

B. Supply, installation and testing of the following:

1. Potable water supply system complete in all respects including but not limited to submittals, shop drawings, piping, water meters, valves, bibbs, insulation, all accessories required for complete and operational of the system.
 2. Water service connections including but not limited to water meters, float valves. Any and all other works involve in providing the complete operation of the water supply system.
 3. Soil waste and vent system complete in all respect including but not limited to connection to existing sewer, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
 4. Storm drainage system complete in all respect including but not limited to connection to existing storm drainage, submittals, shop drawings, pipes, fittings, valves, cleanout, drains, etc. Complete and operational.
- C. Workmanship and installation methods shall conform to the best modern practice. Employ skilled tradesmen to perform work under the direct supervision of fully qualified personnel.
- D. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes as specified in plans and program of work.
- E. Install equipment in strict accordance with manufacturers written recommendations.
- F. Physical sizes of all plant and equipment are to be suitable for the space allocated for the accommodation of such plant and equipment, taking into account the requirement of access for maintenance purposes.
- G. In selecting makes and types of equipment, the Contractor shall ascertain that facilities for proper maintenance, repair and replacement are provided.
- H. Where the Contractor proposes to use an item of equipment other than that specified or detailed in the drawing, which requires any redesign of the system, drawings showing the layout of the equipment and such redesign as required therefore shall be prepared by the Contractor at his own expenses. Where such approved deviation necessitates a different quantity and arrangement of materials and equipment's from that originally specified or indicated in the drawings, the Contractor shall furnish and install any such additional materials and equipment's required by the system at no additional cost.
- I. Equipment catalogue and manufacturer's specifications must be submitted for examination and details shall be submitted for approval before any equipment is to be ordered.
- J. This shall include all information necessary to ascertain the equipment comply with this specification and drawings. Data and sales catalogue of a general nature will not be accepted.
- K. All materials, equipment, components and accessories shall be delivered to the Site in a new condition, properly packed and protected against damage or contamination or distortion, breakage or structural weakening due to handling, adverse weather or other circumstances and, as far as practicable, they shall be kept in the packing cases or under approved protective coverings until required for use.
- L. Any items suffering from damage during manufacture, or in transit, or on site whilst in storage or during erection shall be rejected and replaced without extra cost.
- M. All sanitary fittings and pipework shall be cleaned after installation and keep them in a new condition.
- N. All installed pipelines shall be flushed through with water, rodded when necessary to ensure clearance of debris.

- O. Cleaning and flushing shall be carried out in sections as the installation becomes completed.
- P. The Contractor shall carry out hydraulic test on the complete plumbing systems and the drainage system to show that it is functioning satisfactorily within the requirements of this Specification and local regulations.
- Q. The Contractor shall provide suitable test pumps and arrange for a supply of water required in connection with testing of pipework. The test pump shall be fitted with pressure gauges which shall be of suitable range for the pressure being applied.
- R. Hydraulic tests shall be carried out as the pipework is installed and shall be completed before chases in walls and ducts are closed. Also test shall be carried out prior to false ceilings and other finishes are installed.
- S. Testing apparatus shall be provided by the Contractor. Where any section of pipework or equipment is unable to withstand the maximum pipework test pressure, it shall be isolated during the pipework test then that section of pipework or equipment shall be re-tested at the appropriate test pressure.
- T. The Sanitary Contractor must carry out any additional tests required by the end-user and/or approving agency.
- U. Drainage pipe shall be tested by filling the pipe with 3m. of water higher than the test section and wait for 15 min, then check for leakage at every joints.
- V. Testing of drainage systems shall be carried out in sections by dividing the system horizontally. Each section shall comprise pipework and fitting for three floors/storeys required for testing.
- W. Drainage pressure pipe shall be hydraulic tested at minimum pressure 50 psi.
- X. Hangers and supports for plumbing piping and equipment shall withstand the effects of gravity loads and stresses within limits and under conditions indicated according to ASCE/SEI 7.
- Y. Install hangers and supports to allow controlled thermal and seismic movement of piping systems, to permit freedom of movement between pipe anchors, and to facilitate action of expansion joints, expansion loops, expansion bends, and similar units.
- Z. Install lateral bracing with pipe hangers and supports to prevent swaying.
- AA. Install building attachments within concrete slabs or attach to structural steel. Install additional attachments at concentrated loads, including valves, flanges, and strainers, NPS 2-1/2 (DN 65) and larger and at changes in direction of piping. Install concrete inserts before concrete is placed; fasten inserts to forms and install reinforcing bars through openings at top of inserts.
- BB. Install hangers and supports so that piping live and dead loads and stresses from movement will not be transmitted to connected equipment.
- CC. Install hangers and supports to provide indicated pipe slopes and to not exceed maximum pipe deflections allowed by ASME B31.9 for building services piping.

VI. ELECTRICAL WORKS

A. CONDUITS, BOXES AND FITTINGS

1. This item shall consist of the furnishing and installation of the complete conduit work, consisting of electrical conduits; conduit boxes such as junction boxes, pull boxes, utility boxes, octagonal and square boxes; conduit fittings, such as couplings, locknuts and bushings and other electrical materials needed to complete the conduit roughing-in work of this project.
2. All materials shall be brand new and shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark.

3. All works throughout shall be executed in the best practice in a workmanlike manner by qualified and experienced electricians under the immediate supervision of a duly licensed Electrical Engineer.
4. The work to be done under this division of specifications consists of the fabrication, furnishing, delivery and installation, complete in all details of the electrical work, at the subject premises and all work materials incidental to the proper completion of the installation, except those portions of the work which are expressly stated to be done by other fields. All works shall be done in accordance with the rules and regulations and with the specifications.
5. All lighting fixtures and lamps are as specified and listed on lighting fixture schedule.
6. All grounding system installation shall be executed in accordance with the approved plans. Grounding system shall include building perimeter ground wires, ground rods, clamps, connectors, ground wells and ground wire taps as shown in the approved design.
7. All auxiliary systems such as telephone and intercom system, time clock system, fire alarm system and public address/nurse's call/paging system installations shall be done in accordance with the approved design.
8. Upon completion of the electrical construction work, the contractor shall provide all test equipment and personnel and to submit written copies of all test results.
9. The contractor shall guarantee the electrical installation are done and in accordance with the approved plans and specifications. The contractor shall guarantee that the electrical systems are free from all grounds and from all defective workmanship and materials and will remain so for a period of one year from date and acceptance of works. Any defect shall be remedied by the Contractor at his own expense.

B. WIRES AND WIRING DEVICES

1. This item shall consist of the furnishing and installation of all wires and wiring devices consisting of electric wires and cables, wall switches, convenience receptacles, heavy duty receptacles and other devices shown on the approved Plans but not mentioned in these specifications.
2. Wires and cables shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark. Unless specified or indicated otherwise, all power and lighting conductors shall be insulated for 600 volts. All wires shall be copper, soft drawn and annealed, smooth and of cylindrical form and shall be centrally located inside the insulation.
3. Conductors or wires shall not be drawn in conduits until after the cement plaster is dry and the conduits are thoroughly cleaned and free from dirt and moisture. In drawing wires into conduits, sufficient slack shall be allowed to permit easy connections for fixtures, switches, receptacles and other wiring devices without the use of additional splices.
4. All conductors of convenience outlets and lighting branch circuit homeruns shall be wired with a minimum of 3.5 mm in size. Circuit homeruns to panelboards shall not be smaller than 3.5 mm but all homeruns to panelboard more than 30 meters shall not be smaller than 5.5 mm. No conductor shall be less than 2 mm in size.
5. All wires of 14mm and larger in size shall be connected to panels and apparatus by means of approved type lugs or connectors of the solderless type, sufficiently large enough to enclose all strands of the conductors and securely fastened. They shall not loosen under vibration or normal strain.
6. All joints, taps and splices on wires larger than 14 mm shall be made of suitable solderless connectors of the approved type and size. They shall be taped with rubber and PVC tapes providing insulation not less than that of the conductors.
7. No splices or joints shall be permitted in either feeder or branch conductors except within outlet boxes or accessible junction boxes or pull boxes. All joints in branch circuit wiring shall be made mechanically and electrically secured by approved

splicing devices and taped with rubber and PVC tapes in a manner which will make their insulation as that of the conductor.

8. All wall switches and receptacles shall be fitted with standard Bakelite face plate covers. Device plates for flush mounting shall be installed with all four edges in continuous contact with finished wall surfaces without the use of coiled wire or similar devices. Plaster filling shall not be permitted. Plates installed in wet locations shall be gasketed.

9. When more than one switch or device is indicated in a single location, gang plate shall be used.

C. POWER LOAD CENTER, SWITCHGEAR AND PANELBOARDS

1. This item shall consist of the furnishing and installation of the power load center unit substation or low voltage switchgear and distribution panelboards at the location shown or the approved Plans complete with transformer, circuit breakers, cabinets and all accessories, completely wired and ready for service.

2. All materials shall be brand new and shall be of the approved type meeting all the requirements of the Philippine Electrical Code and bearing the Philippine Standard Agency (PSA) mark.

3. Power Load Center Unit Substation. The Contractor shall furnish and install an indoor-type Power Load Center Unit Substation at the location shown on the approved Plans if required. It shall be totally metal-enclosed, dead front and shall consist of the following coordinated component parts:

- a. High Voltage Primary Section. High voltage primary incoming line section consisting of the following parts and related accessories:

- i. One (1) Air-filled Interrupter Switch, 2-position (open-close) installed in a suitable air filled metal enclosure and shall have sufficient interrupting capacity to carry the electrical load. It shall be provided with key interlock with the cubicle for the power fuses to prevent access to the fuses unless the switch is open.
- ii. Three (3)-power fuses mounted in separate compartments within the switch housing and accessible by a hinged door.
- iii. One (1) set of high voltage potheads or 3-conductor cables or three single conductor cables.
- iv. Lightning arresters shall be installed at the high voltage cubicle if required.

Items (i) and (ii) above could be substituted with a power circuit breaker with the correct rating and capacity.

- b. Transformer Section. The transformer section shall consist of a power transformer with ratings and capacities as shown on the plans. It shall be oil liquid-filled non-flammable type and designed in accordance with the latest applicable standards.

The transformer shall be provided with four (4) approximately 2 1/2 % rated KVA taps on the primary winding in most cases one (1) above and three (3) below rated primary voltage and shall be changed by means of externally gang-operated manual tap changer only when the transformer is de-energized. Tap changing under load is acceptable if transformer has been so designed.

The following accessories shall be provided with the transformer, namely: drain valve, sampling device, filling connection, oil liquid level gauge, ground pad, top filter press connection, lifting lugs, diagrammatic nameplate, relief valve, thermometer and other necessary related accessories.

The high-voltage and low-voltage bushings and transition flange shall be properly coordinated for field connection to the incoming line section and low voltage switchboard section, respectively.

- c. Low Voltage Switchboard Section. The low-voltage switchboard shall be standard modular-unitized units, metal-built, dead front, safety type construction and shall consist of the following:
- i. Switchboard Housing. The housing shall be heavy gauge steel sheet, dead front type, gray enamel finish complete with frame supports, steel bracings, steel sheet panelboards, removable rear plates, copper busbars, and all other necessary accessories to insure sufficient mechanical strength and safety. It shall be provided with grounding bolts and clamps.
 - ii. Secondary Metering Section. The secondary metering section shall consist of one (1) ammeter, AC, indicating type; one (1) voltmeter, AC, indicating type, one (1) ammeter transfer switch for 3-phase; one (1) voltmeter transfer switch for 3-phase; and current transformers of suitable rating and capacity.

The above-mentioned instruments shall be installed in one compartment above the main breaker and shall be complete with all necessary accessories completely wired, ready for use.
 - iii. Main Circuit Breaker. The main circuit breaker shall be draw-out type, manually or electrically operated as required with ratings and capacity as shown on the approved Plans.

The main breaker shall include insulated control switch if electrically operated, manual trip button, magnetic tripping devices, adjustable time overcurrent protection and instantaneous short circuit trip and all necessary accessories to insure safe and efficient operation.
 - iv. Feeder Circuit Breakers. There shall be as many feeder breakers as are shown on the single line diagram or schematic riser diagram and schedule of loads and computations on the plans. The circuit breakers shall be drawout or molded case as required. The circuit breakers shall each have sufficient interrupting capacity and shall be manually operated complete with trip devices and all necessary accessories to insure safe and efficient operation. The number, ratings, capacities of the feeder branch circuit breakers shall be as shown on the approved Plans.

Circuit breakers shall each have of the indicating type, providing 'ON'- 'OFF' and 'TRIP' positions of the operating handles and shall each be provided with nameplate for branch circuit designation. The circuit breaker shall be so designed that an overload or short on one pole automatically causes all poles to open.
 - d. Low Voltage Switchgear (For projects requiring low-voltage switchgear only). The Contractor shall furnish and install a low-voltage switchgear at the location shown on the plans. It shall be metal-clad, dead front, free standing, safety type construction and shall have copper busbars of sufficient size, braced to resist allowable root mean square (RMS) symmetrical short circuit stresses, and all necessary accessories. The low-voltage switchgear shall consist of the switchgear housing, secondary metering, main breaker and feeder branch circuit.
 - e. Grounding System. All non-current carrying metallic parts like conduits, cabinets and equipment frames shall be properly grounded in accordance with the Philippine Electrical Code, latest edition.

The size of the ground rods and ground wires shall be as shown on the approved Plans. The ground resistance shall not be more than 5 ohms.
 - f. Panelboards and Cabinets. Panelboards shall conform to the schedule of panelboards as shown on the approved Plans with respect to supply characteristics, rating of main lugs or main circuit breaker, number and ratings and capacities of branch circuit breakers.

Panelboards shall consist of a factory completed: dead front assembly mounted in an enclosing flush type cabinet consisting of code gauge galvanized sheet steel box with trim and door. Each door shall be provided with catch lock and two (2) keys. Panelboards shall be provided with directories and shall be printed to indicate load served by each circuit.

Panelboard cabinets and trims shall be suitable for the type of mounting shown on the approved Plans. The inside and outside of panelboard cabinets and trims shall be factory painted with one rust-proofing primer coat and two finish shop coats of pearl gray enamel paint.

Main and branch circuit breakers for panelboards shall have the rating, capacity and number of poles as shown on the approved Plans. Breakers shall be thermal magnetic type. Multiple breaker shall be of the common trip type having a single operating handle. For 50-ampere breaker or less, it may consist of single-pole breaker permanently assembled at the factory into a multi-pole unit.

4. The Contractor shall install the Power Load Center Unit Substation or Low-Voltage Switchgear and Panelboards at the locations shown on the approved Plans.

Standard panels and cabinets shall be used and assembled on the job. All panels shall be of dead front construction furnished with trims for flush or surface mounting as required.

D. 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).

E. Drawings, specifications, codes and standards are minimum requirements. Where requirements differ, the more stringent apply.

F. All equipment and installations shall meet or exceed minimum requirements of the Standards and Codes.

G. Execute work in strict accordance with the best practices of the trades in a thorough, substantial, workmanlike manner by competent workmen.

H. 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.

I. PANELBOARDS

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.

2. Enclosures: Flush, Surface, Flush- and surface-mounted cabinets.

- a. Rated for environmental conditions at installed location.
 - i. Indoor Dry and Clean Locations: NEMA, Type 1.
 - ii. Outdoor Locations: NEMA, Type 3R.
 - iii. Kitchen and Wash-Down Areas: NEMA, Type 4X, stainless steel.
 - iv. Indoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA, Type 12.
 - v. Outdoor Locations Subject to Dust, Falling Dirt, and Dripping Noncorrosive Liquids: NEMA, Type 5R.
- b. Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box.
- c. Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover.
- d. Skirt for Surface-Mounted Panelboards: Same gauge and finish as panelboard front with flanges for attachment to panelboard, wall, and ceiling or floor.

e. Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections.

f. 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.

g. Directory Card: Inside panelboard door, mounted in transparent card holder metal frame with transparent protective cover.

3. Incoming Mains Location: Top or Bottom.

4. Phase, Neutral, and Ground Buses:

a. Material: Hard-drawn copper, 98 percent conductivity.

b. Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.

c. 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.

VIII. LANDSCAPING

A. PLANT SCHEDULE

1. A complete schedule of plants, including quantities, sizes, and other requirements, is shown on the Planting Plan. In the event of a discrepancy between the Plant Schedule and the plants counted on the Drawings and the Cost Estimates, the Cost Estimates shall prevail. No substitutes shall be accepted, except with the approval of the implementing agency. The Contractor shall submit all substitution requests, noting the source of plants, location, size, and condition, within thirty (30) days of receiving the Notice to Proceed.

B. PLANT MATERIALS

1. Plant Quality and Size

a. Species and Culture: All plants shall be true to species and variety specified on plan and nursery grown in accordance with good horticultural practices. All plants to be planted must be in good condition; not infected by insects and diseases, in full health and has a well-developed root system.

b. Tree Specifications:

i. All trees shall be typical of their species or variety. Trees shall conform to the measurements specified except that plants larger than those specified may be used, if approved by the implementing agency. Caliper measurements shall be taken six inches (6") above the trunk flare for trees up to four inches (4") in caliper, and 12 inches (12") above the trunk flare for trees over four inches (4") in caliper. Trees shall be measured when branches are in their normal position. If a range of size is given, no tree shall be less than the minimum size, and no less than fifty percent (50%) of the trees shall be as large as the maximum size specified. Trees that meet measurements but do not possess a normal balance between height and spread shall be rejected. Trees shall not be altered by pruning or other means to meet specifications.

ii. Tree trunks shall be straight and well-tapered. Damaged, cut, or crooked trunks; included bark, bark abrasions, sunscald, disfiguring

knots, mold, and prematurely opened buds, or cut limbs over three-quarter inch (3/4") diameter that are not completely callused are cause for rejection. Trunk diameter and taper shall be sufficient so that tree remains vertical without support.

iii. All trees must be properly balled and burlapped prior to installation.

c. Shrub Specifications:

i. All shrubs shall be typical of their species or variety. Shrubs shall conform to the measurements and qualities as indicated in the Planting Plan. Shrubs shall be measured when branches are in their normal position. If a range of size is given, no shrub shall be less than the minimum size, and no less than fifty percent (50%) of the shrubs shall be as large as the maximum size specified. Shrubs that meet measurements but do not possess a normal balance between height and spread shall be rejected. Shrubs shall not be altered by pruning or other means to meet specifications.

c. Groundcover Specifications:

i. All groundcovers shall be typical of their species or variety. Groundcovers shall conform to the measurements and qualities as indicated in the Planting Plan.

C. CONSTRUCTION AND INSTALLATION

1. Layout

a. The Contractor shall follow the planting layout as specified on the Planting Plan.

2. Protection of Existing Trees

a. Contractor shall protect existing trees that are not designated for removal on the Planting Plan. Contractor shall disturb not more than one-third (1/3) of the root system. Contractor shall temporarily brace the tree trunk in place until the root system is backfilled. Contractor shall thoroughly water exposed root systems until backfilled.

b. Contractor shall ensure bark, branches, roots, and balls of plants are adequately protected at all times from damage including sun and winds.

c. Contractor shall ensure tree branches, trunk, and roots of existing trees are protected during construction. Measures for protection may include effective barrier fencing, branch and/or root pruning, protective mulch, supplementary water, soil aeration and information signage.

3. Existing Plant Relocation

a. Existing trees and shrubs designed for relocation as shown on the Planting Plan shall be dug according to the applicable standards for the plant type. Plants shall be pruned, dug, balled and burlapped, containerized, or dug bare root, moved and planted in accordance with specified tree planting requirements.

b. Plants designated for relocation shall be maintained well; watered adequately, protected from the sun, properly braced and stored in a safe area.

4. Setting and Planting

a. Setting and Planting Contractor shall set balled and burlapped plants, which are not planted immediately upon delivery, on the ground and protect them with soil, moist shredded bark, mulch or other acceptable material.

b. Contractor shall protect plants, if possible, from direct sun until they are planted

c. During planting, plants shall be gently removed from plastic containers and shall not be pulled from the container by the trunk.

d. Soil shall be worked firmly into and around the roots so that there are no air pockets. All broken or damaged roots shall be cut back to the point where they are clean and free of rot. No other root pruning shall be done.

e. After planting, a topsoil of 2" thickness shall be backfilled as specified to fill all voids and to avoid breaking root ball or bruising roots.

5. Trees

a. Staking and guying shall conform to the Drawings. The Contractor shall stake only if necessary.

b. Ties made of approved material shall be attached directly to the stakes or attached to the stakes by wire. In no case shall the wire extend around the tree trunk, even if covered by a hose.

c. Ties shall be attached loosely enough to allow the trunk to sway in the wind without allowing movement to the roots. Ties shall be secured at the lowest point on the trunk at which the root ball remains stationary.

