



# Republika ng Pilipinas Lungsod Quezon

**BIDS AND AWARDS COMMITTEE FOR INFRASTRUCTURE & CONSULTANCY**

2<sup>nd</sup> Floor, Finance Building, Procurement Department, Quezon City Hall Complex, Elliptical Road, Quezon City



September 30, 2021

## Request for Quotation/ Proposal

No.	Project No.	Project Name	Location	Amount	Duration Cal. Days	Source Fund
<b>Parks - Small A</b>						
1	21-001 SV	Proposed Rehabilitation of Welcome Arc at Manresa Park	Manresa	247,536.00	30	Engineering Department
<b>Buildings – Small A</b>						
2	21-002 SV	Proposed Rehabilitation of Reception Area at Various Health Center (District 2)	Various Barangays	341,124.74	30	OCM-20% CDF
3	21-003 SV	Proposed Temporary Enclosure for Crematory Machine at Baesa Crematorium	Baesa	594,910.45	30	Engineering Department-SB No. 1
4	21-004 SV	Proposed Rehabilitation of Reception Area at Various Health Center (District 3)	Various Barangays	632,587.24	30	OCM-20% CDF
5	21-005 SV	Proposed Rehabilitation of Material Recovery Facility at Third Floor (Roof Deck)	Mariana	789,657.49	60	Engineering Department-SB No. 1
6	21-006 SV	Proposed Rehabilitation of Reception Area at Various Health Center (District 1)	Various Barangays	809,220.13	30	OCM-20% CDF
7	21-007 SV	Proposed Rehabilitation of Reception Area at Various Health Center (District 6)	Various Barangays	851,009.93	30	OCM-20% CDF
8	21-008 SV	Proposed Rehabilitation of Multi-Purpose Hall at Bagumbuhay	Bagumbuhay	908,267.19	60	Engineering Department-SB No. 1
9	21-009 SV	Proposed Rehabilitation of Reception Area at Various Health Center (District 4)	Various Barangays	953,997.37	30	OCM-20% CDF
10	21-010 SV	Proposed Rehabilitation of Tennis Court at Villa Orion Union	West Fairview	995,610.53	60	Engineering Department-SB No. 1
<b>Roads – Small B</b>						
11	21-011SV	Proposed Rehabilitation of Steel Bridge at Tacloban Street	Alicia and Bahay Toro	695,189.25	90	Engineering Department
<b>Roads – Small B</b>						
12	21-012 SV	Proposed Rehabilitation (Surface Improvement) of Halcon Street at Amparo Subdivision	Nagkaisang Nayon	897,220.87	10	Engineering Department
13	21-013 SV	Proposed Rehabilitation of Road and Drainage at Balimbing Street	Veterans Village	971,164.95	60	OCM-20% CDF



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The Quezon City Government through its Bids and Awards Committee – Infra and Consultancy undertake an Small Value Procurement in accordance with **Section 53.9 of the Revised Implementing Rules and Regulations of Republic Act No. 9184.**

Please quote your best offer for the project/s described above, subject to the Terms and Conditions provided. Submit your proposal/price quotation duly signed by you or your duly authorized representative not later than **5 October 2021** on or before **10:00 A.M.**, Philippine Standard Time, together with the following documents:

1. PhilGEPS Platinum Certificate
2. DTI or SEC Registration Certificate
3. Mayor's Permit
4. Tax Clearance
5. PCAB License (Bidders with valid Philippine Contractors Accreditation Board (PCAB)
6. Audited Financial Statements
7. Net Financial Contracting Capacity (NFCC)
8. List of Key Construction Personnel to be assign for the project
9. List of Major Equipment to be used for the Project
10. Duly Notarized Affidavit of Undertaking of Key Personnel and Equipment
11. Income/Business Tax Returns
12. Omnibus Sworn Statement prescribed by the Government Procurement Policy Board (GPPB) duly notarized with attached Secretary's Certificate (*If a partnership, corporation, cooperative, or joint venture*). The authorized representative as identified in the Omnibus Sworn Statement shall be the signatory in the proposal/price quotation form.

Opening of Quotations/Proposals will be on **5 October 2021** at exactly **11:00 A.M.**

in a **SEALED LONG BROWN ENVELOPE** shall:

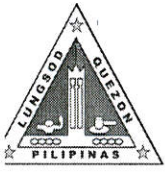
- 1 Contain the Name of Project of the contract to be quoted in capital letters;
- 2 Bear the name and address of the Contractor in capital letters;
- 3 Be addressed to the Procuring Entity's BAC.

Name of Project: **IN CAPITAL LETTERS**

**Quezon City Local Government  
BIDS AND AWARDS COMMITTEE (INFRA & CONSULTANCY)  
2/F Procurement Department, Finance Building  
Quezon City Hall Compound**

For any clarification you may contact us at 89884242 loc. 8505/8709.

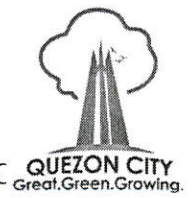
**ATTY. MARK DALE DIAMOND P. PERRAL**  
Chairman, BAC Infra and Consultancy



# Republika ng Pilipinas Lungsod Quezon

**BIDS AND AWARDS COMMITTEE FOR INFRASTRUCTURE & CONSULTANCY**

2<sup>nd</sup> Floor, Finance Building, Procurement Department, Quezon City Hall Complex, Elliptical Road, Quezon City



## *TERMS AND CONDITIONS*

1. Contractor shall **provide correct and accurate** information required in this form.
2. Price quotation/proposal must be valid for a period of thirty (30) calendar days from the date of submission.
3. Price quotation/proposal, to be denominated in Philippine Peso shall include all taxes, duties and/or levies payable.
4. Quotation/Proposal **exceeding** the Approved Budget for the Contract (ABC) shall be **rejected**.
5. Award of contract shall be made to the lowest quotation/proposal (for infra) which complies with the minimum technical specifications and other terms and conditions stated herein.
6. Any interlineations, erasures or overwriting shall be valid only if they are signed or initialed by the contractor or his/her duly authorized representative/s.
7. The Engineering Department shall have the right to inspect and monitor the construction projects
8. Non-submission of eligibility documents shall mean disqualification of Quotation/Proposal.
9. Liquidated damages equivalent to one tenth (1/10) of one percent (1%) of the cost of the unperformed portion for every day of delay, Engineering Department shall rescind the contract once the cumulative amount of liquidated damages reaches ten percent (10%) of the amount of the contract, without prejudice to other courses of action and remedies open to it.
10. Failure to follow these instructions will disqualify your entire quotation/proposal.

**ATTY. MARK DALE DIAMOND P. PERRAL**

Chairman, BAC Infra and Consultancy



Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**  
5th, 6th, 7th Floors, Q.C. Civic Center Building B  
Telephone No. 8988-4242 Local 8538



**PROJECT TITLE: PROPOSED REHABILITATION OF TENNIS COURT AT VILLA ORION UNION**  
**LOCATION: BRGY. WEST FAIRVIEW, DISTRICT 5, QUEZON CITY**

### LIST OF MANPOWER

NO	MANPOWER	QUANTITY
1	Project Engineer	1
2	Materials Engineer	1
3	Safety Officer	Refer to DOLE Requirement
4	Foreman	1
5	Skilled Worker	6
6	Driver	1
7	Heavy Equipment Operator	1
8	Laborer	7

Prepared by:

*Mapili*  
**VERGEL JEROME A. MAPILI**  
Planning and Programming Division

Checked by:

*Naong*  
**JOCELYN A. NAONG**  
Planning and Programming Division



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**PROJECT TITLE: PROPOSED REHABILITATION OF TENNIS COURT AT VILLA ORION UNION ✓**  
**LOCATION: BRGY. WEST FAIRVIEW, DISTRICT 5, QUEZON CITY**

### LIST OF EQUIPMENT

NO	EQUIPMENT	QTY
1	Bar Cutter	1
2	One - Bagger Mixer	1
3	Welding Machine	1
4	Elf Truck	1
5	Minor Tools	As Needed
6	Power Tools	As Needed

Prepared by:

  
**VERGEL JEROME A. MAPILI**  
Planning and Programming Division

Checked by:

  
**JOCELYN A. NAONG**  
Planning and Programming Division



Republic of the Philippines  
Quezon City

## CITY ENGINEERING DEPARTMENT

Civic Center Building B, Quezon City Hall Compound, Elliptical Road  
Diliman, Central 1100 Quezon City  
Trunkline: +63 2 8988 4242



# TECHNICAL SPECIFICATIONS

## QUEZON CITY INFRASTRUCTURE PROJECT

**PROJECT TITLE :** PROPOSED REHABILITATION OF TENNIS COURT AT VILLA ORION UNION  
**LOCATION :** BRGY. WEST FAIRVIEW, DISTRICT 5, QUEZON CITY

