

I. INTRODUCTION:

These specifications shall encompass all the work necessary for the project **“PROPOSED RENOVATION OF THE INTEGRATED TECHNOLOGY BUILDING FOR COLLEGE OF MEDICINE (PHASE 3)”** and as further defined herein. The work shall include furnishing all labor, materials, equipment, tools, facilities and transportation to complete the project in accordance with the drawings and specifications.

The drawings and the specifications are complementary to each other. Drawings are graphic means of showing the work to be done. They are particularly suited to showing where materials are located. Thus, drawing exists essentially to show sizes, location, and placement. Not all works, however, can be presented in the drawings. Generalized works are usually in statement form; hence the Contractor is strongly advised to read the specification carefully.

Specification on the other hand, is used to describe the materials, construction techniques, samples, shop drawings, guarantee, and the other contract requirements. Together, the Drawings and the Specification are used to inform the contractor. In cases where specified brand carries with it the manufacture's specifications, the manufacture's specification shall hold the precedence over this specification.

II. THE LANGUAGE OF THE SPECIFICATIONS:

The specifications are the abbreviated type and include incomplete sentences. The selection of sentence structure depends on the underlying principles of the specifications:

- a. That the technical specifications are only one part of the Contract Document.
- b. That the contract is between the Owner and the General Contractor; and
- c. That the General Contractor is the only party responsible for completing the work in accordance with the Contract Document

Therefore:

- A. Only the General Contractor is referred to in the specification so as not to violate the intent of the contract and so as not to undermine the proper chain of command.
- B. Any reference to Specialty Trade Contractors in the technical Specifications is made only in so far a selection of specialty Trade Contractors is made through bidding. Once the Specialty Trade Contractions are selected and assigned to the General Contractor, the General Contractor assumes all responsibilities for the execution of the whole project in accordance with the Contract Documents. Therefore, in the contract between the Owner and the General Contractor, the Specialty Trade Contractor, the Specialty Trade Contractor is not referred to the entire Contract Document, the work “Contractor” referred to the General Contractor.



- C. The omission of the phrase “the contractor shall” is intentional because the whole specifications are directed to the Contractor. Omitted words or phrases shall be supplied by the interference in the same manner, as they are when a “note” occurs in the drawings.
- D. Where “as shown”, “as intended”, “as detailed”, or words similar import are used, it shall be understood that the reference in the drawings accompanying the specifications is made unless otherwise stated.
- E. Where “as directed”, “as required”, “as permitted”, “as authorized”, “as approved”, “as accepted”, or other words similar import are used, it shall be understood that the direction, requirements, permission, authorization, approval, or acceptance of the Architect is intended unless otherwise stated.
- F. As used herein, “provide” shall be understood to mean “provide complete in place” that is “furnished and installed”.

III. GENERAL REQUIREMENTS:

- 1. The contractor shall secure from the government agencies all necessary licenses and permits needed.
- 2. Cleanliness shall be maintained at all times within the job site and its immediate premises.
- 3. If errors or omissions appear in the drawings, specifications or other documents, these shall be referred to the designing architect.
- 4. All applicable provisions of the different divisions of the specification for each work trade shall apply for all items cited in this summary.
- 5. Materials deemed necessary to complete the work but not specifically mentioned in the specification, working drawings, of in the Contract Document, shall be supplied and installed by the Contractor without extra cost to the Owner. Such material shall be of the highest quality available and install and applied in a workmanlike manner at prescribed or appropriate locations.
- 6. Materials specifically mentioned in this Summary shall be installed following efficient and sound Engineering and Construction practice, and especially as per Manufacture’s application and installation specification, which shall govern over all works, alluded in this Specification.
- 7. The Contractor shall clean the site and dispose waste after the completion of the project.

IV. PREPARATION OF SITE:

Preparation of the working area at site covers the requirements for providing all the temporary work at the project site, on-site storage facilities, implementing security requirements and safety protocols in the project site as required for the proper performance and completion of the work. All temporary installation used for the work shall be removed after completion of the Work.



V. STANDARD SPECIFICATIONS

PART 1. MOBILIZATION AND DEMOBILIZATION

1.1 General Requirements

Mobilization shall mean the transport to the project site of personnel and equipment as stipulated in the proposal of the Contract of the project while demobilization shall be the subsequent removal from the site after the completion of the project. Approval of the Engineer is required when one opted to demobilize any major equipment before the completion of the project.

1.2 Method of Measurement

Mobilization and Demobilization shall be paid by lot.

1.3 Basis of Payment

Method of Measurement shall be paid for at the Contract Unit Price or for the item listed below. Such payment shall be full compensation for furnishing, maintaining, and ensuring against loss of any equipment/tools.

