### GENERAL SPECS. FOR PLUMBING WORKS

- 1. ALL PLUMBING WORKS HEREIN INCLUDED SHALL BE INSTALLED ACCORDING TO THE PROVISIONS OF THE NATIONAL PLUMBING CODE OF THE PHILS., THE NATIONAL BUILDING CODE AND THE RULES AND REGULATIONS OF THE CITY OF BORONGAN, EASTERN SAMAR.
- 2. WORKS SHALL BE EXECUTED IN CLOSE COORDINATION WITH ALL TRADES. NOTIFY IMMEDIATELY ANY DISCREPANCY WITH OTHER TRADES. ANY RELOCATION REQUIRED FOR THE PROPER EXECUTION OF OTHER TRADES SHALL BE WITH PRIOR APPROVAL OF THE ARCHITECT OR ENGINEER. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES AT SITE AND COORDINATE THE WORKS WITH THE SEWER LINE EFFLUENT OR DISPOSAL POINT AND WATER LINE SERVICE CONNECTING POINT.
- 3. THE TOTAL SCOPE OF WORK SHALL INCLUDE ALL WORKS AS DESCRIBED IN THE PLANS AND LISTED IN THE PLUMBING WORKS AS PART OF THE CONTRACT DOCUMENTS. PROPOSED SANITARY UTILITIES SHALL CONFORM TO THE ACTUAL LOCATION,
- DEPTH AND INVERT ELEVATION OF ALL EXISTING PIPES AND STRUCTURES AS VERIFIED BY THE CONTRACTOR.
- 4. ALL DIMENSIONS SUCH AS PIPE SIZES ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
- 5. ALL SANITARY DRAINAGE LINES SHALL MAINTAIN A MINIMUM SLOPE OF 2% UNLESS OTHERWISE NOTED.
- 6. ALL STORM DRAINAGE LINES SHALL MAINTAIN A MINIMUM SLOPE OF 1% UNLESS OTHERWISE NOTED.
- 7. ALL WATER LINES SHALL BE HYDROSTATICALLY TESTED AT 1034 KPa (150 PSIG).
- 8. THE NEW WATER DISTRIBUTION PIPING SYSTEM SHALL BE THOROUGHLY FLUSHED AND DISINFECTED WITH CHLORINE AT 50 PPM CONCENTRATION.
- 9. ALL HOSE BIBBS SHALL BE PROVIDED WITH GATE VALVES.
- 10. UNLESS OTHERWISE INDICATED, ALL FIXTURES OR TRAP MUST BE
  PROVIDED WITH INDIVIDUAL VENTS. THERE SHALL BE REQUIRED
  VENTILATION AND LIGHTING SYSTEM FOR TOILETS AND BATHROOMS AND ALL WET AREAS.
- 11. ALL 90° CHANGES IN DIRECTIONS SHALL BE MADE BY THE APPROPRIATE USE OF FORTY FIVE DEGREES (45°) WYE AND 1/8 BEND. THE SAME SHALL BE DONE FOR VERTICAL SOIL STACKS. TEES AND CROSSES MAY BE USED ONLY IN VENT PIPES.
- 12. UNLESS OTHERWISE SPECIFIED, PIPE SIZE OF FLOOR DRAINS SHALL BE THE SAME AS THE CONNECTING PIPE.
- 13. ALL GATE VALVES SHALL BE BRONZE AND RATED AT 862 KPa (125PSI)
  CRANE OR APPROVED EQUAL.
- 14. PIPE HANGERS SHALL BE WROUGHT IRON OR OTHER APPROVED COMMERCIAL HANGERS. CHAIN STRAPS OR WIRE HANGERS WILL NOT BE PERMITTED. PIPE SLEEVE SHALL BE PROVIDED AT WALLS, COLUMNS OR SLABS, GREATER THAN THE ACTUAL LINES PASSING THROUGH WALLS OR UNDER SLABS TO PROTECT THE PIPES FROM BREAKAGE.
- 15. WATER LINES SHALL HAVE INDIVIDUAL GATE VALVE PER TOILET AND WHEREVER NECESSARY
- FOR MAINTENANCE PURPOSES.
- 16. ALL PIPES PASSING THROUGH THE SEISMIC GAP SHALL BE PROVIDED WITH FLEXIBLE CONNECTORS. SIZE SHALL BE THE SAME AS CONNECTING PIPE.
- 17. CLEANOUTS ARE REQUIRED UNDER THE FOLLOWING CONDITIONS:
- A. EVERY CHANGE IN HORIZONTAL DIRECTIONS EXCEEDING TWENTY TWO AND HALF (22–1/2) DEGREES.
- B. EVERY FIFTY (50'-0") FEET OR 15 METERS OF CONTINUOUS HORIZONTAL RUN OF PIPE.
- C. AT THE END OF HORIZONTAL LINES.
- 18. PROHIBITED FITTINGS: NO DOUBLE HUBS OR DOUBLE TEE WYE BRANCH SHALL BE USED ON HORIZONTAL SOIL OR WASTE LINE.
- 19. ALL GATE VALVES/ CLEANOUTS ON SHAFTS AND WHEREVER THERE ARE ASSEMBLIES SHALL HAVE AN ACCESS PANEL.
- 20.WATER LINE PIPES 1-1/2" $\phi$  AND BELOW THAT ARE BURIED, EMBEDDED AND LOCATED INSIDE THE BUILDING SHALL BE PPR.
- 21.WATER LINE PIPES 2" AND ABOVE THAT ARE BURIED, EMBEDDED AND LOCATED INSIDE THE BUILDING SHALL BE PVC.
- 22.WATER LINE PIPES EXPOSED TO WEATHER, UV AND POSSIBLE MECHANICAL DAMAGE SHALL BE G.I.
- 23. SUPPLIER OF THE EQUIPMENT MUST PROVIDE MANUAL TO THE OWNER FOR REFERENCE.
- 24. THE CONTRACTOR MUST SUBMIT SHOP DRAWINGS TO THE DESIGNER FOR APPROVAL.