### I. GENERAL REQUIREMENTS

- a. Comply with the current and existing laws, ordinances and applicable codes, rules and regulations and standards. Any works perform contrary to the existing laws, rules and regulations, ordinances and standards without notice shall bear all cost arising therefrom.
- b. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- c. Should there be any change(s) in drawings or specifications, it is required to comply with the governing regulations, notify the implementing agency.
- d. Photographs shall be taken as, when and where directed at intervals of not more than one month. The photographs shall be sufficient in number and location to record the exact progress of the works. The photographs shall be retained and will become the property of the Government.
- e. Site verification / inspection shall be conducted to validate the scope of works. No extra compensation and extension of time shall be given due to negligence or inadvertence.
- f. The quality of materials shall be of the best grade of their respective kinds for the purpose. The work shall also be performed in the best and most capable manner in strict accordance with requirements of the plans and details. All materials not conforming to the requirements of these specifications shall be considered as defective.
- g. All equipment and installations shall meet or exceed minimum requirements of the standards and codes.
- h. Mobilization and Demobilization (if applicable)
  - i. Mobilization shall include all activities and related costs for transportation of personnel, equipment, and operating supplies to the site; establishment of offices, buildings, and other necessary general facilities for the operations at the site.
  - ii. Demobilization shall include all activities and costs for transportation of personnel, equipment, and supplies not anymore required within the construction site including the disassembly, removal and site clean-up of offices and other facilities assembled on the site specifically for this contract.
- i. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen. Provide a competent, experienced, full-time supervisor who is authorized to make decisions on behalf of the Contractor.
- j. Temporary Facilities and Utilities
  - i. All facilities shall be near the job site, where necessary and shall conform to the best standard for the required types.
  - ii. Temporary facilities shall be provided and maintained including sanitary facilities and first aid stations.
  - iii. Temporary utilities shall be sufficiently provided until the completion of the project such as water, power and communication.



- iv. Temporary enclosure shall be provided within the construction site with adequate guard lights, railings and proper signages.
  - v. Temporary roadways shall be constructed and maintained to sustain loads to be carried on them during the entire construction period.
  - vi. Upon completion of the work, the temporary facilities shall be demolished, hauled-out and disposed properly.
- k. Adequate construction safety and health protection shall be provided at all times during the execution of work to both workers and property.
- i. A fully trained Medical Aide shall be employed permanently on the site who shall be engaged solely from medical duties.
  - ii. The medical room shall be provided in waterproof; it could be a building or room designated and used exclusively for the purpose and have a floor area of at least 15 square meters and a glazed window area of at least 2 square meters.
  - iii. The location of the medical room and any other arrangements shall be made known to all employees by posting on prominent locations suitable notices in the site.
  - iv. Additional safety precautions shall be provided in the observance of pandemic. Protocols set-forth by the government shall be strictly followed.
- l. Necessary protections to the adjacent property shall be provided to avoid untoward incidents / accidents.
- m. Final cleaning of the work shall be employed prior to the final inspection for certification of final acceptance. Final cleaning shall be applied on each surface or unit of work and shall be of condition expected for a building cleaning and maintenance program.

## **II. SITE WORKS**

- A. All grades, lines, levels and dimensions shall be verified as indicated on the plans and details. Any discrepancies or inconsistencies shall be reported before commencing to work.
- B. Removal / demolition of existing structures shall be done in accordance to safety procedures.
- C. All excavations shall be made to grade as indicated in the plans. Whenever water is encountered in the excavation process, it shall be removed by pumping, care being taken that the surrounding soil particles are not disturbed or removed.
- D. All backfills shall be placed in layers not exceeding to 150mm in thickness and each layer shall be thoroughly compacted wetting, tamping and rolling.

## **III. CIVIL / STRUCTURAL WORKS**

### **A. CONCRETE WORK**

- a. Delivery, Storage, and Handling: All materials shall be so delivered, stored, and handled as to prevent the inclusion of foreign materials and the damage of materials by water or breakage. Package materials shall be delivered and stored in original packages until ready to be used. Packages or materials showing evidence of water or other damage shall be rejected.
- b. Unless otherwise specified herein, concrete works shall conform to the requirements of the ACI Building Code. Full cooperation shall be given on trades to install embedded items. Provisions shall be made for setting items not placed in the forms. Before concrete is placed, embedded items shall have been inspected and tested for concrete aggregates and other materials shall have been done.

c. Materials

- i. Cement for concrete shall conform to the requirements of specifications for Portland Cement (ASTM C – 150).
- ii. Water used in mixing concrete shall be clean and free from other injurious amounts of oils, acids, alkaline, organic materials or other substances that may be deleterious to concrete or steel.
- iii. Fine aggregates shall be beach or river sand conforming to ASTM C33, "Specification for Concrete Aggregates". Sand particle shall be coarse, sharp, clean free from salt, dust, loam, dirt and all foreign matters.
- iv. Coarse aggregates shall be either natural gravel or crushed rock conforming to the "Specifications for Concrete Aggregates (ASTM C33). The minimum size of aggregates shall be larger than one fifth (1/5) of the narrowest dimensions between sides of the forms within which the concrete is to be cast nor larger than three fourths (3/4) of the minimum clear spacing between reinforcing bars or between reinforcing bars and forms.

d. Proportioning and Mixing

- i. Proportioning and mixing of concrete shall conform to the requirements for Item 405 of the standard specification with the following proportions:

Cement : Sand : Gravel

- Class "A" - 1 : 2 : 3
- Class "B" - 1 : 2 : 4
- Class "C" - 1 : 2 ½

- ii. Concrete mixture to be used for concrete shall conform with the structural requirements.
- iii. Mixing – concrete shall be machine mixed. Mixing shall begin within 30 minutes after the cement has been added to the aggregates.

e. Forms

- i. General – Forms shall be used whatever necessary to confine the concrete and shape it to the required lines, or to insure the concrete of contamination with materials caving from adjacent, excavated surfaces. Forms shall have sufficient strength to withstand the pressure resulting from placement and vibration of the concrete, and shall be maintained rigidly in correct position. Forms shall be sufficiently tight to prevent loss or mortar from the concrete. Forms shall be ¼" waterproof plywood and form lumber.
- ii. Cleaning of Forms – before placing the concrete, the contact surfaces of the formed shall be cleaned of encrustations of mortar, the grout or other foreign material.
- iii. Removal of Forms – forms shall be removed in a manner which will prevent damage to the concrete. Forms shall not be removed without approval. Any repairs of surface imperfections shall be formed at once and airing shall be started as soon as the surface is sufficiently hard to permit it without further damage.

f. Placing Reinforcement:

Steel reinforcement shall be provided as indicated, together with all necessary wire ties, chairs, spacer supported and other devices necessary to install and secure the reinforcement properly. All reinforcement, when placed, shall be free from loose, flaky rust and scale, oil grease, clay and other coating and foreign substances that would reduce or destroy its bond with concrete. Reinforcement shall be placed accurately and secured in place by use of metal or concrete supports, spacers and ties. Such supports shall be used in such manner that they will not be exposed or contribute in any way, to the discoloration or deterioration of the concrete.



g. Conveying and Placing Concrete:

- i. Conveying – concrete shall be conveyed from mixer to forms as rapidly as applicable, by methods which will prevent segregation, or loss of ingredients. There will be no vertical drop greater than 1.5 meters except where suitable equipment is provided to prevent segregation and where specifically authorized.
- ii. Placing – concrete shall be worked readily into the corners and angles of the forms and around all reinforcement and imbedded items without permitting the material to segregate, concrete shall be deposited as close as possible to its final position in the forms so that flow within the mass does not exceed two (2) meters and consequently segregation is reduced to a minimum near forms or embedded items, or elsewhere as directed, the discharge shall be so controlled that the concrete may be effectively compacted into horizontal layers not exceeding 30 centimeters in depth within the maximum lateral movement specified.
- iii. Time interval between mixing and placing. Concrete shall be placed before initial set has occurred and before it has contained its water content for more than 45 minutes. No concrete mix shall be placed before 60 complete revolution of the machine mixer.
- iv. Consolidation of Concrete – concrete shall be consolidated with the aid of mechanical vibrating equipment and supplemented by the hand spading and tamping. Vibrators shall not be inserted into lower cured that have commenced initial set; and reinforcement embedded in concrete beginning to set or already set shall not be disturbed by vibrators. Consolidation around major embedded parts shall by hand spading and tamping and vibrators shall not be used.
- v. Placing Concrete through reinforcement – In placing concrete through reinforcement, care shall be taken that no segregation of the coarse aggregate occurs. On the bottom of beams and slabs, where the congestion of steel near the forms makes placing difficult, a layer of mortar of the same cement-sand ratios as used in concrete shall be first deposited to cover the surfaces.

h. Curing

- i. General – All concrete shall be moist cured for a period not less than seven (7) consecutive days by an approved method or combination applicable to local conditions.
- ii. Moist Curing – The surface of the concrete shall be kept continuously wet by covering with burlap plastic or other approved materials thoroughly saturated with water and keeping the covering spraying or intermittent hosing.

i. Finishing

- i. Concrete surfaces shall not be plastered unless otherwise indicated. Exposed concrete surfaces shall be formed with plywood, and after removal of forms, the surfaces shall be smooth, true to line and shall present or finished appearance except for minor defects which can be easily repaired with patching with cement mortar, or can be ground to a smooth surface to remove all joint marks of the form works.
- ii. Concrete Slabs on Fill. The concrete slabs on fill shall be laid on a prepared foundation consisting of sub grade and granular fill with thickness equal to the thickness of the overlaying slab except when indicated.

