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

DEPARTMENT ORDER)
No. 31)
Series of 2023)

SUBJECT: Guidelines for the Corrective Maintenance Implementation of All DPWH Water-Based Equipment

3/21/2023

To ensure the highest efficiency and utilization of all DPWH Water-Based Equipment (WBE) thru the proper and timely implementation of Corrective Maintenance (CM) procedures, the streamlining and strengthening of the corresponding guidelines are indispensable. Consequently, all concerned offices and personnel are hereby directed to strictly implement the guidelines set forth in this Order.

This Department Order is created to standardize the CM implementation process, which includes funding, execution, and monitoring, thru enhanced delegation of functions and responsibilities to the Bureau of Equipment (BOE), Regional Offices (RO), Equipment Management Division (EMD), District Engineering Offices (DEO), and Area Equipment Sections (AES).

Attached as Annex A, Annex B, Annex F and Annex C, D.1-D.3, E, G, H, I, J, and K respectively are the Guidelines for the CM Implementation of all DPWH WBE, CM Implementation Process Flow, CM Inspection Matrix for BOE-FED Inspectorate Team and the required CM forms.

Any violation of this Order shall subject the erring accountable official or employee, after due notice and hearing, to immediate sanctions which may include relief, suspension, and/or dismissal in accordance with Civil Service rules and regulations and other applicable existing pertinent laws.

This Department Order shall take effect immediately.

MANUEL M. BONOAN
Secretary

Department of Public Works and Highways
Office of the Secretary



WIN3T02515

- Encl: 1) Guidelines for the Corrective Maintenance Implementation of All DPWH Water-Based Equipment, Annex "A"
2) Corrective Maintenance Implementation Process Flow, Annex "B"
3) Pre-Repair Inspection Report Form for DPWH WBE, Annex "C"
4) CM Program of Work (CM POW) Form for DPWH WBE, Annex "D.1"
5) CM Detailed Unit Price Analysis Form for DPWH WBE, Annex "D.2"
6) CM Timeline (PERT-CPM), Annex "D.3"
7) Open Canvass from Suppliers Form, Annex "D.4"
8) Abstract of Open Canvass with Price Verification Certification, Annex "D.5"
9) History of Maintenance (HOM), Annex "E"
10) CM Inspection Matrix for BOE-FED Inspectorate Team, Annex "F"
11) CM Monthly Accomplishment Report Form for DPWH WBE, Annex "G"
12) Post-Repair Inspection Report Form for DPWH WBE, Annex "H"
13) CM Work Order (CM WO) for DPWH WBE, Annex "I"
14) Receiving Report, Annex "J"
15) Waste Material Report, Annex "K"

Guidelines for the Corrective Maintenance Implementation of All DPWH Water-Based Equipment

In view of the steadily growing water-based equipment fleet of the Department and the increasing number of dredging projects nationwide, streamlining and strengthening the guidelines for the corrective maintenance implementation of all DPWH water-based equipment (WBE) aim to ensure proper and economical maintenance, enhance utilization and for transparency and accountability of equipment end users.

The following guidelines are hereby issued for implementation and adherence:

I. Definition of Terms

1. **Implementing Office (IO)**- Regional Offices (RO) and District Engineering Offices (DEO) that implement DPWH Dredging Projects.
2. **Maintenance** - activities performed on an equipment to ensure that the equipment will continue to perform its intended function by keeping it in good condition or restoring to its serviceable condition.
3. **History of Maintenance (HOM)** - list of all types of maintenance activities or procedures performed on an asset in a chronological order.
4. **Corrective Maintenance (CM)** - maintenance performed to identify, isolate, and rectify a fault so that the equipment can be restored to good operational condition.
 - 4.1. **In-House CM** - CM activities done by the Dredge Crew and personnel from Equipment Management Division (EMD) and Area Equipment Section (AES).
 - 4.2. **Outside CM** - CM activities done by private contractor/service provider wherein the scope of work is found to be beyond the technical capabilities of the Dredge Crew and in-house personnel.
5. **CM Program of Work (CM POW)** – a maintenance plan which consists of:
 - 5.1. **CM Detailed Unit Price Analysis (DUPA)** – details the scope of work, quantity, cost of parts, materials, supplies, service support, labor, shop tools and duration of CM activities needed, including logistics, to meet the requirements in a timely, cost-effective manner on a CM project.
 - 5.2. **CM Timeline** – provides graphical representation of the timeline in the performance of CM activities and shall be prepared by constructing a Program Evaluation and Review Technique – Critical Path Method (PERT-CPM).
 - 5.3. **Pictures** - geotagged photos of the subject equipment and pictures of the component or parts to be repaired with three (3) different angles.

6. **CM Work Order (CM WO)** – this document is issued to execute the repair of an equipment that provides information about the quantity, cost of parts, materials, supplies, service support, labor, tools and duration of CM activities.

II. General Policy Guidelines

1. The request of CM fund for all DPWH WBE shall originate from the Dredge Master (DM). In the event of equipment failure, the DM shall request pre-repair inspection from EMD or AES concerned. The Pre-Repair Inspection Report shall be the basis in preparing the CM Program of Work (POW).
2. All CM POW shall be supported with open canvass from at least three (3) licensed suppliers/dealers and abstract of canvass with price verification certification by the Supply and Property Management Division (SPMD) - Human Resource and Administrative Service (HRAS). The lowest canvass compliant to the required specifications shall be the estimated cost to be used in preparation of CM POW.
3. The equipment's repair cost shall not exceed 30% of the current market price of the same or similar equipment under COA Circular No. 2012-003.
4. In preparation of CM POW, in-house CM shall not be subjected to Overhead Contingencies and Miscellaneous (OCM), Profit mark-up and VAT as prescribed under Department Order No. 197, Series of 2016. For the percentage to be used for outside CM see column below:

Estimated Direct Cost (EDC)	Indirect Cost % For OCM and Profit		Total Indirect Cost % For OCM and Profit
	OCM (% of EDC)	Profit (% of EDC)	
Up to P5Million	15	10	25
Above P5M up to P50M	12	8	20
Above P50M up to P150M	10	8	18
Above P150M	8	8	16

5. Repeated CM request with same scope of work of the same equipment requested within a year or within two (2) consecutive years shall be supported with a comprehensive report with root cause analysis and subject for evaluation, validation and quality audit.
6. CM request of all DPWH WBE that are no longer economical to maintain and operate as determined by BOE shall not be allowed to request any CM fund.
7. The DM shall submit the required documents stated in this Department Order thru IO for any repair or CM performed on DPWH WBE regardless of the funding source.

