC

K0007 + 545.10 C 1,525.10
K0007 + 540.00 C 1,520.00
K0007 + 539.00 C 1,519.00

K0007 + 529.00 C 1,509.00

K0007 + 515.50 C 1,495.50
K0007 + 509.20 C 1,489.20
K0007 + 507.30 C 1,487.30

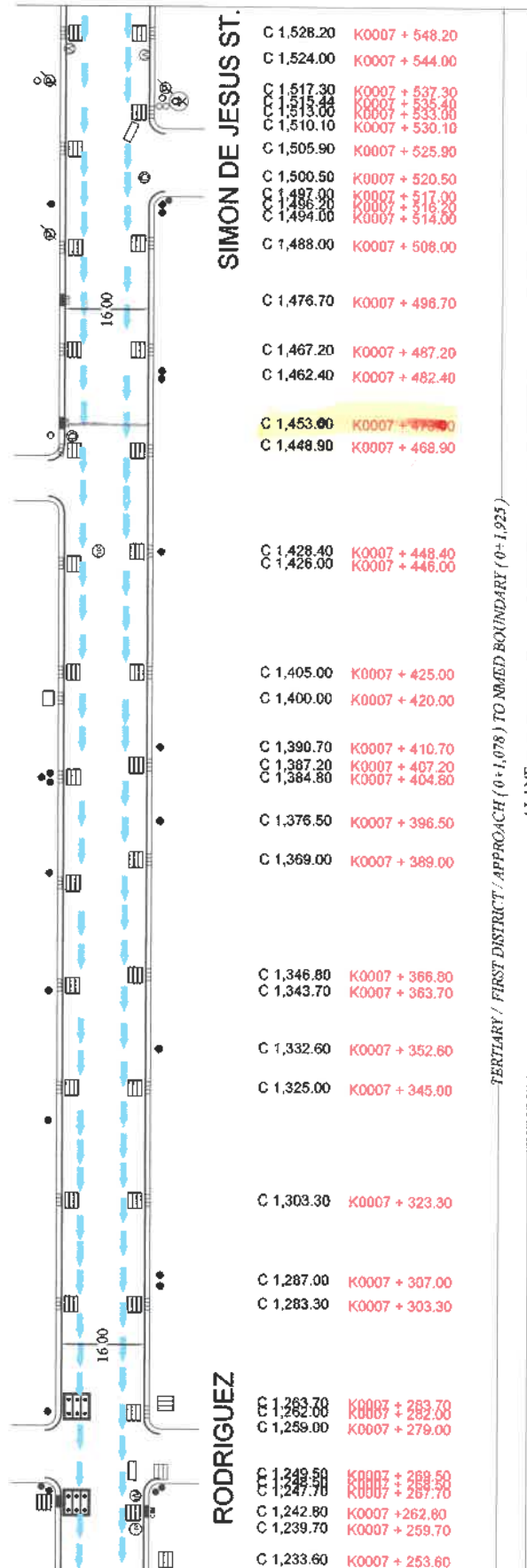
K0007 + 469.50 C 1,449.50
K0007 + 467.00 C 1,447.00

K0007 + 458.20 C 1,438.20

K0007 + 385.30 C 1,365.30
K0007 + 384.40 C 1,364.40

K0007 + 364.70 C 1,344.70

K0007 + 338.70 C 1,318.70



STRAIGHT LINE DIAGRAM OF HONORIO LOPEZ STREET

LIMIT : JUAN LUNA STREET TO NMED BOUNDARY L = 1925.0 M

SECTION ID NO. : S023394Z ROAD ID NO. : R00794LZ

DISTRICT I

LEGEND

36"Ø RCPC

K0007 + 799.00 C 1,779.00
K0007 + 798.20 C 1,778.20

K0007 + 765.80 C 1,745.80

K0007 + 698.40 C 1,678.40

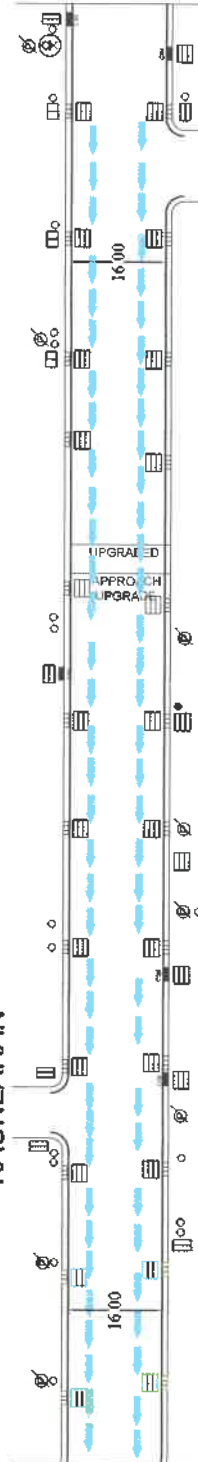
K0007 + 647.20 C 1,627.20

K0007 + 621.80 C 1,601.80
K0007 + 619.50 C 1,599.50

K0007 + 610.80 C 1,590.80
K0007 + 604.60 C 1,584.60

K0007 + 587.80 C 1,567.80
K0007 + 586.30 C 1,566.30

KAUNLARAN



KALAKAL

C 1,781.30 K0007 + 801.30
C 1,775.90 K0007 + 795.90

C 1,787.50 K0007 + 787.50
C 1,783.10 K0007 + 783.10

C 1,750.90 K0007 + 770.90
C 1,745.00 K0007 + 765.00

C 1,727.00 K0007 + 747.00
C 1,723.70 K0007 + 743.70

C 1,708.90 K0007 + 729.90
C 1,706.10 K0007 + 726.10

C 1,692.00 K0007 + 712.00
C 1,687.10 K0007 + 707.10
C 1,684.50 K0007 + 704.50
C 1,681.70 K0007 + 701.70

C 1,676.10 K0007 + 696.10
C 1,669.90 K0007 + 689.90

C 1,663.00 K0007 + 683.00
C 1,661.90 K0007 + 681.90

C 1,643.50 K0007 + 663.50
C 1,638.00 K0007 + 658.00

C 1,629.50 K0007 + 649.50
C 1,623.20 K0007 + 643.40

C 1,618.80 K0007 + 638.80

C 1,603.50 K0007 + 623.50
C 1,601.00 K0007 + 621.00

C 1,594.50 K0007 + 614.50
C 1,589.90 K0007 + 609.90
C 1,587.70 K0007 + 607.70
C 1,585.30 K0007 + 605.30

C 1,573.50 K0007 + 593.50
C 1,572.20 K0007 + 592.20
C 1,567.70 K0007 + 587.70

C 1,548.30 K0007 + 568.30
C 1,545.60 K0007 + 565.60

TERTIARY / FIRST DISTRICT / APPROACH (0+1,078) TO NMED BOUNDARY (0+1,925)

4 LANE

STRAIGHT LINE DIAGRAM OF HONORIO LOPEZ STREET

LIMIT : JUAN LUNA STREET TO NMED BOUNDARY L = 1925.0 M
SECTION ID NO. : S02339LZ ROAD ID NO. : R00794LZ

LEGEND :

36"Ø RCPC

K0007 + 903.50	C 1,883.50
K0007 + 884.10 K0007 + 891.20	C 1,874.10 C 1,871.20
K0007 + 880.40	C 1,860.40
K0007 + 867.40	C 1,847.40
K0007 + 847.20	C 1,827.20
K0007 + 834.50	C 1,814.50
K0007 + 829.60	C 1,809.60
K0007 + 823.10	C 1,803.10

