March 9, 2022

Request for Quotation/ Proposal

No.	Project No.	Project Name	Location	Amount	Duration Cal. Days	Office	Source Fund
Buildings – Small B							
1	22-001SV	Proposed Rehabilitation of Fire Exit at Social Development Center at Barangay Payatas	Payatas	165,523.84	30	Engineering Department	Engineering Department
2	22-002SV	Proposed Rehabilitation of Reception Area at Betty Go Belmonte Super Health Center in Barangay Holy Spirit	Holy Spirit	341,124.74	30	Engineering Department	20% Community Development Fund
3	22-003SV	Proposed Rehabilitation of Novaliches District Hospital Covid Ward	San Bartolome	354,897.38	30	Engineering Department	Engineering Department - SB No. 1
4	22-004SV	Proposed Rehabilitation of Waterline System at Culiat High School	Culiat	586,890.41	60	Engineering Department	Special Education Fund
5	22-005SV	Proposed Temporary Enclosure for Crematory Machine at Baesa Crematorium	Baesa	594,910.45	30	Engineering Department	Engineering Department - SB No. 1
6	22-006SV	Proposed Rehabilitation of Reception Area at Health Centers in Barangay Libis and Barangay Bagumbuhay (District 3)	Libis and Bagumbuhay	632,587.24	30	Engineering Department	20% Community Development Fund
7	22-007SV	Proposed Rehabilitation of Reception Area at Health Centers in Barangay Alicia and Barangay Paltok (District 1)	Alicia and Paltok	809,220.13	30	Engineering Department	20% Community Development Fund
8	22-008SV	Proposed Rehabilitation of of Day Care Center at Idang Street, Sitio Aguardiente	Sta. Monica	828,057.99	30	Engineering Department	Engineering Department - SB No. 1
9	22-009SV	Proposed Upgrading of Electrical System at Sauyo High School	Tandang Sora	846,268.11	90	Engineering Department	Special Education Fund
10	22-010SV	Proposed Rehabilitation of Reception Area at Health Centers in Barangay Apolonio Samson, Barangay Tandang Sora and Barangay Pasong Tamo (District 6)	Apolonio Samson, Tandang Sora and Pasong Tamo	851,009.93	30	Engineering Department	20% Community Development Fund

11	22-011SV	Proposed Rehabilitation of Electrical System at North Fairview Elementary School	North Fairview	856,353.23	60	Engineering Department	Special Education Fund
12	22-012SV	Proposed Upgrading of Service Entrance at NOH Sta. Lucia Senior High School	Sta. Lucia	908,850.15	60	Engineering Department	Special Education Fund
13	22-013SV	Proposed Construction of Terrace at Barangay Hall In Barangay Kalusugan	Kalusugan	914,528.02	60	Engineering Department	Engineering Department
14	22-014SV	Proposed Rehabilitation of Distribution Feeder at Lagro Elementary School	Greater Lagro	933,602.51	60	Engineering Department	Special Education Fund
15	22-015SV	Proposed Rehabilitation of Reception Area at Health Centers in Barangay Kamuning, Barangay Kaunlaran and Barangay San Vicente (District 4)	Kamuning, Kaunlaran and San Vicente	953,997.37	30	Engineering Department	20% Community Development Fund
Roads – Small B							
16	22-016SV	Proposed Rehabilitation (Surface Improvement) at Lourdes Street	Novaliches Proper	933,825.43	30	Engineering Department	20% Community Development Fund

The Quezon City Government through its Bids and Awards Committee – Infra and Consultancy undertake a 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 **15 March 2022** on or before **10:00 A.M.,** Philippine Standard Time, together with the following documents:

1. PhilGEPS Platinum Certificate (3 pages)
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.

Republika ng Pilipinas
Lungsod Quezon

BIDS AND AWARDS COMMITTEE FOR INFRASTRUCTURE & CONSULTANCY

2nd Floor, Finance Building, Procurement Department, Quezon City Hall Complex, Elliptical Road, Quezon City

QUEZON CITY
Great.Green.Growing.

Opening of Quotations/Proposals will be on **15 March 2022** at exactly **1:00 P.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

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.

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 ng Quezon
CITY ENGINEERING DEPARTMENT
5th, 6th, 7th Floors, QC Civic Center Building "B"
Telephone Nos. 8988-4242 Local 8538

PROJECT TITLE: **PROPOSED UPGRADING OF SERVICE ENTRANCE AT NOH STA.LUCIA SENIOR HIGH SCHOOL**

LOCATION: **BARANGAY STA.LUCIA, DISTRICT 5, QUEZON CITY**

LIST OF EQUIPMENT

NO	EQUIPMENT	QTY
1	Scaffolding	As needed
2	Power Tools	As needed
3	Minor Tools	As needed
4	Welding Machine	1
5	Insulation Resistance Tester	1
6	Cut Off Machine	1
7	Elf Truck	1

Prepared by:

KEVIN MICOLE R. DELFINO
Planning & Programming Division

Checked by:

STEPHANIE D. OVIEDO
Planning & Programming Division

Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT
5th, 6th, 7th Floors, QC Civic Center Building "B"
Telephone Nos. 8988-4242 Local 8538

PROJECT TITLE: **PROPOSED UPGRADING OF SERVICE ENTRANCE AT NOH STA.LUCIA SENIOR HIGH SCHOOL**

LOCATION: **BARANGAY STA.LUCIA, DISTRICT 5, QUEZON CITY**

LIST OF PERSONNEL

NO	PERSONNEL	QTY
1	Project Engineer	1
2	Materials Engineer	1
3	Safety Officer/Safety Practitioner	As per DOLE Requirement
4	Foreman	1
5	Skilled Worker	4
6	Driver	1
7	Laborer/Helper	8

Prepared by:

KEVIN MICOLE R. DELFINO
Planning & Programming Division

Checked by:

