PROJECT TITLE:

DPWH STANDARD FOR THE PROPOSED
WE HEAL AS ONE
OFF-SITE DORMITORY / ISOLATION FACILITY
FOR MEDICAL PERSONNEL

SUBMITTED:

JOSEPHINE P. ISTURIS
CHIEF, BUILDINGS DIVISION, BUREAU OF DESIGN

RECOMMENDING APPROVAL:

ABDULCARO M. DOROY
OFFICER IN CHARGE, BUREAU OF DESIGN

APPROVED:

EMIL K. SADAIN, CESOT
DEPUTY DIRECTOR
FOR LIMNO OPERATIONS, TECHNICAL SERVICES, DPWH

5/21/20
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## Plumbing/Sanitary

## Electrical

## Electronics

## Mechanical
GENERAL NOTES/ SPECIFICATIONS:

40L LUXURY TYPE CONTAINER

- FLATPACKED, MODULAR AND STACKABLE
- EASY TO ASSEMBLE, COMBINABLE AND EXTENDABLE

1. DIMENSIONS
   1.1. 12 m LENGTH X 2.4 m WIDTH X 2.7 m HEIGHT

2. WALLS
   2.1. 2. POLYSTYRENE INSULATION WITH DOUBLE SIDED 0.45mm PRE-PAINTED GI SHEET

3. CEILING
   3.1. 2. POLYSTYRENE INSULATION WITH DOUBLE SIDED 0.45mm PRE-PAINTED GI SHEET

4. ROOF
   4.1. 3A 26 PRE-PAINTED CORRUGATED GI ROOFING SHEET WITH GLASSWOOL INSULATION

5. DOORS
   5.1. D-1: 500 x 2100 mm DOUBLE SIDED, OVEN BAKED GI SHEET WITH 50 mm POLYSTYRENE INSULATION W COMPLETE LOCKSET AND LOUVERS
   5.2. D-2: 600 x 2100 mm DOUBLE SIDED, OVEN BAKED GI SHEET WITH 50 mm POLYSTYRENE INSULATION W COMPLETE LOCKSET AND LOUVERS
   5.3. D-3: 700 x 2100 mm DOUBLE SIDED, OVEN BAKED GI SHEET WITH 50 mm POLYSTYRENE INSULATION W COMPLETE LOCKSET AND LOUVERS

6. FLOORING
   6.1. 1” MAGNESIUM BOARD WITH PVC TILES/PLANKS FINISH

7. WINDOWS
   7.1. W-1: 1500mm x 1300mm WITH 5mm THK. ORDINARY GLASS UPVC SLIDING WINDOW
   7.2. W-2: 1500mm x 1500mm WITH 8mm THK. ORDINARY GLASS UPVC AWNING WINDOW

8. STEEL FRAME
   8.1. HOLLOW STEEL SECTION WITH PAINTED FINISH

9. STACKING
   9.1. CAN BE STACKED UP TO FLOOR HEIGHT

10. LIFTING
    10.1. CAN BE LIFTED USING CRANE OR CAN BE LIFTED MANUALLY WHEN DISMANTLED

11. ADDITIONAL SPECIFICATIONS
    11.1. TOILET AND BATH FIXTURES
    11.2. INTERIOR PARTITIONS
**DESIGN CRITERIA:**

1.0 DEAD LOADS (DL):

1.1 CONCRETE: 24.00 kN/m

1.2 STEEL: 25.00 kN/m

1.3 ROOF: 15.90 kN/m

1.4 FLOORING & INSULATION: 0.20 kN/m

1.5 SPEED OF THE WIND: 2.76 m/s

2.0 LIVE LOADS (LL):

2.1 ROOF: 0.88 kPa

2.2 RESIDENTIAL: 1.50 kPa

3.0 WIND LOAD (WL):

THE WIND LOAD ON STRUCTURE AND BUILDING SHALL BE CALCULATED BASED ON NATIONAL STRUCTURAL CODE OF THE PHILIPPINE CONSTRUCTION BOARD. WIND SPEED IS 25 M/S, WIND SPEED EQUALS TO 44-80 MPH.