6. Shrubs

a. When planting a row, shrubs shall be arranged in a zigzag pattern, rather than a straight line. This allows more area for shrub spread and prevention of competition for nutrients in the soil.

7. Ground Cover

a. Sodded grass shall be planted in a tight spacing, allowing no gaps in between each patch.

8. Watering

a. Thoroughly water each plant immediately following planting. Under no condition shall plants not be watered in the same day as planting.

b. The Contractor shall assume full responsibility for plant failure as a direct result of insufficient watering. Upon directive from the implementing agency, the Contractor shall remove the affected plants and replace them immediately. Replacement of plants is considered incidental to the Contract and no separate payment shall be made.

9. Pruning and Repair

a. The only pruning allowed at planting shall be removal of dead, damaged, or broken branches and roots. No pruning paint or other wound dressing shall be used.

D. MAINTENANCE

1. Watering

a. A proposed watering schedule shall be submitted to the Engineer thirty (30) days prior to installation of plant materials. The Contractor shall deep water all trees and shrubs, providing water penetration throughout the root zone to the full depth of the planting pits.

b. The Contractor shall deep water all trees and shrubs twice each week during the maintenance period.

c. If at any time during the maintenance period weather conditions (such as extended period with no rain or continuous drying winds) cause the plant root zone to dry out, the implementing agency may direct the Contractor to deep water all trees and shrubs, vis-à-vis during rainy seasons, when the

root zone is always saturated, the Contractor may not water for this period of time.

- d. Contractor shall provide supplemental watering immediately and at no additional cost to the Municipality.

2. Plant Repair and Replacement

- a. The Contractor shall repair/replace damaged plant materials, regardless of cause, immediately upon notification by the implementing agency. Repair shall include pruning, guying, staking, etc., as necessary. Should repair of plant materials reduce their acceptance to less than minimum specified conditions, the Contractor shall replace plants with specified plant replacements at no additional cost to the Owner

3. Diseases and Pests

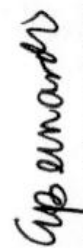
- a. The Contractor shall coordinate with the Engineer in the event that disease, invasive plant infestation, or pest problems are observed on plants within a Project area.
- b. Chemical pesticides are to be used only when other options are not feasible or effective. If pesticides are used, the least toxic pesticide to accomplish the task shall be used.

4. Weeding

- a. The Contractor shall maintain all areas in a weed-free condition. Weed removal shall be a routine maintenance activity.


JOSEPH RYAN A. TUTAY
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Construction and Maintenance Division


AUSTIN ISAAC DO. TOLENTINO
Architect III
Landscape Development Division


ERYLLE JANE G. BERNARDO
Landscape Architect
Landscape Development Division

Section VII. Drawings

[Insert here a list of Drawings. The actual Drawings, including site plans, should be attached to this section, or annexed in a separate folder.]

THE SITE

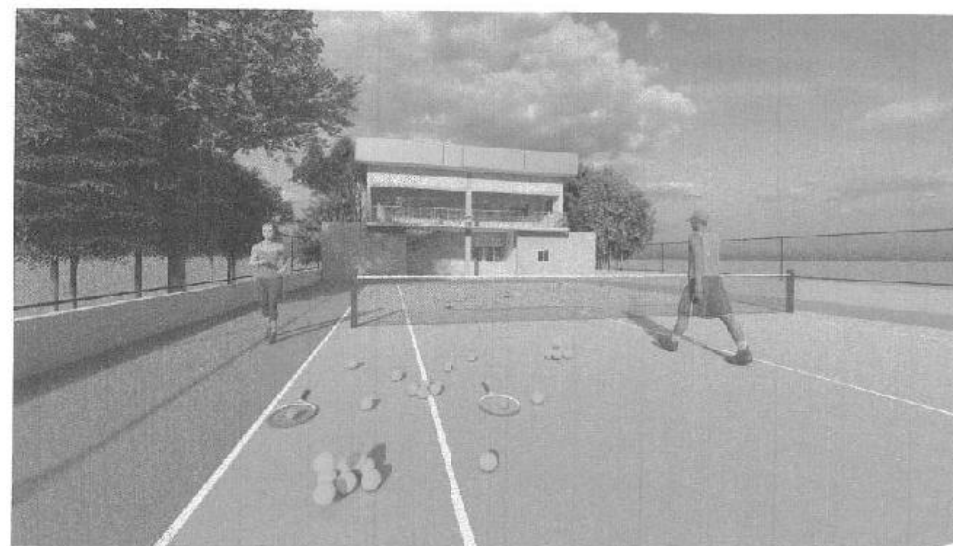


1 LOCATION MAP
1 SCALE N.T.S.

THE SITE



2 VICINITY MAP
1 SCALE N.T.S.



3 PERSPECTIVE
1 SCALE N.T.S.

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PREPARED BY :

RECOMMENDING APPROVAL :

APPROVED BY :

PROJECT TITLE :

SHEET CONTENT :

NOTED BY : N.T.S.

SHEET NO.:



**PARKS
DEVELOPMENT &
ADMINISTRATION
DEPARTMENT**

Arch. BALTAZAR C. AVELINO
OFFICER IN CHARGE

Hon. MA. JOSEFINA G. BELMONTE
CITY MAYOR QUEZON CITY

PROPOSED IMPROVEMENT OF TORO
HILLS PARK

LOCATION : ROY, RAHAY TORO, DISTRICT 1, QC

LOCATION MAP
VICINITY MAP

DATE :

CHECKED BY : A.D.T.

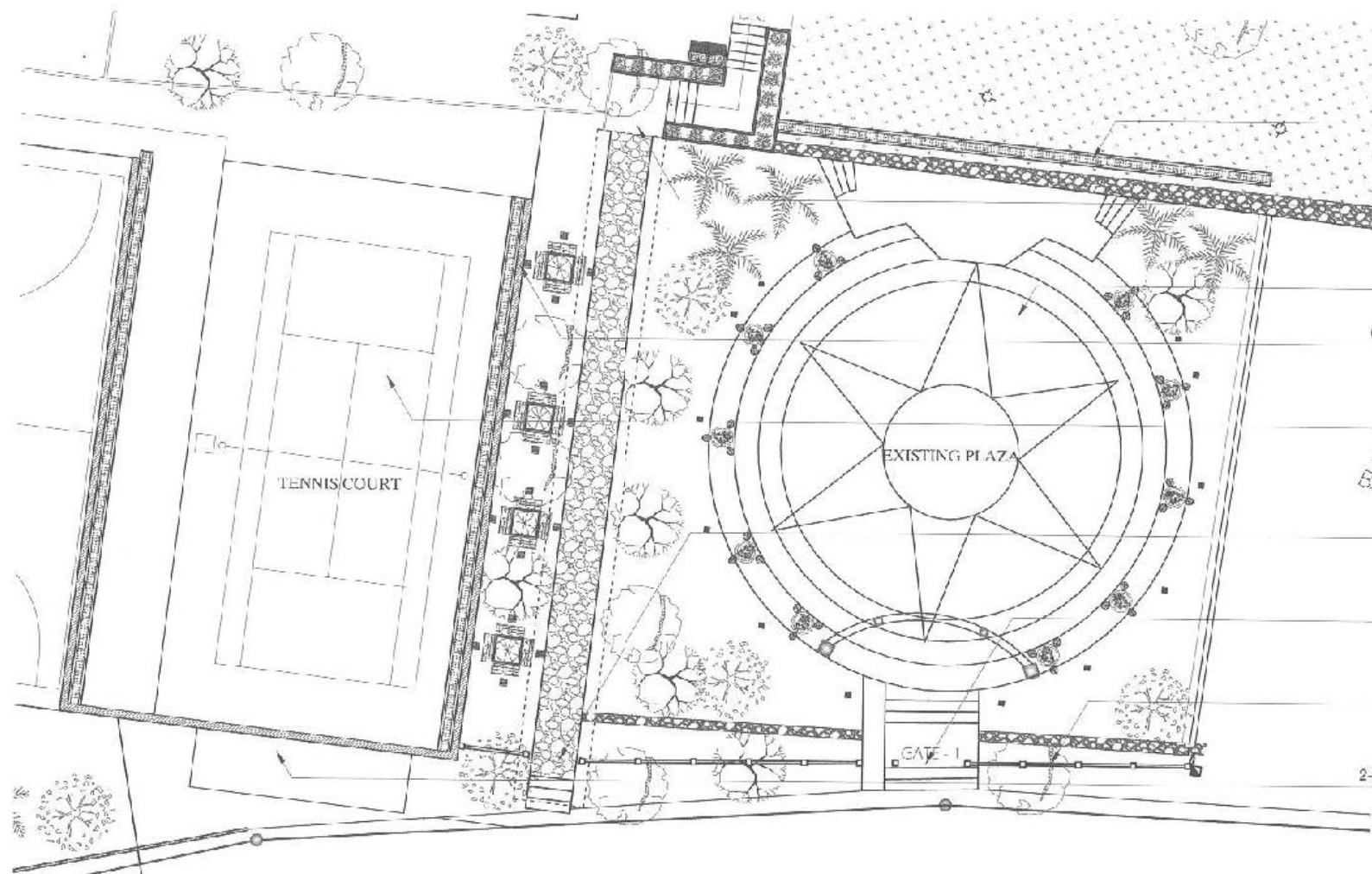
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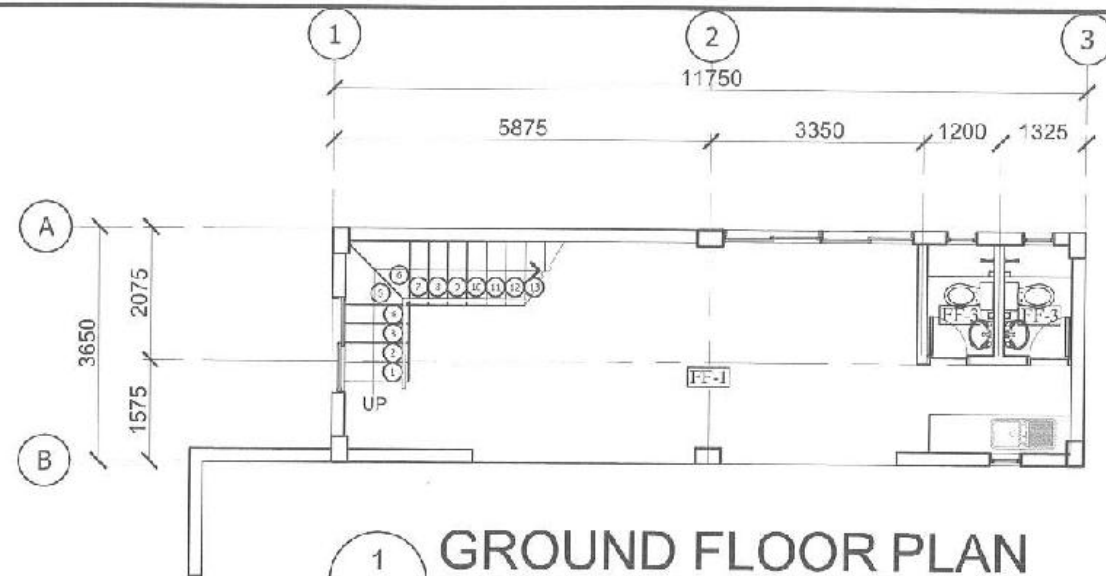
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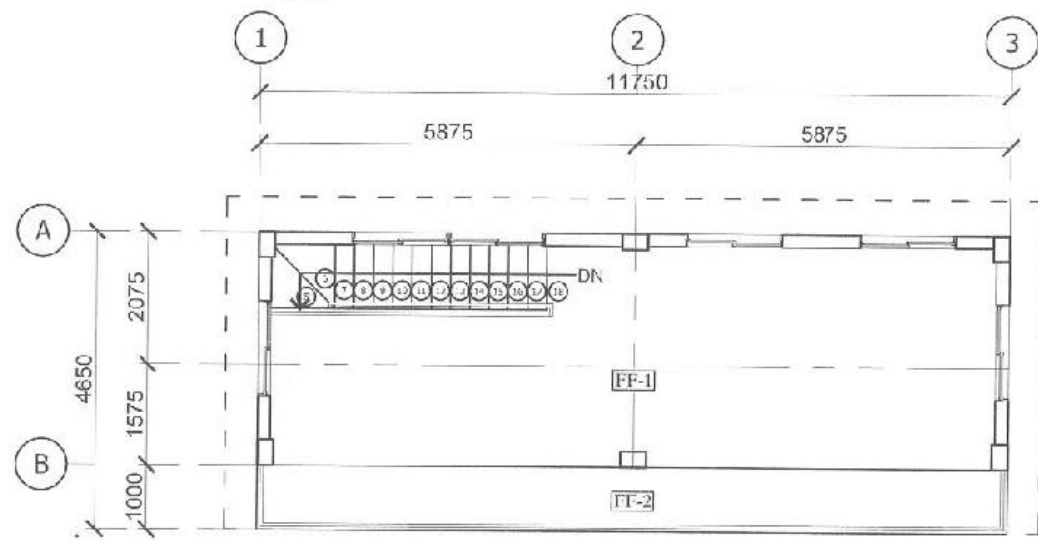
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- PROP. REPAINTING OF EXISTING STAMPED CONCRETE
- PROP. REPAIR AND REPAINTING OF TENNIS COURT PERIMETER FENCE 1
8
- PROP. RESURFACING & REPAINTING OF TENNIS COURT FLOORING (CUSHIONED SYSTEM FIN.)
- PROP. CONSTRUCTION OF GATE-2 1
15
- PROP. CONSTRUCTION OF GATE-1 1
14
- PROP. CONSTRUCTION OF PERIMETER FENCE 1
16
- PROP. CONSTRUCTION OF 2-STOREY TENNIS COURT CLUBHOUSE 1
3

1 SITE DEVELOPMENT PLAN
2 SCALE 1:300

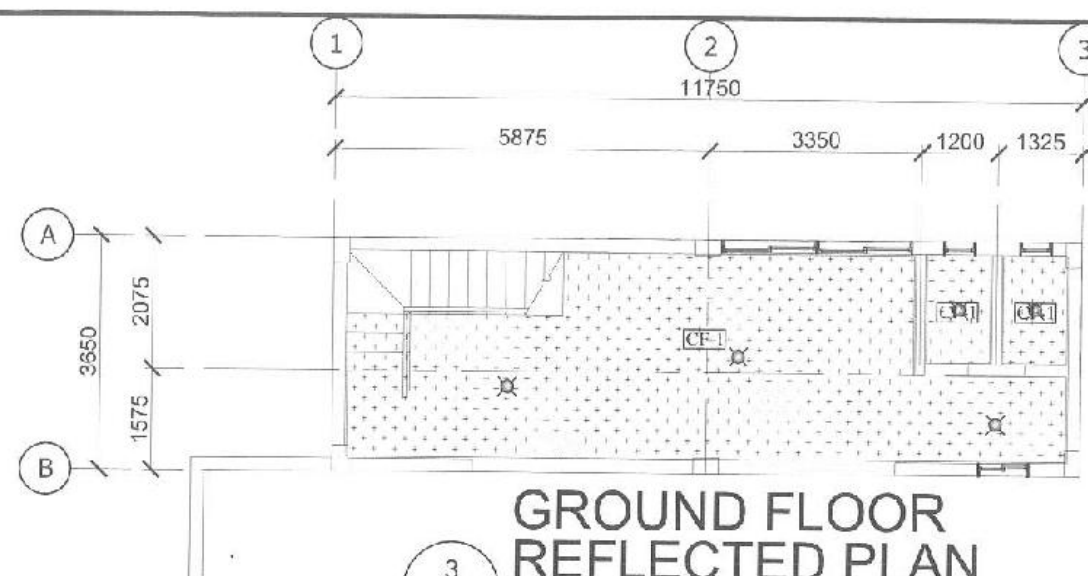
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 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORIL HILLS PARK LOCATION: BAY RAHAY TORIL, DISTRICT 1, QC	SITE DEVELOPMENT PLAN	CHECKED BY: A.D.T. DATE: CADD BY: A.S.T. DATE:	2 22



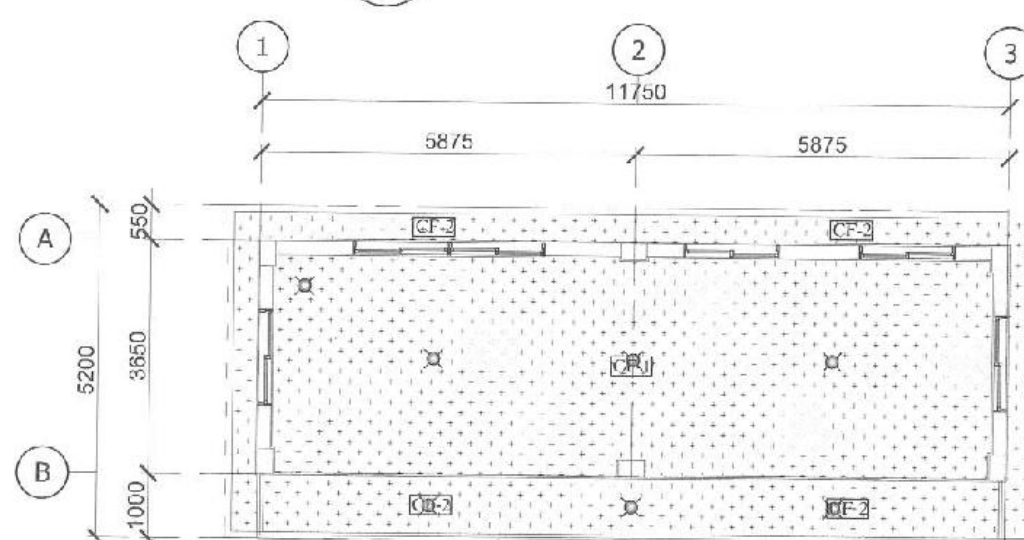
GROUND FLOOR PLAN
SCALE 1:100



SECOND FLOOR PLAN
SCALE 1:100



GROUND FLOOR REFLECTED PLAN
SCALE 1:100



SECOND FLOOR REFLECTED PLAN
SCALE 1:100

SCHEDULE OF FLOOR FINISHES

FF-1	600mm X 600mm PORCELAIN TILES IN WOOD LIKE (MATTE FIN.)
FF-2	300mm X 300mm FLA TURLD CERAMIC TILES IN WOOD LIKE MATTE FIN.
FF-3	300mm X 300mm CERAMIC TILES

SCHEDULE OF CEILING FINISHES

CE-1	42mm UCLM BOARD ON 0.60 M. x 0.60 M. LIGHT METAL FRAME
CE-2	12mm FICFM BOARD ON 0.60 M. x 0.60 M. METAL FRAME

PREPARED BY :

RECOMMENDING APPROVAL :

APPROVED BY :

PROJECT TITLE :

SHEET CONTENT :

NOTED BY : M.S.T.

SHEET NO.:

PROPOSED IMPROVEMENT OF TORO HILLS PARK

2-STOREY
TENNIS CLUBHOUSE:
GROUND FLOOR PLAN
SECOND FLOOR PLAN
GROUND FLOOR -
REFLECTED PLAN
SECOND FLOOR -
REFLECTED PLAN

CHECKED BY: M.S.T.

DATE :

CADD BY: M.S.T.