**B. MASONRY**

a. Masonry Units (CHB):

- i. 100mm thick for all interior walls and 125mm thick for all exterior walls unless otherwise indicated.
- ii. Use 400 psi for non-load bearing blocks and 700 psi for load bearing blocks where required.

iii. Where full height walls are constructed with concrete hollow blocks, these shall extend up to the bottom of beam or slab unless otherwise indicated on plans. Provide stiffener columns & lintel beams as specified in the structural drawings or as specified or as deemed required to assure a stabilized wall due to height & other considerations.

b. Sand:

S-1, washed, clean and greenish in color.

c. Mortar:

One part "Portland" cement and two parts sand and water but not more than three parts sand and water.

d. Plaster bond:

Apply plaster bond to all wall area.

#### **IV. ARCHITECTURAL WORKS**

##### **A. PAINTING WORKS**

- a. All primers, thinners and putty, also waterproofing for internal and external application shall be the same brand as the specified material.
- b. Application shall be as per paint Manufacturer's specification and recommendation.
- c. Provide all drop cloth and other covering requisite for protection of floors, walls, aluminum, glass, finishes and other works.
- d. All applications and methods used shall strictly follow the Manufacturer's Instructions and Specifications.
- e. All surfaces including masonry wall shall be thoroughly cleaned, puttied, sandpapered, rubbed and polished; masonry wall shall be treated with Neutralizer.
- f. All exposed finish hardware, lighting fixtures and accessories, glass and the like shall be adequately protected so that these are not stained with paint and other painting materials prior to painting works.
- g. All other surfaces endangered by stains and paint marks should be taped and covered with craft paper.

#### **V. ELECTRICAL WORKS**

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- C. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes.
- D. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen.

- E. When the tests and inspections have been completed, a label shall be attached to all devices tested. The label shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests.

## F. PANELBOARDS

- F.1 Fabricate and test panel boards according to IEEE 344 to withstand seismic forces defined in Division 16 Sections 16073 and 16074 "Hangers and Supports for Electrical Systems and Vibration and Seismic controls for Electrical Systems" respectively.
- F.2 Enclosures: Flush, Surface, Flush- and surface-mounted cabinets.
- F.2.1 Rated for environmental conditions at installed location.
- i. Indoor Dry and Clean Locations: NEMA 250, Type 1.
  - ii. Outdoor Locations: NEMA 250, Type 3R.
  - iii. Kitchen and Wash-Down Areas: NEMA 250, Type 4X, stainless steel.
  - iv. Other Wet or Damp Indoor Locations: NEMA 250, Type 4.
  - v. Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA 250, Type 5 or Type 12.
- F.2.2 Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box.
- F.2.3 Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover.
- F.2.4 Skirt for Surface-Mounted Panelboards: Same gage and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor.
- F.2.5 Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections.
- F.2.6 Finishes:
- i. Panels and Trim: Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.
  - ii. Back Boxes: Galvanized steel Same finish as panels and trim.
  - iii. Fungus Proofing: Permanent fungicidal treatment for overcurrent protective devices and other components.
- F.2.7 Directory Card: Inside panelboard door, mounted in transparent card holder metal frame with transparent protective cover.
- F.3 Incoming Mains Location: Top or Bottom.
- F.4 Phase, Neutral, and Ground Buses:
- F.4.1 Material: Hard-drawn copper, 98 percent conductivity.
- F.4.2 Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.
- F.4.3 Neutral Bus: 100 percent of phase bus 4. Extra-Capacity Neutral Bus: Neutral bus rated 200 percent of phase bus and UL listed as suitable for nonlinear loads.

**VI. MECHANICAL WORKS (IF APPLICABLE)**

- A. Comply with the current applicable codes, ordinances, and regulations of the authority or authorities having jurisdiction, the rules, regulations and requirements of the utility companies (as applicable).
- B. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.
- C. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes.
- D. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen.
- E. When the tests and inspections have been completed, a label shall be attached to all devices tested. The label shall provide the name of the testing company, the date the tests were completed, and the initials of the person who performed the tests.

Prepared by:

  
VERGEL JEROME A. MAPILI

Planning &amp; Programming Division

Checked by:

  
JOCELYN A. NAONG

Planning &amp; Programming Division

**PROJECT TITLE:      PROPOSED REHABILITATION OF TENNIS COURT AT VILLA ORION UNION**

**LOCATION            :      BARANGAY WEST FAIRVIEW, DISTRICT 5, QUEZON CITY**

**PROJECT NO.    :      21 - 010 SV**

**DURATION        :      Ninety (90) Calendar Days**

***BREAKDOWN OF COST***

<b>ITEM NO.</b>	<b>WORK DESCRIPTION</b>	<b>MATERIALS COST</b>	<b>LABOR COST</b>	<b>INDIRECT COST</b>	<b>AGGREGATE COST</b>
I	GENERAL REQUIREMENTS				
II	SITE WORKS				
III	CIVIL WORKS / STRUCTURAL WORKS				
IV	ARCHITECTURAL WORKS				
V	ELECTRICAL WORKS				

**TOTAL COST    ₱ \_\_\_\_\_**

LUMP SUM BID IN WORDS : \_\_\_\_\_  
\_\_\_\_\_

Contractor : \_\_\_\_\_

**BILL OF QUANTITIES**  
(Building Construction/Rehabilitation Project)

**PROJECT TITLE :** PROPOSED REHABILITATION OF TENNIS COURT AT VILLA ORION UNION

**LOCATION :** BARANGAY WEST FAIRVIEW, DISTRICT 5, QUEZON CITY

**PROJECT NO. :** 21 - 010 SV

**DURATION :** Sixty (60) Calendar Days

**SCOPE OF WORKS:**

- 1 General Requirement include temporary facilities and utilities, billboard, construction safety and health, scaffolding, and clearing, hauling and disposal of construction materials and debris.
- 2 Site Works include removal and demolition works, layout and staking, site clearing and preparation and earthworks.
- 3 Civil and Structural Works include concrete works, masonry works and metal works.
- 4 Architectural Works include painting works.
- 5 Electrical Works include installation of roughing-ins, wiring, devices, fixtures and accessories.
- 6 All necessary testing and commissioning shall be performed in accordance to standards.

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
<b>I</b>	<b>GENERAL REQUIREMENTS</b>				
	Billboard	1	piece	₱	₱
	Clearing, Hauling and Disposal of Construction Materials and Debris	3	t.l.		
	Construction Safety and Health	1	unit		
	Scaffolding (Rental)	52	sq.m.		
	Temporary Electrical and Water Facilities	60	day		
	Temporary Enclosure Around the Construction Area (h=2.4m)	26	l.m.		
				<b>Direct Cost I</b>	₱
<b>II</b>	<b>SITE WORKS</b>				
	Removal Works				
	Demolition of Existing CHB Fence	28	sq.m.	₱	₱
	Removal of Existing Wire Mesh	38	sq.m.		
	Layout and Staking	69	sq.m.		
	Site Clearing and Preparation	69	sq.m.		
	Excavation for Structures				
	Column Footing	6	cu.m.		
	Wall Footing	9	cu.m.		
				Subtotal	₱
	Soil Treatment	82	sq.m.	₱	₱
	Gravel Bedding	1	sq.m.		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Backfill and Compaction	8	cu.m.	₱	₱
				Subtotal	₱
				<b>Materials Cost II</b>	₱
				<b>Labor Cost II</b>	
				<b>Direct Cost II</b>	₱
<b>III</b>	<b>CIVIL WORKS / STRUCTURAL WORKS</b>				
	Concrete Works				
	On-site Mix, 21 MPa, 3/4" Gravel, @ 28 Days				
	Column Footing	2	cu.m.	₱	₱
	Wall Footing	3	cu.m.		
	Column	3	cu.m.		
	Reinforcing Steel Bars				
	Grade 40 Reinforcing Steel Bar with G.I. Tie Wire #16				
	10mmØ, Column Ties	109	kg		
	12mmØ, Wall Footing	135	kg		



ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	Grade 60 Reinforcing Steel Bar with G.I. Tie Wire #16				
	16mmØ, Footing	180	kg		
	16mmØ, Column	160	kg		
	Formworks				
	Column Footing	8	sq.m.		
	Wall Footing	12	sq.m.		
	Column	21	sq.m.		
	Scaffolding and Shoring				
	Column	20	l.m.		
	Masonry Works				
	150mm CHB Laying including Mortar, Reinforcement and Two-Face Plastering	69	sq.m.		
	Metal Works				
	Fence				
	50mm Ø GI Pipe	272	kg		
	50mm x 50mm Wire Mesh	23	sq.m.		
	Miscellaneous & Consumables				
	Acetylene Tank Refill	1	tank		
	Assorted Metal Drill Bit	3	piece		
	Cut Off Blade	3	piece		
	Grinding Disc Metal	3	piece		
	Oxygen Tank Refill	1	tank		
	Welding Rod	1	box		
				Materials Cost	₱
				Labor Cost	
				Subtotal	₱
	Re-installation of Existing Wire Mesh Fence and Gate	38	sq.m.		
				Subtotal	₱
				<b>Materials Cost III</b>	₱
				<b>Labor Cost III</b>	
				<b>Direct Cost III</b>	₱
<b>IV</b>	<b>ARCHITECTURAL WORKS</b>				
	Painting Works				
	Elastomeric Paint Finish (Exterior Walls)	356	sq.m.	₱	₱
	Epoxy Enamel Paint Finish (Steel Surfaces)	244	sq.m.		
				<b>Materials Cost IV</b>	₱
				<b>Labor Cost IV</b>	
				<b>Direct Cost IV</b>	₱
<b>V</b>	<b>ELECTRICAL WORKS</b>				
	Roughng-ins				
	20mmØ PVC Pipe	75	piece	₱	₱
	Fittings and Accessories				
	20mmØ PVC Adaptor	12	piece		

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	20mmØ PVC Locknut and Bushing	12	pair		
	100mm x 100mm PVC Junction Box with Cover	6	piece		
	Wires and Cables				
	3.5mm² THHN Wire	2	roll		
	Lighting Fixtures ( Energy Efficient )				
	Lamp with 10W LED Bulb	6	piece		
	Miscellaneous & Consumables				
	400cc Solvent Cement	1	can		
	All Around Sealant	1	can		
	Electrical Tape	5	roll		
	G.I Tie Wire (for cable pulling)	1	kg		
	Hacksaw Blade	2	piece		
	Masking Tape	1	roll		
	Pulling Lubricant	1	gal		
	Rubber Tape	3	roll		
				<b>Materials Cost V</b>	<b>₱</b>
				<b>Labor Cost V</b>	
				<b>Direct Cost V</b>	<b>₱</b>

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
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**SUMMARY**

ITEM NO	WORK DESCRIPTION & SCOPE OF WORKS	TOTAL COST
I	GENERAL REQUIREMENTS	₱
II	SITE WORKS	
III	CIVIL WORKS / STRUCTURAL WORKS	
IV	ARCHITECTURAL WORKS	
V	ELECTRICAL WORKS	
Strictly enforce health protocols relative to the latest applicable DPWH memorandum	<b>TOTAL DIRECT COST</b>	₱
	Overhead, Contingencies and Miscellaneous Expenses (OCM)	
	PROFIT VAT	
	<b>TOTAL ESTIMATED COST</b>	₱

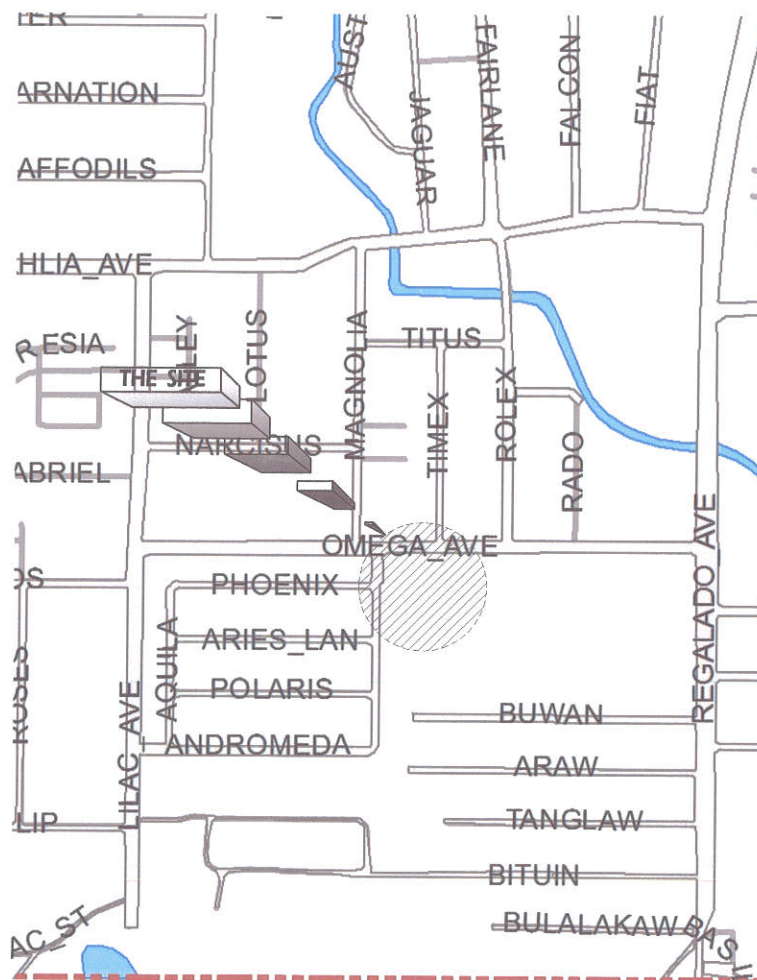
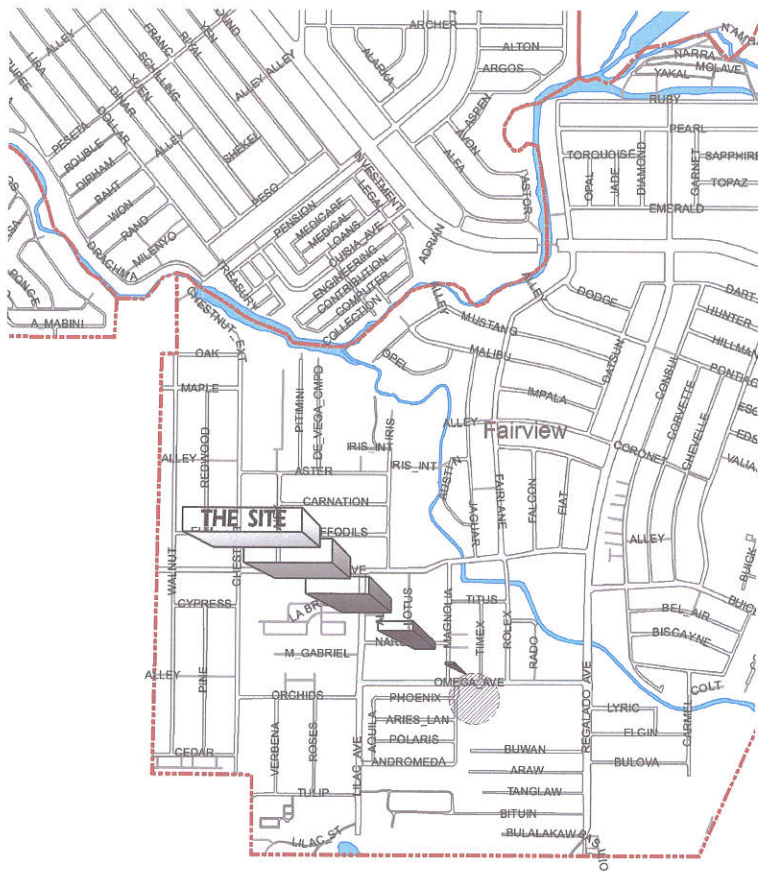


TABLE OF CONTENT

AR-01	VICINITY MAP LOCATION MAP
AR-02	TENNIS COURT FENCE EXISTING AND PROPOSED LAYOUT
AR-03	SECTION A EXISTING B AND PROPOSED B
ST-01	GENERAL NOTES COLUMN FOOTING DETAILS WALL FOOTING
EL-01	GENERAL NOTES LEGENDS AND SYMBOLS LIGHTING LAYOUT

1 VICINITY MAP

SCALE: NTS

2 LOCATION MAP

SCALE: NTS



Republika ng Pilipinas  
Lungsod ng Quezon  
**CITY ENGINEERING DEPARTMENT**

PROJECT TITLE :  
**PROPOSED REHABILITATION OF  
TENNIS COURT AT VILLA ORION UNION**  
LOCATION: BARANGAY WEST FAIRVIEW , DISTRICT 5, QUEZON CITY

DRAWN BY: RYN  
DATE:  
CHECKED BY: JAn  
REVISION NO.:

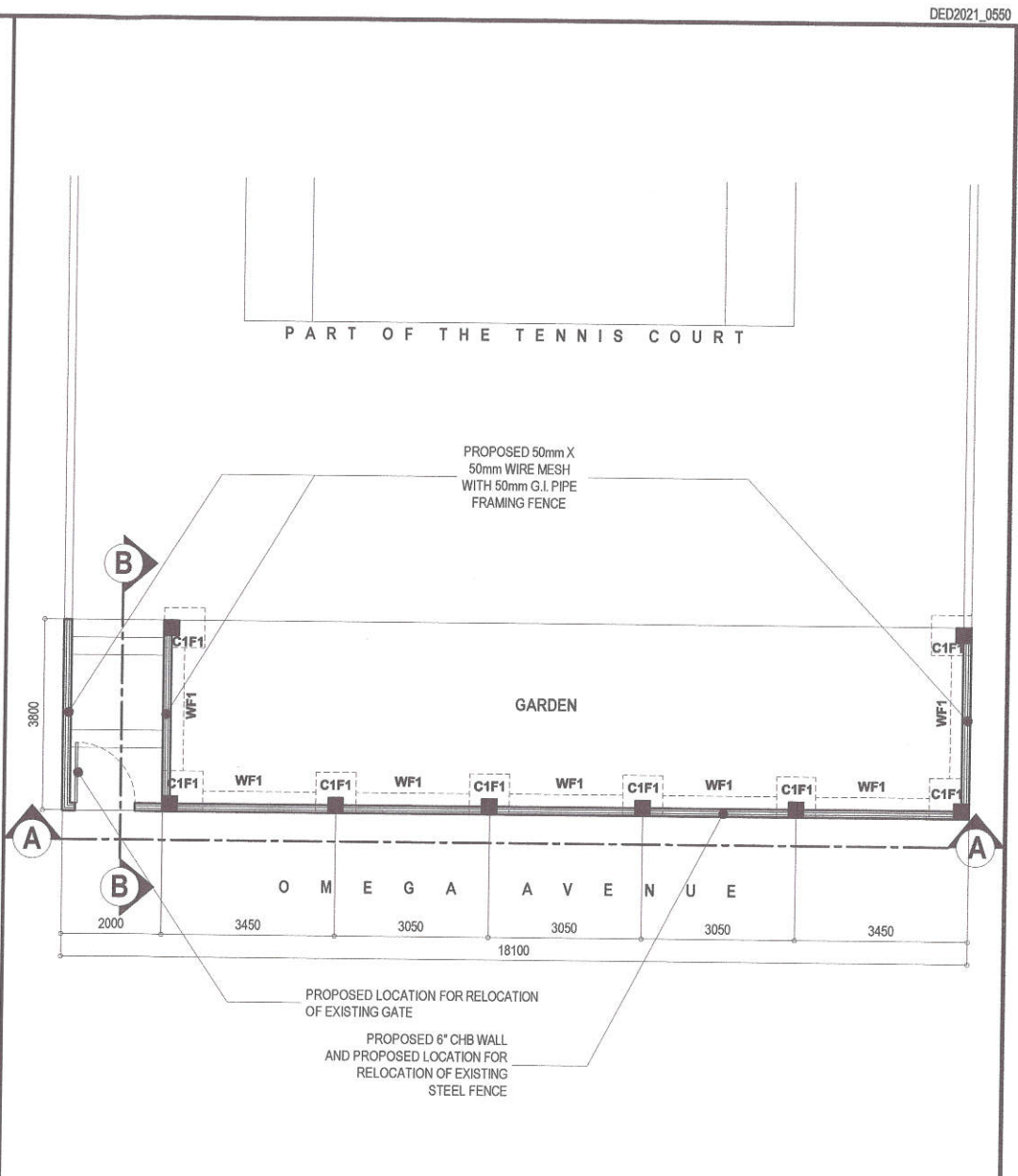
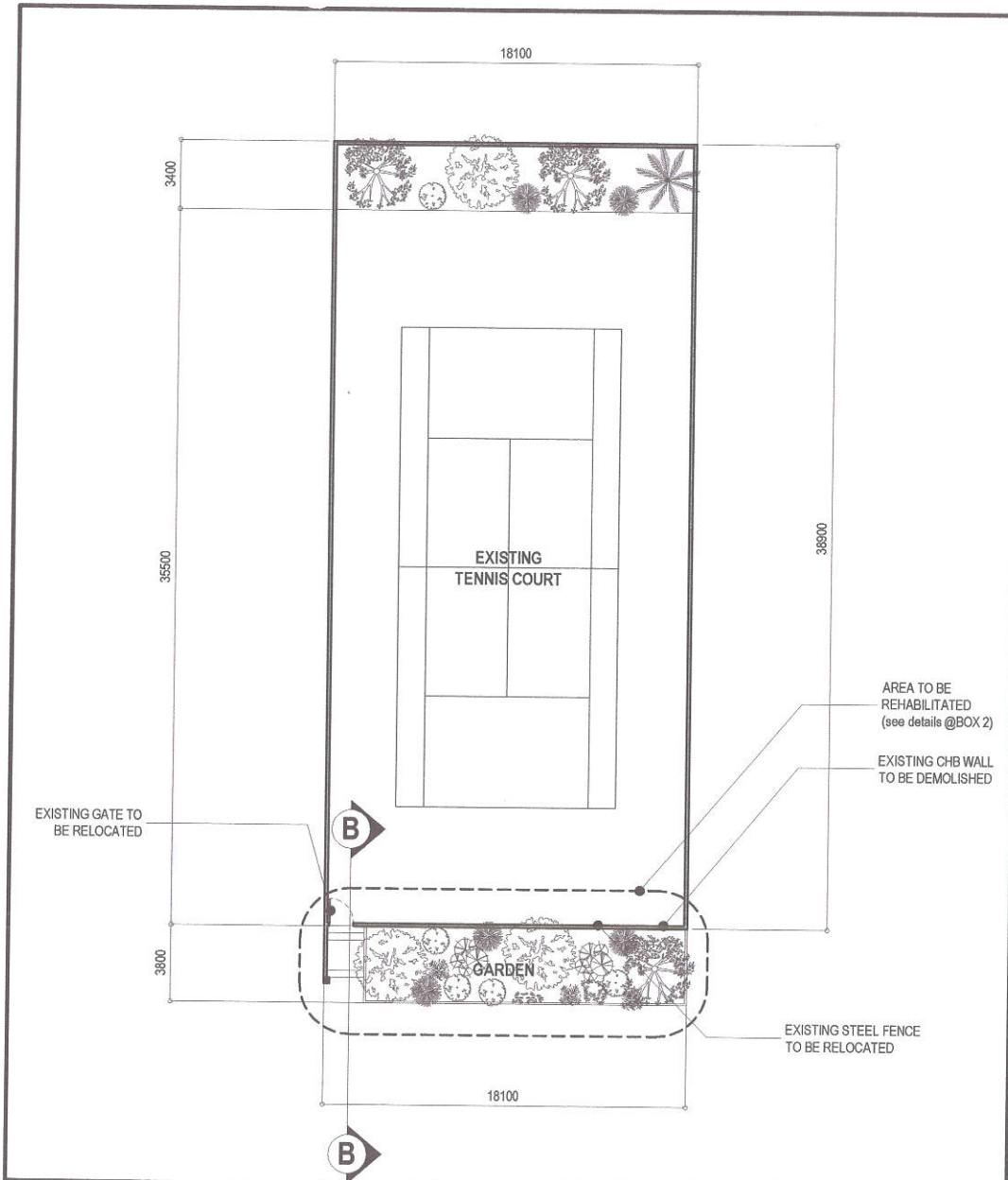
SUBMITTED BY:  
  
**ENGR. LEO S. DEL ROSARIO**  
HEAD , PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:  
  
**ENGR. ISAGANI R. VERZOSA , JR.**  
CITY ENGINEERING DEPARTMENT

APPROVED BY:  
  