1.1 BASIC WIND SPEED: 1.5

2.0 OCCUPANCY CATEGORY: B

3.0 STRUCTURAL CATEGORY: B

4.0 MATERIALS:

4.1 NORMAL WEIGHT CONCRETE: 24.00 kN/m³ MINIMUM COMpressive STRENGTH @ 28 DAYS AS FOLLOWS:

SLAB ON-GRADE, FOOTING:

\[ V \leq 0.5 \text{ MPa} \]

4.2 REINFORCED STEEL:

REINFORCED STEEL SHALL BE DESIGNATED WITH A MINIMUM YIELD STRENGTH:

ALL SIZES:

\[ 420 \text{ MPa} (60,000 \text{ PSI}) \]

4.3 REINFORCED CONCRETE:

REINFORCED CONCRETE SHALL BE DESIGNATED WITH A MINIMUM YIELD STRENGTH:

ALL SIZES:

\[ 420 \text{ MPa} (60,000 \text{ PSI}) \]

4.4 WELD:

WELDING ELECTRODE:

\[ 100 \text{ MPa} (15,000 \text{ PSI}) \]

5.0 NOTES ON FOUNDATION:

5.1 NO FOOTING SHALL REST ON ALL-PREPARE FROM THE WHEEL COMPACTED GRAVEL BED BEFORE CHAPPING.

5.2 FOOTING IS DESIGNED WITH AN ASSUMED MINIMAL ALLOWABLE SOLID SETTING CAPACITY (AT 90 UP) IF LOCATION IS KNOWN OR FOUND OUT TO HAVE NO BED OF LESS THAN THE ALLOWED, THE FOOTING DESIGN SHALL BE REVISED ACCORDINGLY.
PLUMBING NOTES:

1. PLUMBING SYSTEMS shall comprise PIPES, VALVES, Fittings, AND SUPPLIES FOR THE HYDRAULIC SCALE OF THE BUILDING.

2. CHANGE IN DIRECTION:
   ALL CHANGE IN DIRECTION SHALL BE MADE AT APPOINTED USES OF Fittings, Valves, AND SUPPLIES.

3. MATERIALS:
   ALL MATERIALS USED SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE LOCAL BUILDING CODE AND THE REQUIREMENTS OF THE CONTRACTOR.

4. PLUMBING LEGEND:
   ALL PLUMBING DETAILS SHALL BE IN ACCORDANCE WITH THE PLUMBING LEGEND.

5. PLUMBING FLOOR PLANS:
   ALL PLUMBING FLOOR PLANS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACTOR.

6. PLUMBING DRAINAGE:
   ALL PLUMBING DRAINAGE SYSTEMS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACTOR.

7. PLUMBING HANGERS:
   ALL PLUMBING HANGERS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACTOR.

8. PLUMBING CONDUIT:
   ALL PLUMBING CONDUIT SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACTOR.

9. PLUMBING TRAPS:
   ALL PLUMBING TRAPS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACTOR.

10. PLUMBING SADDLES:
    ALL PLUMBING SADDLES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACTOR.
PLUMBING NOTES:

1.-

2. Change in direction of:

3. Change in direction of:

4. Change in direction of:

5. Change in direction of:

6. Change in direction of:

7. Change in direction of:

8. Change in direction of:

PLUMBING LEGEND:

P2 SHEET SCALE: 1/4 IN. = 1'-0"

1. CLEAN OUT
2. FLOOR DRAIN
3. FLOOR HANGER
4. CLOSED VENT
5. SINK
6. GATE VALVE
7. WATER CLOSET
8. VENT
9. DRAIN

PIPE HANGER DETAIL

ISOMETRIC DIAGRAM (WATER/LINE LAYOUT)

ISOMETRIC DIAGRAM (PUMP AND DRAINAGE LINE LAYOUT)

P2 SHEET SCALE: 1/4 IN. = 1'-0"

FLOOR DRAIN P-TRAP DETAIL

FLOOR DRAIN DETAIL
LEGEND:
- AUTOMATIC CIRCUIT BREAKER
- AC/DC ON/OFF SWITCH
- 30 AMP FUSE
- 15 AMP FUSE

SCHEDULE OF WIRE, CONDUIT, AND ROD:

SERVICE WIRE AND CONDUIT:
- 2 x 30mm² THHN + 1 x 60mm² THHN (2) in 4-core PVC.
- 2 x 30mm² THHN + 1 x 80mm² THHN (2) in 5-core PVC.
- 2 x 200mm² THHN + 1 x 300mm² THHN (2) in 6-core PVC.