# PIPE DIAMETER USE NOMINAL SIZES

FOR POLYPROPHYLENE AND uPVC PIPE SIZES

| METRIC UNITS<br>(COMMERCIAL SIZE) | ENGLISH UNITS<br>(NOMINAL DIA.) |  |  |  |  |  |  |
|-----------------------------------|---------------------------------|--|--|--|--|--|--|
| 25 mm diameter                    | 3/4 inch                        |  |  |  |  |  |  |
| 40 mm diameter                    | 1 1/4 inches                    |  |  |  |  |  |  |
| 50 mm diameter                    | 1 1/2 inches                    |  |  |  |  |  |  |
| 63 mm diameter                    | 2 inches                        |  |  |  |  |  |  |
| 100 mm diameter                   | 3 inches                        |  |  |  |  |  |  |
| 140 mm diameter                   | 6 inches                        |  |  |  |  |  |  |

## FIXTURE CONNECTION SCHEDULE

| FIXTURE                 | WASTE<br>(mm) | P-TRAP<br>(mm) | VENT<br>(mm) | CWL<br>(mm) |
|-------------------------|---------------|----------------|--------------|-------------|
| WATER CLOSET-TANK TYPE  | 100           | INTEGRAL       | 50           | 1/2"        |
| WATER CLOSET-VALVE TYPE | 100           | INTEGRAL       | 50           | 1"          |
| URINAL                  | 50            | INTEGRAL       | 50           | 3/4"        |
| LAVATORY                | 50            | 50             | 50           | 1/2"        |
| SLOP SINK               | 50            | 50             | 50           | 1/2"        |
| FLOOR DRAIN             | 50            | 50             | 50           |             |