III. Documents Required for the Request of Corrective Maintenance Fund

1. DPWH-QMSP-41-01-Rev00, Pre-Repair Inspection Report for DPWH WBE;

2. DPWH-QMSP-41-02-Rev00, CM Program of Work (CM POW) for DPWH WBE;
3. DPWH-QMSP-41-03-Rev00, CM Detailed Unit Price Analysis for DPWH WBE;
4. DPWH-QMSP-41-04-Rev00, CM Timeline (PERT-CPM);
5. DPWH-QMSP-41-05-Rev00, Open Canvass by end-user from at least three (3) licensed suppliers/dealers;
6. DPWH-QMSP-41-06-Rev00, Abstract of Open Canvass with price verification certification by the Supply and Property Management Division (SPMD) – Human Resource and Administrative Service (HRAS);
7. DPWH-QMSP-41-07-Rev00, History of Maintenance (HOM) of the subject component/equipment for the past three (3) years; and
8. Certified true copy of the latest Property Acknowledgement Receipt (PAR)

The process flow for the submission and approval of request for Corrective Maintenance fund of all DPWH WBE and the offices/personnel responsible for each process is shown in Annex "B" of this Department Order.

IV. Duties and Responsibilities

1. Dredge Master (DM)

- a. Requests pre-repair inspection from EMD/AES then prepares and submits the CM POW based on the pre-repair inspection report attaching all documents required for the request of CM fund.
- b. Assists the Inspectorate Team from Bureau of Equipment – Floating Equipment Division (BOE-FED) in conducting ocular inspection;
- c. Prepares and submits the CM WO to the Head of IO for approval;
- d. Supervises the execution of CM activities and ensures that such activities are within the schedule and in accordance to the approved CM POW;
- e. Monitors the on-going CM and submits regularly the CM Monthly Accomplishment Report to BOE thru IO;
- f. Conducts post-repair inspection after completion of CM activities;
- g. Submits to BOE the copy of CM WO, Purchase Order (PO), Receiving Report, Waste Material Report, Post-Repair Inspection Report thru IO after completion of CM activities;

- h. Ensures strict compliance to the provisions of this Department Order.

2. Implementing Office (IO)

2.1. Regional Office - Equipment Management Division

2.1.1. Chief, Equipment Management Division

- a. Directs the Equipment Inspector to conduct pre-repair inspection upon receipt of the request made by the DM;
- b. Reviews and signs the Pre-Repair Inspection Report requested by the DM;
- c. Directs the Equipment Inspector to assist the DM in preparing the required documents for the request of CM funds;
- d. Reviews, signs, and forwards the request of CM funds to BOE thru the Regional Director for approval;
- e. Directs the Equipment Inspector to assist the BOE-FED Inspectorate Team during on-board inspection;
- f. Undertakes the procurement of the required resources on the approved CM POW;
- g. Reviews and submits the CM WO prepared by the DM to the Regional Director for approval;
- h. Informs the BOE upon start of any CM activities thru memorandum;
- i. Directs the Equipment Inspector to certify and sign the CM WO upon completion of CM activities;
- j. Monitors and supervises the on-going CM and check compliance to the approved schedule and CM POW;
- k. Reviews and signs the CM Monthly Accomplishment Report prepared by the DM and submits to BOE thru the Regional Director and ensures timely submission;
- l. Informs BOE upon completion of any CM activities thru memorandum;
- m. Directs the Equipment Inspector to conduct post-repair inspection after completion of any CM activities;

- n. Reviews, signs, and submits the Post-Repair Inspection Report to the Regional Director for his/her signature.
- o. Submits to BOE the copy of CM WO, Purchase Order (PO), Receiving Report, Waste Material Report, Post-Repair Inspection Report thru the Regional Director upon completion of any CM activities; and
- p. Ensures strict compliance to the provisions of this Department Order.

For dredging projects implemented by the DEO, the concerned Area Equipment Section (AES) shall conduct all in-house CM for all DPWH-WBE. The following are the duties and responsibilities for each office:

2.2 Area Equipment Section

2.2.1. Area Equipment Engineer (AEE)

- a. Directs the Equipment Inspector to conduct pre-repair inspection;
- b. Reviews and signs the Pre-Repair Inspection Report requested by the DM;
- c. Directs the Equipment Inspector to assist the DM in preparing the required documents for the request of CM fund;
- d. Reviews, signs, and forwards the request of CM fund to BOE thru the District Engineer for approval;
- e. Directs the Equipment Inspector to assist the Inspectorate Team from the BOE-FED during on-board inspection;
- f. Directs the Equipment Inspector to certify and sign the CM WO upon completion of CM activities;
- g. Monitors and supervises the on-going CM and check compliance to the approved schedule and CM POW;
- h. Reviews and signs the CM Monthly Accomplishment Report prepared by the DM and submits to BOE thru the District Engineer and ensures timely submission;
- i. Directs the Equipment Inspector to conduct post-repair inspection after completion of CM activities;
- j. Reviews, signs and submit the Post-Repair Inspection Report to the District Engineer for his/her signature.

- k. Submits to BOE the copy of CM WO, Purchase Order (PO), Receiving Report, Waste Material Report and Post-Repair Inspection Report thru the District Engineer upon completion of any CM activities; and
- l. Ensures strict compliance to the provisions of this Department Order.

2.3 District Engineering Office (DEO)

2.3.1. District Engineer (DE)

- a. Reviews, signs, and submits the CM POW to BOE;
- b. Undertakes the procurement of the required resources on the approved CM-POW;
- c. Reviews and signs the CM WO prepared by the DM;
- d. Informs the BOE upon start of any CM activities thru memorandum;
- e. Monitors and supervises the on-going corrective maintenance and check compliance to the approved schedule and CM POW;
- f. Reviews, signs, and submits the CM Monthly Accomplishment Report to BOE and ensures timely submission;
- g. Informs BOE upon completion of any CM activities thru memorandum;
- h. Reviews and signs the Post-Repair Inspection Report.
- i. Submits to BOE the copy of CM WO, Purchase Order (PO), Receiving Report, Waste Material Report and Post-Repair Inspection Report after completion of any CM activities; and
- j. Ensures strict compliance to the provisions of this Department Order.

3. Bureau of Equipment (BOE)

- a. Evaluate all CM requests and check the required documents if complete and accurate;
- b. Conduct ocular inspection thru online or on-site if needed to verify and validate the CM POW;
- c. Prepare a comprehensive report, recommend accordingly and adjust the CM POW if necessary based on the conducted ocular inspection and available information from HOM database.

- d. Forward the copy of the evaluated CM POW and inspection report to the concerned IO;
- e. Prepare the request of Sub-Allotment Advice to be submitted to Finance Service;
- f. Regularly monitor the progress of on-going CM and check compliance to the approved schedule and CM POW;
- g. Evaluate the CM Monthly Accomplishment Report submitted by IO; and
- h. Conduct post-repair inspection thru online or on-site if needed.

V. Inspection and Monitoring

1. **Pre-Repair Inspection** – In the event of equipment failure, the DM shall request pre-repair inspection from EMD/AES concerned using the form DPWH-QMSP-41-01-Rev00. The DM shall fill-out the required information under Section A and shall be submitted to EMD/AES concerned within 24 hours upon observation of the damage or failure.