DATE :

LOCATION : BAY, BISHAY TORO, DISTRICT 1, QC

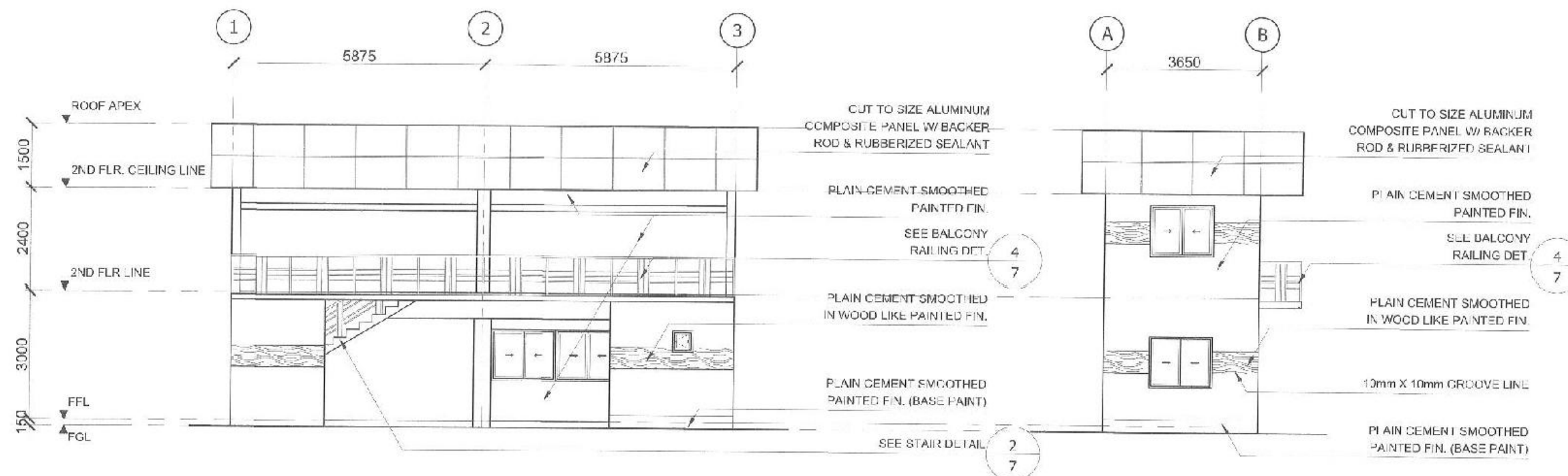


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Hon. MA. JOSEFINA G. BELMONTE
CITY MAYOR
QUEZON CITY

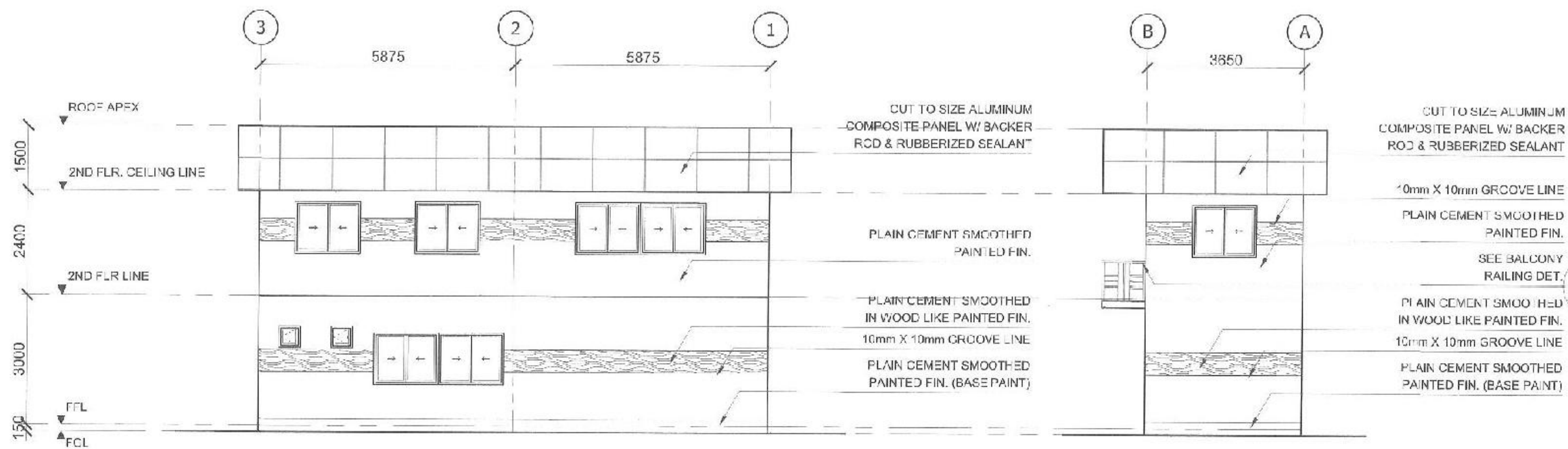
3
22



1 FRONT ELEVATION
4 SCALE 1:100

2 LEFT-SIDE ELEVATION
4 SCALE 1:100

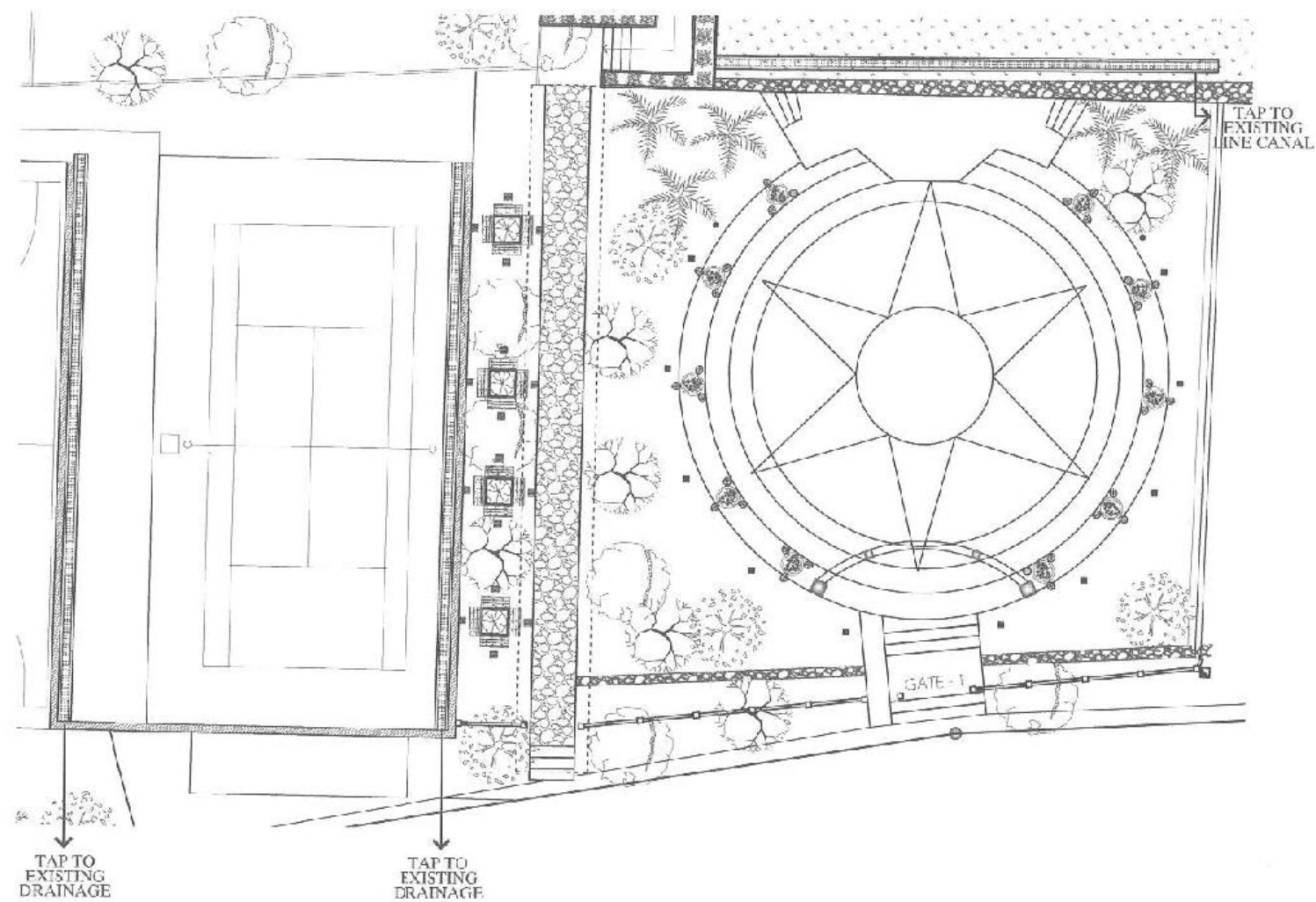
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 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK	2-STOREY TENNIS CLUBHOUSE:	DATE :	4 22	
				FRONT ELEVATION	CHECKED BY: M.S.T.		DATE :
				LEFT-SIDE ELEVATION	CADD BY: M.S.T.		DATE :
			LOCATION: BGY. BAHAY TORO, DIST. REG. 1, QC				



1 REAR ELEVATION
5 SCALE 1:100

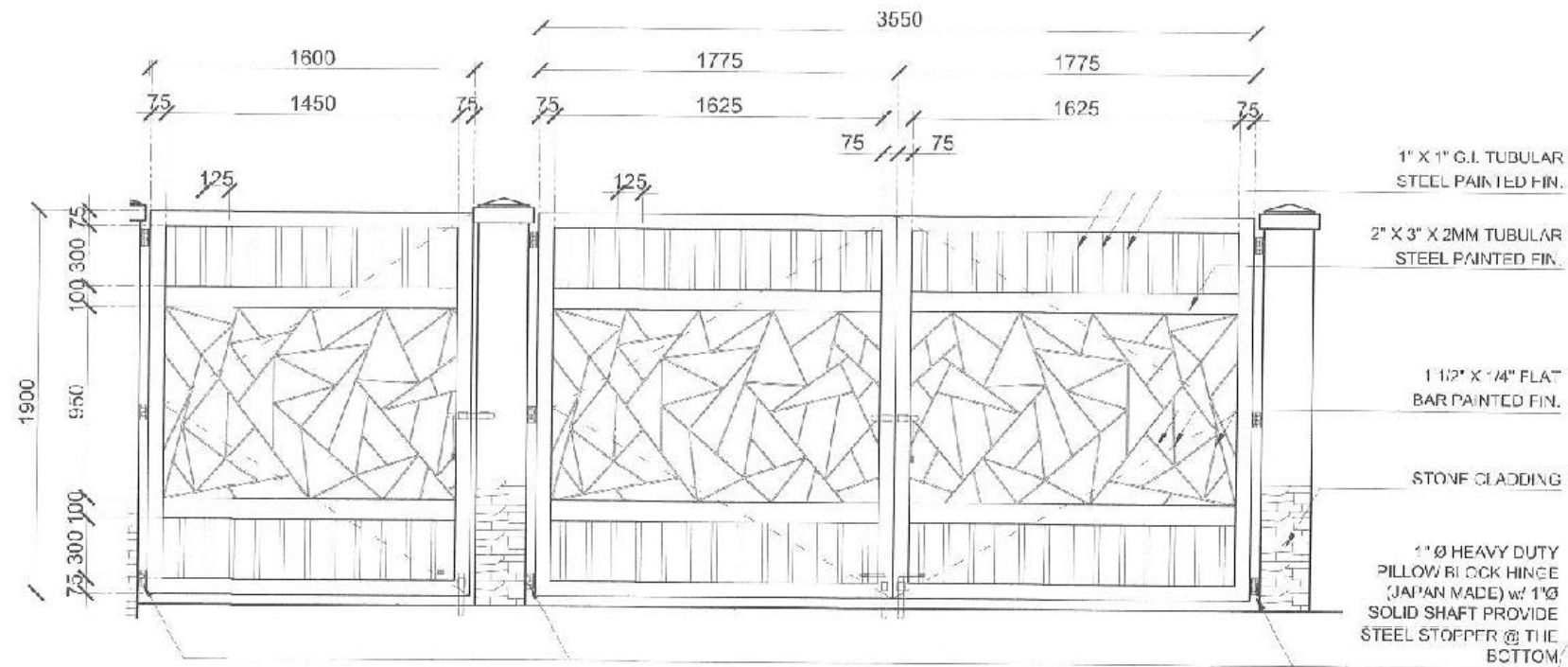
2 RIGHT-SIDE ELEVATION
5 SCALE 1:100

PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	PROJECT TITLE:	SHEET CONTENT:	NOTED BY: M.S.I.	SHEET NO.:
 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	 Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	 Hon. M.A. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK LOCATION: BGY. BAHAY TORO, DISTRICT 1, SC	2-STORY TENNIS CLUBHOUSE: REAR ELEVATION RIGHT-SIDE ELEVATION	DATE:  CHECKED BY:  DATE:  CADD BY:  DATE:	

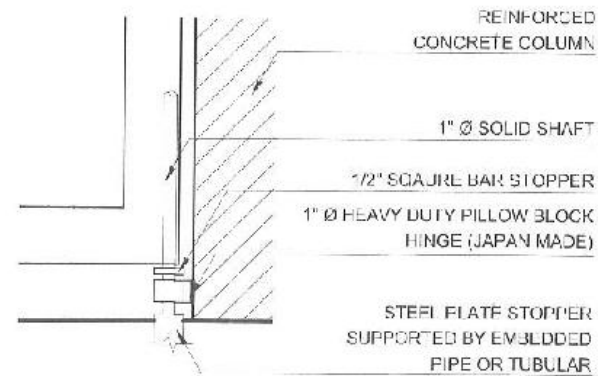


3
13 LINE CANAL LAYOUT
SCALE 1:300

PREPARED BY :	RECOMMENDING APPROVAL :	APPROVED BY :	PROJECT TITLE :	SHEET CONTENT :	NOTED BY : <i>[Signature]</i>	SHEET NO.:
 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK LOCATION : BGY. PATAI TORO, DISTRICT 1 GC	LINE CANAL LAYOUT	DATE : CHECKED BY : <i>[Signature]</i> DATE : CADD BY : <i>[Signature]</i> DATE :	13 22

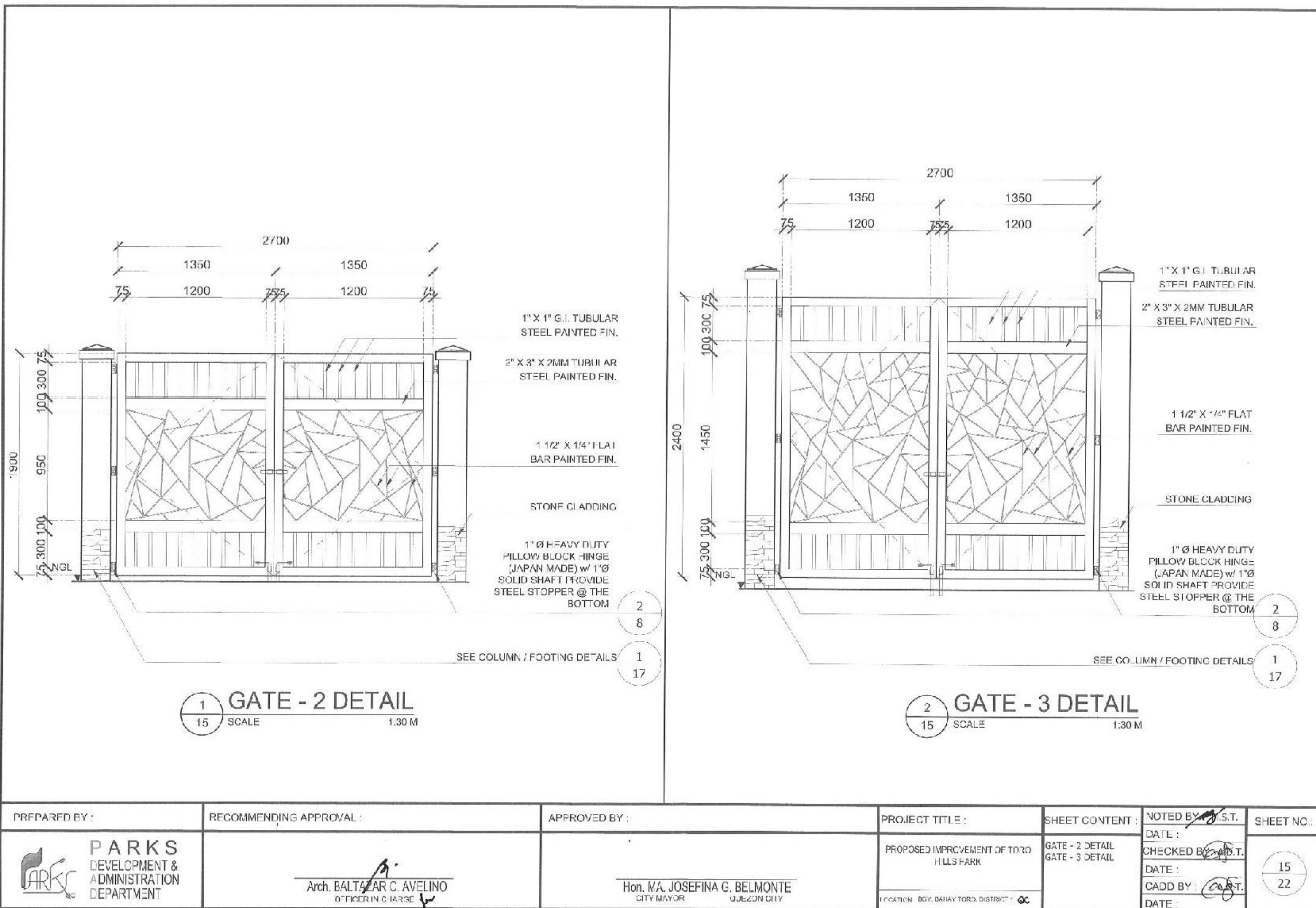


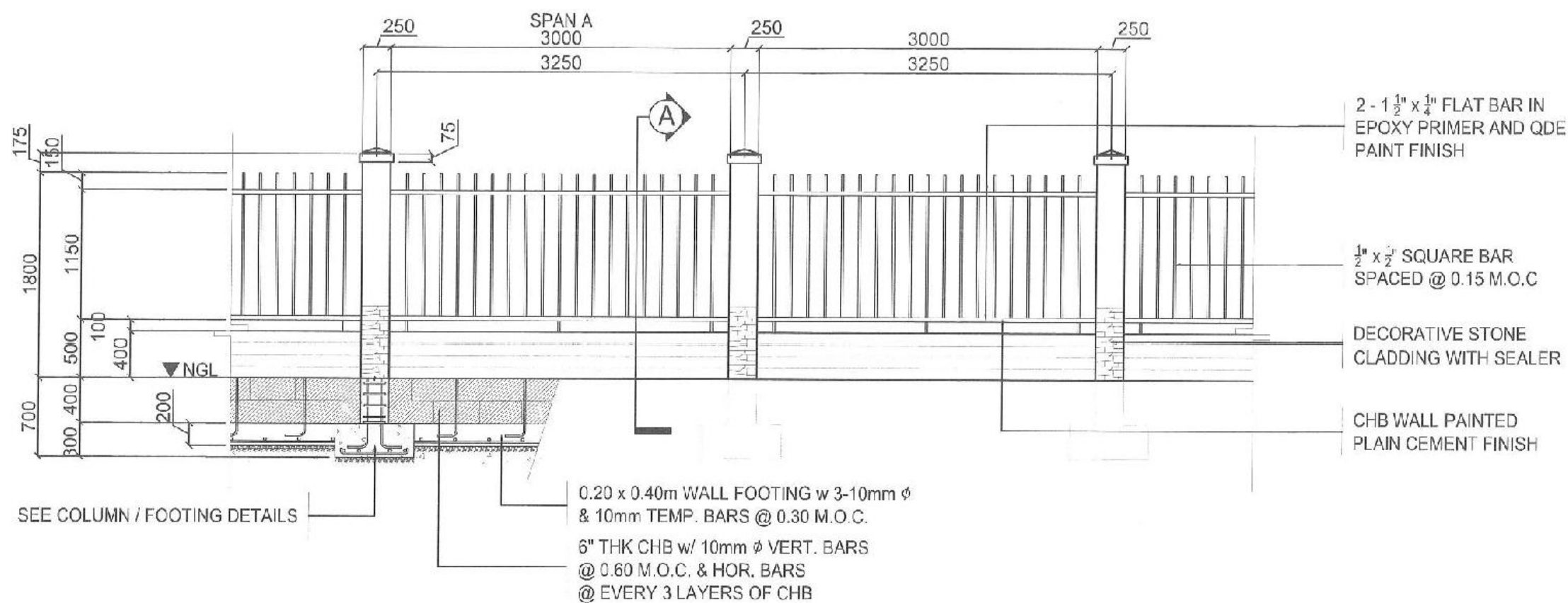
1 GATE - 1 DETAIL
SCALE 1:30 M



2 PILLOW BLOCK HINGE w/ STOPPER DET.
SCALE N.T.S.

PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	PROJECT TITLE:	SHEET CONTENT:	NOTED BY: <i>[Signature]</i> S.T.	SHEET NO.:
PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK	GATE - 1 DETAIL PILLOW BLOCK HINGE w/ STOPPER DET.	DATE: <i>[Signature]</i> CHECKED BY: <i>[Signature]</i> DATE: <i>[Signature]</i> CADD BY: <i>[Signature]</i> DATE:	14 22
LOCATION: SCV BAHAY TOIG DISTRICT 1 CC						