GROUNDING WIRE AND CONDUIT:
- 1 x 6.0 mm² THHN in 5-core PVC.
- 1 x 14 mm² THHN in 5-core PVC.
- 1 x 50 mm² THHN in 5-core PVC.

GROUNDING ROD:
- 2500 x 150 x 6.000 mm length Copperslug grounding rod.
- 2500 x 150 x 6.000 mm length Copperslug grounding rod.

LIGHTING LAYOUT (OPTION 1)
GENERAL NOTES:

1. CONTRACTOR IS ADVISED TO VERIFY AND SURVEY THE PLACE OF INSTALLATION WE SHALL BE HONORED AND STANDARDS WE CAN INSTALLATION WORKS SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER.

2. ALL NECESSARY GOVERNMENT PERMITS SHALL BE SECURED PRIOR TO THE START OF INSTALLATION WORKS.

3. ALL AIR CONDITIONING UNITS AND VENTILATING UNITS ARE TO BE INSTALLED IN CONFORMITY WITH THE MANUFACTURER'S INSTRUCTIONS. ALL AIR CONDITIONING EQUIPMENT MUST BE INSTALLED IN A MANNER THAT WILL ALLOW EASY SERVICEABILITY.

4. ALL DUCT WORKS SHALL BE PROVIDED WITH INCORPORATED CORRUGATED DUCT SHAPED DRAWING PRIOR TO INSTALLATION.

5. ALL ELECTRICAL OUTLETS SHALL BE PROVIDED WITH PROPER RATING AND DETERMINATION OF ELECTRICAL LOADS prior to installation.

6. ALL SCHEDULED DRAWINGS TO THE CIVIL SHAPE OF THE HOUSE SHALL BE PROVIDED IN ACCORDANCE WITH THE SPECIFICATION DRAWING DETAILS.

7. ALL INSTALLATION ELECTRICAL UNITS EXCEPT INDOOR UNITS ARE TO BE TESTED AND INSPECTED BY INSTALLED prior to installation.

8. ALL INDIVIDUAL EQUIPMENT SHALL BE PROVIDED WITH INSTALLATION SUPPORTS AND INSTALLATION EQUATION. CORRECT SHAPED DRAWING PRIOR TO INSTALLATION.

9. ALL INDICATED DIMENSIONS ARE IN MILLIMETERS

## SCHEDULE OF EQUIPMENT

<table>
<thead>
<tr>
<th>WINDOW TYPE AIR CONDITIONER</th>
<th>INDOOR UNIT</th>
<th>OUTDOOR UNIT</th>
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<tbody>
<tr>
<td>DESIGNATION</td>
<td>UNIT</td>
<td>CAPACITY</td>
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<td>MSLA-05</td>
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<tr>
<th>BELT-DRIVEN VANEAXIAL FAN DETAIL</th>
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<table>
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<th>DESIGNATION</th>
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<th>CAPACITY</th>
<th>HP</th>
<th>RPM</th>
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## LEGENDS & SYMBOLS:

- Air Cooled Condensing Unit (ACCU) Drawing Detail
- Belt-Driven Vaneaxial Fan
- Window Type AC Installation Detail
- Wall Mounted FCU Mouting Detail

## PROJECT INFORMATION:

- Project Location: Rizal
- Responsible Engineer: Aricasto M. Odoy
- Responsible Draftsman: Josephine P. Brutus
- Approved by: Emily S. Sadan, CEOS 1

## APPROVALS:

- Submission Date: 2019-01-10
- Recommended Approval: Yes
- Approved by: Emily S. Sadan, CEOS 1

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**Note:** The image contains detailed architectural and engineering drawings, including plans for air-conditioning and ventilation systems, with specifications and legends for different components and equipment.