STEPHANIE D. OVIEDO
Planning & Programming Division

PROJECT TITLE : PROPOSED UPGRADING OF SERVICE ENTRANCE AT NOH STA. LUCIA SENIOR HIGH SCHOOL

LOCATION : BARANGAY STA. LUCIA, DISTRICT 5, QUEZON CITY

PROJECT NO. : 22 - 012SV

DURATION : Sixty (60) Calendar Days

BREAKDOWN OF COST

ITEM NO	WORK DESCRIPTION	MATERIALS COST	LABOR COST	INDIRECT COST	AGGREGATE COST
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 UPGRADING OF SERVICE ENTRANCE AT NOH STA. LUCIA SENIOR HIGH SCHOOL

LOCATION : BARANGAY STA. LUCIA, DISTRICT 5, QUEZON CITY

PROJECT NO. : 22 - 012SV

DURATION : Sixrty (60) Calendar Days

SCOPE OF WORKS:

1. General requirements include temporary facilities and utilities, billboard, scaffolding and construction safety and health and hauling and disposal of demolished materials and debris.
2. Installation of electrical roughing-ins and wirings.
3. Installation of panel board and its accessories.
4. Construction of concrete service entrance post.
5. All necessary testing of materials and commissioning works must be performed as per standard procedure.

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
I	**GENERAL REQUIREMENTS**				
	Billboard	1	pc	₱	₱
	Clearing, Hauling and Disposal of Construction Materials and Debris	1	t.l		
	Construction Health and Safety	1	unit		
	Scaffolding (Rental)	20	sq.m		
	Temporary Enclosure Around the Construction Area (H=2.4m)	40	l.m.		
	Temporary Lighting and Water Facilities	60	days		
				Direct Cost I	₱
II	**SITE WORKS**				
	Dismantling of existing 50mm² THHN Wire	120	lm	₱	₱
	Layout and Staking	21	sq.m		
	Site Clearing and Preparation	21	sq.m		
	Excavation Works	4	cu.m		
	Backfill	3	cu.m		
				Subtotal	₱
	Gravel Bedding	1	cu.m		
				Materials Cost	
				Labor Cost	
				Subtotal	
				Materials Cost II	₱
				Labor Cost II	
				Direct Cost II	₱
III	**CIVIL WORKS / STRUCTURAL WORKS**				

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
A	Concrete Works				
	On Site Mix Concrete				
	Earth Pit for Electrical Grounding system	1	cu.m	₱	₱
	Footing	1	cu.m		
	Column	4	cu.m		
B	Reinforcing Steel Bars				
	Grade 40 Reinforcing Steel Bar with G.I. Tie Wire #16				
	10mmØ Column	71	kg		
	Grade 60 Reinforcing Steel Bar with G.I. Tie Wire #16				
	16mmØ Footing	57	kg		
	16mmØ Column	133	kg		
C	Formworks & Scaffoldings				
	Earth Pit for Electrical Grounding system	2	sq.m		
	Column	22	sq.m		
	Column	7	l.m.		
D	Metal works				
	50mm x 50mm x 4mm thick Angle Bar	121	kg		
				Materials Cost III	**₱**
				Labor Cost III	
				Direct Cost III	**₱**

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
IV	**ARCHITECTURAL WORKS**				
A	Painting Works				
	Epoxy Enamel Paint Finish (Electrical Works)	3	sq.m	₱	₱
	Red Oxide Primer (Electrical Works)	3	sq.m		
				Materials Cost IV	**₱**
				Labor Cost IV	
				Direct Cost IV	**₱**
V	**ELECTRICAL WORKS**				
	Roughing-ins, Pipes and Fittings				
	25mmØ IMC Pipe	1	pc	₱	₱
	50mmØ IMC Pipe	4	pcs		
	90mmØ IMC Pipe	4	pcs		
	25mmØ IMC Locknut & Bushing	4	pcs		
	32mmØ IMC Locknut & Bushing	4	pcs		
	50mmØ IMC Locknut & Bushing	4	pcs		
	90mmØ IMC Locknut & Bushing	4	pcs		
	25mmØ IMC Coupling	2	pcs		
	32mmØ IMC Coupling	4	pcs		
	50mmØ IMC Coupling	8	pcs		
	90mmØ IMC Coupling	4	pcs		
	32mmØ Weatherproof Entrance Cap, Diecast type	1	pc		
	50mmØ Weatherproof Entrance Cap, Diecast type	2	pcs		
	90mmØ Weatherproof Entrance Cap, Diecast type	1	pc		
	14mm² Ø Solderless Connector w/ Two-bolt	4	pcs		
	50mm² Ø Solderless Connector w/ Two-bolt	8	pcs		
	250mm² Ø Solderless Connector w/ Two-bolt	2	pcs		
	10mmØ x 250mm Oval eye bolt w/ locknut	1	pair		
	20mmØ x 3000mm Grounding Rod with Ground Clamp	1	set		
	Wires and Cables				
	3.5mm² THHN Wire	1	roll		
	8.0mm² THHN Wire	10	lm		
	14mm² THHN Wire	40	lm		
	50mm² THHN Wire	150	lm		
	50mm² TW Wire	6	lm		
	50mm² BCW Wire	1	lm		
	250mm² THW Wire	12	lm		
	Pipe Hangers & Supports				
	Vertical Layout for 1m interval	27	lm		
	Panelboard and Circuit Breaker				
	MDP-Main Distribution Panel Main:1-400AT, 450AF,2P,230V ,65KAIC, 60Hz, MCCB Branches:2-150AT, 200AF,2P,230V ,65KAIC, 60Hz, MCCB 1-125AT, 200AF,2P,230V ,65KAIC, 60Hz, MCCB 1-60AT, 100AF,2P,230V ,65KAIC, 60Hz, MCCB Enclosure: Weatherproof Type, NEMA 3R, with Ground Terminals	1	assy		

