- Only trained operators or banksman shall engage to control or operate heavy equipment machines.
- 8. The Contractor shall assign a one (1) fulltime Safety Officer/Safety Engineer and one (1) fulltime First Aider.
- 9. The full-time Safety Engineer/Officer assigned at the site who shall strictly monitor work activities. Said Safety Engineer/Officer shall ensure strict compliance with regard to the wearing of additional personal protective equipment (PPE) required such as, but not limited to, face masks, safety glasses/goggles, face shields, and long sleeve T-shirts, and other measures to contain the spread of COVID-19 in the workplace.
- 10. Work activities shall be strictly monitored daily by the Safety Officer on site to ensurecompliance with safety standards and quarantine protocols.
- 11. Proper waste disposal shall be provided for infectious waste such as PPEs and other waste products coming from outside the construction premises.
- Contractor shall submit a copy of the approved OSH Program to the Agency through PMC.
- The Contractor shall strictly adhere to the provisions of this scope. Non-complianceof
 this requirement shall be a valid ground for suspension and/or termination of
 contract.

IV. Permits, Fees, and Clearances

The work under this Item shall consist of furnishing all required fees and payments for building permit processing, material testing as well as permanent electrical service connection processing and performing all operations necessary for the satisfactory completion of all project.

- Payments for building permit application with the maximum amount of 100,000.00php will be charged to the Contractor. This includes but not limited to payment for signing engineers including structural design and analysis, zoning clearance fees, permit processing fees, if required, occupancy permit fee, and fire protection certificate.
- 2. During project implementation, the Contractor shall conduct material testing at any testing materials agency recognized by the DPWH under the supervision of a representative from the Project Monitoring Committee. All material testing shall be in accordance with the DPWH Standards. In addition, payments for such Material Testing is included in this Item and will be charged to the Contractor.
- Upon completion of all works, the Contractor shall apply for the permanent electrical service connection of the building. Any additional fees and materials necessary for the electrical service connection such as but not limited to service drop and accessories shall be covered by this Item.

V. Mobilization/ Demobilization

- This Item includes the mobilization/ demobilization of materials and equipment, construction of Temporary Facilities, Bunkhouse, Warehouse storage & Project Site Office.
- All materials used for billboards, signages, bunkhouses shall be new and be turned over to the implementing unit after the completion of the project.
- This item includes demobilization of all construction debris from the site after all works has been completed.

CIVIL, MECHANICAL, ELECTRICAL, & PLUMBING/ SANITARY WORKS

PART A. EARTHWORKS

VI. Clearing and Grubbing

This item shall consist of clearing, grubbing, removing and disposing of all vegetation and debris as designated in the Contract, except those objects that are

GO

designated to remain in place or are to be removed in consonance with other provisions of this Specification. The work shall also include the preservation from injury or defacement of all objects designated to remain.

All surface objects and all trees, stumps, roots and other protruding obstructions, not designated to remain, shall be cleared and/or grubbed, including mowed as required, except as provided below:

- Removal of undisturbed stumps and roots and nonperishable solid objects with a minimum depth of one (1) meter below subgrade or slope of the embankment will not be required.
- In areas outside of the grading limits of cut and embankment areas, stumps and nonperishable solid objects shall be cut off not more than 150 mm above the ground line or low water level.
- In areas to be rounded at the top of cut slopes, stumps shall be cut off flush with or below the surface of the final slope line.
- Grubbing of pits, channel changes, and ditches will be required only to the depth necessitated by the proposed excavation within such areas.
- In areas covered by cogon/ talahib, wild grass and other vegetation, topsoil shall be cut to a maximum depth of 150 mm below the original ground surface or as designated by the Engineer and disposed outside the clearing and grubbing limits.
- Except in areas to be excavated, stump holes and other holes from which obstructions are removed shall be backfilled with suitable material and compacted to the required density.
- 7. If perishable material is burned, it shall be burned under the constant care of component watchmen at such times and in such a manner that the surrounding vegetation, other adjacent property, or anything designated to remain will not be jeopardized. If permitted, burning shall be done in accordance with applicable laws, ordinances, and regulation.
- Material and debris which cannot be burned and perishable materials may be disposed off by methods and at locations approved by the implementing agency, on or off the project site.
- 9. If disposal is by burying, the debris shall be placed in layers with the material so disturbed to avoid nesting. Each layer shall be covered or mixed with earth material by the land-fill method to fill all voids. The top layer of material buried shall be covered with at least 300mm(12 inches) of earth or other approved material and shall be graded, shaped and compacted to present a pleasing appearance.
- This scope involves clearing and grubbing of the entire building footprint as well as site clearing where the septic tank will be located as per plan.
- 11. The construction site shall also be cleared and free from construction debris upon completion of the project. The cost involved in the disposal activities shall be included in the unit bid price.