The Equipment Inspector/s from EMD/AES shall conduct pre-repair inspection to the subject equipment to determine the necessity and extent of repair to be done and to determine the type of CM to be performed. All necessary information under Section B of the same form shall be accomplished by the Equipment Inspectors concerned. The approved pre-repair inspection report shall be the basis in preparing the CM POW.

2. **Ocular Inspection** – Inspectorate Team from BOE-FED together with the Equipment Inspector/s from EMD/AES shall conduct ocular inspection on-board or online inspection via video conferencing to verify and validate all submitted CM requests. The BOE-FED Inspectorate Team is given the discretion in the conduct of ocular inspection depending on the severity or extent of the damage and amount needed for the repair. The guidelines in conducting ocular inspection is attached as Annex "F" of this Department Order.

After the conduction of any on-board or online inspection, the BOE-FED Inspectorate Team shall prepare a comprehensive report regarding the conducted inspection and shall be the basis for the evaluation of the CM POW.

3. **Monitoring** – Regular monitoring of the progress of the CM activities through validation of the submitted monthly reports by the DM shall be conducted by both IO and BOE-FED to check compliance to the schedule and to the approved CM-POW.
4. **Post-Repair Inspection** – Equipment Inspector/s from EMD/AES and service providers who performed the CM activities shall conduct post-repair inspection on the spare parts procured/installed and repair done upon completion using the form

DPWH-QMSP-41-09-Rev00. The service provider shall conduct testing of the newly repaired equipment/component for at least two (2) hours of continuous operation.

The presence of BOE-FED Inspectorate Team shall depend on the severity or extent of the CM as prescribed on the CM Inspection Matrix attached as Annex "F" of this Department Order.

VI. Reporting

1. Implementing Office (IO)

1.1. DPWH-QMSP-41-08-Rev00, CM Monthly Accomplishment Report for DPWH WBE- Upon start of any CM activities, a CM Monthly Accomplishment Report shall be submitted to BOE thru the Head of IO not later than the 15th day of the succeeding reporting month.

The following documents shall be submitted to the BOE after the conduction of Post-Repair Inspection:

1.2. DPWH-QMSP-41-09-Rev00, Post Repair Inspection Report for DPWH WBE;

1.3. DPWH-QMSP-41-10-Rev00, Corrective Maintenance Work Order (CM WO) for DPWH WBE;

1.4. DPWH-QMSP-41-11-Rev00, Receiving Report (Annex "J");

1.5. DPWH-QMSP-41-12-Rev00, Waste Material Report (Annex "K"); and

1.6. Purchase Order

2. Bureau of Equipment (BOE)

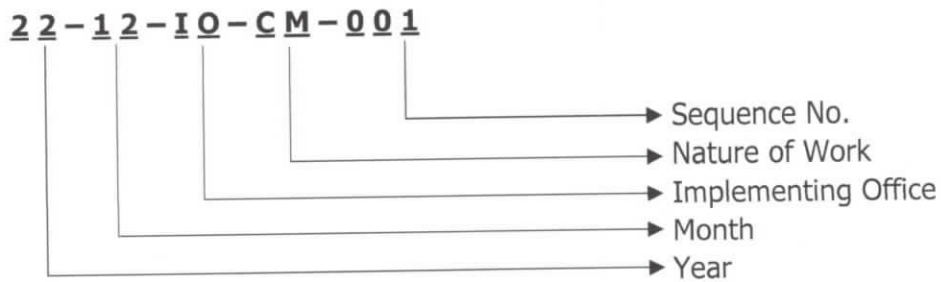
2.1. CM Compliance Report –The BOE-FED Inspectorate Team shall submit a comprehensive report for all completed CM activities to be submitted to the BOE Director and shall have the following documents attached:

- a. CM request
- b. CM ocular inspection report;
- c. CM Work Order;
- d. Receiving Report;
- e. Post-Repair Inspection Report;
- f. Purchase Order; and

g. Waste Material Report

The Inspectorate Team shall secure scanned copy of the CM Compliance Report and update the existing HOM database.

VI. Work Order Control Coding



Implementing Office Code:

BOE- Bureau of Equipment
 R01, NCR, R4A,..., R13- Regional Offices
 DEO1, DEO2, DEO3 – District Engineering Offices

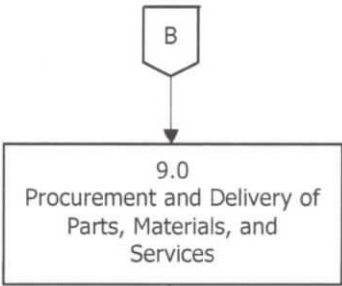
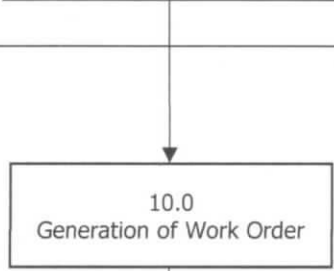
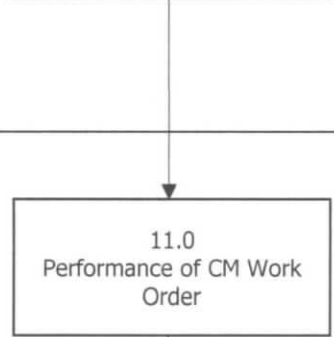
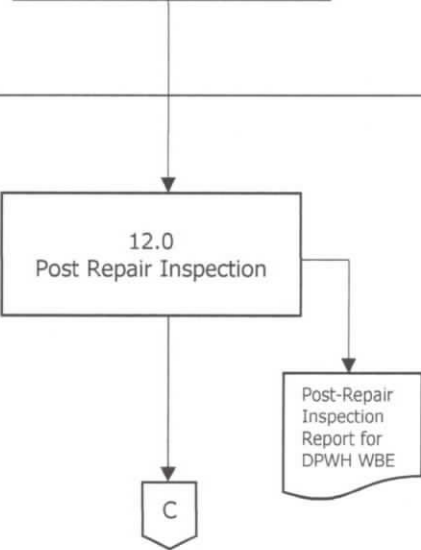
VII. Source of Funds

All funds for the maintenance of DPWH Water Based Equipment shall be charged against the appropriate Maintenance and Other Operating Expenses (MOOE) of this Department.