ITEM NO	WORK DESCRIPTION AND SCOPE OF WORKS	QTY	UNIT	UNIT COST	TOTAL COST
	DP-DPWH (For Replacement) Main:1-150AT, 200AF,2P,230V ,65KAIC, 60Hz, MCCB Branches:4-60AT, 100AF,2P,230V ,65KAIC, 60Hz, MCCB Enclosure: Weatherproof Type, NEMA 1, with Ground Terminals	1	assy		
	Miscellaneous & Consumables				
	10mmØ Nylon Gray	30	lm		
	All around Sealant	4	cans		
	Electrical Tape	20	rolls		
	Masking Tape	1	roll		
	No.90 Cadweld powder	1	pack		
	Rubber Tape	30	rolls		
	Secondary Rack w/ 2 spool, Heavy Duty	8	pc		
	Welding rod	1	kg		
				Materials Cost V	**₱**
				Labor Cost V	
				Direct Cost V	**₱**

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

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	
	TOTAL DIRECT COST	**₱**
	Overhead, Contingencies and Miscellaneous Expenses (OCM)	
	Profit	
	VAT	
	TOTAL ESTIMATED COST	**₱**

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 NAME: **PROPOSED UPGRADING OF SERVICE ENTRANCE OF NOH STA. LUCIA HIGH SCHOOL**

LOCATION: **BARANGAY STA.LUCIA, 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 struct 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 course, 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 hall 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 tires, 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 cursed that have commenced initial set; and reinforcement embedded in concepts 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 grounded 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.

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 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.

f. 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 panelboards 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.

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.

Prepared By:

KEVIN MICOLE R. DELFINO
Planning and Programming Division

Checked By:

STEPHANIE D. OVIEDO
Planning and Programming Division

1. ALL ELECTRICAL WORKS SHALL BE DONE IN ACCORDANCE WITH THE PROVISIONS OF THE LATEST EDITION OF THE PHILIPPINE ELECTRICAL CODE, THE LAWS AND ORDINANCES OF THE LOCAL CODE ENFORCING AUTHORITIES AND THE REQUIREMENTS OF THE LOCAL POWER AND TELEPHONE UTILITY COMPANY.
2. LOCATION OF CONDUITS SHOWN ON THE DRAWING/PLAN ARE DIAGRAMMATIC, ALL CONDUITS SHALL BE INSTALLED IN A MANNER HEREINAFTER SPECIFIED AND SHALL WHEN NECESSARY BE BUILT-IN DURING CONSTRUCTION.
3. ALL MATERIALS TO BE USED SHALL BE NEW AND INSTALLED IN APPLICATION FOR WHICH THEY ARE INTENDED.
4. ALL ITEMS NOT SPECIFICALLY SHOWN ON THE PLAN BUT OBVIOUSLY REQUIRED IN CONSTRUCTION TO OBTAIN A WORKABLE INSTALLATION SHALL BE INCLUDED.
5. ALL CONDUIT PIPES SHALL BE POLYVINYL CHLORIDE CONDUIT (PVC) EXCEPT AS NOTED ON THE PLANS AND SPECIFICATIONS. REFER TO SPECIFICATION FOR INSTALLATION REQUIREMENT.
6. MINIMUM SIZE OF CONDUIT SHALL BE 20 MM DIAMETER.
7. ALL CONDUIT SHALL BE CONCEALED UNLESS SPECIFICALLY SHOWN OR NOTED OTHERWISE. EXPOSED CONDUIT RUNS SHALL BE INSTALLED PARALLEL TO OR PERPENDICULAR WITH THE BUILDING LINE AND SUPPORTED BY CONDUIT CLAMPS EVERY 1.50 METERS.
8. PROVIDE GALVANIZED PULLING WIRE G.A. 18 OR ALL EMPTY CONDUITS.
9. PULL BOXES SHALL BE PROVIDED BY THE CONTRACTOR WHENEVER NECESSARY TO FACILITATE WIRE PULLING EVEN IF THESE ARE NOT INDICATED ON THE PLANS.
10. FOR BOXES WITH MORE THAN FOUR WIRES ENTERING, USE 0.10 M X 0.10 M SQUARE BOX WITH ONE ADAPTER RING. (TYPICAL FOR RECEPTACLE BOXES)
11. ALL LIGHTING AND CONVENIENCE OUTLET CIRCUITS SHALL BE 3 WIRE 3.5 SQ. MM THHN UNLESS OTHERWISE NOTED. MINIMUM SIZE OF WIRE SHALL BE 3.5 SQ. MM THW.
12. ALL DUPLEX RECETACLE OUTLETS SHALL BE GROUNDING TYPE WITH PARALLEL SLOTS FOR 220 V.
13. PROVIDE GROUND FAULT CURRENT INTERRUPTER CIRCUIT BREAKER FOR LOADS MARKED "GFCI" ON THE PLAN.
14. ALL METALLIC CONDUITS, CABINETS AND EQUIPMENT SHALL BE PROPERLY GROUNDED AND BONDED.
15. UNLESS OTHERWISE NOTED, MOUNTING HEIGHT FOR WALL MOUNTED DEVICES SHALL BE AS FOLLOWS:
    - RECEPTACLE OUTLET - 300 MM AFF
    - TELEPHONE OUTLET - 300 MM AFF
    - CATV OUTLET - 300 MM AFF
    - LIGHTING SWITCH - 1370 MM AFF
16. LOCATION OF ELECTRICAL FIXTURES ARE APPROXIMATE ONLY FINAL LOCATIONS OF FIXTURES SHALL BE DETERMINED ON SITE TO AVOID INTERFERENCE WITH OTHER SYSTEMS AND/OR EQUIPMENT.
17. REFER TO MECHANICAL, PLUMBING ANF FIRE PROTECTION DRAWINGS FOR RATINGS AND LOCATIONS OF EQUIPMENT AS WELL AS THEIR CONTROL SEQUENCES AS SPECIFIED AND OR SHOWN UNDER THEIR RESPECTIVE SECTIONS.
18. ALL CIRCUIT BREAKERS UNAVAILABLE TO MARKET SHALL REFER TO NEXT HIGHER RATING, PROVIDED THAT THE AMAPCITY OF ITS FEEDER IS ALLOWABLE. THIS SHALL BE IN ACCORDANCE TO THE LATEST VERSION OF PHILIPPINE ELECTRICAL CODE.