VII. Structure Excavation

This Item shall consist of the necessary excavation for the foundation of structural columns, tie beams, and other structures not otherwise provided for in the Specifications. Except as otherwise provided for pipe culverts, the backfilling of completed structures and the disposal of all excavated surplus materials shall be in accordance with these specifications and in reasonably close conformity with the plans or as established by the Engineer.

All earthwork excavation shall be confined to the construction area as shown on the plans and shall be done in an approved manner with proper equipment. Excavation shall be suspended during rain and inclement weather, or when unsatisfactory field conditions are encountered unless otherwise directed by the ENGINEER. At all times during construction, the CONTRACTOR shall maintain proper drainage in the construction area and shall take all measures necessary for erosion and sediment control.

- 1. Excavation work shall be done in all kinds of soils.
- This scope includes the excavation of column footing, tie beam and wall footing for masonry wall and removal of materials within the staked - out line of the building as well as excavation for septic tank and catch basinlocated as per plan.

40

- The Contractor shall furnish all the necessary labor, place and maintain all support and shoring as maybe required for the excavation, including the removal/pumping of storm/waste water from the excavation.
- 4. The Contractor shall take every precaution to protect existing utility services from damage during construction operations. If damage occurs, the Institution shall be notified immediately and repairs shall be made promptly at the Contractor's expense. All repair works shall be satisfactory to the Engineer and the Institution. When interruptions of existing utilities occur, temporary service shall be provided as approved by the Engineer and Owner of the utility.
- The Contractor shall provide a working space allowance of 0.5 m each face of the structural element (for footing, wall footings and tie beams) for an excavation of 1.0 m depth and .8m for 2.0 m depth of excavation, respectively.

VIII. Embankment (Incl. Backfilling and Gravel Bedding)

This Item shall consist of the construction of embankment per this specification and inconformity with the lines, grades, and dimensions shown on the plans or established by the Engineer.

- Excavated areas around structures shall be backfilled with free-draining granular material approved by the Engineer and placed in horizontal layers not over 150 mm in thickness, to the level of the original ground surface. Each layer shall be moistened or dried as required and thoroughly compacted with mechanical tampers at 90% MDD.
- All excavated materials, so far as suitable, shall be utilized as backfill or embankment. The surplus materials shall be disposed of in such a manner as not to obstruct the stream or otherwise impair the efficiency or appearance of the structure. No excavated materials shall be deposited at any time that may endanger the partly finished structure.
- This Item includes utilization of excavated material from column footing, tie beam, and wall footing for embankment up to the Natural grade line and an additional volume of suitable backfilling materials.
- The concrete strength of column and tie beams must be attained up to its considerable strength before backfilling and compaction is done on-site.
- Gravel bedding for Slab on Grade and Wall Footing must be properly observed onsite and must have a minimum compacted thickness of 50mm.
- The finished grade line of the structure must refer to the finished roadway as per standard construction practice.
- 7. No footing shall rest on fill.
- Contractor to provide for de-watering of excavations from either surface water, groundwater, or seepage.
- The Contractor shall include backfilling and compaction works at 1.0m offset distance (outside) from the perimeter of the building at 90% MDD.

IX. Soil Poisoning

This Item shall consist of furnishing and applying termite control chemicals, including the use of equipment and tools in performing such operations in accordance with this Specification.

Termite control chemicals or toxicants shall be able to immediately exterminate termites or create barriers to discourage entry of subterranean termites into the building areas.

Before any termite control work is started, thorough examination of the site shall be undertaken so that the appropriate method of soil poisoning can be applied. The Contractor shall coordinate with other related trades through the Engineer to avoid delay that may arise during the different phases of application of the termite control chemicals.

 This scope includes soil poisoning of areas covered by the structure's slab on grade and ramps on grade as well as concrete pavement.