Corrective Maintenance Implementation Process Flow

PROCESS FLOW	RESPONSIBLE	DETAILS
<pre> graph TD START([START]) --> 1.0[1.0 DM requests pre-repair inspection from EMD/AES] 1.0 --> Report1[Pre-Repair Inspection Report for DPWH WBE] </pre>	(1) Dredge Master (DM)	In the event of equipment failure, the DM shall request pre-repair inspection from EMD/AES. The DM shall fill-out the required information under Section A of the Pre-Repair Inspection Report form and shall be submitted to EMD/AES concerned within 24 hours upon observation of the damage or failure.
<pre> graph TD 1.0 --> 2.0[2.0 EMD/AES conducts pre-repair inspection] 2.0 --> Report2[Pre-Repair Inspection Report for DPWH WBE] </pre>	(1) Dredge Master (DM) (2) Area Equipment Section/Equipment Management Division (3) District Engineering Office/Regional Office	Upon receipt of the pre-repair inspection requested by the DM, the Equipment Inspectors from EMD/AES shall conduct pre-repair inspection to the subject equipment to determine the necessity and extent of repair to be done and to determine the type of CM to be performed. All necessary information under Section B of the same form shall be accomplished by the Equipment Inspectors concerned. The approved pre-repair inspection report shall be the basis in preparing the CM POW.
<pre> graph TD 2.0 --> 3.0[3.0 DM prepares the CM request and submits to BOE thru IO for funding] </pre>	(1) Dredge Master (DM) (2) Area Equipment Section/Equipment Management Division (3) District Engineering Office/Regional Office	After completion of pre-repair inspection report, the DM shall prepare the following required documents for the request of CM fund: (1) Pre-Repair Inspection Report; (2) CM Program of Work; (3) CM Detailed Unit Price Analysis; (4) CM Timeline; (5) Open Canvass from least three (3) licensed suppliers/dealers; (6) Price verification/monitoring report (7) History of Maintenance (HOM); and (8) Certified copy of the latest Property Acknowledgement Receipt (PAR)
<pre> graph TD 3.0 --> 4.0[4.0 BOE-FED evaluate the CM request] 4.0 --> A{{A}} </pre>	(1) BOE-FED	The BOE-FED shall evaluate all submitted CM request and check all supporting documents if complete and accurate.

PROCESS FLOW	RESPONSIBLE	DETAILS
<pre> graph TD A[A] --> D{Ocular inspection?} D -- YES --> 5.0[5.0 BOE-FED Inspectorate Team conduct on-board or online inspection] D -- NO --> 7.0[7.0 BOE prepare and submit sub-allotment request to Finance Service] 5.0 --> 6.0[6.0 BOE-FED Inspectorate Team prepare and submit the inspection report and evaluated CM POW to the BOE Director and forward the copy to concern IO] 6.0 --> 7.0 7.0 --> 8.0[8.0 Releasing of CM Funds] 8.0 --> B[B] </pre>	(1) Dredge Master (DM) (2) Area Equipment Section/Equipment Management Division (3) District Engineering Office/Regional Office (4) BOE-FED	<p>All CM requests with a category 3-16 based on the CM Inspection Matrix, the BOE-FED Inspectorate Team is required to conduct ocular inspection thru on-board or online inspection via video conferencing to verify and validate the submitted request with the presence of the DM and Equipment Inspectors from EMD or AES.</p> <p>After the conduction of on-board or online inspection, the BOE-FED Inspectorate Team shall prepare a comprehensive report regarding the conducted ocular inspection and shall be the basis for the evaluation of the CM POW.</p> <p>BOE-FED Inspectorate Team may opt not to conduct ocular inspection for CM requests with minor expenditures involved and no impact on the normal operation of the equipment.</p>
6.0 BOE-FED Inspectorate Team prepare and submit the inspection report and evaluated CM POW to the BOE Director and forward the copy to concern IO	(1) BOE-FED (2) Area Equipment Section/Equipment Management Division (3) District Engineering Office/Regional Office	<p>After the conduction of ocular inspection, the BOE-FED Inspectorate Team shall prepare CM ocular inspection report and adjust the CM POW if needed to be submitted to the BOE Director and informs the IO concerned regarding the findings and assessment attaching the original copy of the inspection report and certified true copy of the evaluated CM POW thru memorandum.</p> <p>BOE-FED Inspectorate Team shall then forward the evaluated CM POW attaching the copy of inspection report to FED Finance Unit for the preparation of sub-allotment request.</p>
7.0 BOE prepare and submit sub-allotment request to Finance Service	(1) BOE-FED	<p>The BOE shall prepare and submit a sub-allotment request to Finance Service (FS) for budget earmarking based on the evaluated CM POW.</p>
8.0 Releasing of CM Funds	(1) BOE (2) Finance Service (FS)	<p>FS forwards sub-allotment request to Undersecretary for Technical Services thru the Assistant Secretary for Technical Services for the approval of releasing of funds.</p> <p>FS releases funds to the Implementing Office and notifies BOE thru memorandum attaching the copy of the Sub-Allotment Advice SAA.</p>

PROCESS FLOW	RESPONSIBLE	DETAILS
 <pre> graph TD B[B] --> 9.0[9.0 Procurement and Delivery of Parts, Materials, and Services] </pre>	(1) Dredge Master (DM) (2) Area Equipment Section/Equipment Management Division (3) District Engineering Office/Regional Office	<p>BAC Regional Office/DEO conducts bidding in accordance to RA 9184.</p> <p>IO issues Receiving Report (RR) for the newly delivered parts, materials, supplies and services.</p>
 <pre> graph TD 9.0 --> 10.0[10.0 Generation of Work Order] </pre>	(1) Dredge Master (DM) (2) Area Equipment Section/Equipment Management Division (3) District Engineering Office/Regional Office	<p>The DM shall prepare the CM WO in accordance to the evaluated CM POW to be submitted to the IO for approval. The DM shall fill out data on labor, tools, parts and materials to be used prior to the execution of the CM activities.</p> <p>The DM shall use the CM WO to request the withdrawal of CM parts and materials needed. The Supply Officer of the IO shall then issue Requisition and Issue Slip (RIS) and Gate Pass which shall be attached on the CM WO.</p>
 <pre> graph TD 10.0 --> 11.0[11.0 Performance of CM Work Order] </pre>	(1) Dredge Master (DM) (2) Area Equipment Section/Equipment Management Division (3) District Engineering Office/Regional Office (4) Service Provider	<p>The EMD/AES shall inform the BOE upon the start of the CM activities thru memorandum.</p> <p>The EMD/AES or service provider shall perform the CM activities based on the approved CM WO.</p> <p>The Equipment Inspector shall certify and signs the approved CM WO upon completion of CM activities.</p>
 <pre> graph TD 11.0 --> 12.0[12.0 Post Repair Inspection] 12.0 --> Report[Post-Repair Inspection Report for DPWH WBE] Report --> C[C] </pre>	(1) BOE-FED (2) Area Equipment Section/Equipment Management Division (3) District Engineering Office/Regional Office (4) Service Provider	<p>The BOE-FED Inspectorate Team together with the DM, Equipment Inspector/s from EMD/AES shall conduct post-repair inspection on the spare parts procured/installed and repair done. The service provider shall conduct testing on the subject component/equipment for at least 2 hours of continuous operation.</p> <p>BOE-FED Inspectorate Team may opt not to conduct post-repair inspection for CM requests with minor expenditures involved and no impact on the normal operation of the equipment.</p> <p>Upon completion, the IO shall submit copy of Post Repair Inspection Report for DPWH WBE, CM Work Order, Receiving Report, Waste Material Report and Purchase Order to BOE. IO shall also update their History of Maintenance (HOM) upon completion of CM activities.</p>