1 GENERAL NOTES AND SEPCIFICATIONS

SCALE: NTS

- TWO WIRE FEEDER LINE
- BRANCH LINE FROM BUILDING–MDP
- PANEL POARD
- TAPPING POINT
- GW/GR — GROUND WELL/GROUND ROD PIT
- GR — GROUND ROD
- PROPOSED DISTRIBUTION POST
- EXISTING DISTRIBUTION POST
- 2–SPOOL SECONDARY RACK (HEAVY DUTY)
- PROPOSED SERVICE ENTRANCE POST
- (M) KILOWATT–HOUR METER
- SERVICE ENTRANCE

2 LEGENDS AND SYMBOLS

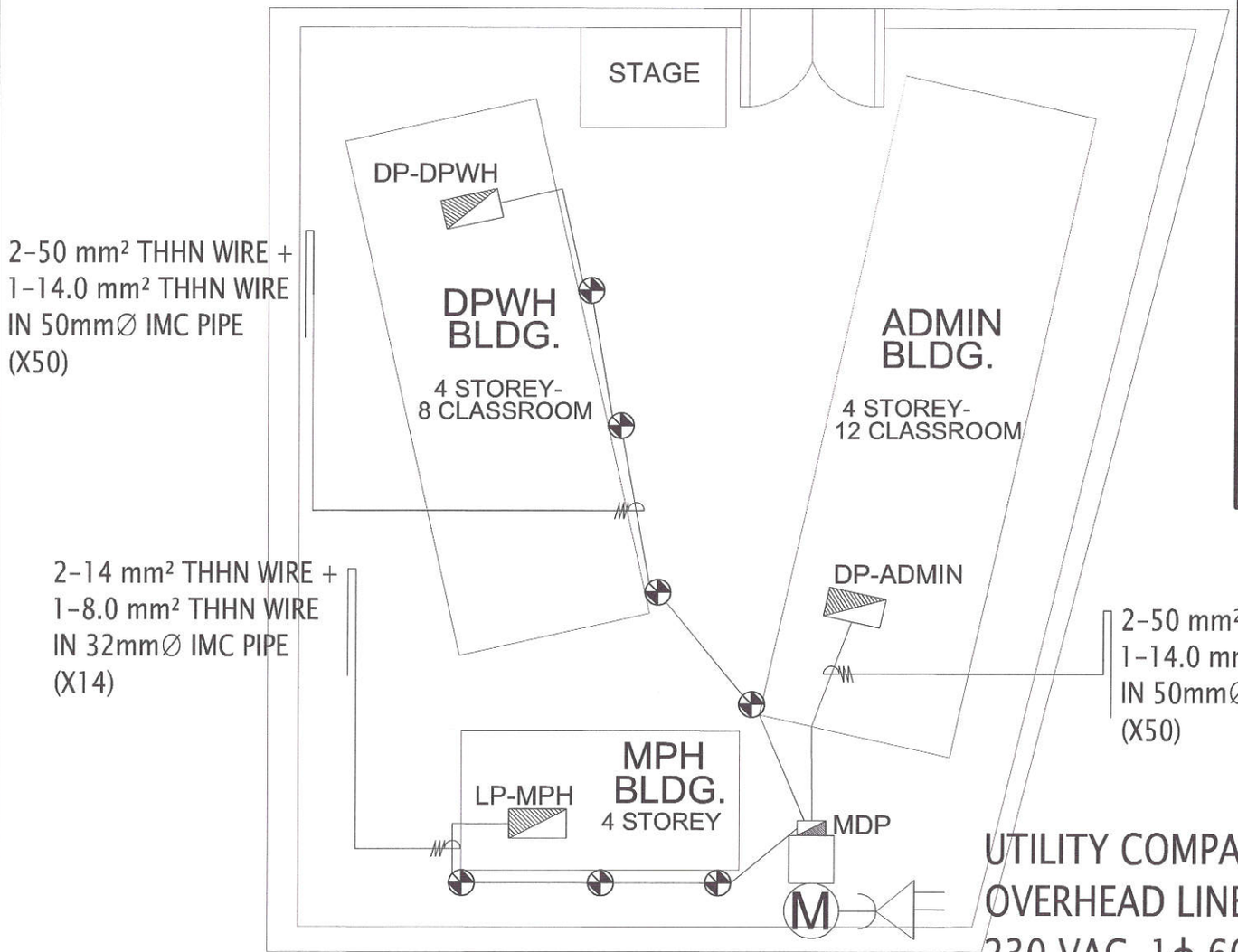
SCALE: NTS

3 VICINITY MAP

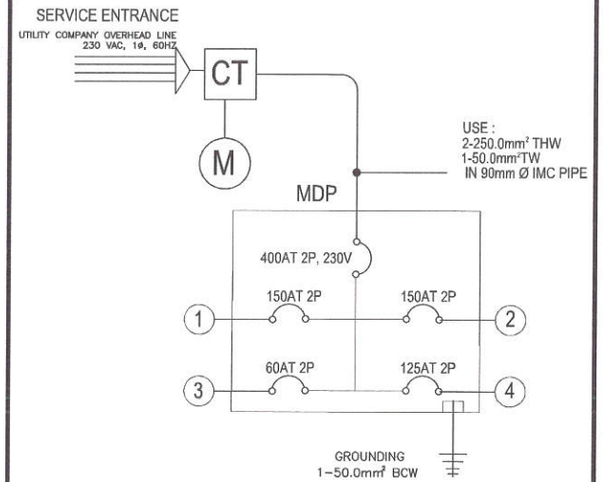
SCALE: NTS

Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE: PROPOSED UPGRADING OF SERVICE ENTRANCE OF NOH STA.LUCIA HIGH SCHOOL LOCATION: BARANGAY STA.LUCIA, DISTRICT 5, QUEZON CITY	DRAWN BY: KMD DATE: DECEMBER 09, 2020 CHECKED BY: 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, QUEZON CITY	SHEET CONTENTS: GENERAL NOTES AND SPECIFICATIONS, LEGENDS AND SYMBOLS, VICINITY MAP SHEET NO.: EL-01