Payments shall be made under:

Pay Item Number	Description	Unit of Measurement
1	Mobilization and Demobilization	Lot

PART 2. EXCAVATION AND SHORING WORKS

2.1 General Requirements

Excavation and shoring works include site preparation, surveying, excavation according to plans, managing spoil materials, installing and monitoring shoring systems like sheet piles or ground anchors, dewatering as needed, protecting existing structures, performing backfilling, and completing site grading, all while adhering to safety regulations and obtaining necessary permits.

2.2 Method of Measurement

Excavation and Shoring Works shall be paid by cubic meter.

2.3 Basis of Payment

Method of Measurement shall be paid for at the Contract Unit Price or for the item listed below. Such payment shall be full compensation for furnishing, maintaining, and ensuring against loss of any equipment/tools.

Payments shall be made under:

Pay Item Number	Description	Unit of Measurement
2	Excavation and Staging Works	Cu.m




PART 3. DEMOLITION WORKS

3.1 Description

This item shall consist if the removal wholly or in part, and disposal of existing partition, roofing, pedestal and ceiling which are not designed or permitted to remain, except for the obstructions to be removed and disposed of under other terms in the contract.

3.2 Method of Measurement

Demolition Works shall be paid by lot.

3.3 Basis of Payment

Method of Measurement shall be paid for at the Contract Unit Price or for the item listed below. The payment shall include labor, equipment, tools and incidentals to complete the work prescribed in this item.

Payments shall be made under:

Pay Item Number	Description	Unit of Measurement
3	Demolition Works	Sq.m

PART 4. SCAFFOLDING AND STAGING WORKS

4.1 Description

This item includes the design, engineering, provision of materials, labor for erection, use, maintenance, and dismantling of scaffolding and staging structures to provide safe access and work platforms on construction projects.

4.2 Method of Measurement

Scaffolding and staging works shall be paid by lot.

4.3 Basis of Payment

Method of Measurement shall be paid for at the Contract Unit Price or for the item listed below. The payment shall include labor, equipment, tools and incidentals to complete the work prescribed in this item.

Payments shall be made under:

Pay Item Number	Description	Unit of Measurement
4	Scaffolding and staging works	lot

PART 5. WALL FINISHING WORKS

5.1 Description

This work shall consist of requirements for the installation of embossed exterior acrylic logo and letters on the building facade as shown on the Plans and in accordance with this specification.



5.2 Material Requirements

5.2.1 Acrylic Logo and Letters

Acrylic logo and letters shall conform to the requirements as defined in the plans, 150mm thk. This emphasizes that the logo and letters must adhere to the detailed specifications outlined in the project plans. This includes the design, placement, and any other specific design elements, color schemes, or finishes required.

5.2.2 Color Requirement

All exterior signage will have a distinct visual hierarchy, with a prominent gold logo and clear white text.

5.3 Construction Requirements

The acrylic logo, constructed from 150mm thick gold acrylic sheet, will be meticulously fabricated to the exact dimensions and embossed pattern specified in the design documents. The logo will be professionally embossed to achieve the desired depth and detail, ensuring a high-quality finish. The logo will be securely attached to the support structure using appropriate adhesives, ensuring proper alignment and stability. A weatherproof sealant will be applied around the edges and attachment points to protect against moisture and prevent damage. The completed logo will undergo a thorough visual inspection for accuracy, quality of embossing, and overall appearance, ensuring it meets the highest standards of craftsmanship. Detailed fabrication drawings and installation instructions will be provided to the contractor, ensuring a smooth and successful installation process.

5.4 Method of Measurement

Wall Finishing Works shall be paid by lot.

5.5 Basis of Payment

Method of Measurement shall be paid for at the Contract Unit Price or for the item listed below. The payment shall include materials, labor, equipment, tools and incidentals to complete the work prescribed in this item.

Payments shall be made under:

Pay Item Number	Description	Unit of Measurement
5	Wall Finishing Works	lot

PART 6. CEILING WORKS

6.1 Description

This section covers the requirement for providing all ceiling work at the Project site. The work shall include furnishing all labor, materials, equipment, tools and transportation necessary to complete the work indicated on the drawings and specified herein.

6.2 Materials Requirements




All framing works for ceiling must be replace. Framing system shall be straight, light, non-combustible and not susceptible to termite damage. Screws shall be used to connect framing components and fasten other materials to the framing. All ceiling eaves inclusive to renovation must be replaced with PVC Ceiling Panel Boards.