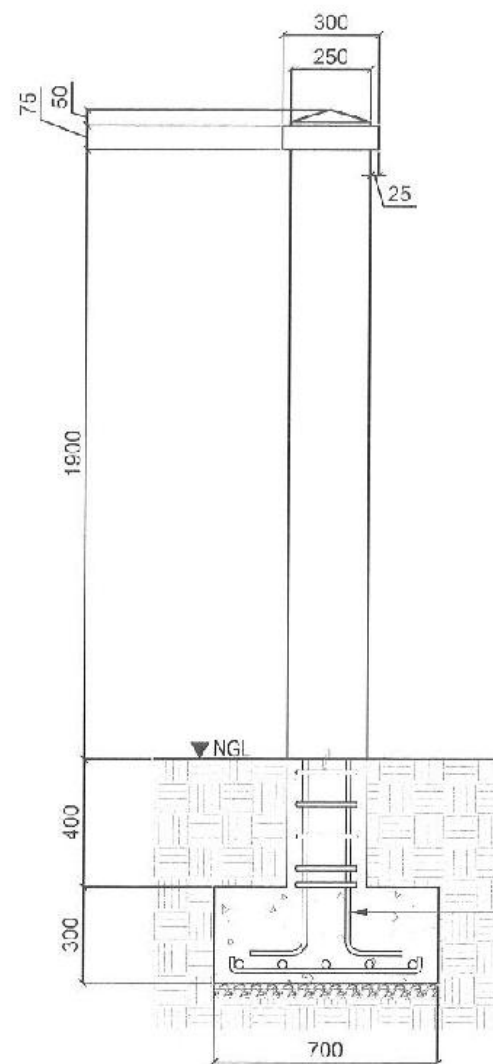




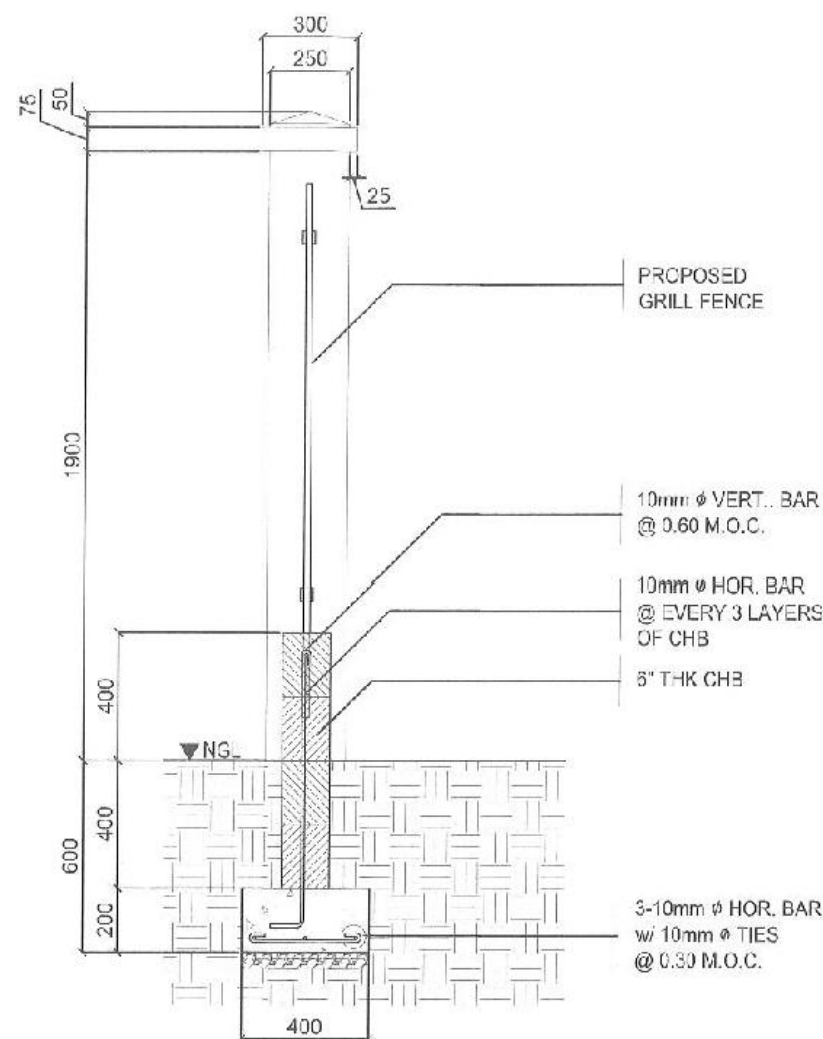
ELEVATION / SECTION

1 PERIMETER FENCE DETAIL
16 SCALE 1:40 M

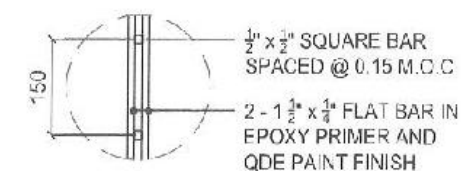
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 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	 Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	 Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK LOCATION: DOY. DAIYAY TORO, DISTRICT 1, QC	PERIMETER FENCE DET.	DATE:  CHECKED BY: M.S.T. DATE:  CADD BY: M.S.T. DATE: 	16 22



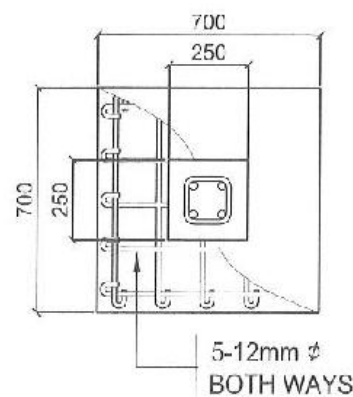
1 SECTION "A"
17 SCALE 1:20 M



2 COLUMN ELEVATION/SECTION
17 SCALE 1:20 M

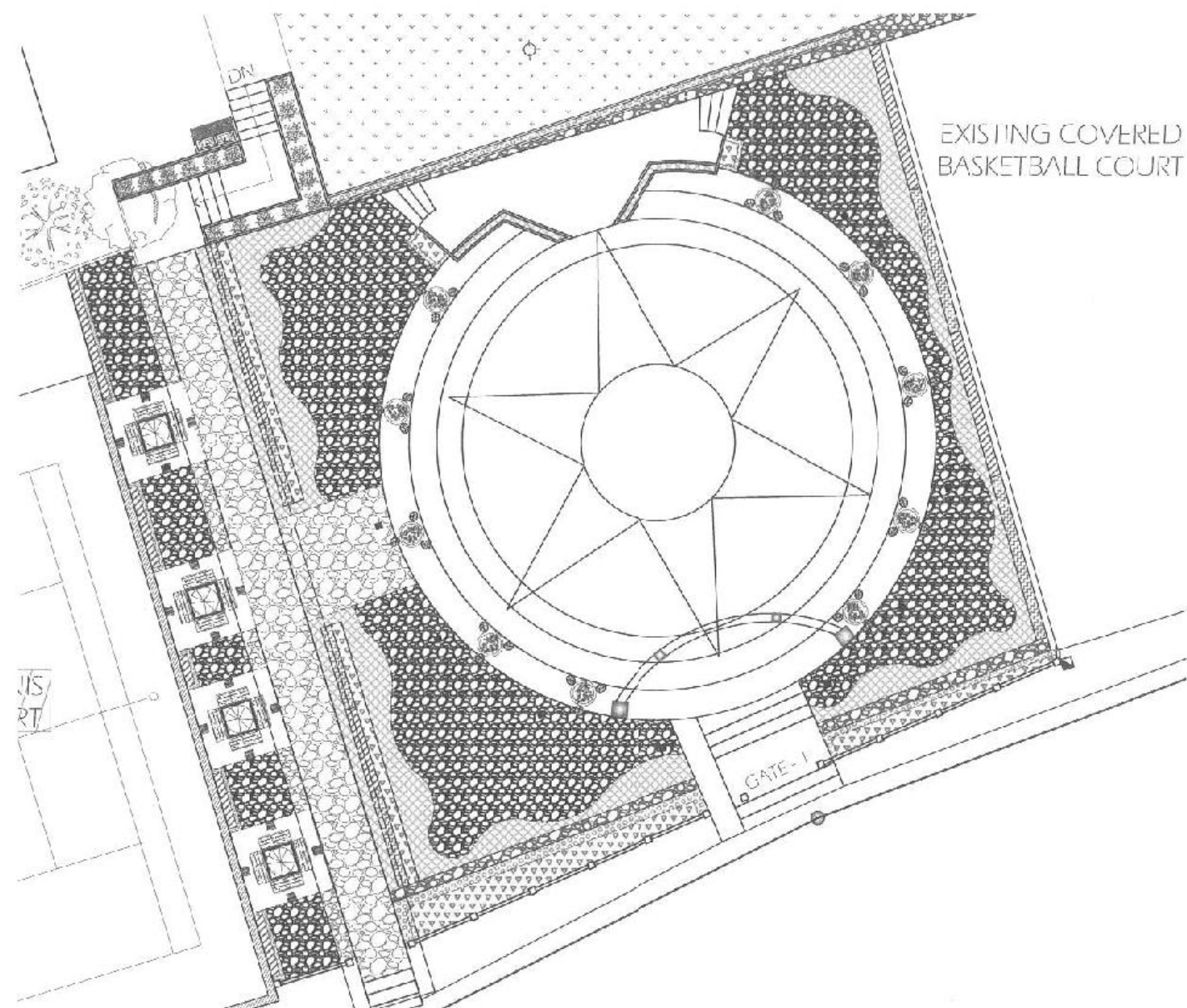


4 DETAIL "C" (PLAN)
10 SCALE 1:10 M



3 COLUMN FOOTING DETAIL
17 SCALE 1:20 M

PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	PROJECT TITLE:	SHEET CONTENT:	NOTED BY: J.S.T.	SHEET NO.:
PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK	SECTION "A" DETAIL "C" (PLAN) COLUMN ELEV./SECTION COLUMN FOOTING DET.	DATE: CHECKED BY: J.S.T. DATE: CADD BY: J.S.T. DATE:	17 22
			LOCATION: BUY, BARRY TONG, US. RCT 1, QC			



1 LANDSCAPING PLAN
17 SCALE 1:250

LEGEND:

SHRUBS:

	KAMUNING (Murraya paniculata) @ 0.60 - 1.00 M.H.T.; @ 0.70 M.O.C.
	MAKI (Podocarpus maki) @ 0.80 - 1.00 M.H.T.; @ 0.70 M.O.C.
	SCHEFFLERA (Schefflera arboricola) @ 0.40 - 0.80 M.H.T.; @ 0.30 M.O.C.
	TRAILING LANTANA (Lantana montevidensis) @ 0.10 - 0.20 M.H.T.; @ 0.10 M.O.C.
	WEDELIA (Wedelia trilobata) @ 0.10 - 0.20 M.H.T.; @ 0.10 M.O.C.

PREPARED BY:



PARKS
DEVELOPMENT &
ADMINISTRATION
DEPARTMENT

RECOMMENDING APPROVAL:

Arch. BALTAZAR C. AVELINO
OFFICER IN CHARGE

APPROVED BY:

Hon. MA. JOSEFINA G. BELMONTE
CITY MAYOR QUEZON CITY

PROJECT TITLE:

PROPOSED IMPROVEMENT OF TORO
HILLS PARK

LOCATION: BAY, BAHAY TORO, DISTRICT 1, QC

SHEET CONTENT:

LANDSCAPING PLAN

NOTED BY: M.S.T.

DATE:

CHECKED BY: I.D.M.

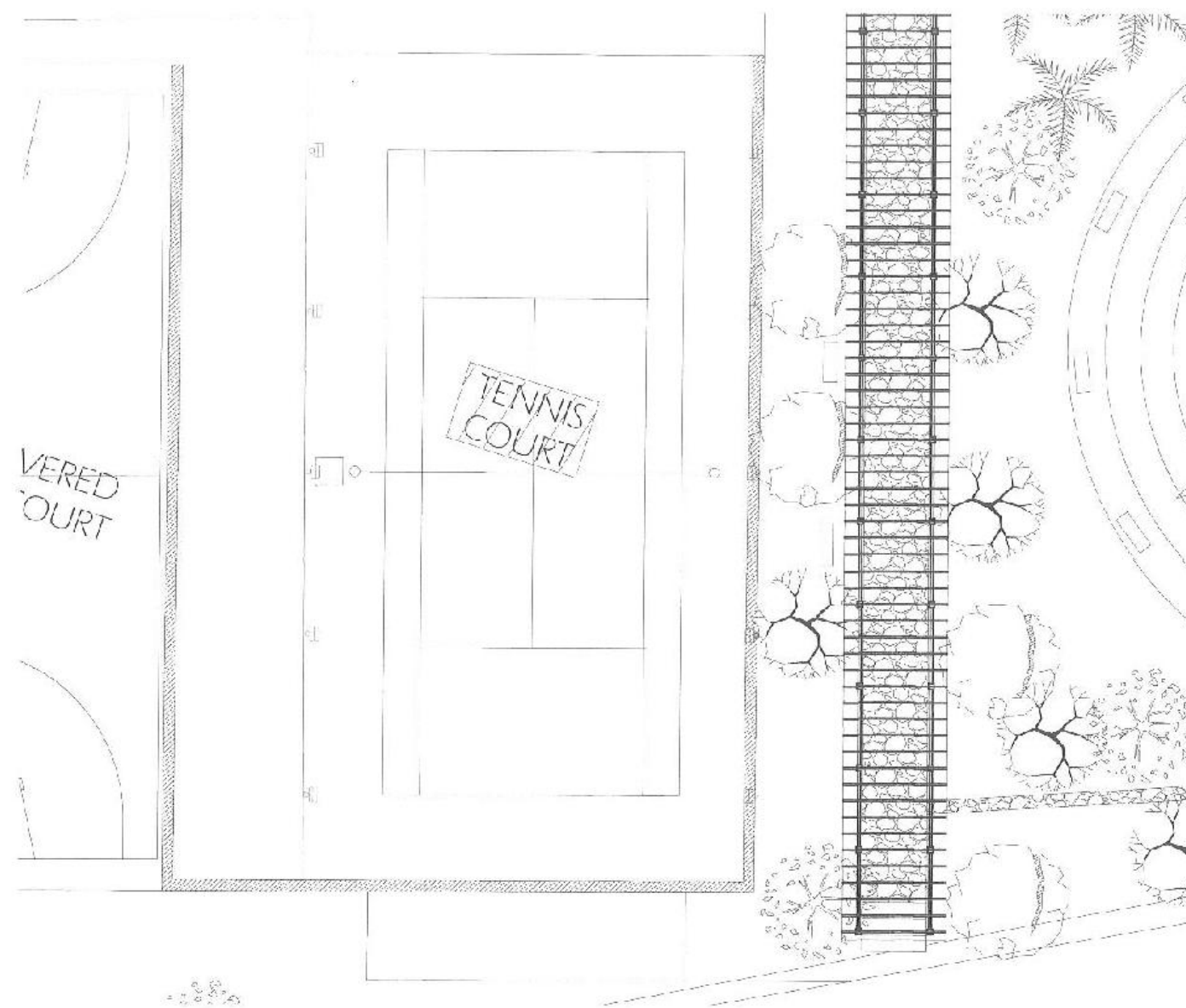
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DATE:

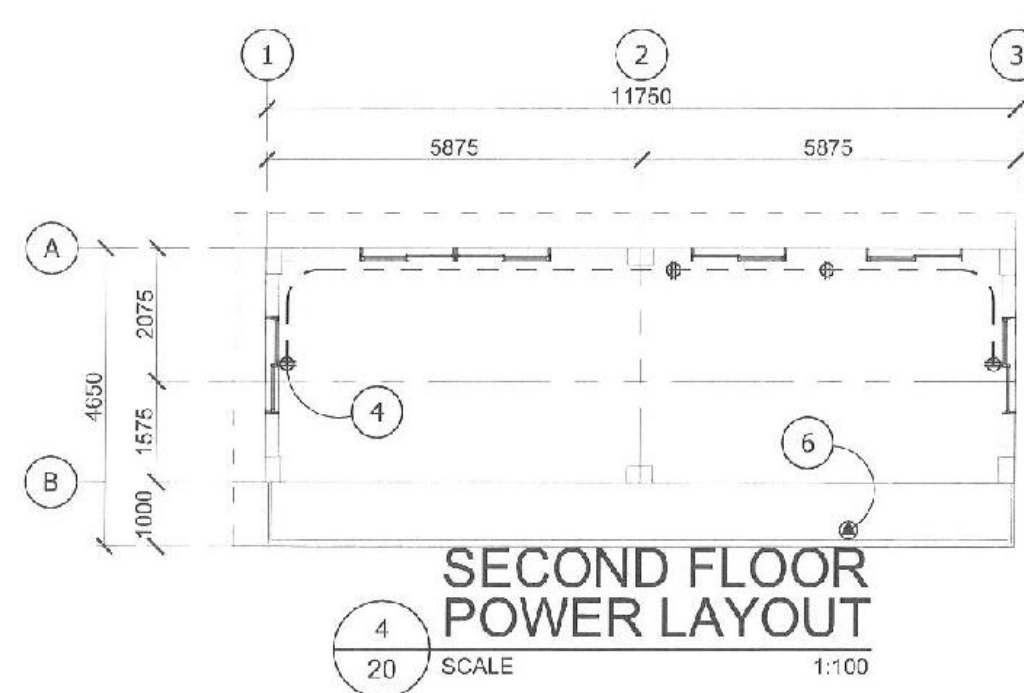
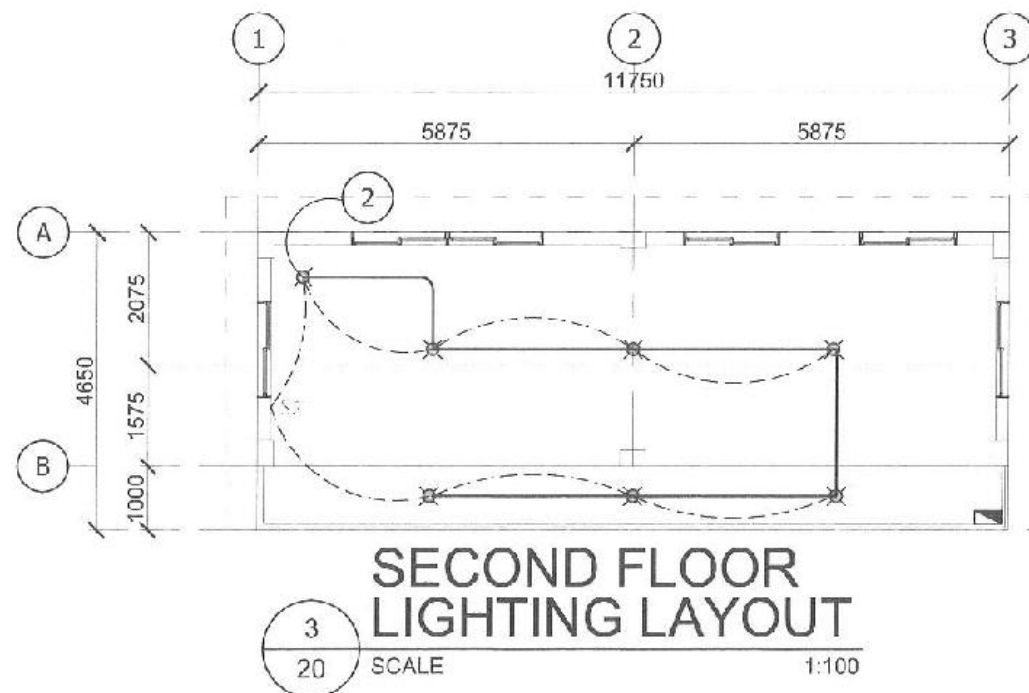
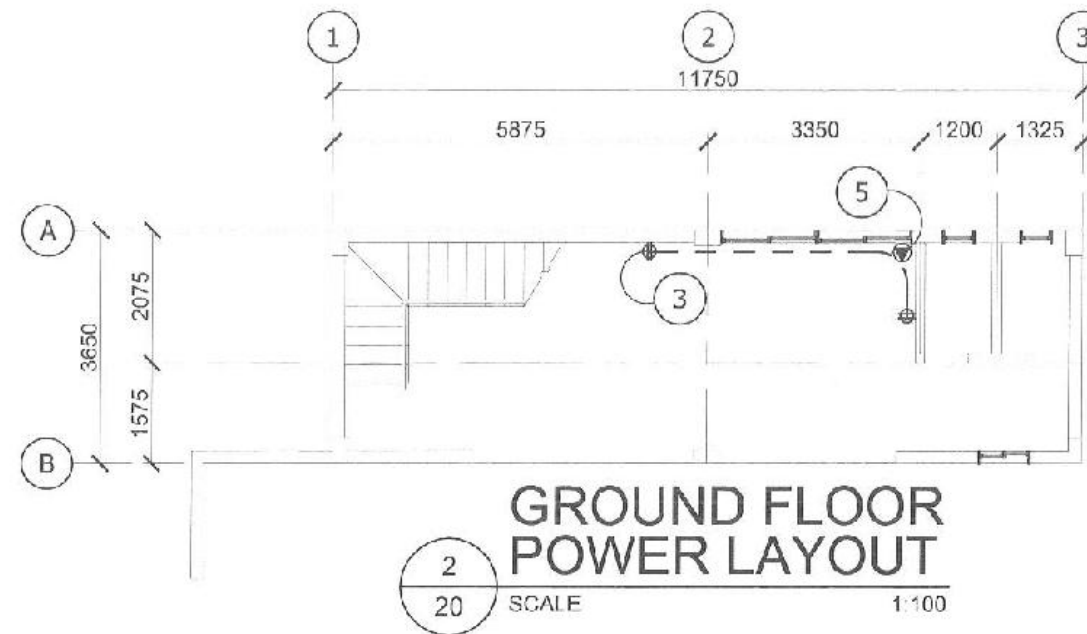
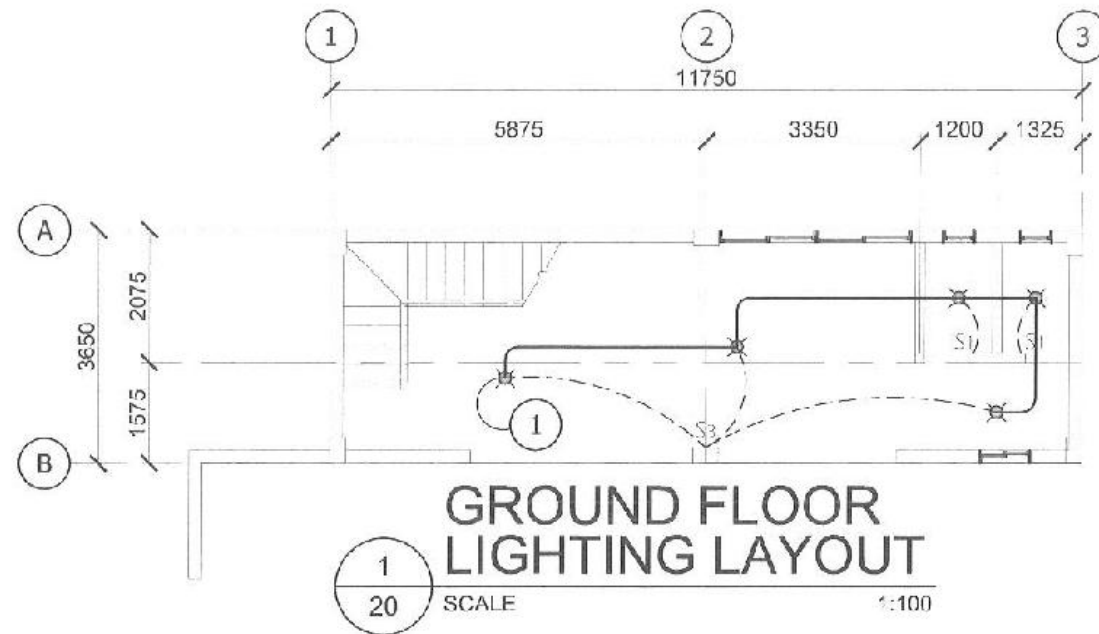
SHEET NO.:

18
22



1 LIGHTING LAYOUT (TENNIS COURT)
19 SCALE 1:200

PREPARED BY :	RECOMMENDING APPROVAL :	APPROVED BY :	PROJECT TITLE :	SHEET CONTENT :	NOTED BY : M.S.T. DATE :	SHEET NO. :
 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	 Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	 Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK LOCATION : BSY, BAHAY TORO, DISTRICT 1, QC	LIGHTING LAYOUT (TENNIS COURT)	 CHECKED BY: R.M. B. DATE : CADD BY : M.B.C. DATE :	 19 22



PREPARED BY :	RECOMMENDING APPROVAL :	APPROVED BY :	PROJECT TITLE :	SHEET CONTENT :	NOTED BY : J.S.T.	SHEET NO. :
 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	 Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	 Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK LOCATION: ROY RALAY TORO DISTRICT GC	2-STOREY TENNIS CLUBHOUSE GRD & 2ND FLR - LIGHTING LAYOUT GRD & 2ND FLR - POWER LAYOUT	DATE : CHECKED BY: R.M.C. DATE : CADD BY: M.B.D.C. DATE :	20 22

CKT No.	LOAD DESCRIPTION	VA	AMP	VOLTS	CIRCUIT BREAKER	SIZE OF WIRE	RACEWAYS
1	LIGHTING OUTLET (L.O.) 5-UNITS	500	2.50	230	20	2 # 3.5mm ² THHN WIRE	15mm PVC
2	LIGHTING OUTLET (L.O.) 7-UNITS	700	3.50		20	2 # 3.5mm ² THHN WIRE	15mm PVC
3	CONV. OUTLET (C.O.) 2-UNITS	400	3.50		20	2 # 3.5mm ² THHN WIRE	15mm PVC
4	CONV. OUTLET (C.O.) 3-UNITS	600	5.50		20	2 # 3.5mm ² THHN WIRE	15mm PVC
5	ACU 1-2 HP	2760	12.00		30	2 # 5.5mm ² THHN WIRE	15mm PVC
6	ACU 1-2 HP	2760	12.00		30	2 # 5.5mm ² THHN WIRE	15mm PVC
7	LIGHTING OUTLET (L.O.) 10-UNITS	1000	5.50		30	2 # 5.5mm ² THHN WIRE	15mm PVC
8	LIGHTING OUTLET (L.O.) 10-UNITS	1000	5.50		30	2 # 5.5mm ² THHN WIRE	15mm PVC
9	S P A R E						
10	S P A R E						
TOTAL							

$I_t = 9720 \text{ WATTS} / 230 \text{ VOLTS}$
 $= 42.26 \text{ AMP} @ 100\% \text{ DF}$
 $= 42.26 \text{ AMPS}$

USE: 2 # 14 mm² THHN WIRE
 1 # 8 mm² THHN WIRE
 IN 25 mm RSC PIPE

USE: 100 AMP CIRCUIT BREAKER
 FOR MAIN PROTECTION

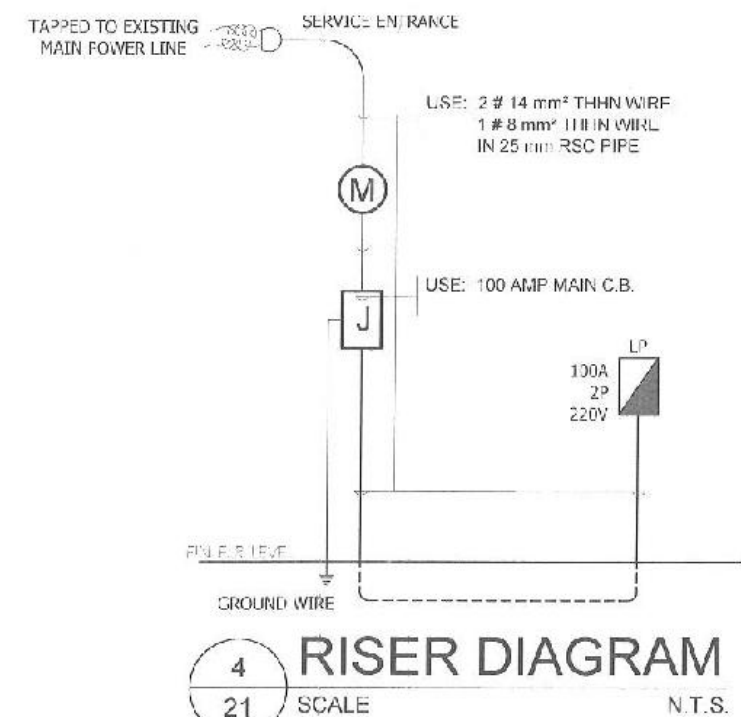
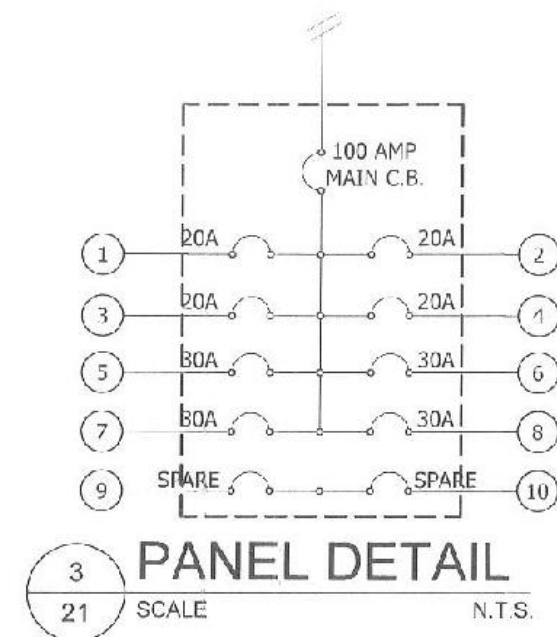
1 SCHEDULE OF LOAD & COMPUTATION

21 SCALE N.T.S.

- SERVICE ENTRANCE 220V
- KILOWATT HOUR METER
- LIGHTING PANEL BOARD
- CEILING LIGHTING OUTLET
- CONVENIENCE OUTLET
- AIR-CONDITIONING UNIT
- CIRCUIT HOMERUN
- CIRCUIT BREAKER
- UTILITY BOX
- GROUNDING WIRE
- ONE-GANG SWITCH
- TWO-GANG SWITCH

2 LEGEND AND SYMBOLS

21 SCALE N.T.S.



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	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR DUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK	2 STORY TENNIS CLUBHOUSE SCHEDULE OF LOAD & COMPUTATION LEGEND AND SYMBOLS PANEL DETAIL RISER DIAGRAM	CHECKED BY: DATE: CADD BY: DATE:	21 22

ALL WORKS SHALL COMPLY WITH THE PROVISIONS OF THE LATEST APPROVED EDITION OF THE PHIL. ELECTRICAL CODE WITH THE RULES AND REGULATIONS OF THE NATIONAL AND LOCAL AUTHORITIES CONCERNED IN THE ENFORCEMENT OF THE ELECTRICAL LAWS AND ORDINANCES, AND WITH THE RULES AND REGULATIONS OF THE UTILITY COMPANIES CONCERNED.

ALL ELECTRICAL FIXTURES TO BE USED IN THIS PROJECT SHALL BE NEW, BE NEW AND APPROVED TYPE FOR BOTH LOCATION AND PURPOSED INTENDED.

THE TYPE TO BE USED SHALL BE COPPE THERMOPLASTIC AND INSULATED TYPE "THHN" OR "TW" WITH 600 VOLTS INSULATION, THE MINIMUM SIZE SHALL BE 3.5mm² FOR WIRE AND 15mm ϕ (NOMINAL) FOR CONDUIT REPECTIVELY.

ALL ELECTRICAL INSTALLATION SHALL BE DONE IN PVC CONDUIT PIPE NOT SMALLER THAN 15mm ϕ TRADE (SCH. 40) EXCEPT FOR SERVICE ENTRANCE WHICH SHALL BE DONE IN RIGID STEEL CONDUIT (RSC) PIPE.

WHERE EVER REQUIRED AND NECESSARY FULL BOXES SHALL BE SUCH INSTALLED AT CONVINIENT SPACES OR LOCATION ALTHOUGH SUCH BOXES ARE NOT SHOWN NOR INDICATED IN THE PLAN.

ALL INSTALLATION OF ELECTRICAL WORKS CALLED FOR IN THIS PLAN SHOULD BE UNDER IMMEDIATE AND DIRECT SUPERVISION OF DULY LICENSED ELECTRICAL ENGINEER OR MASTER ELECTRICIAN.

ADEQUATE GROUNDING SHALL BE PROVIDED PROPERLY.
POWER SUPPLY SHALL BE 220V, 2 WIRES, 1 ϕ , 60Hz.



2
22 VICINITY MAP
SCALE N.T.S.

1
22 GENERAL NOTES
SCALE N.T.S.

PREPARED BY :	RECOMMENDING APPROVAL :	APPROVED BY :	PROJECT TITLE :	SHEET CONTENT :	NOTED BY : <i>[Signature]</i> N.T.S. DATE :	SHEET NO. :
 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	<i>[Signature]</i> Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK	GENERAL NOTES VICINITY MAP	CHECKED BY : <i>[Signature]</i> DATE : CADD BY : <i>[Signature]</i> M.S.C. DATE :	22 22
			LOCATION : BGY, BAHAY TORO, DISTRICT 1, QC			

THE SITE

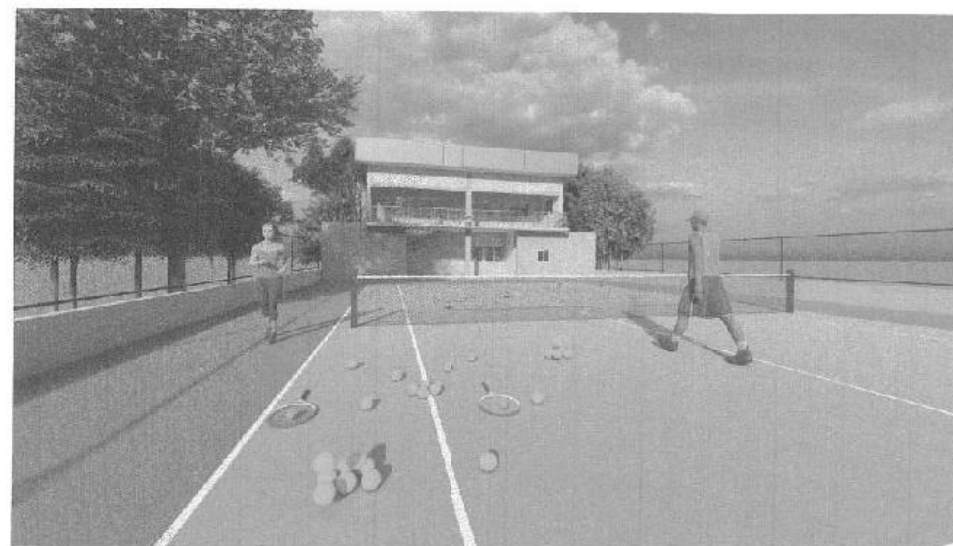


1 LOCATION MAP
1 SCALE N.T.S.

THE SITE



2 VICINITY MAP
1 SCALE N.T.S.



3 PERSPECTIVE
1 SCALE N.T.S.

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5	REAR ELEV. / RIGHT - SIDE ELEV.
6	CROSS SECTION & ROOF PLAN
7	STAIR PLAN, TYP. STAIR DET. (ELEV.)
	TYP. STAIR DET. (SECTION)
	TYP. BALCONY RAILING DET.
	TYP. STAIR RAILING DET.
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	LEGEND AND SYMBOLS
	PANEL DETAIL & RISER DIAGRAM
22	GENERAL NOTES
	VICINITY MAP

PREPARED BY :

RECOMMENDING APPROVAL :

APPROVED BY :

PROJECT TITLE :

SHEET CONTENT :

NOTED BY : N.T.S.

SHEET NO.:



**PARKS
DEVELOPMENT &
ADMINISTRATION
DEPARTMENT**

Arch. BALTAZAR C. AVELINO
OFFICER IN CHARGE

Hon. MA. JOSEFINA G. BELMONTE
CITY MAYOR QUEZON CITY

PROPOSED IMPROVEMENT OF TORO
HILLS PARK

LOCATION : RAY, RAHAY TORO, DISTRICT 1, QC

LOCATION MAP
VICINITY MAP

DATE :

CHECKED BY : A.D.T.

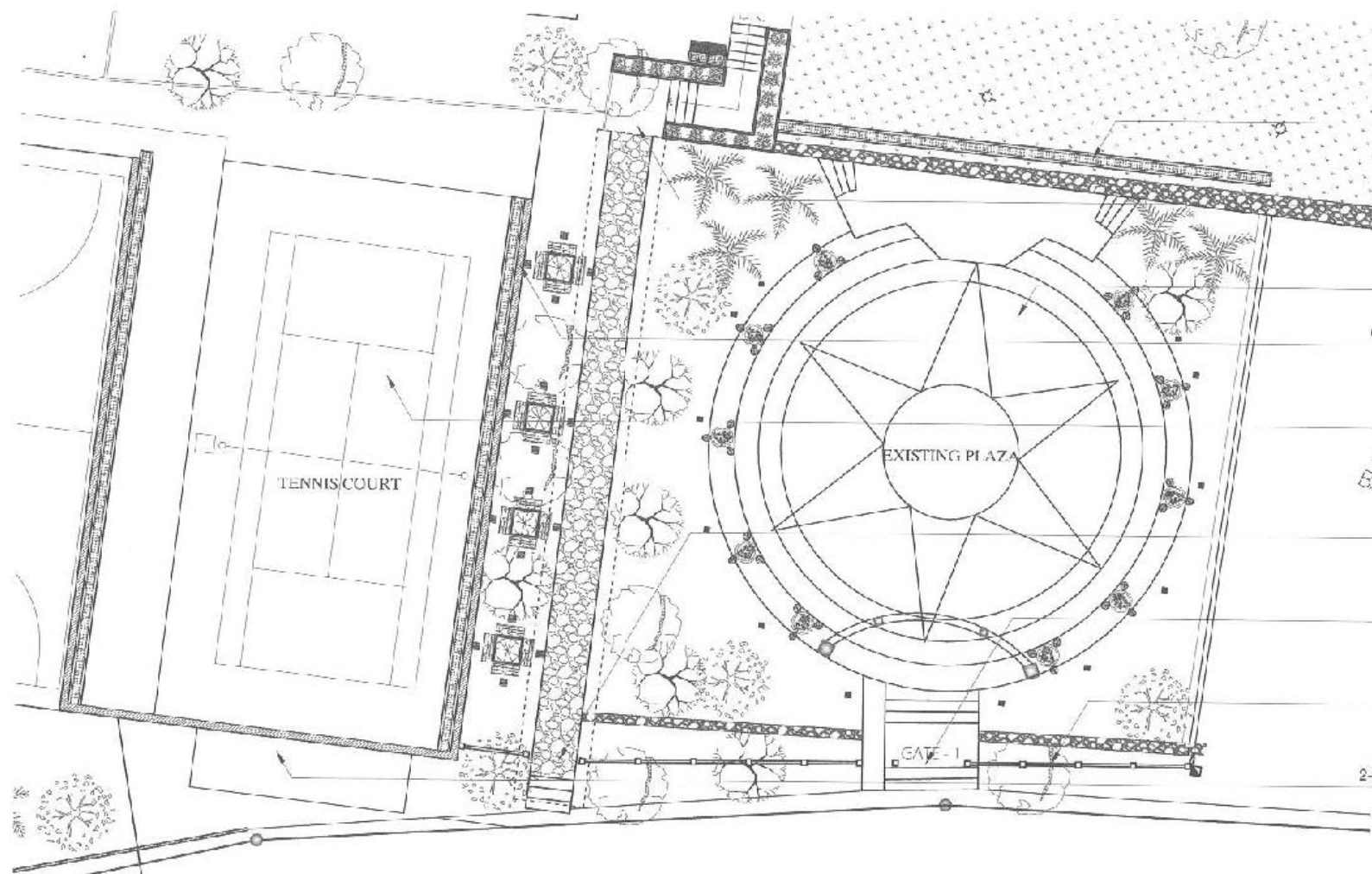
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CADD BY : A.D.T.