PROCESS FLOW	RESPONSIBLE	DETAILS
<pre> graph TD C{{C}} --> P[13.0 BOE prepares the CM Compliance Report and submits to the BOE Director] P --> O[CM Compliance Report] O --> E([END]) </pre>	(1) BOE-FED	<p>The BOE-FED Inspectorate Team shall update the Bureau's WBE HOM Database and submit a comprehensive report to the BOE Director regarding the completed CM activities and shall attached all following documents such as:</p> <ul style="list-style-type: none"> (1) CM request; (2) CM ocular inspection report; (3) CM Work Order; (4) Receiving Report; (5) Post-Repair Inspection Report for DPWH WBE; (4) Waste Material Report; and (5) Purchase Order



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
DPWH REGIONAL OFFICE No. _____
[Office Location]

PRE-REPAIR INSPECTION REPORT FOR DPWH WBE

A. This section is to be accomplished by the Dredge Master. All items in this section must be completely filled-up.	
Date Prepared: _____	Date of PAR: _____
Type, Make and Model: _____	Date the Observed Problem Occurred: _____
DPWH No.: _____	No. of Day(s) the Problem has been Recurring: _____
Implementing Office: _____	Hour Meter Reading: _____
Location: _____	Last CM Performed: _____
Findings/Defects: _____ _____ _____ _____	
Scope of Work: _____ _____ _____ _____	
Parts/Materials/Labor Needed: _____ _____ _____ _____	
Requested by: _____ [Name & Signature] Dredge Master III	
B. This section is to be accomplished by the EMD/AES personnel upon the conduct of pre-repair inspection:	
Date Received: _____	Control No.: _____
Type of CM: <input type="checkbox"/> In-House <input type="checkbox"/> Outside	
Findings and Recommendations: _____ _____ _____ _____	
Scope of Work: _____ _____ _____ _____	
Parts/Materials/Labor Needed: _____ _____ _____ _____	
Date Inspection Completed: _____ Date Prepared: _____	
Inspected by: _____ [Name & Signature] [Equipment Inspector] [Office]	Approved for Repair: _____ [Name & Signature] AE/Chief, EMD [Office]



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
[OFFICE NAME]
[Office Location]

CORRECTIVE MAINTENANCE PROGRAM OF WORK (CM POW) FOR DPWH WBE

Form No: _____

Project Title: _____						
Equipment Type, Make and Model: _____				Type of CM: _____		
DPWH No: _____				Project Duration: _____		
Implementing Office : _____				Target Date to Start: _____		
Location: _____				Target Date to Finish: _____		

Item No.	SCOPE OF WORK	QUANTITY	UNIT	DIRECT UNIT COST		% Deviation
				As Submitted	As Evaluated	
I						
II						
III						
IV						
V						
VI						

Breakdown of Expenditure	As Submitted		As Evaluated		EQUIPMENT NEEDED	
	Total	% of Total	Total	% of Total	DESCRIPTION	No. of Units Required
1 Labor						
2 Materials						
3 Equipment						
4 OCM						
5 CP						
6 VAT						
Total						

TOTAL ESTIMATED COST	As Submitted	As Evaluated

PREPARED:

REVIEWED & SUBMITTED:

APPROVED:

[Name and Signature]
[Dredgemaster III]
[Office]

[Name and Signature]
[Area Engineer/Chief, EMD]
[Office]

[Name and Signature]
[DE/RD]
[Office]



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
[OFFICE NAME]
[Office Location]

CORRECTIVE MAINTENANCE DETAILED UNIT PRICE ANALYSIS (CM DUPA) FOR DPWH WBE

Project Title: _____		Implementing Office: _____			
Type, Make and Model: _____		Location: _____			
DPWH No.: _____					
Scope of Work: _____					
Defects: _____					
Failure Cause/Mode: _____					
A.	Designation (Labor/Technical Support)	No. of Person	No. of Days	Rate/Day	Cost (PhP)
A.1					
	X-X-X-X-X				
	Sub - Total for A.1-As Submitted				
A.2					
	X-X-X-X-X				
	Sub-Total for A.2 - As Evaluated				
B.	Name and Capacity (Equipment/Shop/Service Support)	No. of Unit	No. of Days	Rate/Day	Cost (PhP)
B.1					
	X-X-X-X-X				
	Sub - Total for B.1- As Submitted				
B.2					
	X-X-X-X-X				
	Sub - Total for B.2- As Evaluated				
C.	Name and Specification (Parts/Supplies/Materials and other consumables)	Unit	Quantity	Actual Unit Cost	Cost (PhP)
C.1					
	X-X-X-X-X				
	Sub - Total for C.1- As Submitted				
C.2					
	X-X-X-X-X				
	Sub - Total for C.2- As Evaluated				
D.1	Direct Unit Cost - As Submitted			A.1+B.1+C.1	
D.2	Direct Unit Cost - As Evaluated			A.2+B.2+C.2	
E.1	Overhead, Contingencies and Miscellaneous (OCM) - As Submitted			8%-15% of D.1.	
E.2	Overhead, Contingencies and Miscellaneous (OCM) - As Evaluated			8%-15% of D.2.	
F.1	Contractor's Profit - As Submitted			8%-10% of D.1.	

F.2	Contractor's Profit - As Evaluated	8%-10% of D.2.	
G.1	Value Added Tax (VAT) - As Submitted	5% of (D.1+E.1+F.1)	
G.2	Value Added Tax (VAT) - As Evaluated	5% of (D.2+E.2+F.2)	
H.1	Total Cost - As Submitted	D.I + E.1+F.1+G.1	
H.2	Total Cost - As Evaluated	D.I + E.1+F.1+G.1	

(Please use extra sheet if there are still more items.)