1 **ELECTRICAL DISTRIBUTION FEEDER LAYOUT**



2 **PANELBOARD DETAILS**

SCALE: NTS

Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE: PROPOSED UPGRADING OF SERVICE ENTRANCE OF NOH STA.LUCIA HIGH SCHOOL LOCATION: BARANGAY STA.LUCIA, DISTRICT 5, QUEZON CITY	DRAWN BY: DATE: DECEMBER 09, 2019 CHECKED BY: SDG REVISION NO.:	SUBMITTED BY: ENGR. LEO S. 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 , QUEZON CITY	SHEET CONTENTS: ELECTRICAL DISTRIBUTION FEEDER LAYOUT PANELBOARD DETAILS SHEET NO. EL-02

WIRE CODE	SIZE OF	
	WIRES	CONDUITS
X14	2–14mm² THHN COPPER WIRE 1–8.0mm² THHN GROUND WIRE	IN 32mmø IMC PIPE
X50	2–50mm²THHN COPPER WIRE 1–14mm² THHN GROUND WIRE	IN 50mmø IMC PIPE
X250	2–250mm² THW COPPER WIRE 1–50mm² TW GROUND WIRE	IN 90mmø IMC PIPE

SERVICE ENTRANCE

UTILITY COMPANY OVERHEAD LINE
2–WIRE+ G, 230 VAC, 1ø, 60HZ

M

Z250

PROPOSED
MAIN DISTRIBUTION PANEL
400AT,450AF, 2P,230v
IN NEMA 3R
BRANCHES:
2-150AT,200AF, 2P,230v
1-60AT,100AF, 2P,230v
1-125AT,200AF, 2P,230v

X50 — DP-DPWH
150AT/200AF
2 POLE
(FOR REPLACEMENT)

X50 — DP-ADMIN
150AT/200AF
2 POLE
(EXISTING)

X14 — LP-MPH
60AT/100AF
2 POLE
(EXISTING)

1 - 50. 0mm² BCW GROUND WIRE IN 25mmØ IMC PIPE
CADWELDED TO DELTA CONNECTED GROUND ROD
(SEE EL-04 FOR DETAILS)

1 **SINGLE LINE DIAGRAM**

SCALE: NTS

Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
PROPOSED UPGRADING OF SERVICE ENTRANCE OF NOH STA.LUCIA HIGH SCHOOL
LOCATION: BARANGAY STA.LUCIA, DISTRICT 5, QUEZON CITY

DRAWN BY: KMD
DATE: DECEMBER 09, 2019
CHECKED BY: SDD
REVISION NO.:

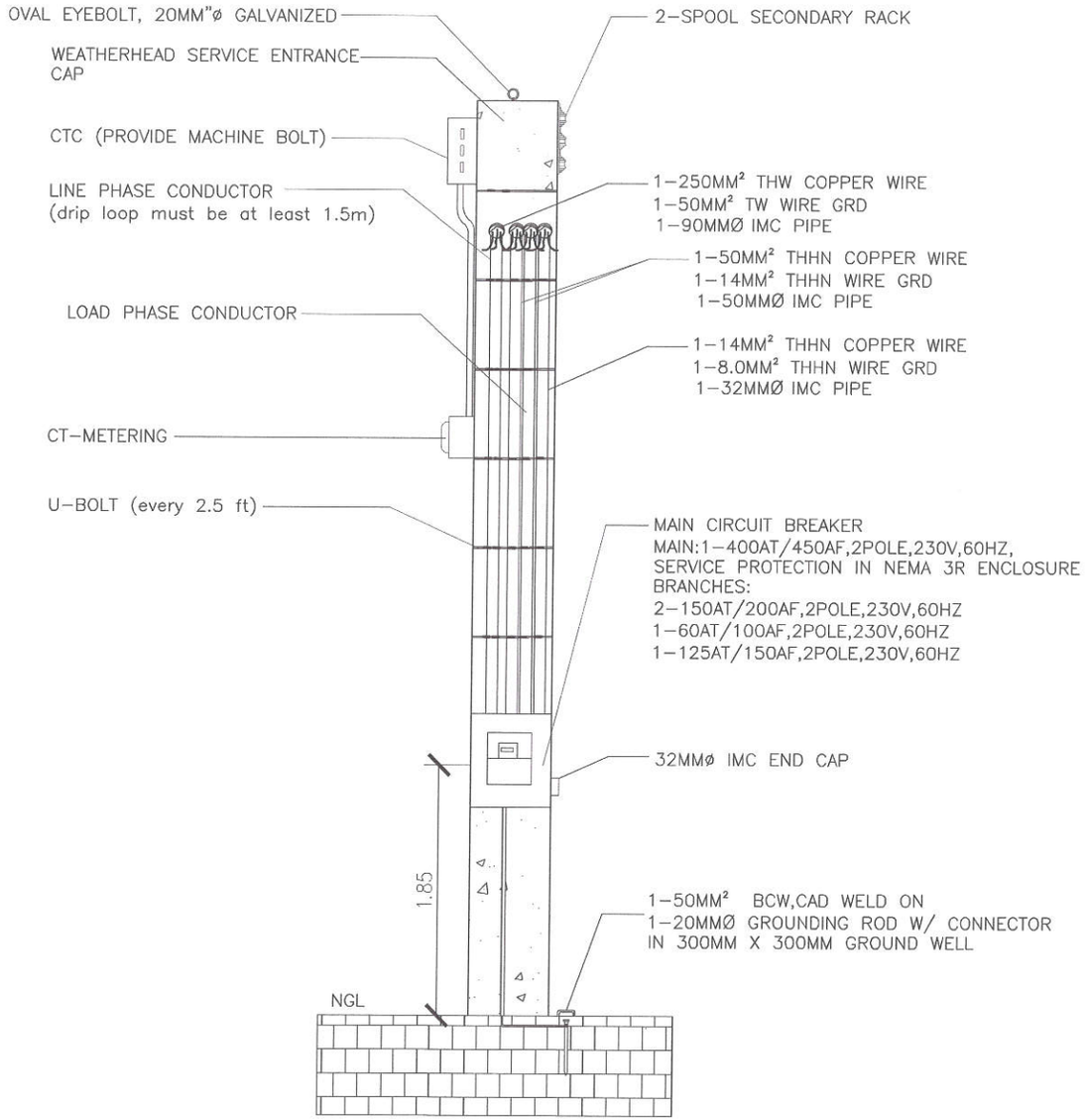
SUBMITTED BY:
ENGR. LEO S. DEL ROSARIO
HEAD , PLANNING & PROGRAMMING DIVISION

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

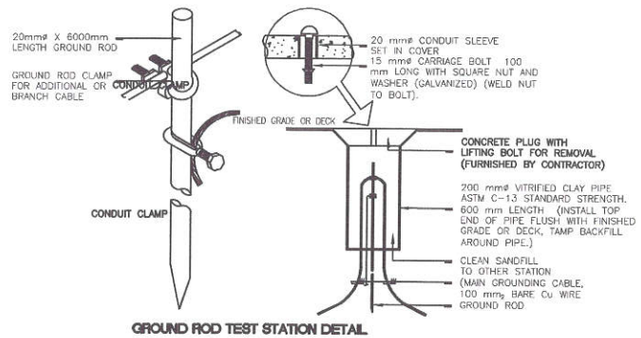
APPROVED BY:
HON. MA. JOSEFINA G. BELMONTE
CITY MAYOR, QUEZON CITY

SINGLE LINE DIAGRAM

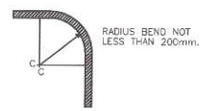
EL-03

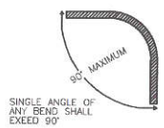


1 SERVICE ENTRANCE DETAILS

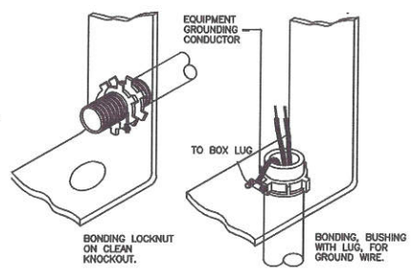


GROUND ROD TEST STATION DETAIL





DETAIL OF BENDING RADIUS



NOTE:

CONNECTION OF THREADED RIGID METAL CONDUIT OR INTERMEDIATE METALLIC CONDUIT TO A THREADED BOSS OR HUB IS CONSIDERED TO BE A BONDED CONDUIT TERMINATION.

BONDED RACEWAY TERMINATION FOR SHEET METAL KNOCKOUTS

2 PANELBOARD DETAILS

SCALE: NTS

Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE: PROPOSED UPGRADING OF SERVICE ENTRANCE OF NCH STA.LUCIA HIGH SCHOOL	DRAWN BY: DMD	SUBMITTED BY: ENGR. LEO S. 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, QUEZON CITY	SERVICE ENTRANCE DETAILS MISCELLANEOUS DETAILS	EL-04
LOCATION: BARANGAY STA.LUCIA, DISTRICT 5, QUEZON CITY	DATE: DECEMBER 09, 2019					
	CHECKED BY:					
	REVISION NO.:					

LP-MPH (MULTIPURPOSE HALL)

CKT. NO.	LOAD DESCRIPTION	VOLTS	VA	AMP.	AT	SIZE OF	
						WIRES	CONDUITS
1	8–LIGHTING OUTLETS	230	800	3.48	20	3–3.5mm² THHN COPPER WIRE	IN 20mmø PVC PIPE
2	1–800W REFRIGERATOR	230	800	3.48	20	2–3.5mm² THHN COPPER WIRE 1–3.5mm² THHN GROUND WIRE	IN 20mmø PVC PIPE
3	3–CONVENIENCE OUTLETS	230	540	2.35	20	2–3.5mm² THHN COPPER WIRE 1–3.5mm² THHN GROUND WIRE	IN 20mmø PVC PIPE
4	3–CONVENIENCE OUTLETS	230	540	2.35	20	2–3.5mm² THHN COPPER WIRE 1–3.5mm² THHN GROUND WIRE	IN 20mmø PVC PIPE
5	1–1HP WACU	230	1840	2.35	30	2–5.5mm² THHN COPPER WIRE 1–3.5mm² THHN GROUND WIRE	IN 25mmø PVC PIPE
6	1–1HP WACU	230	1840	2.35	30	2–5.5mm² THHN COPPER WIRE 1–3.5mm² THHN GROUND WIRE	IN 25mmø PVC PIPE
			6360	27.65			

COMPUTATION :

$$IT = \frac{6360VA + (25\% \times 1840VA)}{230\ V}$$

IT = 29.65 AMPERES

OVER CURRENT PROTECTION
USE : 60AT/100AF, 2P, 230V MOLDED CASE CIRCUIT BREAKER IN NEMA 1

MAIN FEEDER :
USE : 2 - 14.0mm² THHN & 1-8.0mm² THHN GROUND WIRE IN 32mmØ IMC PIPE

DP-DPWH (FOR REPLACEMENT OF BREAKERS)