DATE :

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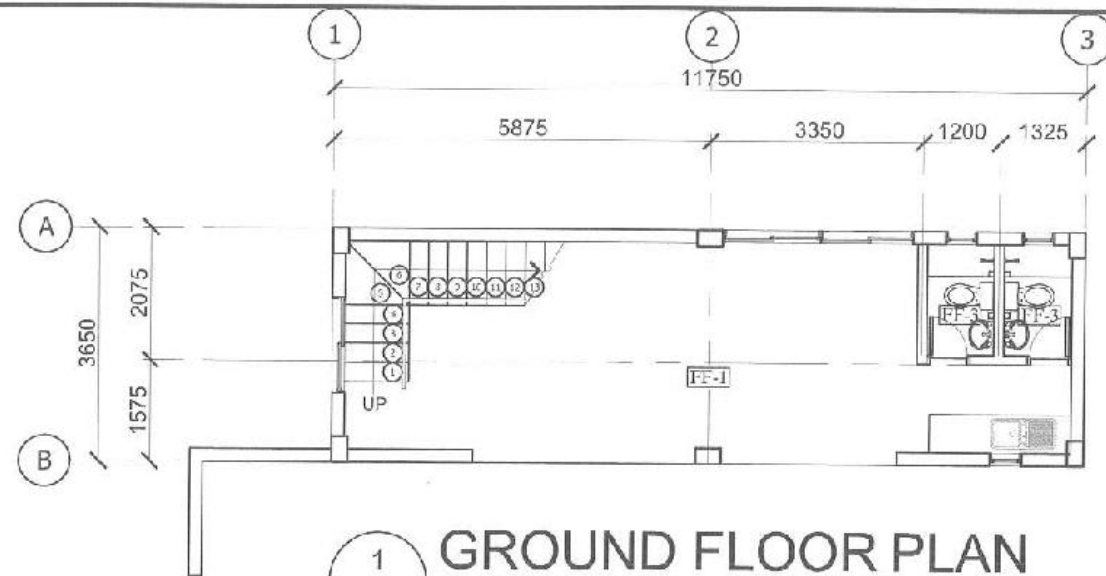
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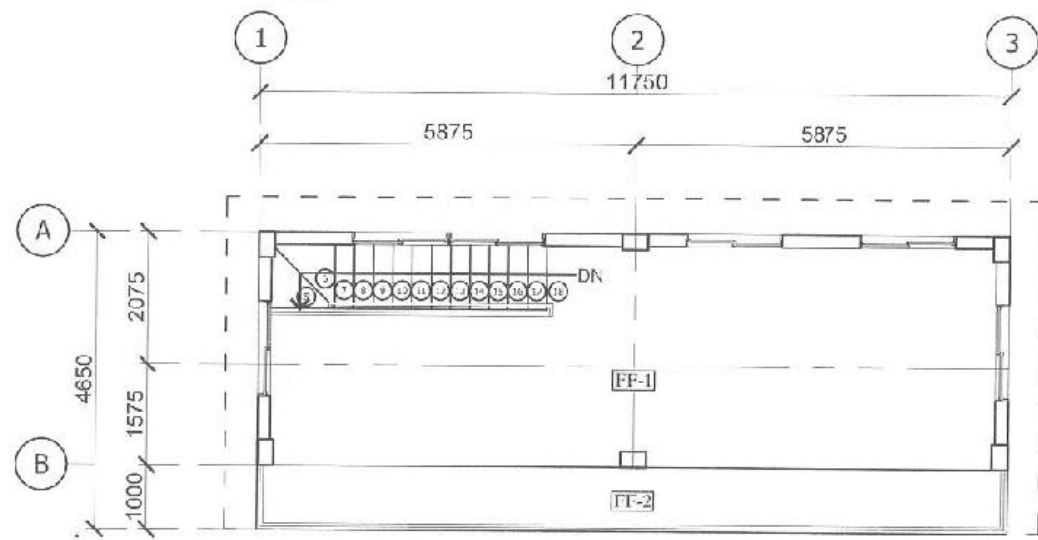
- PROP. CONSTRUCTION OF PERFORATED LINE CANAL 3
8
- PROP. CONSTRUCTION OF GATE-3 2
15
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14
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16
- PROP. CONSTRUCTION OF 2-STOREY TENNIS COURT CLUBHOUSE 1
3

1 SITE DEVELOPMENT PLAN
2 SCALE 1:300

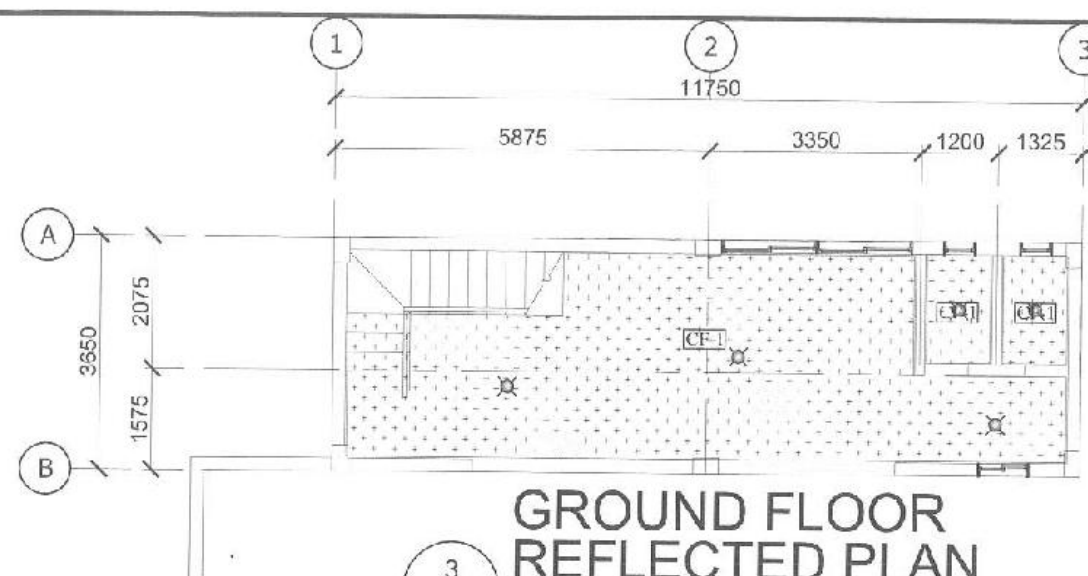
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 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	 Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	 Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORIL HILLS PARK LOCATION: BAY RAHAY TORIL, DISTRICT 1, QC	SITE DEVELOPMENT PLAN CHECKED BY: A.S.T. DATE: CADD BY: A.S.T. DATE:	   	2 22



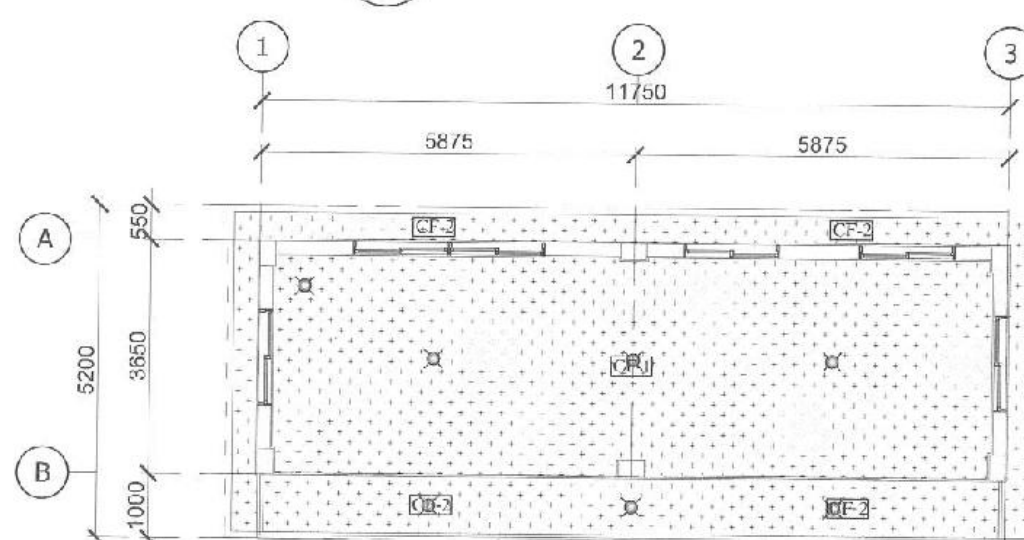
1
3
GROUND FLOOR PLAN
SCALE 1:100



2
3
SECOND FLOOR PLAN
SCALE 1:100



3
3
GROUND FLOOR REFLECTED PLAN
SCALE 1:100



4
3
SECOND FLOOR REFLECTED PLAN
SCALE 1:100

SCHEDULE OF FLOOR FINISHES

FF-1	600mm X 600mm PORCELAIN TILES IN WOOD LIKE (MATTE FIN.)
FF-2	300mm X 300mm FLA TURLD CERAMIC TILES IN WOOD LIKE MATTE FIN.
FF-3	300mm X 300mm CERAMIC TILES

SCHEDULE OF CEILING FINISHES

CE-1	42mm UCLM BOARD ON 0.60 M. x 0.60 M. LIGHT METAL FRAME
CE-2	12mm FICFM BOARD ON 0.60 M. x 0.60 M. METAL FRAME

PREPARED BY :

RECOMMENDING APPROVAL :

APPROVED BY :

PROJECT TITLE :

SHEET CONTENT :

NOTED BY : M.S.T.

SHEET NO.:

PARKS
DEVELOPMENT &
ADMINISTRATION
DEPARTMENT

Arch. BALTAZAR C. AVELINO
OFFICER IN CHARGE

Hon. MA. JOSEFINA G. BELMONTE
CITY MAYOR
QUEZON CITY

PROPOSED IMPROVEMENT OF TORO
HILLS PARK

LOCATION : BAY, BISHAY TORO, DISTRICT 1, QC

2-STOREY
TENNIS CLUBHOUSE:
GROUND FLOOR PLAN
SECOND FLOOR PLAN
GROUND FLOOR -
REFLECTED PLAN
SECOND FLOOR -
REFLECTED PLAN

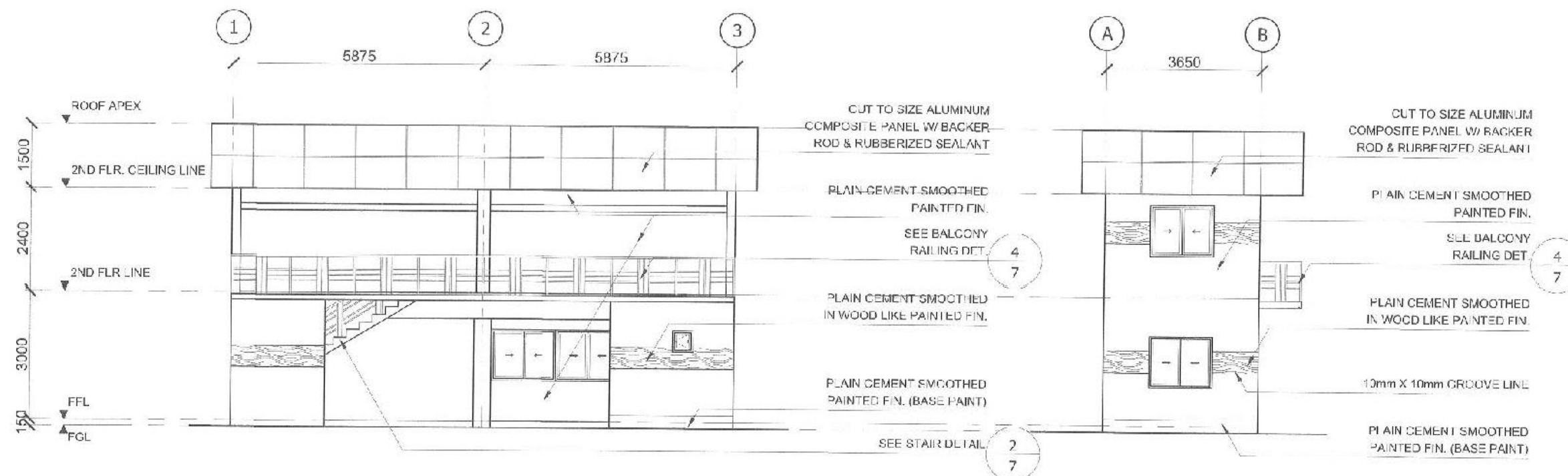
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DATE :

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DATE :

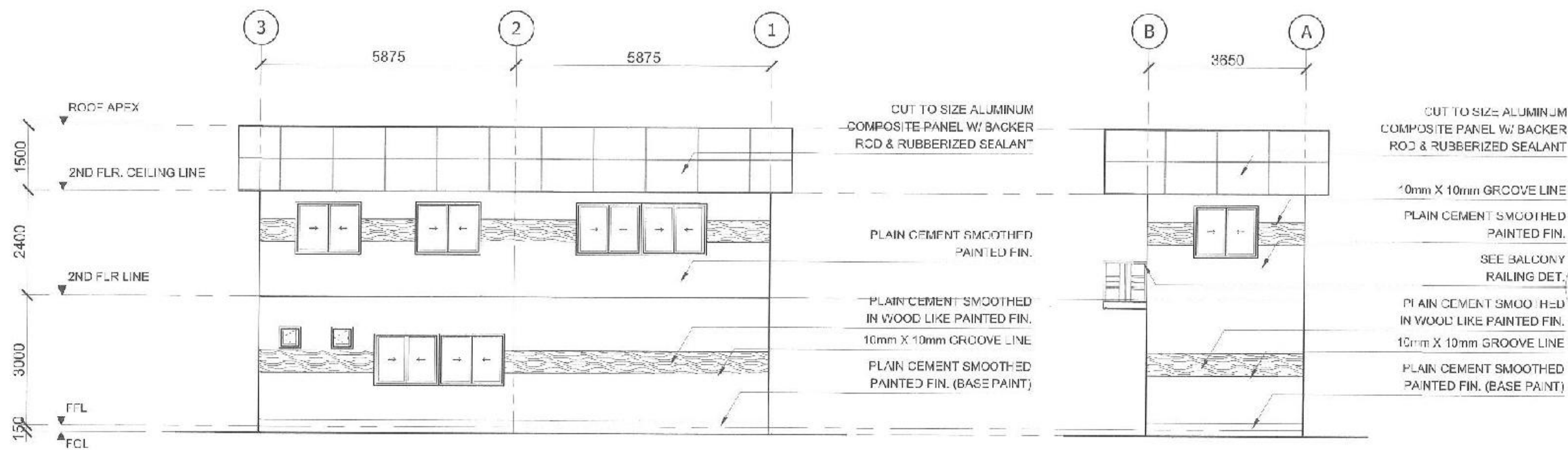
3
22



1 FRONT ELEVATION
4 SCALE 1:100

2 LEFT-SIDE ELEVATION
4 SCALE 1:100

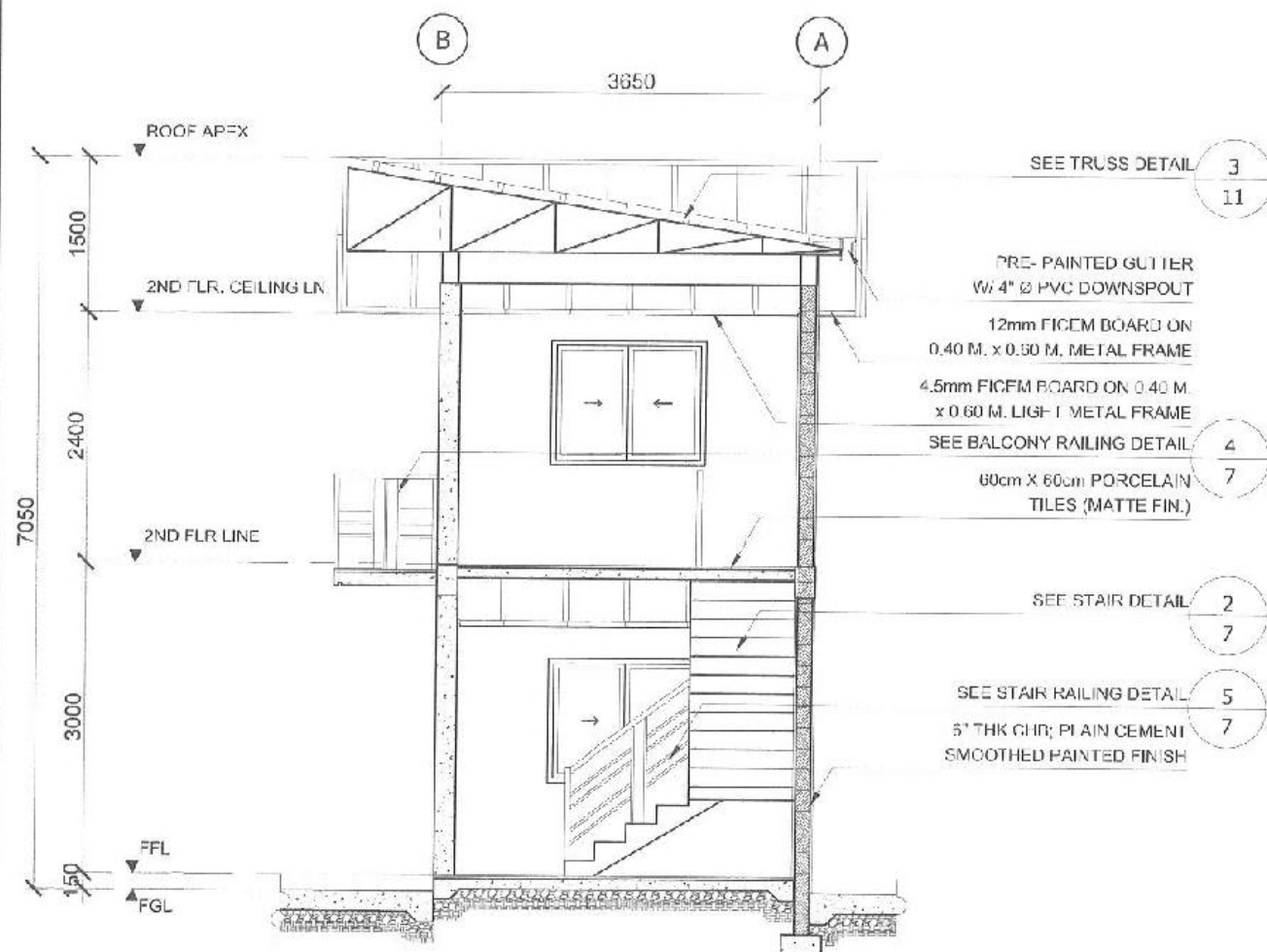
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PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR	PROPOSED IMPROVEMENT OF TORO HILLS PARK	2-STOREY TENNIS CLUBHOUSE: FRONT ELEVATION LEFT-SIDE ELEVATION	DATE: CHECKED BY: M.S.T. DATE: CADD BY: M.S.T. DATE:	4 22
LOCATION: BGY. BAHAY TORO, DIST. REG. 1, QC						



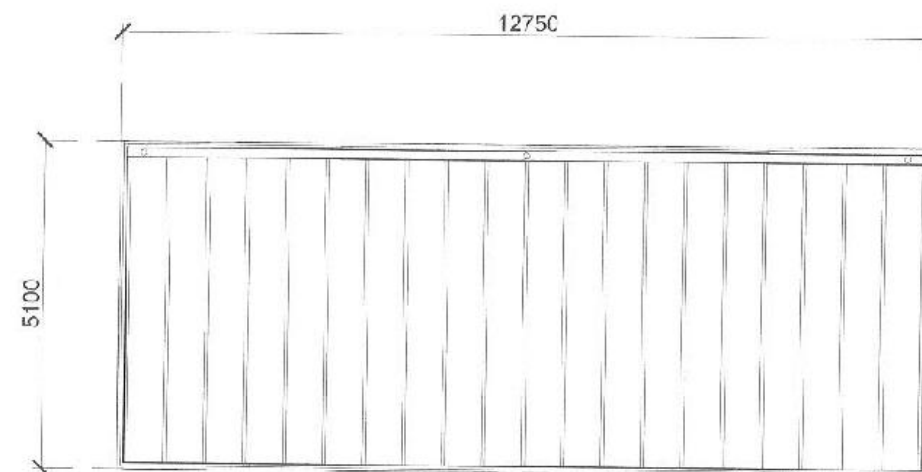
1 REAR ELEVATION
5 SCALE 1:100

2 RIGHT-SIDE ELEVATION
5 SCALE 1:100

PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	PROJECT TITLE:	SHEET CONTENT:	NOTED BY: M.S.L.	SHEET NO.:
 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	 Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	 Hon. M.A. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK LOCATION: BGY. BAHAY TORO, DISTRICT 1, SC	2-STORY TENNIS CLUBHOUSE: REAR ELEVATION RIGHT-SIDE ELEVATION	DATE:  CHECKED BY:  DATE:  CADD BY:  DATE:	5 22