PREPARED BY:

REVIEWED & SUBMITTED:

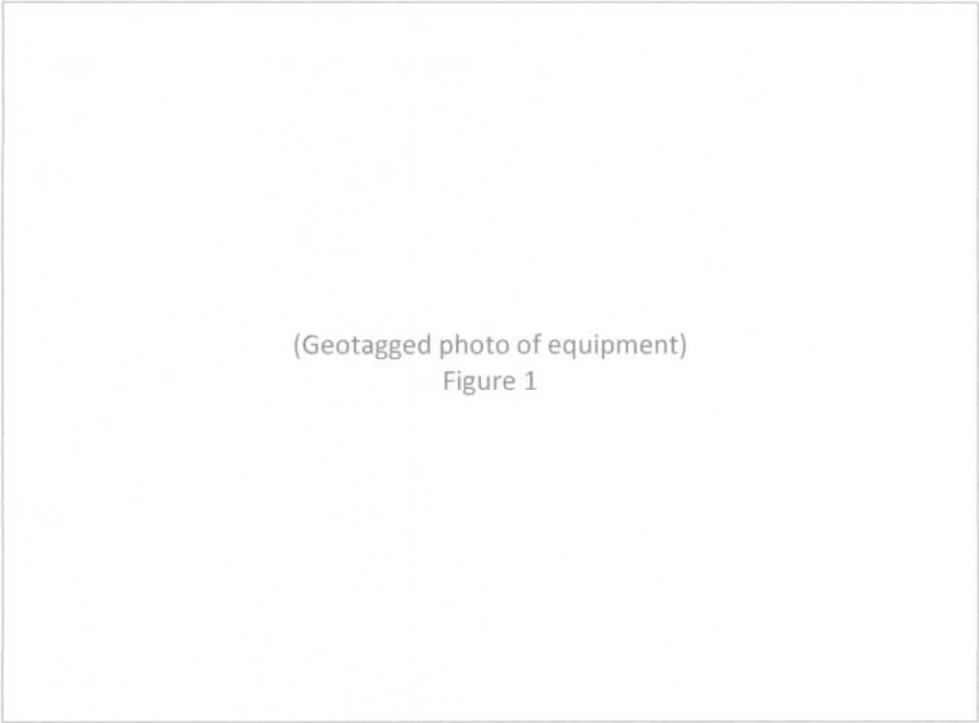
[Name and Signature]
[Dredgemaster III]
[Office]

[Name and Signature]
[Area Engineer/Chief, EMD]
[Office]

APPROVED:

[Name and Signature]
[DE/RD]
[Office]

Pictures



(Geotagged photo of equipment)
Figure 1

Caption:

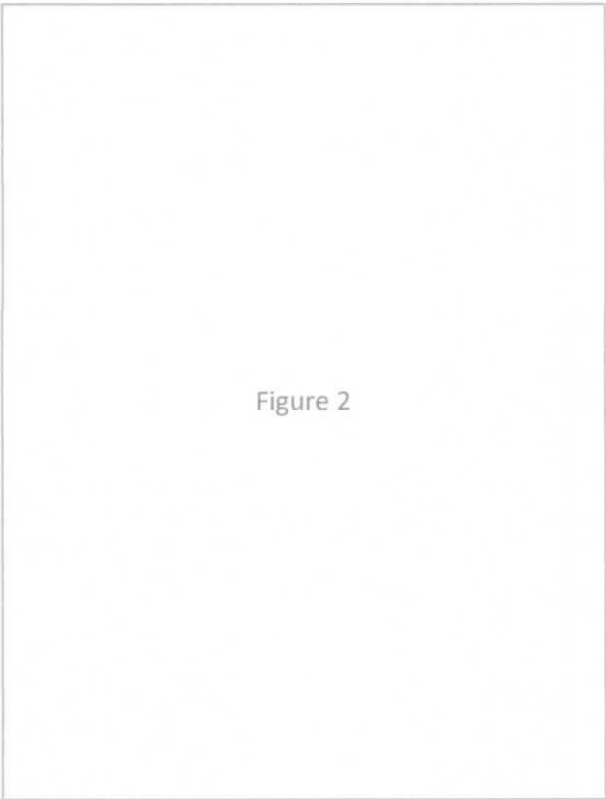


Figure 2

Caption:



Figure 3

Caption:

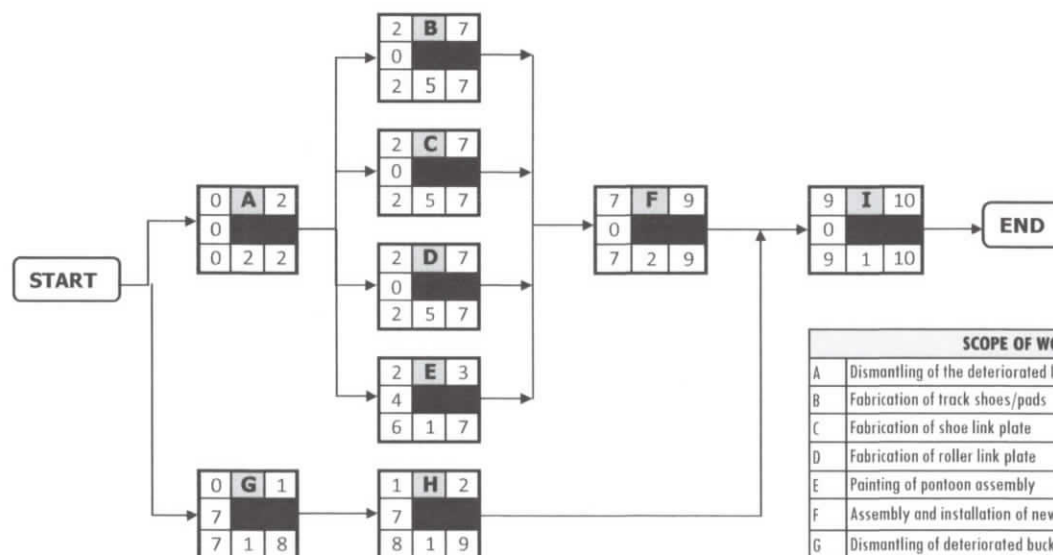


Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
[OFFICE NAME]
[Office Location]

CM TIMELINE (PERT-CPM)
(Sample Only)

Project Title: Repair of undercarriage assembly and bucket assembly of DPWH AE K4-46
Type, Make and Model: Amphibious Excavator DX6000
DPWH No.: K4-46
Location: Cagayan River, Dummun, Gattaran, Cagayan

Total Estimated Cost: Php 6,000,000.00
Total Project Duration (Days): 23 WD
Target Date to Start: January 4, 2023
Target Date to Finish: February 3, 2023



	SCOPE OF WORK	Duration	Predecessor	ES	EF	LS	LF	Slack
A	Dismantling of the deteriorated left track chain assembly	2		0	2	0	2	0
B	Fabrication of track shoes/pads	5	A	2	7	2	7	0
C	Fabrication of shoe link plate	5	A	2	7	2	7	0
D	Fabrication of roller link plate	5	A	2	7	2	7	0
E	Painting of pantoon assembly	1	A	2	3	6	7	4
F	Assembly and installation of new left track chain assembly	2	B,C,D,E	7	9	7	9	0
G	Dismantling of deteriorated bucket pins	1		0	1	7	8	7
H	Installation of new bucket pins	1	G	1	2	8	9	7
I	Post Repair Inspection	1	F,H	9	10	9	10	0
Total Project Duration (Days):		23						

PREPARED BY:

REVIEWED & SUBMITTED:

APPROVED:

[NAME & SIGNATURE]
[Dredgemaster III]
[Office]