CKT. NO.	LOAD DESCRIPTION	VOLTS	VA	AMP.	AT	SIZE OF	
						WIRES	CONDUITS
1	LP–DPWH GF	230	8000	34.78	60	2–14mm² THHN COPPER WIRE 1–8.0mm² THHN GROUND WIRE	IN 32mmø PVC PIPE
2	LP–DPWH 2F	230	6000	26.09	60	2–14mm² THHN COPPER WIRE 1–8.0mm² THHN GROUND WIRE	IN 32mmø PVC PIPE
3	LP–DPWH 3F	230	6000	26.09	60	2–14mm² THHN COPPER WIRE 1–8.0mm² THHN GROUND WIRE	IN 32mmø PVC PIPE
4	LP–DPWH 4F	230	6000	26.09	60	2–14mm² THHN COPPER WIRE 1–8.0mm² THHN GROUND WIRE	IN 32mmø PVC PIPE
			26000	113.04			

COMPUTATION :

$$IT = \frac{26,000\ VA + (25\% \times 1840\ VA)}{230\ V}$$

IT = 113.04 AMPERES

OVER CURRENT PROTECTION
USE : 150AT/200AF, 2P, 230V MOLDED CASE CIRCUIT BREAKER IN NEMA 1

MAIN FEEDER :
USE : 2 - 50.0mm² THHN & 1-14.0mm² THHN GROUND WIRE IN 50mmØ IMC PIPE

DP-ADMIN

CKT. NO.	LOAD DESCRIPTION	VOLTS	VA	AMP.	AT	SIZE OF	
						WIRES	CONDUITS
1	LP–GF	230	8000	34.78	60	2–14mm² THHN COPPER WIRE 1–8.0mm² THHN GROUND WIRE	IN 32mmø PVC PIPE
2	LP–2F	230	8000	34.78	60	2–14mm² THHN COPPER WIRE 1–8.0mm² THHN GROUND WIRE	IN 32mmø PVC PIPE
3	LP–3F	230	8000	34.78	60	2–14mm² THHN COPPER WIRE 1–8.0mm² THHN GROUND WIRE	IN 32mmø PVC PIPE
4	LP–4F	230	8000	34.78	125	2–14mm² THHN COPPER WIRE 1–8.0mm² THHN GROUND WIRE	IN 32mmø PVC PIPE
			32000	139.12			

COMPUTATION :

$$IT = \frac{32,000\ VA + (25\% \times 1840\ VA)}{230\ V}$$

IT = 141.12 AMPERES

OVER CURRENT PROTECTION
USE : 150AT/200AF, 2P, 230V MOLDED CASE CIRCUIT BREAKER IN NEMA 1

MAIN FEEDER :
USE : 2 - 50.0mm² THHN & 1-14.0mm² THHN GROUND WIRE IN 50mmØ IMC PIPE

MDP (MAIN DISTRIBUTION PANEL)

CKT. NO.	LOAD DESCRIPTION	VOLTS	VA	AMP.	AT	SIZE OF	
						WIRES	CONDUITS
1	DP–ADMIN	230	32000	139.12	150	2–50mm² THHN COPPER WIRE 1–14mm²THHN GROUND WIRE	IN 50mmø IMC PIPE
2	DP–DPWH	230	26000	113.04	150	2–50mm² THHN COPPER WIRE 1–14mm²THHN GROUND WIRE	IN 50mmø IMC PIPE
3	LP–MPH	230	6360	27.65	60	2–14mm² THHN COPPER WIRE 1–8.0mm² THHN GROUND WIRE	IN 25mmø IMC PIPE
4	PROV. FOR EMERGENCY SUPPLY	230	23000	100	125	2–38mm² THHN COPPER WIRE 1–14mm²THHN GROUND WIRE	IN 32mmø IMC PIPE (PROVIDED BY SOLAR CONTRACTOR)
			64360	279.83			

COMPUTATION :

$$IT = \frac{64,360\ VA + (25\% \times 1840\ VA)}{230\ V}$$

IT = 301.83 AMPERES

OVER CURRENT PROTECTION
USE : 400AT/450AF, 2P, 230V MOLDED CASE CIRCUIT BREAKER IN NEMA 1

MAIN FEEDER :
USE : 2 - 250.0mm² THW & 1-50.0mm² TW GROUND WIRE IN 90mmØ IMC PIPE

1 **SCHEDULE OF LOADS**

SCALE: NTS

Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE:
PROPOSED UPGRADING OF SERVICE ENTRANCE OF NOH STA.LUCIA HIGH SCHOOL

LOCATION: BARANGAY STA.LUCIA, DISTRICT 5, QUEZON CITY

DRAWN BY:
DATE: DECEMBER 09, 2019
CHECKED BY:
REVISION NO.:

SUBMITTED BY:
ENGR. LEO S. 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, QUEZON CITY

SCHEDULE OF LOADS

EL-05

GENERAL NOTES:

NOTES ON REINFORCEMENT:

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM WITH THE LATEST BUILDING CODE OF AMERICAN CONCRETE INSTITUTE (ACI-318)
2. ALL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH AT THE ENO 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	3000 Psi (20.685 MPA)	1 in (25 mm)	4 in (100mm)
b.BEAMS COLUMNS. FOOTINGS SUSPENDED SLAB	3000 Psi (20.685 MPA)	$\frac{3}{4}$ in (19mm)	4 in (100mm)