NOTE: SEE CATALOGUE FOR THE RECOMMENDED PIPE SIZE

#### LEGEND AND SYMBOLS

- CHECK VALVE
- GATE VALVE
- FLOAT VALVE

EFS
- FLOAT SWITCH

SP - SUBMERSIBLE PUMP
- WATER DOWNFEED

WATER RISERFLOOR CLEAN OUT

CATCH BASINFCOFLOOR CLEANOUTG.I.GALVANIZED IRON

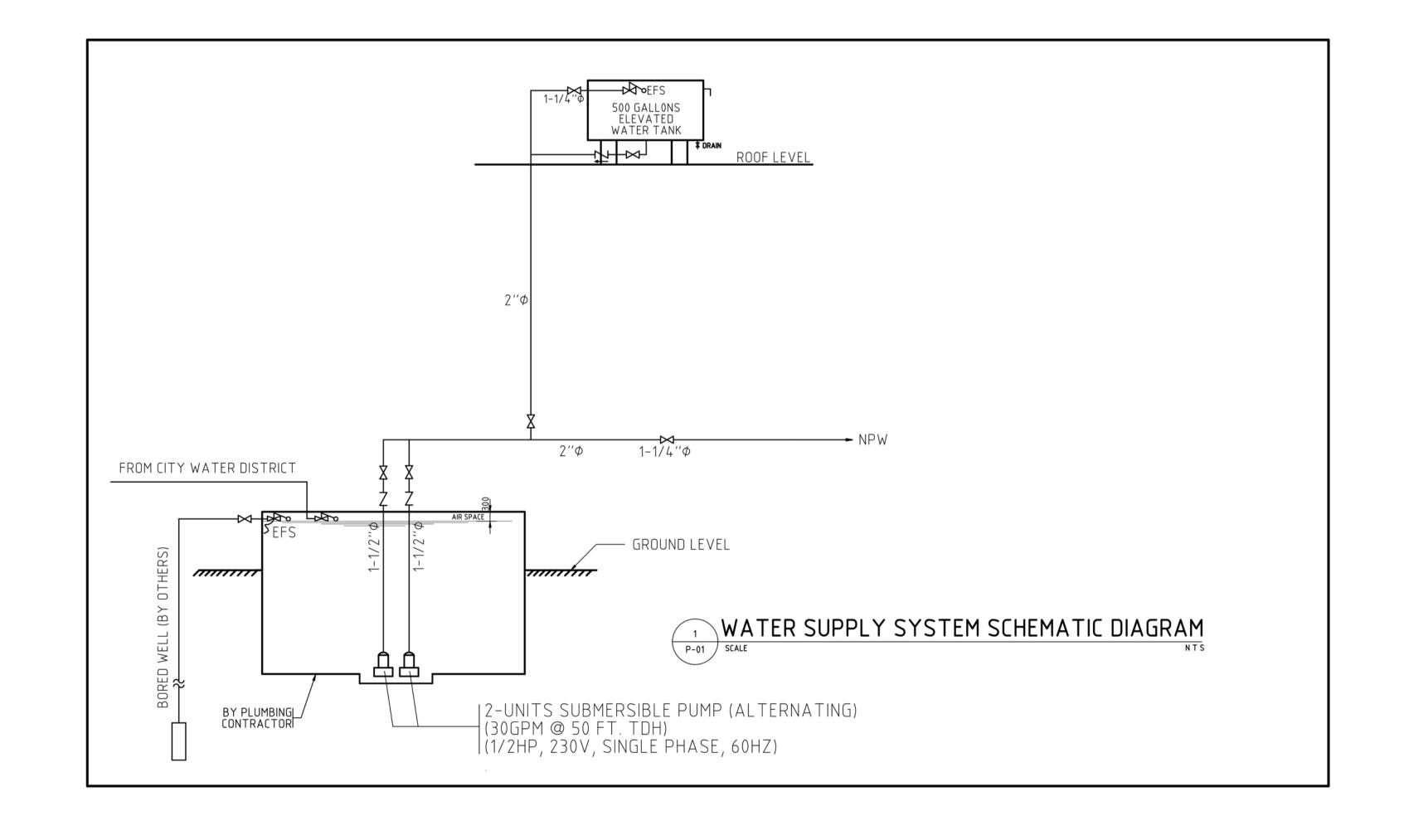
FLOOR DRAIN

PVC - POLYVINYL CHLORIDE
PPR - POLYPROPYLENE RESIN

## PLUMBING FIXTURES

- URINAL
- LAVATORY
- WATER CLOSET

- FLOOR WASTE





ANGEL F. GONZALES

SANITARY ENGINEER

Reg. No. | PTR No. : | Place of Issue : Quezon City

0917723 C Date of Issue : Feb. 17, 2015

PROJECT / LOCATION:

MULTI-PURPOSE CENTER

CITY OF BORONGAN, EASTERN SAMAR



/UNICEF



MARCO BOASSO
CHIEF OF MISSION IOM PHILIPPINES
DIRECTOR MANILA GLOBAL ADMINISTRATIVE CENTER

APPROVED FOR IMPLEMENTATION BY OWNER:

NO. REVISIONS DATE BY SHEET CONTENT

1 ISSUED FOR BIDDING 23SEP15 JZR
2 ISSUED FOR CONSTRUCTION 200CT15 JZR
3 REVISION - A 15JUL16 JZR WATER SUPPLY SYSTEM SCHEMATIC DIAGRAM

CHECKED AFG DRAWN JZR FILENAME

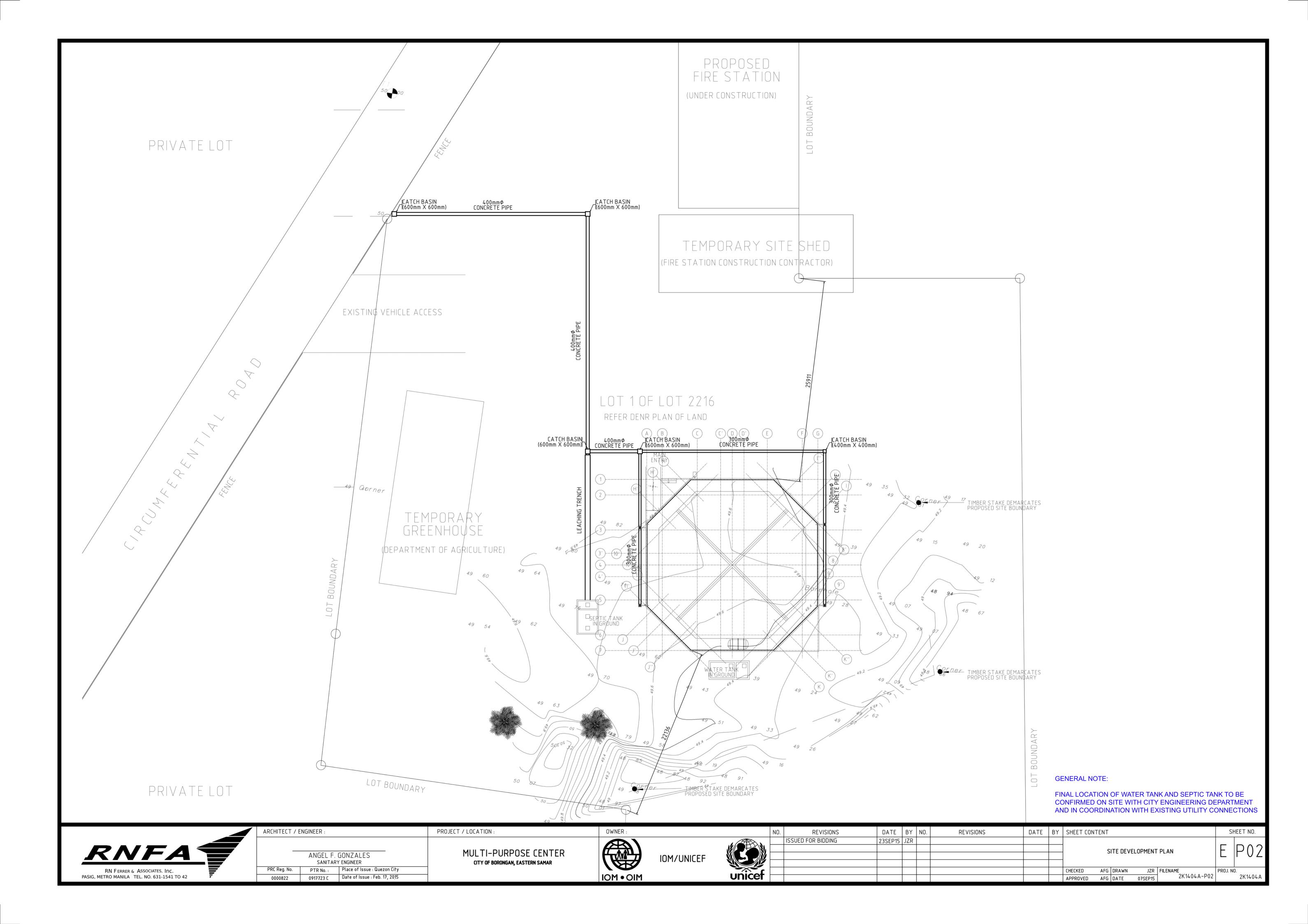
APPROVED AFG DATE 15JUL16

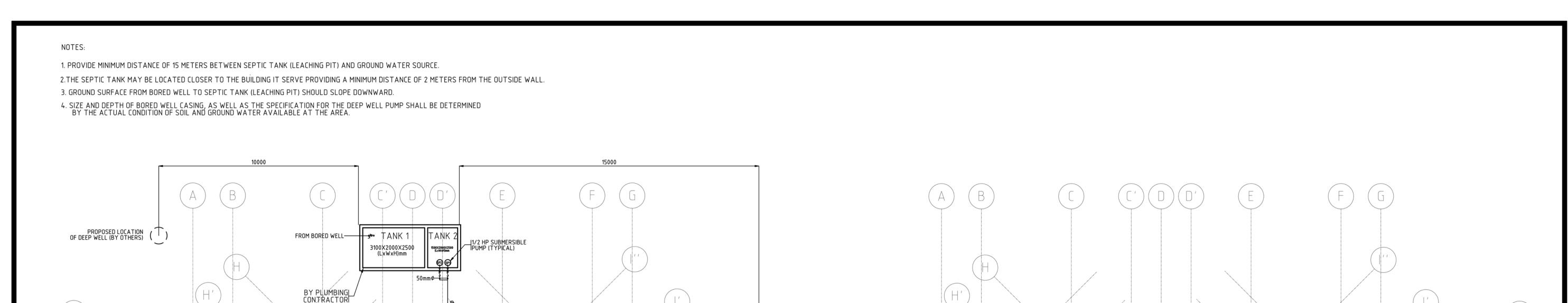
SHEET NO.