**HON. MA. JOSEFINA G. BELMONTE**  
CITY MAYOR

SHEET CONTENT  
VICINITY MAP  
LOCATION MAP

SHEET NO.  
**AR-01**  
**1/5**

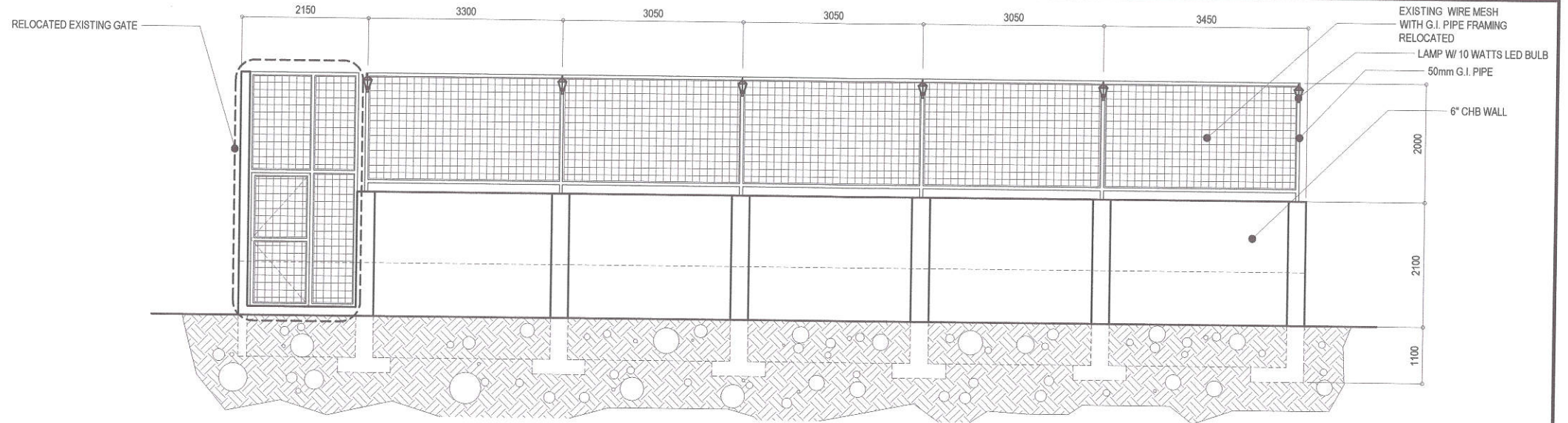


**1 EXISTING TENNIS COURT FENCE** SCALE : NTS

**2 PROPOSED TENNIS COURT FENCE** SCALE : 1:100 MTS.

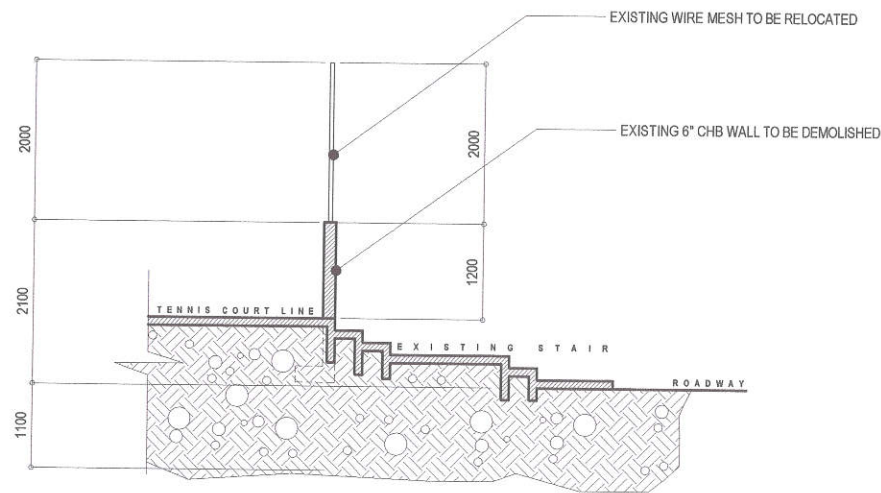
<p>Republika ng Pilipinas Lungsod ng Quezon <b>CITY ENGINEERING DEPARTMENT</b></p>	PROJECT TITLE :	DRAWN BY: RYB	SUBMITTED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	SHEET CONTENT	SHEET NO.
	PROPOSED REHABILITATION OF TENNIS COURT AT VILLA ORION UNION	DATE:				EXISTING AND PROPOSED FENCE	
	LOCATION: BARANGAY WEST FAIRVIEW , DISTRICT 5, QUEZON CITY	CHECKED BY: JAn	REVISION NO.:	ENGR. LEO S. DEL ROSARIO HEAD , PLANNING & PROGRAMMING DIVISION	ENGR. ISAGANI R. VERZOSA , JR. OIC, CITY ENGINEERING DEPARTMENT	HON. MA. JOSEFINA G. BELMONTE CITY MAYOR	





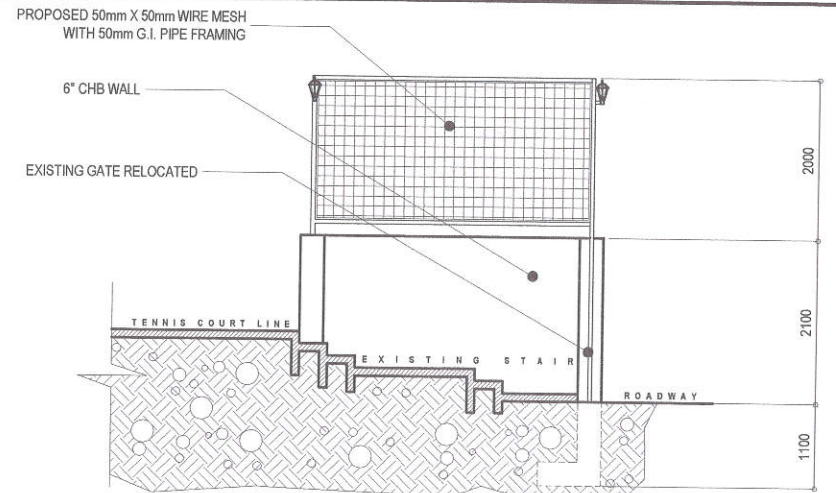
**1 SECTION A**

SCALE : 1:100 MTS.



**2 EXISTING SECTION B**

SCALE : 1:100 MTS.



**3 PROPOSED SECTION B**

SCALE : 1:100 MTS.



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DRAWN BY: RYB  
DATE:  
CHECKED BY: JLN  
REVISION NO.:

SUBMITTED BY:  
**ENGR. LEO S. DEL ROSARIO**  
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:  
**ENGR. ISAGAN R. VERZOSA, JR.**  
OIC, CITY ENGINEERING DEPARTMENT

APPROVED BY:  
**HON. MA. JOSEFINA G. BELMONTE**  
CITY MAYOR

SHEET CONTENT  
SECTIONS

SHEET NO.  
**AR-03**  
**3 5**

**GENERAL**

- CONSTRUCTION NOTES AND TYPICAL DETAILS APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED MODIFY TYPICAL DETAILS AS DIRECTED TO MEET SPECIAL CONDITIONS
- SHOP DRAWINGS WITH ERECTION AND PLACING DIAGRAMS OF ALL STRUCTURAL FOR ENGINEERS APPROVAL BEFORE FABRICATION
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS BEFORE ALL WORK IS TO BEGIN. CHECK WITH MECHANICAL AND ELECTRICAL CONTRACTORS FOR CONDUITS, PIPE SLEEVES, ETC TO BE EMBEDDED IN CONCRETE
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO PROVIDE ADEQUATE SHORINGS AND BRACINGS OF THE STRUCTURE FOR ALL LOADS THAT MAY BE IMPOSED DURING CONSTRUCTION
- IN CASE OF QUESTION ARISING FROM THE INTERPRETATION OF OR CONFLICT WITH OTHER DOCUMENTS THE ATTENTION OF THE OWNER ENGINEER SHALL BE CALLED IN WRITING

**CONCRETE & REINFORCEMENT**

- ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH THE LATEST BUILDING CODE OF AMERICAN CONCRETE INSTITUTE (ACI-318)
  - ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH AT THE END OF TWENTY EIGHT (28) DAYS WITH CORRESPONDING MAXIMUM SIZE AGGREGATE AND SLUMPS AS FOLLOWS
- | LOCATION   | STRENGTH | MAX SIZE OF AGGREGATES | MAX SLUMP |
|--|----------|------------------------|-----------|
| a. SLAB ON GRADE, CURBS, PAVEMENTS, WALL FOOTING |          |                        |           |
| b. BEAMS, COLUMNS, FOOTINGS SUSPENDED SLAB       |          |                        |           |