6.3 Construction Requirements

6.3.1 Installation of Framing

DPWH Standard Specifications for NonStructural Metal Framing, under Item 1035 entails that for the installation of ceiling assemblies:

- a. Fix and align accurately all steel angles at the maximum interval of 1.20 meter for longer side and maximum interval of 0.8 meter for the shorter side.
- b. Tie the suspension rod securely to the steel angle.
- c. Attach the carrying channel to the suspension clip then use the rod joiner to connect the suspension rod to the suspension clip.
- d. Attach the metal furring to the carrying channel at right angle to each other using the clips. Metal furring shall be spaced with maximum distance of 0.40 meter o.c. up to 0.60 o.c. meter apart and carrying channel shall be spaced with maximum distance of 1.2 meter o.c.
- e. Ceiling boards are attached to the metal framing by screw. Screw shall be spaced at a maximum of 200 mm o.c.

6.3.2 Installation of PVC Ceiling Panel

PVC panels and trims are cut precisely to size, and adhesive is applied to the back of each panel before being securely attached to the ceiling. Subsequent panels are installed in a similar manner, ensuring each panel is level and flush with adjacent panels. The installation is completed by adding trims or applying sealant to the edges for a neat finish

6.3.3 Quality of Materials

All materials to be incorporated in the carpentry and joinery works shall be of good quality. Before incorporation in work, all materials shall have been inspected/accepted by the Engineer of his authorized representative.

6.3.4 Storage and Protection of Materials

Boards and other materials shall be protected from dampness during and after delivery at the site. Protect surrounding areas and surfaces to preclude damage. Avoid soiling, spatter, and damage to work of other trades. Use cover cloths or other means of protection. Remove, clean, and repair or damaged work. Materials shall be delivered well in advance of actual need and in adequate quantity to preclude delay in the work.

6.3.5 Shop Drawings



Shop drawings complete with essential dimensions and details of construction, as may be required by the Engineer in connection with carpentry and joinery work, shall be submitted for approval before proceeding with work.

6.3.6 Storage of Materials

All new materials shall be delivered by the manufacture in original, unopened, undamaged containers with identification labels intact. All materials shall be stored protected from exposure to rain, or other harmful weather conditions.

6.4 Method of Measurement

Ceiling Works shall be paid by sq.m

6.5 Basis of Payment

Method of Measurement shall be paid for at the Contract Unit Price or for the item listed below. The payment shall include labor, equipment, tools and incidentals to complete the work prescribed in this item.

Payments shall be made under:

Pay Item Number	Description	Unit of Measurement
6	Ceiling Works	sq.m

PART 7. PAINTING WORKS

All painting works of this project, except as hereinafter specified, shall be done with the prescribed painting products. The painting contractor shall supply all labor, paint materials, tools, staging and equipment, and shall perform all painting and finishing work as shown in the schedule of painting and finishing work for this project.

The painting contractor shall store his materials in one place in the building to be kept neat and clean, care being taken in the storage of paints, oils, etc. to prevent danger of fire. Oily rags shall be kept in metal containers and shall be removed from the building every end of the working day.

Upon completion of the painting works, the painting contractor shall be removing any spots from all finish work. He shall present his work to the Project Owner or Architect/Engineer in-charge of construction, free from blemishes and rubbish generated by his workers.

It shall be the painting Contractor's responsibility to protect his work and those of other contractors during the time his work is underway. He shall be responsible for any damage for the work or property of other caused by his employees or by himself.

Before any painting is done surfaces shall be cleaned, smoothed and freed from dust, dirt, grease, mortar, rust and other foreign substances. All parts where paint remover has been used all paint and paint materials shall be delivered to the building site in unbroken packages, bearing the marks of specified brand. No adulteration of specified paints with other brands shall be allowed.

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7.1 Painting Works (Masonry/Concrete)

7.1.1 Scope

The work shall consist of cleaning and preparing masonry/concrete surfaces and applying protective paint coatings.

7.1.2 Materials

All painting materials shall be delivered to the work site in original containers with seals and labels intact. Containers shall not be opened until after they have been inspected.

7.1.3 Application of Paint

Specified patching and repair of the facade must be polished as specified in the plan and details. Application of exterior substrates before painting must be performed with necessary preparation.

Repainting of masonry/concrete with surface defects shall be repaired and all surfaces shall be scraped to remove deteriorated coatings and other deleterious materials. Surfaces shall then be cleaned with any commercial cleaner to remove all grease, oil, and chemical residues. Paint materials shall be kept sealed or covered when not in use. Color pigments shall be used to produce the exact shades paint, which shall conform to the approved color scheme of the building. If brushes are used, they shall have sufficient body and length of bristle to spread paint in a uniform coat. Paint shall be evenly spread and thoroughly brushed out and no residual brush marks shall remain. On surfaces which are inaccessible for brushing, paint shall be applied by spray, or other means as approved.