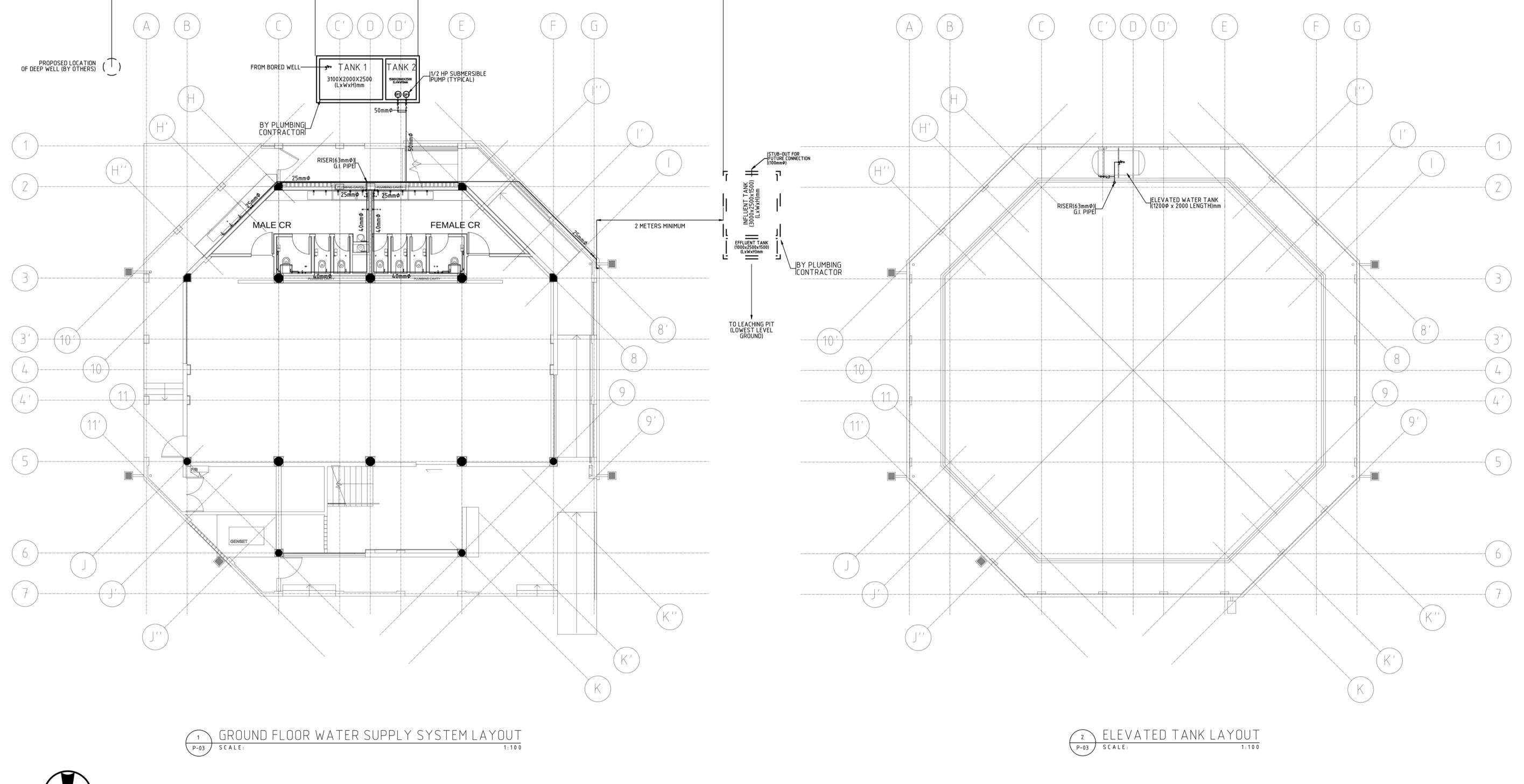
ND PROJ. NO.
2K1404A-P01

SHEET NO.

2K1404A









|   | ARCHITECT / ENGINEER :   | PROJECT / LOCATION :            | OWNER :   |              | NO.      | REVISIONS          | DATE    | BY  | NO. REVISIONS | DATE | BY SHEET         | CONTENT   | SHEET NO. |
|---|--|---------------------------------|-----------|--------------|----------|--------------------|---------|-----|---------------|------|------------------|---|-----------|
|   |  |                                 |           |              | . —      | ISSUED FOR BIDDING | 23SEP15 | JZR |               |      |                  |   |           |
| RNFA  | ANGEL F. GONZALES  | MULTI-PURPOSE CENTER            |           | IOM/LINICEE  | <b>½</b> |                    |         |     |               |      | GF               | ROUND FLOOR WATER SUPPLY SYSTEM LAYOUT AND ELEVATED TANK LAYOUT | F 1403    |
| RN FERRER & ASSOCIATES, Inc.                | SANITARY ENGINEER  PRC Reg. No.   PTR No.   Place of Issue : Quezon City | CITY OF BORONGAN, EASTERN SAMAR |           | 10117 ONICLI |          |                    |         |     |               |      | CHECKE           | D AFG DRAWN JZR FILENAME F                                      | PROJ. NO. |
| PASIG, METRO MANILA TEL. NO. 631-1541 TO 42 | 0000822 0917723 C Date of Issue : Feb. 17, 2015                          |                                 | IOM • OIM | uńicef       |          |                    |         |     |               |      | CHECKE<br>APPRO\ | 2K1/.0/. A = D03  | 2K1404A   |