[NAME & SIGNATURE]
[Area Engineer/Chief, EMD]
[Office]

[NAME & SIGNATURE]
[Area Engineer/Chief, EMD]
[Office]



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

[OFFICE NAME]

[Office Location]

OPEN CANVASS

Name of Supplier		Note : All entries appearing on this form must be made "legibly", otherwise, this form and all information will be deemed null and void.
Address		
Telephone No.		
E-mail Address (if any)		

Please quote "legibly" your government price for the article(s) listed hereunder and indicate the brand name, specifications, and other descriptions or information necessary.

nn **Date of Canvass:** _____

Item No.	Article / Description	Qty.	Unit	Unit Price	Total Price	Remarks
						<p>Authorized by:</p> <p>Signature _____</p> <p>Name _____</p> <p>Designation _____</p> <p>Date _____</p> <p><i>I hereby certify that this canvass was made by the undersigned on the date stated above and the price(s) quoted herein was the present actual estimated price at the time of canvassing.</i></p> <p>Canvassed By:</p> <p>Signature _____</p> <p>Name _____</p> <p>Designation _____</p> <p>Date _____</p> <p><i>I hereby certify that this price quotation(s) for the item(s) appearing herein are true and correct and that this/these is/are our current prices(s)</i></p> <p>Supplier's Authorized Representative:</p> <p>Signature _____</p> <p>Name _____</p> <p>Designation _____</p> <p>Date _____</p>

ABSTRACT OF OPEN CANVASS

[illegible]

Prepared by:

NOTED:

[Name and Signature]
[RD/DE]
[Office]



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
[OFFICE NAME]
[Office Location]

HISTORY OF MAINTENANCE

Form No: _____

[illegible]

CM Inspection Matrix for BOE-FED Inspectorate Team

		Extent of Damage			
		1	2	3	4
		CM cost is <Php30k and operational	CM cost is <Php30k and not operational	CM cost is >Php30k and operational	CM cost is >Php30k and not operational
CM DURATION ↓	1 <3 days	1	2	3	4
	2 >3 days	2	4	6	8
	3 <5 days	3	6	9	12
	4 >5 days	4	8	12	16

CM Category	Ocular Inspection	Post-Repair Inspection
1-2	May opt not to conduct ocular inspection	May opt not to conduct post-inspection
3-6	On-board or online inspection is required.	On-board or online post-repair inspection is required.
7-16	Mandatory on-board inspection.	Mandatory on-board post-repair inspection.

Project Title: _____
Equipment Type, Make & Model.: _____
DPWH NO.: _____
Location: _____

SCOPE OF WORK	Approved Duration	CY Month	Days																															Cost	% Accomplish ment	Status	Remarks
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
			Total																																		

[Office]

Pictures During Post Repair Inspection

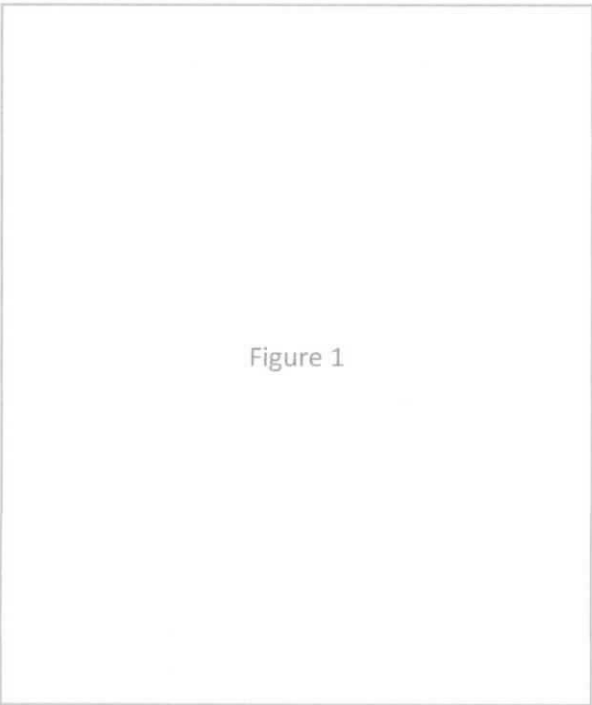


Figure 1

Caption:

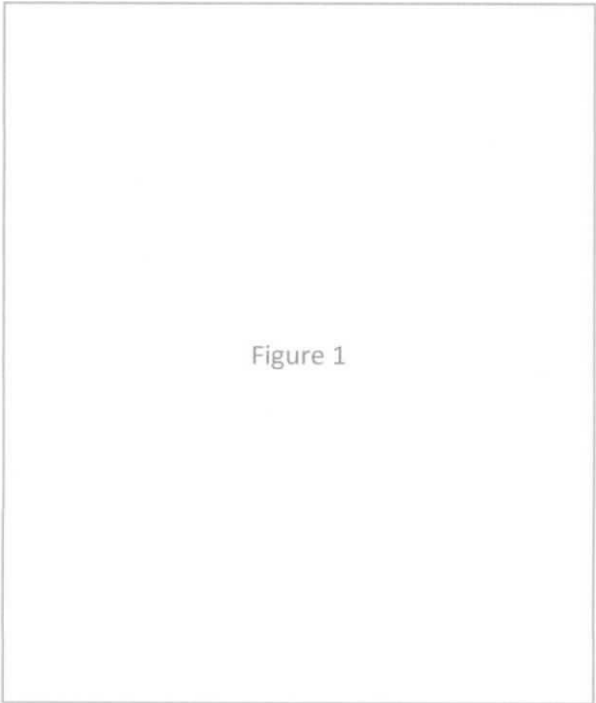


Figure 1

Caption:

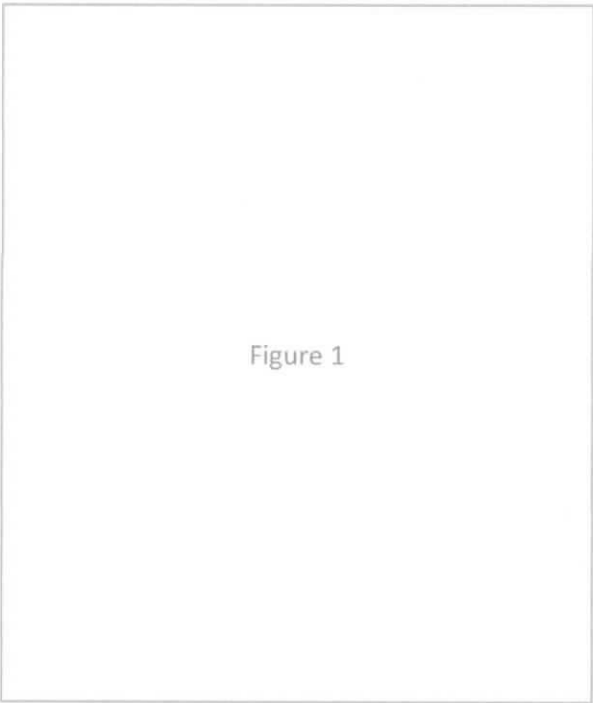


Figure 1

Caption:

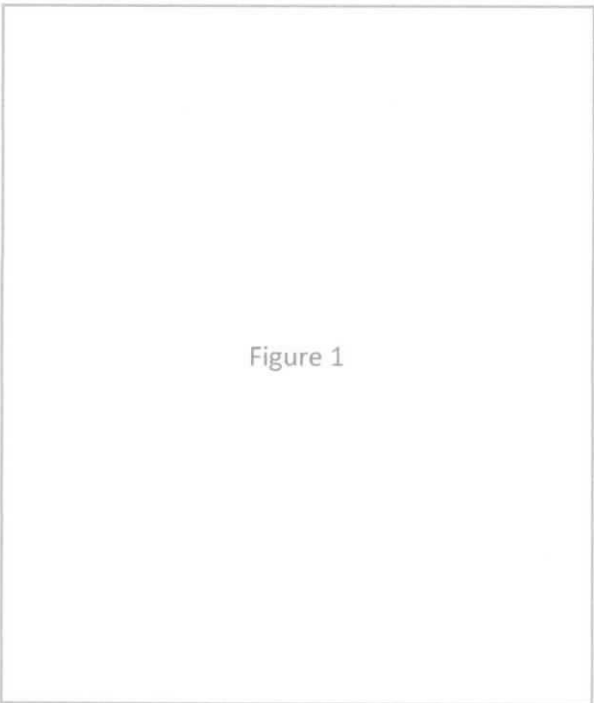


Figure 1

Caption:



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
[OFFICE NAME]
[Office Location]

CORRECTIVE MAINTENANCE WORK ORDER (CM WO) FOR DPWH WBE

Project Title: _____
 Type, Make & Model: _____ Type of CM: _____
 DPWH No. : _____ Work Order No: _____ Date Issued: _____
 Implementing Office: _____ Date of PAR: _____
 Location: _____ Project Duration: _____
 SAA No./Date: _____ Date Started: _____
 Approved Amount: _____ Date Completed: _____

WORK DETAILS

No.	Scope of Work	Defects	Failure Cause	Failure Mode

PARTS, SUPPLIES, MATERIALS and CONSUMABLES

No.	Material Description	Qty	Unit	Name of Supplier	Invoice/OR Date	Model/Part No.	Unit Cost	Total Cost

EQUIPMENT/SHOP/SERVICE SUPPORT

No.	Description	No. of Unit	No. of Days	Rate per day	Total Cost

LABOR

No.	Designation (Labor/Technical Support)	No. of Person	No. of Hours	Rate/Hour	Total Cost

BREAKDOWN OF EXPENDITURES

Materials	
Equipment	
Labor	
OCM	
CP	
VAT	
Grand Total	

SUMMARY OF EXPENSES (Last 5 years)

Year	Cost
2018	
2019	
2020	
2021	
2022	

REMARKS

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ACCOUNTABILITIES

PREPARED BY:	APPROVED:
<p>_____ [Name and Signature] [Dredgemaster III] [Office]</p>	<p>_____ [Name and Signature] [DE/RD] [Office]</p>

CERTIFICATION

I hereby certify that the above-stated project/CM has been satisfactorily completed on _____ in accordance to the approved CM POW amounting to _____ and that the equipment is operational and ready for Post Repair Inspection.

 [Name and Signature]
 [Equipment Inspector]
 [Office]

(Please use extra sheet if there are still more items.)



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS & HIGHWAYS

[OFFICE NAME]

[Office Location]

RECEIVING REPORT

IMPLEMENTING OFFICE:				RECEIVING REPORT NO.:	
ISSUING OFFICE OR WAREHOUSE:				PURCHASE ORDER NO.:	
METHOD OF ACQUISITION: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> PURCHASE (Partial Delivery)</div> <div style="width: 33%;"><input type="checkbox"/> PURCHASE</div> <div style="width: 33%;"><input type="checkbox"/> CONTRACTOR ACQUIRED/T-OVER</div> <div style="width: 33%;"><input type="checkbox"/> FOUND DURING INVENTORY</div> <div style="width: 33%;"><input type="checkbox"/> DONATION</div> <div style="width: 33%;"><input type="checkbox"/> CONSTRUCTION/FABRICATION</div> <div style="width: 33%;"><input type="checkbox"/> TRANSFER W/O COST</div> <div style="width: 33%;"><input type="checkbox"/> OTHERS _____</div> </div>				CONTRACT NO.:	
				DATE PREPARED:	
RECEIVED FROM:					
ACCOUNTING AND APPROPRIATION DATA: (if available)					
ITEM OR PROPERTY NO.	DESCRIPTION	QUANTITY ACCEPTED	UNIT	UNIT COST	TOTAL COST
GRAND TOTAL:					
RECEIVING INFORMATION					
<i>The quantity in the "QUANTITY ACCEPTED" Column of the above listed Property/ Parts/ Materials/ Supplies has been received and are subject to final inspection for conformity with specifications on the order.</i>					
GUARD ON DUTY/SIGNATURE:			RECEIVING PERSONNEL'S SIGNATURE:		
DATE OF DELIVERY:			DATE RECEIVED:		
DELIVERED AT:			RECEIVING PERSONNEL TITLE:		



Republic of the Philippines
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS
[OFFICE NAME]
[Office Location]

WASTE MATERIAL REPORT					
Department of Public Works and Highways					
Agency					
<i>Place of Storage:</i>				<i>W.M.R. No.</i>	
<i>One-Stop Processing Center, Property Section, SPMD-AMMS</i>				<i>Date:</i>	
ITEMS FOR DISPOSAL				RECORD OF SALES	
ITEM	QTY.	UNIT	DESCRIPTION	O.R. No.	Amount
			X-X-X-X-X-X-X		
			Note:		
			Worn-out parts taken from _____,		
			(DPWH No.) assigned to _____, Office		
			Concerned.		
<i>Returned by:</i>			<i>Received by:</i>		
_____			_____		
[Name and Signature]			[Name and Signature]		
[Designation]			[Designation]		
[Office]			[Office]		
<i>Certified Correct:</i>			<i>Disposal Approved:</i>		
_____			_____		
[Name and Signature]			[Name and Signature]		
[Designation]			[Designation]		
[Office]			[Office]		
CERTIFICATION OF INSPECTION					
I hereby certify that the properly enumerated above was disposed of as follows:					
Item _____ Destroyed					
Item _____ Sold at Private sale					
Item _____ Sold at Public Auction					
Item _____ Transferred without cost to _____					
<i>Property Inspector:</i>			<i>Witness to Disposition:</i>		
_____			_____		
[Name and Signature]			[Name and Signature]		
[Designation]			[Designation]		
[Office]			[Office]		