- ALL REINFORCING BARS SHALL CONFORM TO PHS49 GRADE 275 FOR 12MM AND SMALLER BARS AND GRADE 415 FOR 16mm AND LARGER BARS.
  - IN GENERAL THE LATEST EDITION OF ACI 318. MANUAL OF STANDARD PRACTICE DETAILING REINFORCED CONCRETE STRUCTURES SHALL BE ADHERED TO UNLESS OTHERWISE SHOWN OR NOTED
  - MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS
- | CONCRETE DEPOSITED DIRECTLY AGAINST GROUND | 75mm  |
|--|-------|
| SUSPENDED SLABS                            | 20mm  |
| SLAB ON GRADE                              | 40 mm |
| WALLS ABOVE GRADE                          | 25 mm |
| BEAMS & COLUMNS                            | 40mm  |
- SPLICES SHALL BE SECURELY WIRED TOGETHER AND SHALL LAP OR EXTEND IN ACCORDANCE WITH TABLE 1 (TABLE OF LAP SPLICE AND ANCHORAGE LENGTH UNLESS OTHERWISE SHOWN ON DRAWINGS SPLICES SHALL BE STAGGERED WHENEVER POSSIBLE)
  - ALL ANCHOR BOLTS, DOWELS AND OTHER INSERTS SHALL BE PROPERLY POSITIONED AND SECURED IN PLACE PRIOR TO PLACING OF CONCRETE
  - CONTRACTOR SHALL NOTE AND PROVIDE ALL MISCELLANEOUS CURBS, SILLS, STOOLS, EQUIPMENTS, AND MECHANICAL BASES THAT ARE REQUIRED BY THE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS
  - ALL CONCRETE SHALL BE KEPT MOIST FOR A MINIMUM OF SEVEN (7) CONSECUTIVE DAYS IMMEDIATELY AFTER POURING BY THE USE OF WET BURLAP FOG SPRAYING, CURING COMPOUNDS OR OTHER APPROVED METHODS
  - STRIPPING OF FORMS AND SHORES
- | CONCRETE FOUNDATION                                     | CURING  |
|---|---------|
| SUSPENDED SLAB EXCEPT WHEN ADDITIONAL LOADS ARE IMPOSED | 24HRS   |
| PEDESTAL, COLUMNS, WALLS                                | 14 DAYS |
| BEAMS   | 2 DAYS  |
|   | 21 DAYS |

- DEVELOPMENT LENGTH FOR ALL BARS SHALL BE A MINIMUM OF 50 BAR DIAMETER UNLESS OTHERWISE NOTED
- STRUCTURAL STEEL AND PLATES**
- ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM (A-36) SPECIFICATIONS WITH MINIMUM YIELD STRENGTH,  $f_y = 250 \text{ MPa}$
  - ANCHOR & FASTENER BOLTS, ALL BOLTS SHALL CONFORM TO ASTM (A-307) SPECIFICATIONS
  - WELDING RODS, ALL WELDING RODS SHALL BE MILD STEEL ELECTRODE, LOW HYDROGEN E7018 WITH MINIMUM YIELD STRENGTH = 420 MPa

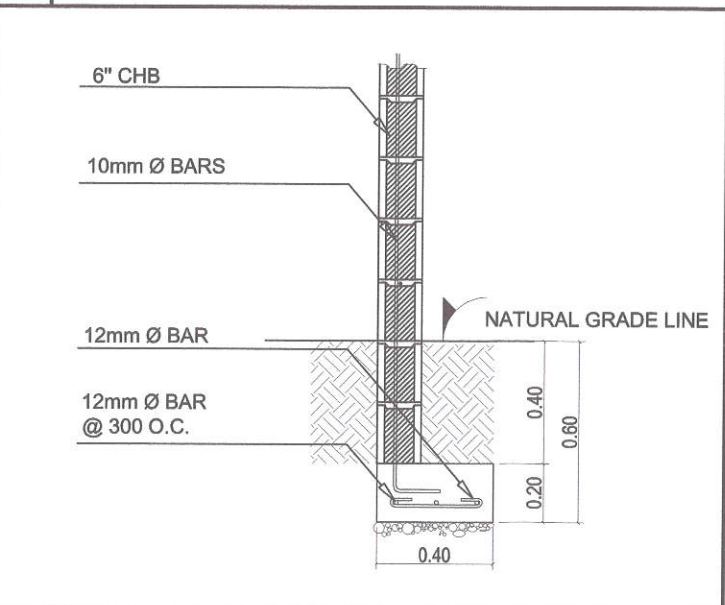
- FOUNDATION**
- FOUNDATION IS DESIGNED BASED ON NATIONAL BUILDING CODE OF THE PHILIPPINES FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 2400kPa
  - FOUNDATION SHALL REST ON NATURAL SOIL, UNLESS OTHERWISE NOTED BY THE ENGINEER, NO PART OF THE FOUNDATION SHALL REST ON FILL
  - THE CONTRACTOR SHALL NOTIFY THE ENGINEER UPON COMPLETION OF FOUNDATION EXCAVATION FOR ACTUAL SOIL CONDITIONS WHICH DO NOT CONFORM TO THE BOA BEARING CAPACITY FOR PROPER REVISION

- MASONRY WALLS**
- ALL MATERIALS WORKMANSHIP SHALL BE IN ACCORDANCE W/ THE APPLICABLE STANDARD & SPECIFICATIONS OF THE STRUCTURAL CODE OF THE PHILIPPINES & UNIFORM BUILDING CODE
  - MORTAR & GROUT FOR ALL CONCRETE MASONRY SHALL CONFORM TO ASTM Z70 - TYPE N & SHALL HAVE A MINIMUM OF 28 DAYS STANDARD CYLINDER COMPRESSIVE STRENGTH OF 17.5MPa (2500 PSI)
  - ALL CHB SHALL BE LAID OUT WITH CELLS IN UNOBSTRUCTED VERTICAL CONTINUITY
  - ALL CELLS ESPECIALLY THOSE WITH REINFORCEMENT SHALL BE FILLED WITH MORTAR REINFORCEMENT, AS TABULATED BELOW SHALL BE PROVIDED UNLESS OTHERWISE SPECIFIED IN THE PLAN
  - ALL MASONRY WALLS SHALL BE PROVIDED W/ STIFFENED BEAM BLOCK & STIFFENER AS REQUIRED
- 5a. FOR HIGH WALLS 1 EVERY 3000MM & COLUMN (BOLT) AT 3000 mm ON CENTER  
5b. FOR DOORS & WINDOWS OPENING PROVIDE LINTEL BEAM SAME AS STIFFENER BEAM BLOCK

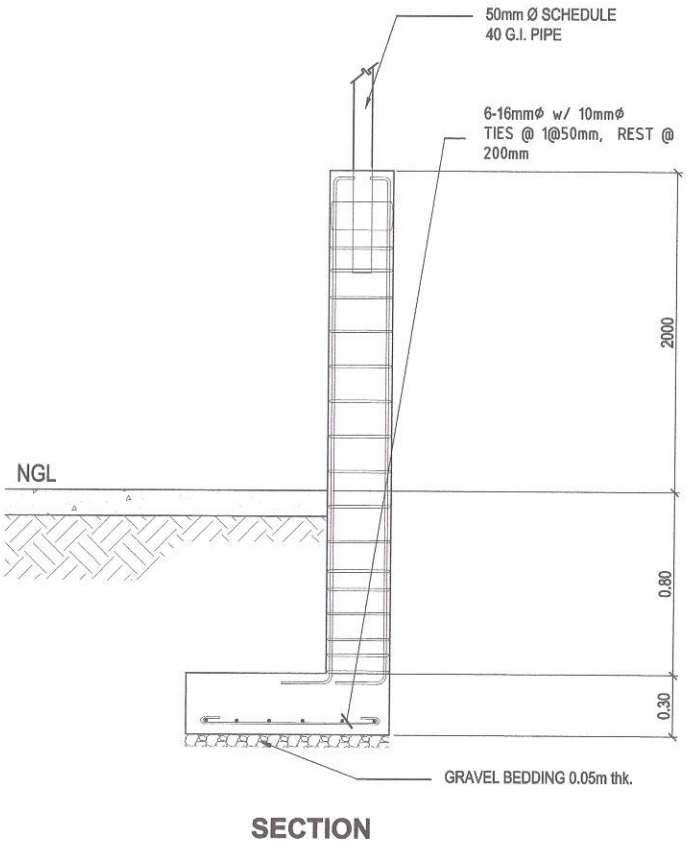
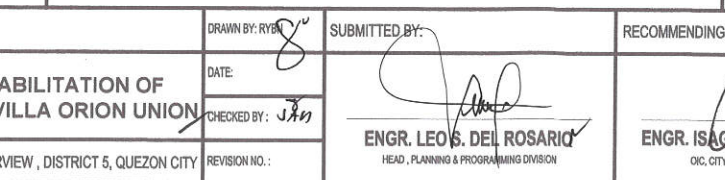
BLOCK THICKNESS (mm)	CHB REINFORCEMENTS		NOTES
	HORIZONTAL REINFORCEMENT	VERTICAL REINFORCEMENT	
100	10mm Ø BARS @ EVERY 3RD LAYER OF CHB	10mm Ø @ 600 mm O.C	A. MIN LAP SPLICE = 300mm LONG
150	10mm Ø BARS @ EVERY 3RD LAYER OF CHB	10mm Ø @ 600 mm O.C	B. PROVIDE RIGHT ANGLE REINFORCEMENT @ CORNERS

**1 GENERAL NOTES** SCALE: NTS

**2 COLUMN FOOTING DETAIL** SCALE: NTS



**3 WALL FOOTING DETAIL** SCALE: NTS



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PROJECT TITLE: **PROPOSED REHABILITATION OF TENNIS COURT AT VILLA ORION UNION**