All painting works of this project, except as hereinafter specified, shall be done with the prescribed painting products. The painting contractor shall supply all labor, paint materials, tools, staging and equipment, and shall perform all painting and finishing work as shown in the schedule of painting and finishing work for this project.

The painting contractor shall store his materials in one place in the building to be kept neat and clean, care being taken in the storage of paints, oils, etc. to prevent danger of fire. Oily rags shall be kept in metal containers and shall be removed from the building every end of the working day.

Upon completion of the painting works, the painting contractor shall be removing any spots from all finish work. He shall present his work to the Project Owner or Architect/Engineer in-charge of construction, free from blemishes and rubbish generated by his workers.

It shall be the painting Contractor's responsibility to protect his work and those of other contractors during the time his work is underway. He shall be responsible for any damage for the work or property of other caused by his employees or by himself.

Before any painting is done surfaces shall be cleaned, smoothed and freed from dust, dirt, grease, mortar, rust and other foreign substances. All parts where paint remover has been used all paint and paint materials shall be delivered to the building site in

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unbroken packages, bearing the marks of specified brand. No adulteration of specified paints with other brands shall be allowed.

7.2 Method of Measurement

Painting Works shall be paid by sq.m

7.3 Basis of Payment

Method of Measurement shall be paid for at the Contract Unit Price or for the item listed below. The payment shall include labor, equipment, tools and incidentals to complete the work prescribed in this item.

Payments shall be made under:

Pay Item Number	Description	Unit of Measurement
7	Painting Works	Sq.m

PART 8. SEDIMENTATION TANKS

8.1 Description

Sedimentation is the natural process by which suspended solid particles, like soil and dust, settle out of water under gravity, while a cistern is a storage tank that collects water, often rainwater, which can then accumulate this sediment. Sedimentation is used in water treatment to clarify water before it enters a cistern, preventing the buildup of dirt, roof moss, and other impurities that can cause odor and discoloration. This item encompasses design, construction, rehabilitation, and operation, focusing on removing suspended solids by providing sufficient detention time and surface area.

8.2 Method of Measurement

Sedimentation tanks shall be paid by cu.m.

8.3 Basis of Payment

Method of Measurement shall be paid for at the Contract Unit Price or for the item listed below. The payment shall include labor, equipment, tools and incidentals to complete the work prescribed in this item.

Payments shall be made under:

Pay Item Number	Description	Unit of Measurement
8	Sedimentation Tanks	Cu.m

PART 9. WASTEWATER TREATMENT SYSTEM

9.1 Description

This item shall consist of the construction, installation, and completion of a wastewater treatment facilities in accordance with this Specification and as shown on the Plans. The work includes all necessary civil, mechanical, and electrical works, as well as






furnishing all labor, materials, tools, equipment, and incidentals required to complete the facility in a safe and functional condition.

The specifications, design criteria, performance requirements, and layout of the wastewater treatment system shall be as indicated in the Plans and other Contract Documents. All works shall conform to the requirements set forth by relevant environmental and sanitation regulations.

9.2 Method of Measurement

Wastewater treatment system shall be paid by lot.

9.3 Basis of Payment

Method of Measurement shall be paid for at the Contract Unit Price or for the item listed below. The payment shall include labor, equipment, tools and incidentals to complete the work prescribed in this item.

Payments shall be made under:

Pay Item Number	Description	Unit of Measurement
9	Wastewater Treatment	lot

PART 10. SITE CLEARING

10.1 Description

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

The Engineer will establish the limits of work and designate all things to remain. 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 project site, other adjacent property, or anything designated to remain on the right way will not be jeopardized. If permitted, burning shall be done in accordance with applicable laws, ordinances, and regulation.

In the event that the Contractor is directed by the Engineer not to start burning operations or to suspend such operations because of hazardous weather conditions, material to be burned which interferes with subsequent construction operations shall be moved by the Contractor to temporary locations clear of construction operations and later, if directed by the Engineer, shall be placed on a designated spot and burned.

Materials and debris which cannot be burned and perishable materials may be disposed off by method and at locations approved by the Engineer, on or off the project.

10.2 Method of Measurement

Site Clearing shall be paid by lot.

10.3 Basis of Payment

Method of Measurement shall be paid for at the Contract Unit Price or for the item listed below. The payment shall include labor, equipment, tools and incidentals to complete the work prescribed in this item.

Payments shall be made under:

Pay Item Number	Description	Unit of Measurement
10	Site Clearing	lot