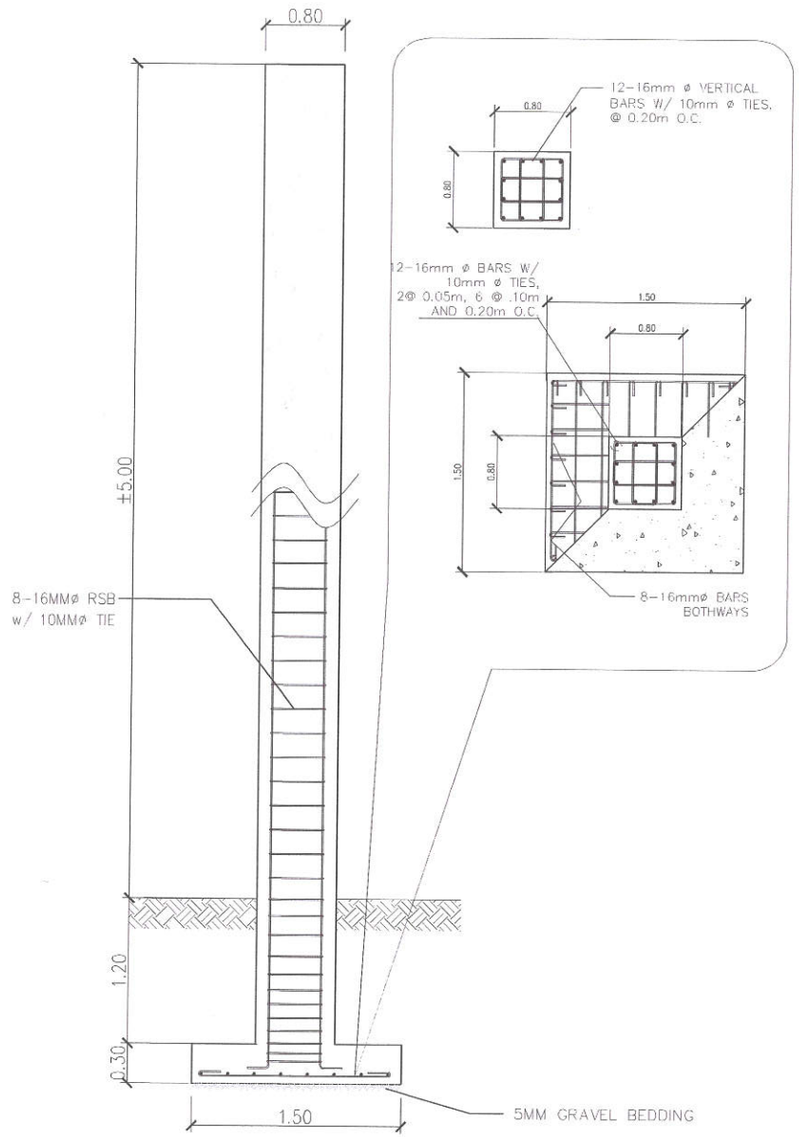
3. All REINFORCING BARS SHALL CONFORM TO PNS49 GRADE 275 FOR 12MM AND SMALLER BARS AND GRADE 415 FOR 16mm AND LARGER BARS.
4. IN GENERAL THE LATEST EDITION OF ACM15. MANUAL OF STANDARD PRACTICE DETAILING REINFORCED CONCRETE STRUCTURES SHALL BE ADHERED TO UNLESS OTVERWISE SHOWN OR NOTED.
5. MAINTAIN MINIMUM CONCRETE COVER FOR REINFORCING STEEL AS FOLLOWS:

CONCRETE DEPOSITED DIRECTLY AGAINST GROUND	75mm
SUSPENDED SLABS	20mm
SIAB ON GRADE	40 mm
WALLS ABOVE GRADE	25 mm
BEAMS & COLUMNS	40mm

6. 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 SPICES SHALL BE STAGGERED WHENEVER POSSIBLE.)
7. ALL ANCHOR BOLTS DOWELS AND OTHER INSERTS SHALL BE PROPERLY POSITIONED AND SECURED IN PLACE PRIOR PLACING OF CONCRETE
8. CONTRACTOR SHALL NOTE AND PROVIDE ALL MISCELLANEOUS CURBS SILLS STOOLS, EQUIPMENTS & MECHANICAL BASES THAT ARE REQUIRED BY THE ARCHITECTURAL. ELECTRICAL, AND MECHANICAL DRAWINGS.
9. 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.
10. STRIPPING OF FORMS AND SHORES:

FOUNDATION	24 HRS.
SUSPENDED SLAB EXCEPT WHEN ADDITIONAL LOADS ARE IMPOSED	8 DAYS
WALL	21 DAYS
BEAMS	14 DAYS
COLUMNS	21 DAYS

11. DEVELOPMENT LENGTH FOR ALL BARS SHALL BE A MINIMUM OF 50 BAR DIAMETER UNLESS OTHERWISE NOTED STRUCTURAL STEEL AND PLATES.
12. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM (A-36) SPECIFICATIONS WITH MINIMUM YIELD STRENGTH, fy= 250 MPa
13. ANCHOR & FASTENER BOLTS. ALL BOLTS SHALL CONFORM TO ASTM (A-307) SPECIFICATIONS
14. WELDING RODS. ALL WELDING RODS SHALL BE MILD STEEL ELECTRODE. LOW HYDROGEN E7018 WITH MINIMUM YIELD STRENGTH = 420 MPa
15. FOUNDATION IS DESIGNED BASED ON NATIONAL BUILDING CODE OF THE PHILIPPINES FOR AN ALLOWABLE SOIL BEARING CAPACITY Of 240KPa
16. FOUNDATION SHALL REST ON NATURAL SOIL. UNLESS OTHERWISE NOTED BY THE ENGINEER. NO PART OF THE FOUNDATION SHALL REST ON FILL
17. 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.



1 GENERAL SPECIFICATIONS

2 METERING POLE DETAILS

SCALE: NTS

Republika ng Pilipinas
Lungsod ng Quezon
CITY ENGINEERING DEPARTMENT

PROJECT TITLE: PROPOSED UPGRADING OF SERVICE ENTRANCE OF DON QUINTIN PAREDES HIGH SCHOOL	DRAWN BY:	SUBMITTED BY: ENGR. LEO S. 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, QUEZON CITY	GENERAL SPECIFICATIONS METERING POLE DETAILS
LOCATION: BARANGAY QUIRINO 2-B, DISTRICT 3, QUEZON CITY	DATE: NOVEMBER 07, 2019				ST-01
	CHECKED BY: JAC				
	REVISION NO.:				