LOCATION: BARANGAY WEST FAIRVIEW, DISTRICT 5, QUEZON CITY

DRAWN BY: RYB  
DATE:  
CHECKED BY: JFN  
REVISION NO.:

SUBMITTED BY:  
**ENGR. LEOS DEL ROSARIO**  
HEAD, PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:  
**ENGR. ISAGANI R. VERZOSA, JR.**  
OIC, CITY ENGINEERING DEPARTMENT

APPROVED BY:  
**HON. MA. JOSEFINA G. BELMONTE**  
CITY MAYOR

SHEET CONTENT: GENERAL NOTES COLUMN/FOOTING WALL FOOTING DETAILS

SHEET NO. **ST-01**  
**4 5**



**GENERAL NOTES:**

1. ALL WORKS SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATION
2. THE WORKS SHALL COMPLY WITH THE PROVISION OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, LAWS, ORDINANCES, RULES AND REGULATIONS OF THE LOCALITY HAVING JURISDICTION OVER THE PROJECT REQUIREMENTS OF LOCAL POWER COMPANY.
3. ALL THE JOB SHALL BE EXECUTED IN THE MOST THOROUGH PROMPT AND WORKMANLIKE MANNER EMPLOYING STANDARD TOOLS, EQUIPMENT, METHOD AND GOOD ENGINEERING PRACTICES. THE JOB SHALL BE DONE COMPLETE IN ALL ASPECTS AS REQUIRED PER PLANS AND SPECIFICATIONS AND READY FOR OPERATIONS.
4. ALL MATERIALS TO BE USED SHALL BE OF THE BEST QUALITY , BRAND NEW AS SPECIFIED.
5. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO PRESENT GENERAL LAYOUT AND BROAD OUTLINE/DESCRIPTION OF THE PROJECT BUT DO NOT NECESSARILY INDICATE/DESCRIBED ACTUAL LOCATIONS, LEVEL AND DISTANCES OF THE EQUIPMENT. THE CONTRACTOR IS HEREBY REQUIRED TO MAKE SUCH ADJUSTMENT AT THE JOBSITE AS LOCATION, DISTANCES AND LEVELS ARE GOVERNED BY ACTUAL FIELD CONDITIONS.
6. ANY DISCREPANCY BETWEEN THE PLANS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION /DECISION.
7. ALL LIGHTING AND CONVENIENCE OUTLET CIRCUITS SHALL BE 3.5 SQ. MM. THW COPPER WIRE UNLESS OTHERWISE NOTED. MINIMUM SIZE OF WIRE SHALL BE 3.5 SQ. MM. COPPER WIRE
8. ALL DUPLEX RECEPTACLE OUTLETS SHALL BE GROUNDING TYPE WITH PARALLEL SLOTS FOR 220V.
9. UNLESS NOTED OTHERWISE IN THE DRAWING, WIRING DEVICES SHALL BE INSTALLED AS FOLLOWS.  
 LIGHTING CONTROL - 1.40 M. ABOVE FLOOR FINISH  
 OUTLET  
 CONVENIENCE - 0.30 M. ABOVE FLOOR FINISH  
 OUTLET
10. BOXES, WIRE, GUTTERS, ENCLOSURE SHALL BE FABRICATED FROM STEEL WITH THICKNESS AS FOLLOWS:  
 MAXIMUM WIDTH OF THE WIDEST SURFACE STEEL  

UP TO INCLUDING 152.40mm	GA 16
OVER 152.40 mm BUT NOT OVER 457.30 mm	GA 14
OVER 457.30 mm BUT NOT OVER 762 mm	GA 12
OVER 762 mm	GA 10
11. REFER TO NOTES AND SPECIFICATION FOR MORE INFORMATION.

**SWITCH SYMBOLS**


S SINGLE POLE TOGGLE SWITCH, NOMENCLATURE DENOTES THE CIRCUIT OR PORTION OF CIRCUIT CONTROLLED BY SWITCH

NOMENCLATURE:  
 3W - THREE WAY SWITCH  
 2Sb - TWO GANG SWITCH  
 3Sbc - THREE GANG SWITCH

**1 GENERAL NOTES**

SCALE : NTS

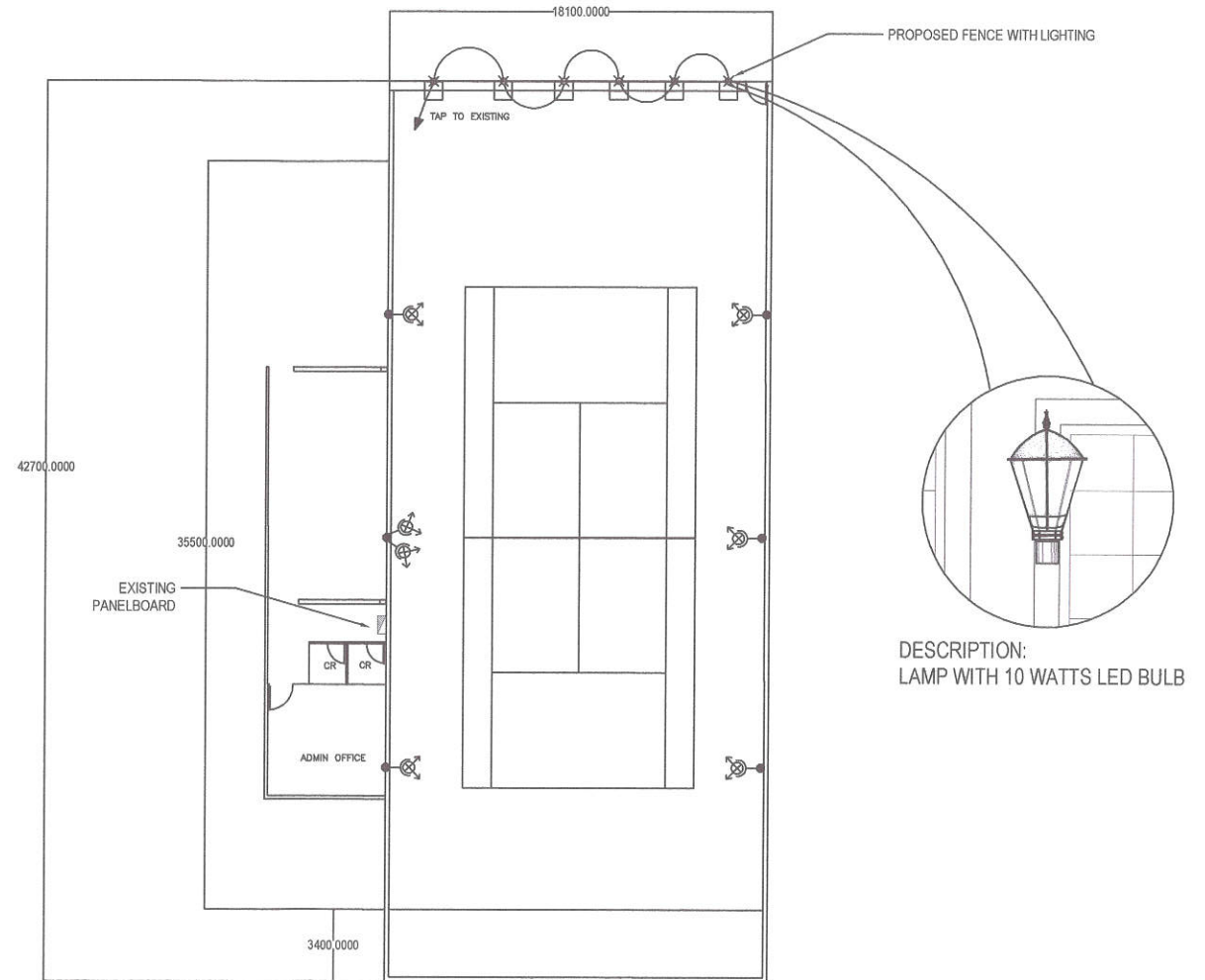
**LEGENDS :**

-  PROPOSED LAMP WITH 10W LED BULB
-  EXISTING EXTERIOR FLOODLIGHT
-  PANEL BOARD

**2 LEGEND AND SYMBOLS**

SCALE : NTS

**3 LIGHTING LAYOUT**

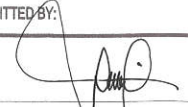




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LOCATION: BARANGAY WEST FAIRVIEW , DISTRICT 5, QUEZON CITY

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**ENGR. LEO S. DEL ROSARIO**  
 HEAD , PLANNING & PROGRAMMING DIVISION

RECOMMENDING APPROVAL:  
  
**ENGR. ISAGANI R. VERZOSA , JR.**  
 C.E. CITY ENGINEERING DEPARTMENT

APPROVED BY:  
  
**HON. MA. JOSEFINA G. BELMONTE**  
 CITY MAYOR

SHEET CONTENT  
 GENERAL NOTES  
 LEGEND AND SYMBOLS  
 LIGHTING LAYOUT

SHEET NO.  