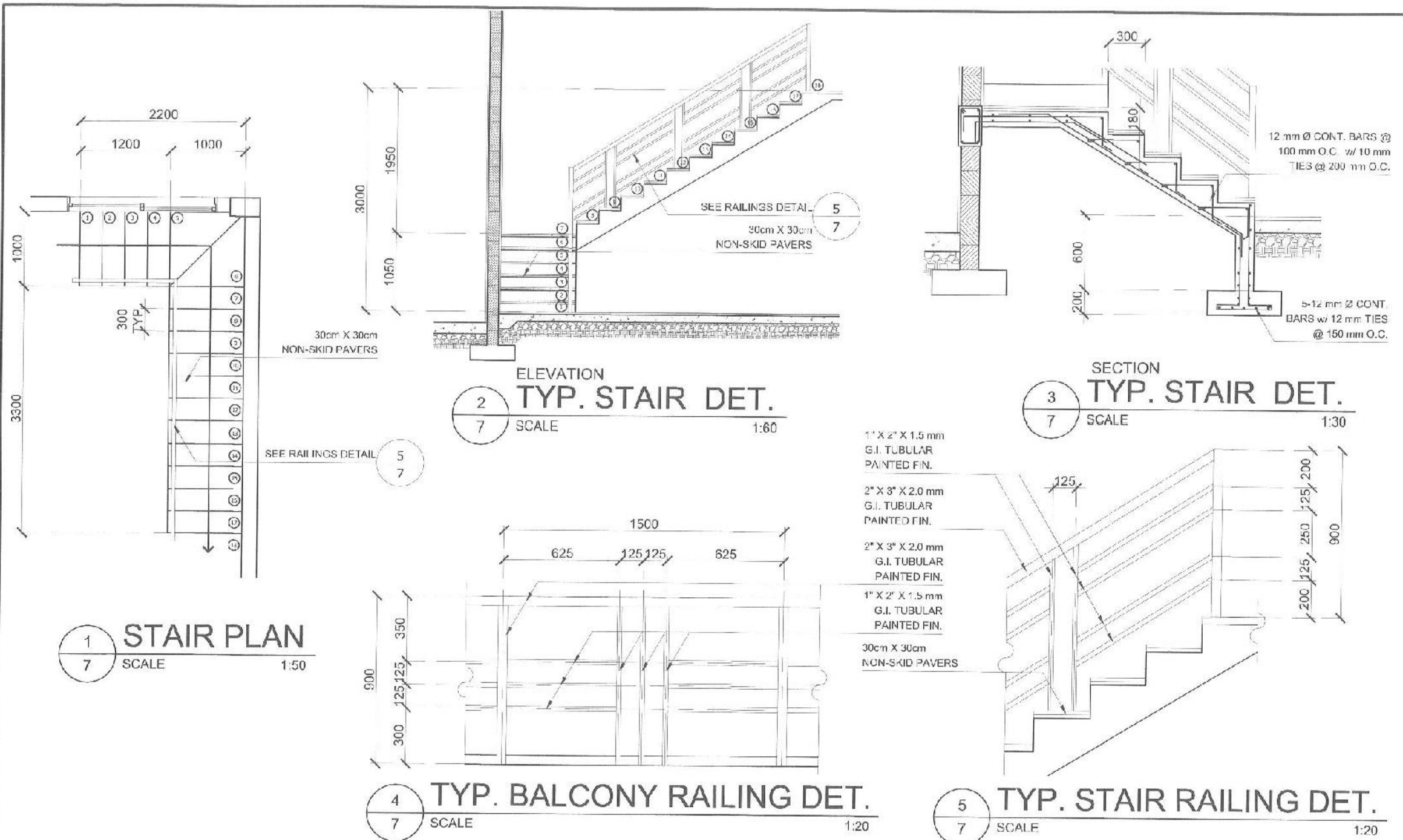


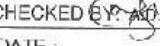
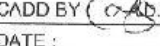
1 CROSS SECTION
6 SCALE 1:60

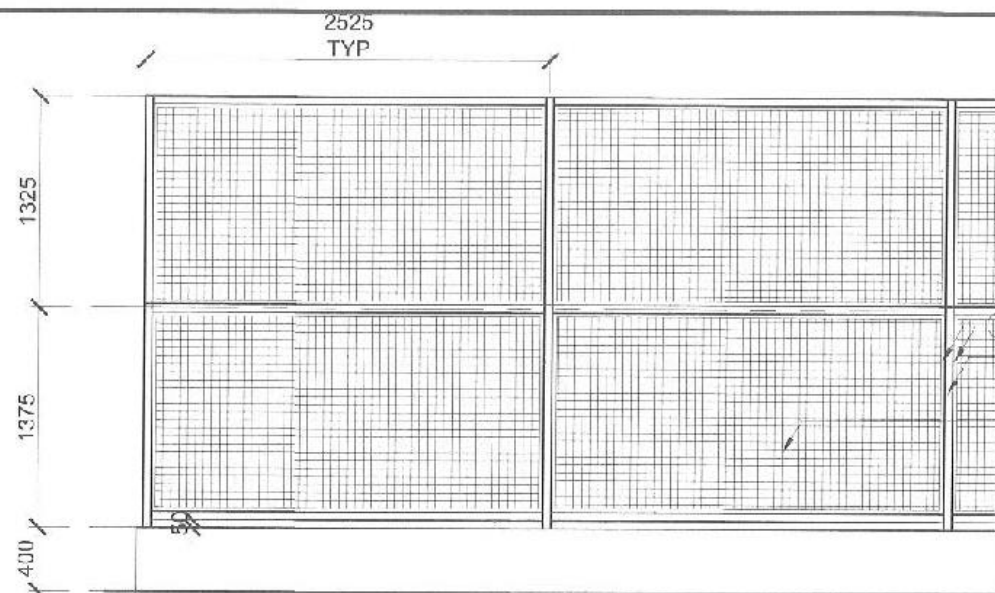


2 ROOF PLAN
6 SCALE 1:100

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 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK LOCATION: BGY. SAN AY TIGRO, DISTRICT 1, QC	2-STOREY TENNIS CLUBHOUSE CROSS SECTION ROOF PLAN	DATE:  CHECKED BY:  DATE:  CADD BY:  DATE:	6 22

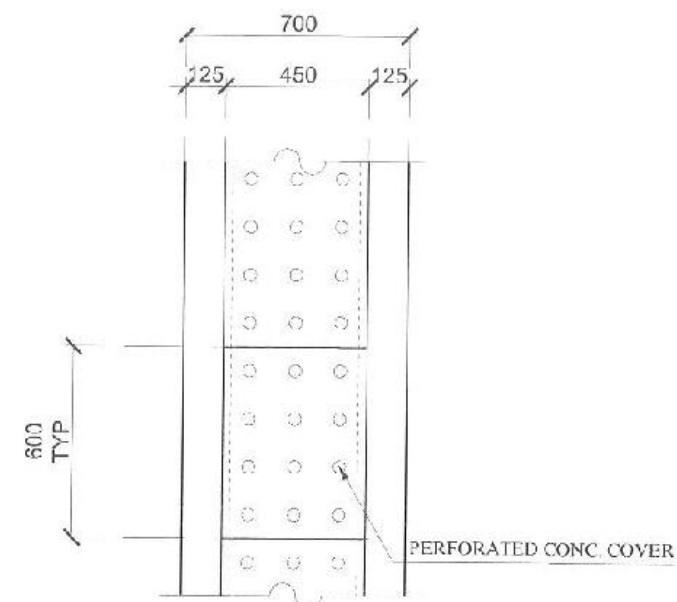


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 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK	2-STOREY TENNIS CLUBHOUSE: STAIR PLAN TYP. STAIR DET. (ELEV.) TYP. STAIR DET. (SECTION) TYP. BALCONY RAILING DET. TYP. STAIR RAILING DET.	DATE:  CHECKED BY:  DATE:  CADD BY:  DATE:	7 22



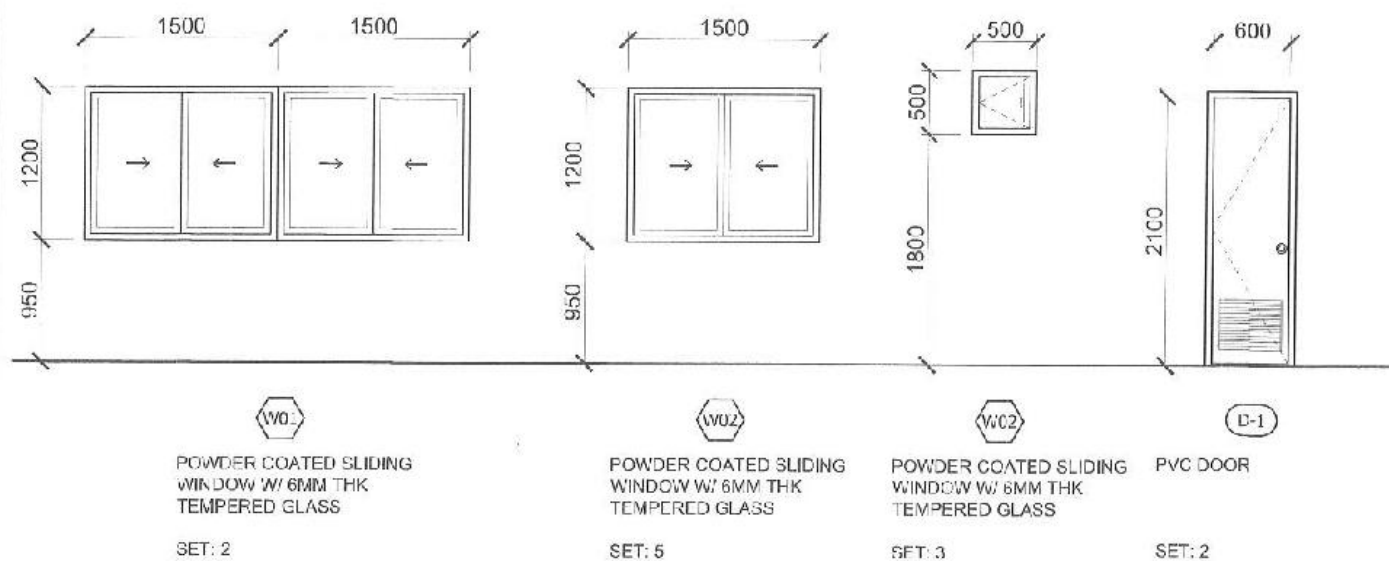
1
6
SCALE 1:40 M

**PERIMETER FENCE DETAIL
@ TENNIS COURT (EXISTING)**



3
8
SCALE 1:20 M

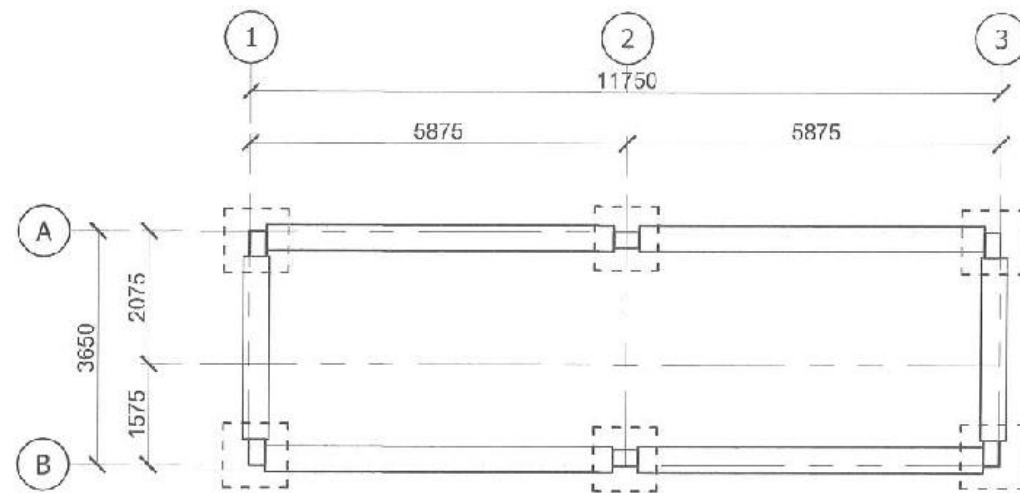
PERFORATED LINE CANAL DETAIL



2
8
SCALE 1:50 M

DOOR & WINDOWS SCHEDULE

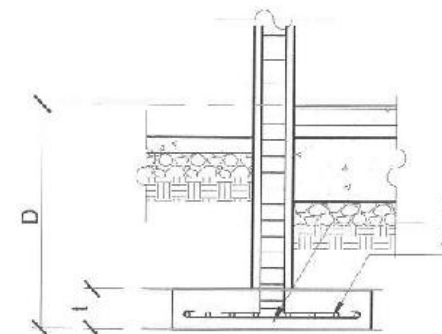
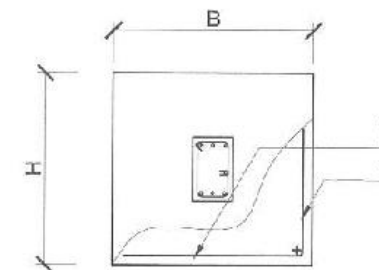
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 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	 Arch. BALTAZAR C. AVELINO OFFICE IN CHARGE	 Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR CUEZCO CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK LOCATION: 309, SAHAY TORO, DISTRICT 1, SC	PERIMETER FENCE DET. @ TENNIS COURT DOOR & WINDOWS SCHED. PERFORATED LINE CANAL DETAIL	CHECKED BY: M.S.T. DATE: CADD BY: M.S.T. DATE:	8 22



1 FOUNDATION PLAN
9 SCALE 1:100

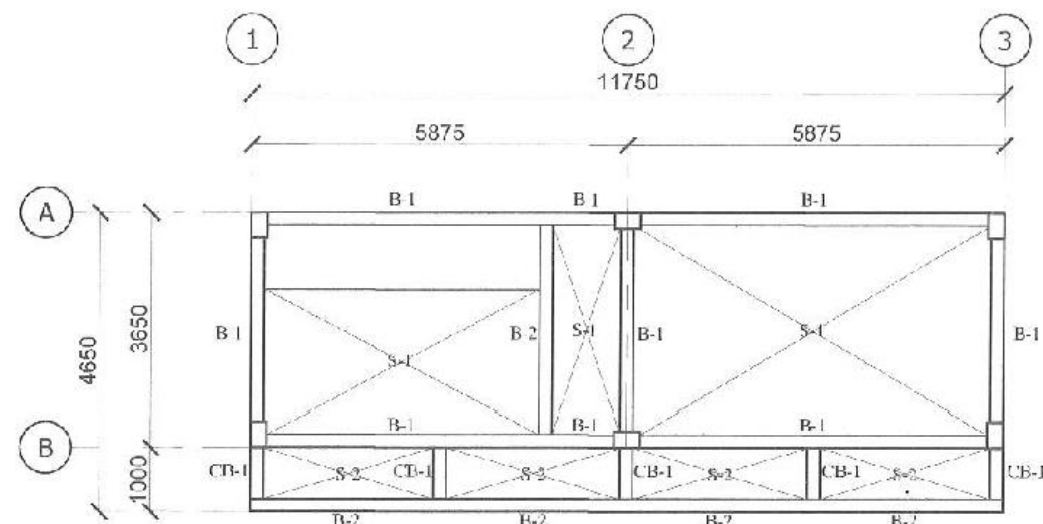
SCHEDULE OF FOOTING						
FOOTING MARK	SIZE BXH (mm)	DEPTH D (mm)	THICKNESS T (mm)	REINFORCEMENT		REMARKS
				a	b	
F1	1000 X 1000	1200	280	7-16 Ø	7-16 Ø	SQUARE

COLUMN SCHEDULE				
COLUMN MARK	SIZE BXH (mm)	FOOTING TO 2ND FLR	2ND FLR TO ROOF BEAM	10 MM Ø TIES (MM)
C-1	250 X 400	8 - 16 Ø	6 - 16 Ø	2-10 Ø SPACED 2 @ 50, 6 @ 100. REST @ 150mm O.C.



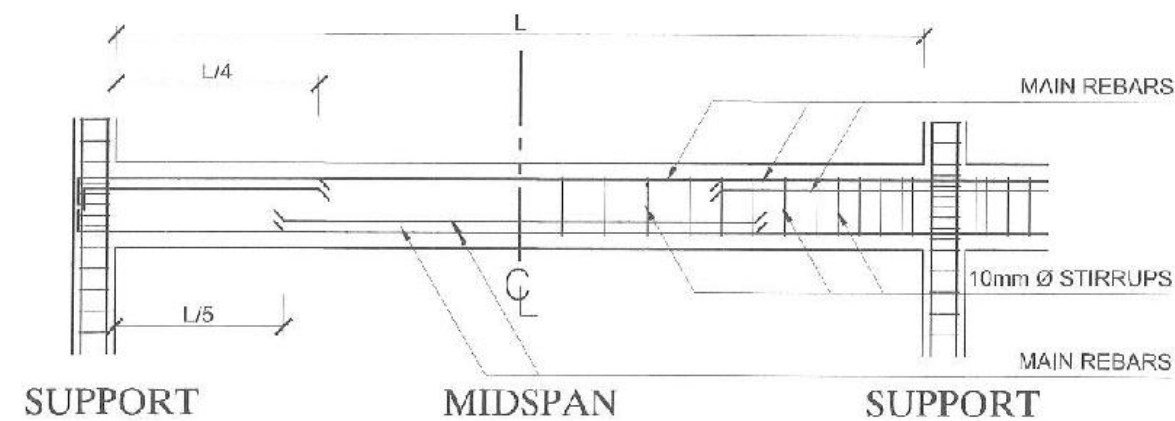
2 COLUMN/ FOOTING SCHEDULE & DET.
9 SCALE 1:NTS

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 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK LOCATION : BGY. BAHAY TORO, DISTRICT 1, QC	2-STOREY TENNIS CLUBHOUSE FOUNDATION PLAN COLUMN/ FOOTING SCHEDULE & DET.	CHECKED BY AD.T. DATE : CADD BY AD.T. DATE :	9 22



1
10
2ND FLOOR FRAMING PLAN
SCALE 1:100

BEAM SCHEDULE				
BEAM MARK	SIZE, (mm)	STEEL REINFORCEMENT, mm		STIRRUPS
		SUPPORT	MID-SPAN	
B-1	200 X 400	6 - 16 Ø 3 - 16 Ø	2 - 16 Ø 5 - 16 Ø	2 @ 50, 6 @ 100 REST @ 150mm O.C.
B-2	200 X 400	4 - 16 Ø 2 - 16 Ø	2 - 16 Ø 3 - 16 Ø	2 @ 50, 4 @ 100, REST @ 150 mm O.C.
RR	160 X 300	2 - 16 Ø 2 - 16 Ø	2 - 16 Ø 2 - 16 Ø	2 @ 50, REST @ 150 mm O.C.
CB-1	200 X 400	4 - 16 Ø 2 - 16 Ø		2 @ 50, REST @ 150 mm O.C.



2
10
BEAM DETAIL/ SCHEDULE
SCALE 1:NTS

PREPARED BY :

RECOMMENDING APPROVAL :

APPROVED BY :

PROJECT TITLE :

SHEET CONTENT :

NOTED BY : *[Signature]* S.I.

SHEET NO.:

PARKS
DEVELOPMENT &
ADMINISTRATION
DEPARTMENT

Arch. BALTAZAR C. AVELINO
OFFICER IN CHARGE

Hon. MA. JOSEFINA G. BELMONTE
CITY MAYOR QUEZON CITY

PROPOSED IMPROVEMENT OF TORO
HILLS PARK

LOCATION : BGY. BAHAY TORO, DISTRICT 1, QC

2-STOREY
TENNIS CLUBHOUSE:
2ND FLOOR
FRAMING PLAN
BEAM DET./SCHEDULE

DATE :

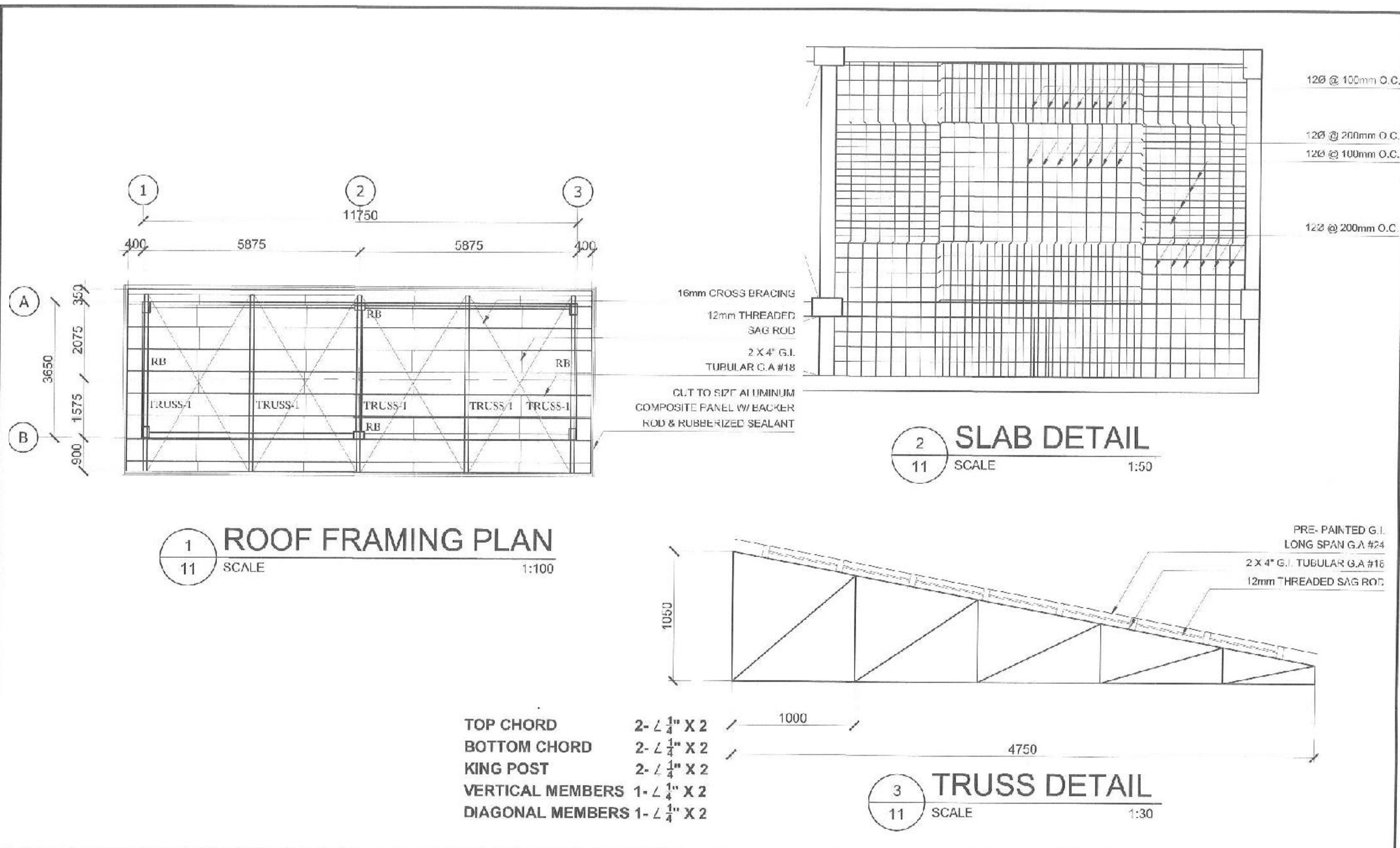
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DATE :

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DATE :

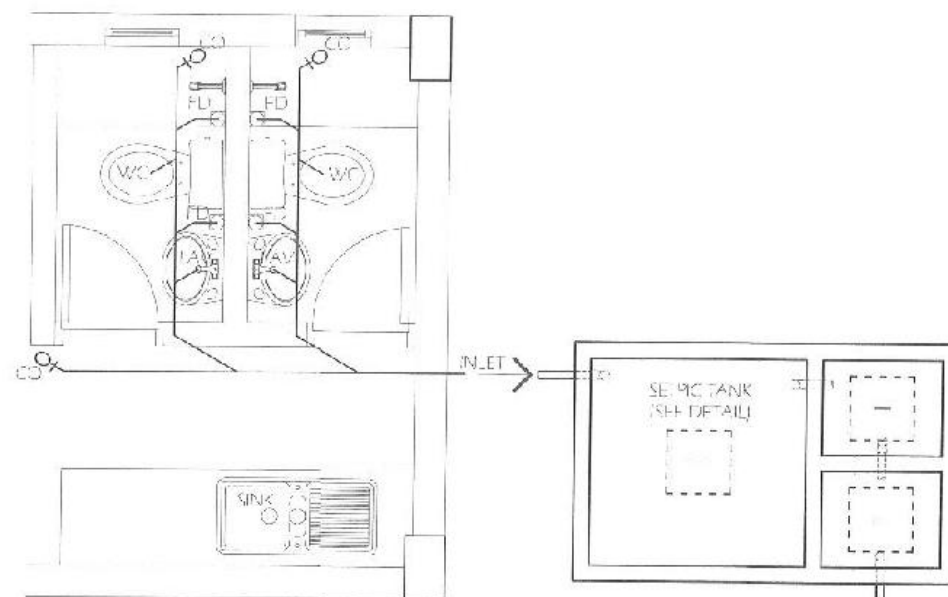
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22



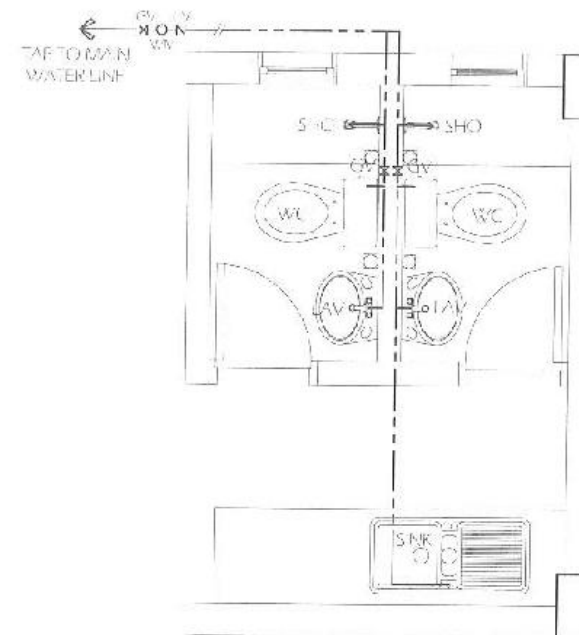
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PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK LOCATION: BOY, BAHAY TORO DISTRICT 11 QC	2-STOREY TENNIS CLUBHOUSE: ROOF FRAMING PLAN SLAB DETAIL TRUSS DETAIL	CHECKED BY: A.D.I. DATE: CADD BY: A.D.I. DATE:	11 22

GENERAL NOTES:

- 01 ALL PLUMBING WORKS INCLUDED HEREIN SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL PLUMBING CODE (RA 1378) AND THE RULES AND REGULATIONS.
- 02 COORDINATE THE DRAWINGS WITH OTHER RELATED DRAWINGS AND SPECIFICATIONS. THE ARCHITECT OR ENGINEER SHALL BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES FOUND HEREIN.
- 03 ALL PIPES SHALL BE INSTALLED AS INDICATED. ANY RELOCATION REQUIRED FOR PROPER EXECUTION OF OTHER TRADES SHALL WITH PRIOR APPROVAL OF THE ENGINEER.
- 04 PROPOSED SANITARY UTILITIES CONFORM TO THE ACTUAL LOCATION, DEPTH & INVERT ELEVATION OF ALL EXISTING PIPES & STRUCTURES AS VERIFIED BY THE CONTRACTOR.
- 05 ALL SLOPES FOR HORIZONTAL DRAINAGE SHALL MAINTAIN 1.5% MINIMUM UNLESS OTHERWISE SPECIFIED.
- 06 ALL WATERLINES SHALL BE PPR PIPES UNLESS OTHERWISE SPECIFIED BY THE ARCHITECT OR ENGINEER.
- 07 THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AT SITE & COORDINATE WORKS WITH SEWER LINE EFFLUENT DISPOSAL & WATERLINE SERVICE CONNECTING POINT.
- 08 ALL PIPE SIZES ARE IN MILLIMETERS AND ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.
- 09 ALL PLUMBING WORKS SHALL BE UNDER THE DIRECT SUPERVISION OF A REGISTERED MASTER PLUMBER OR SANITARY ENGR.



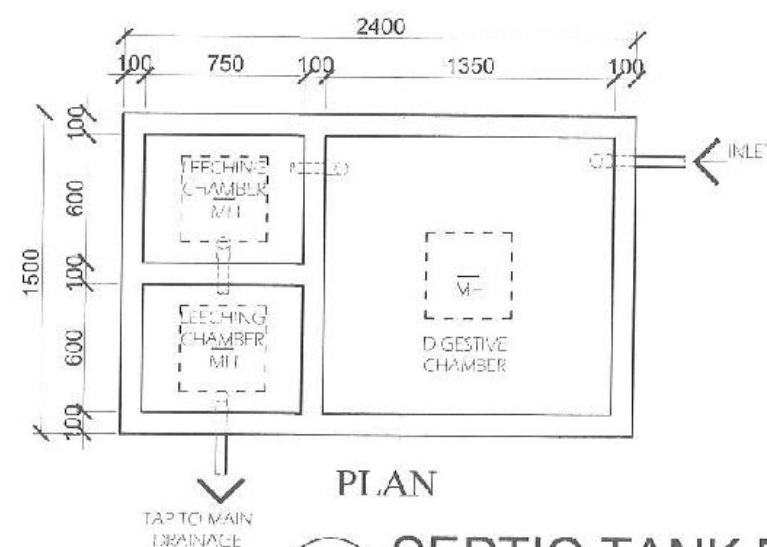
1 SEWER LINE LAYOUT
12 SCALE 1:40



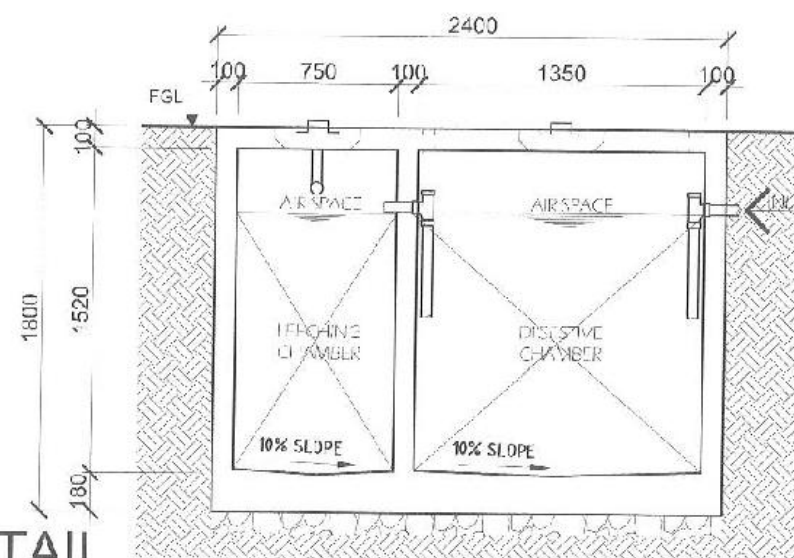
2 WATER LINE LAYOUT
12 SCALE 1:40

LEGEND & SYMBOLS:

---	OWL	COLD WATER LINE
---	OWD	COLD WATER DOWNFALL
○	WM	WATER METER
△	GV	GATE VALVE
---	SWWP	SOLID WASTE PIPE
□	FD	FLOOR DRAIN
○	LAV	LAVATORY
○	WC	WATER CLOSET

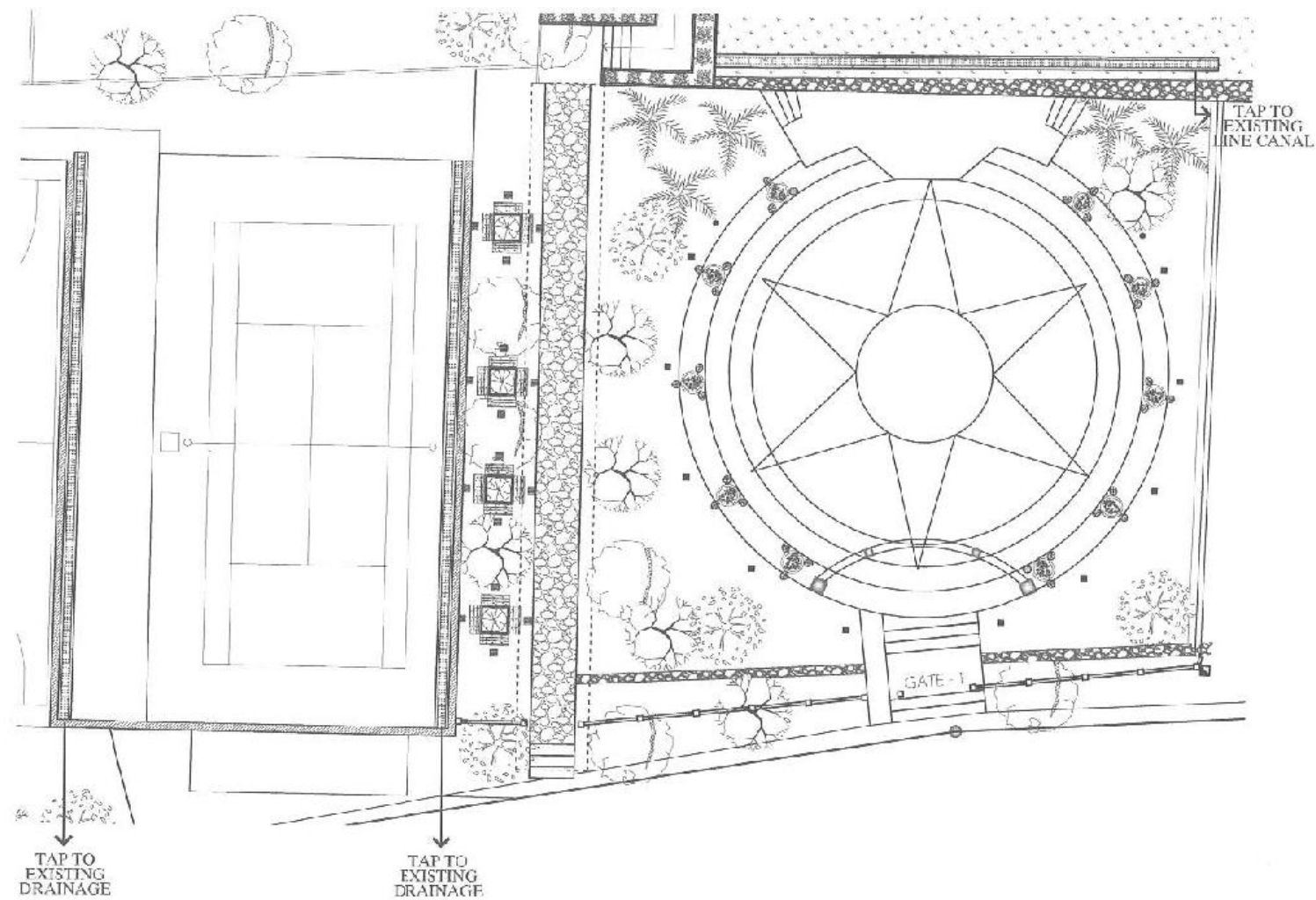


3 SEPTIC TANK DETAIL
12 SCALE 1:30



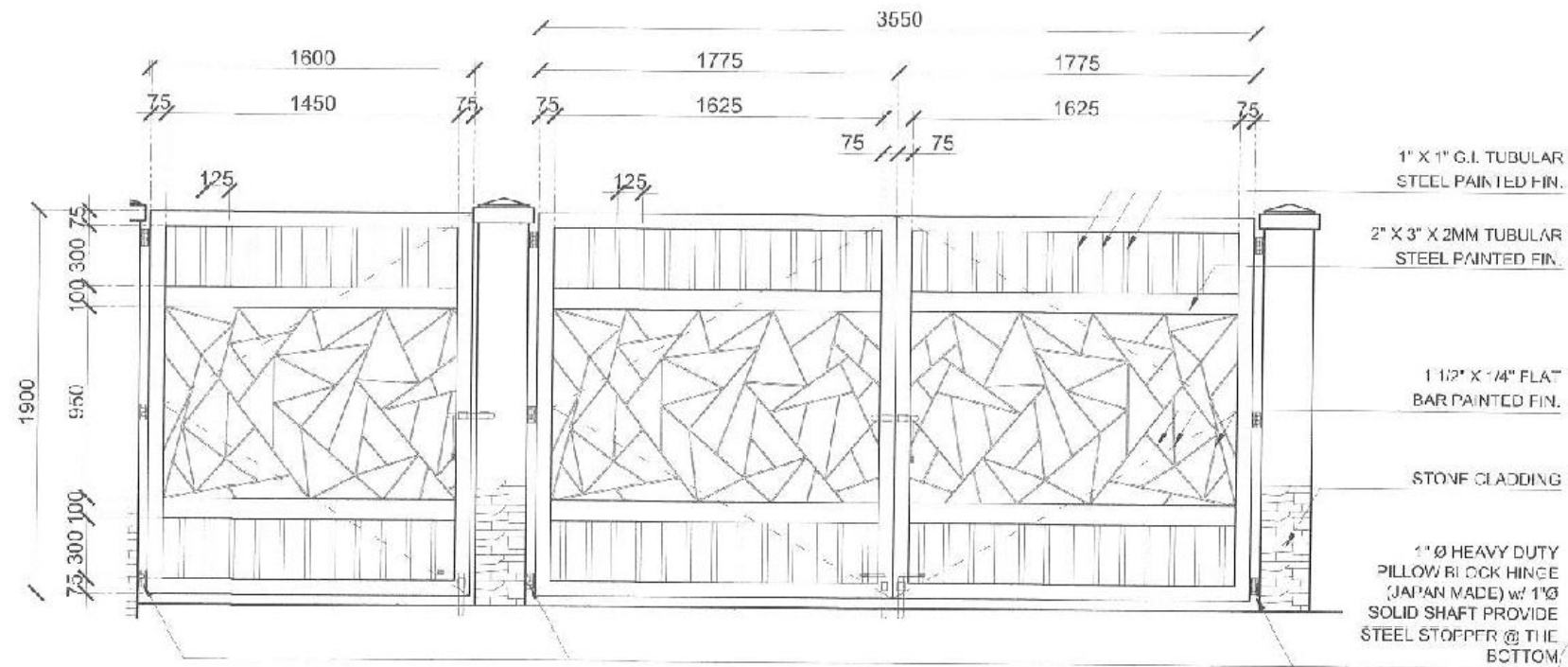
SECTION

PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	PROJECT TITLE:	SHEET CONTENT:	NOTED BY: A.S.T.	SHEET NO.:
PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK	2 STOREY TENNIS CLUBHOUSE: GENERAL NOTES LEGENDS & SYMBOLS SEWER LINE LAYOUT WATER LINE LAYOUT SEPTIC TANK DETAIL	DATE: CHECKED BY: A.D.T. DATE: CADD BY: A.D.T. DATE:	12 22

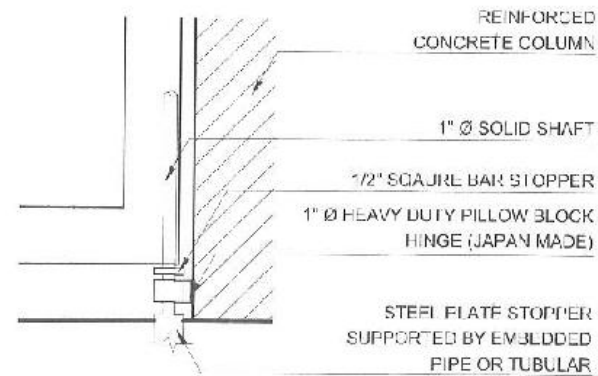


3
13 LINE CANAL LAYOUT
SCALE 1:300

PREPARED BY :	RECOMMENDING APPROVAL :	APPROVED BY :	PROJECT TITLE :	SHEET CONTENT :	NOTED BY : <i>[Signature]</i>	SHEET NO. :
 PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE <i>[Signature]</i>	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK LOCATION : BGY. DALAY TORO, DISTRICT 1 GC	LINE CANAL LAYOUT	DATE : CHECKED BY : <i>[Signature]</i> D.T. DATE : CADD BY : <i>[Signature]</i> D.T. DATE :	13 22



1 GATE - 1 DETAIL
14 SCALE 1:30 M



2 PILLOW BLOCK HINGE w/ STOPPER DET.
14 SCALE N.T.S.

PREPARED BY:	RECOMMENDING APPROVAL:	APPROVED BY:	PROJECT TITLE:	SHEET CONTENT:	NOTED BY: <i>[Signature]</i> S.T.	SHEET NO.:
PARKS DEVELOPMENT & ADMINISTRATION DEPARTMENT	Arch. BALTAZAR C. AVELINO OFFICER IN CHARGE	Hon. MA. JOSEFINA G. BELMONTE CITY MAYOR QUEZON CITY	PROPOSED IMPROVEMENT OF TORO HILLS PARK	GATE - 1 DETAIL PILLOW BLOCK HINGE w/ STOPPER DET.	DATE: <i>[Signature]</i> CHECKED BY: <i>[Signature]</i> DATE: <i>[Signature]</i> CADD BY: <i>[Signature]</i> DATE:	14 22
			LOCATION: SCV BAHAY TOGO DISTRICT 1 CC			