

No: 1860/21/NK/TVPM

Office of the Nirmithi Kendra,
B Block, 4th Floor, Civil Station,
Kudappanakunnu, Thiruvananthapuram 43.
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27.07.2021

Tender Notice for Oxygen Generator Room at Fort Taluke Hospital Trivandrum

District Nirmithi Kendra invites Competitive tenders from authorized Firms/experienced contractors in the form attached herewith for **Oxygen Generator Room** at District Nirmithikendra's Project site **Fort Taluke Hospital Trivandrum**

S.N o.	PARTICULARS	QTY	UNIT
1	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil	4.800	cum
2	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	4	sqm
3	Demolishing R.C.C. work manually / by mechanical means including stacking of steel bars and disposal of unserviceable material within 50 metres lead as per direction of Engineer - in-Charge.	4.644	cum
4	Providing and laying in position cement concrete of specified grade excluding the cost of centering and shuttering - All work up to plinth level: 1:3:6 (1 cement : 3 coarse sand : 6 graded stone aggregate 40 mm nominal size)	1.086	cum
5	Providing and laying in position specified grade of reinforced cement concrete, excluding the cost of centering, shuttering, finishing and reinforcement - All work up to plinth level: 1:1:5:3 (1 cement 1.5 coarse sand : 3 graded stone aggregate 20 mm nominal size)	0.961	cum
6	Centering and shuttering including strutting, etc. and removal of form for: Foundations, footings, bases of columns, etc for mass concrete	12	sqm
7	Steel reinforcement for R.C.C work including straightening, cutting, bending, placing in position and binding all complete upto plinth level Thermo - Mechanically Treated bars of grade Fe-500D or more	513.34	kg
8	Providing and fixing bolts including nuts and washers complete	90	kg

9	Providing and fixing up to floor five level precast cement concrete hollow block, including hoisting and setting in position with cement mortar 1:3 (1 cement : 3 coarse sand), cost of required centering,shuttering complete:1:1.5:3 (1 cement : 1.5 coarse sand (Zone III): 3 graded stone aggregate 20 mm nominal size)	1.423	cum
10	15 mm cement plaster on rough side of single or half brick wall of mix:1:4 (1 Cement : 4 coarse sand)	30.600	sqm
11	Finishing with Deluxe Multi surface paint system for interiors and exteriors using primer as per manufacturers specifications:Painting wood work with Deluxe Multi Surface Paint of required shade. Two or more coat applied @ 0.90 ltr/10 sqm over an under coat of primer applied @ 0.75 ltr/10 sqm of approved brand and manufacture	30.600	sqm
12	Reinforced cement concrete work in beams, suspended floors, roofs, having slope up to 150 landings,balconies, shelves, chajjas, lintels, bands, plain window sills, staircases and spiral stair cases up to floor five level excluding the cost of centering, shuttering, finishing and reinforcement, with 1:1.5:3 (1 cement :1.5 coarse sand (Zone III) : 3 graded stone aggregate 20 mm nominal size).	2.853	cum
13	15 mm cement plaster on rough side of single or half brick wall finished with a floating coat of neat cement of mix:1: 4 (1 cement : 4 fine sand)	14.950	sqm
14	Floor painting with floor enamel paint of approved brand and manufacture of required colour to give an even shade:Two or more coats on new work	14.950	sqm
15	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs,landings, balconies and access platform	17.661	sqm
16	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately), using good quality Anjili wood /jack wood	0.028	cum
17	Providing and fixing panelled or panelled and glazed shutters for shutters for doors, windows and clerestory windows, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer - in-charge.30 mm thick shutters	2.640	sqm
18	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum Long Term Design Strength (LTDS) of more than 50% of ultimate tensile strength at 30 degree Celcius corresponding to 12 % strain	17.500	sqm

	.Ultimate tensile strength- 600 kN/m		
19	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete.Hot finished welded type tubes	3605.3 21	kg
20	Providing at all heights, levels and locations Aluminium profile industrialtroughed sheet of Alloy 31500/31000/40800, conforming to IS 1254, IS 737, IS2676. The sheet shall be fixed using self drilling/self tapping SS screws of size5.5x65 mm with EPDM seal complete upto required pitch in horizontal, verticalor curved surfaces i/c cutting to size and shape where required as perspecifications,detail drawings and direction of Engineer-in-Charge. The rateshall be inclusive of all screws, seal, ridge,labour, scaffolding, machinery forfixing and approved sealent where required etc. but excluding the cost ofpurlins, rafters and trusses.0.71 mm thick, the profile detail width 1044/920 mm, cover width 1000/875mm.	57.300	sqm
21	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ± 1 mm), with wall thickness 2.0mm (± 0.2 mm), corners of the door frame to be jointed with galvanized brackets and stainless steel screws, joints mitred and plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 x 19 mm and 1 mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer'sspecification and direction of Engineer-in-chargeExtruded section profile size 42x50 mm	15	m
22	Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of uPVC multi-chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 +/- 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated)touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.Ifasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc.Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes forfixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacentfinished wall shall be filled with weather proof silicon sealent over backer rod of required size and ofapproved quality, all complete as per approved drawing & direction of Engineer-in-Charge.	6	sqm

	(Single /double glass panes, wire mesh and silicon sealant shall be paid separately)Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable.Two track two panels sliding window made of (small series) frame 52 x 44 mm &sash 32 x 60mm both having wall thickness of 1.9 +/- 0.2 mm and single glazingbead of appropriate dimension. (Areaof window upto 1.75 sqm)		
23	2 Electrical items :-4 core 35mm cable 75m,4core 25mm cable 20 m,End termination25 mm & amp;35mm 4nos,10 SWG cu wire 40m,4way VDB 1no,25A SP MCB 3nos ,panel board 1nos	L.S	

2) Bid Price

- The contract shall be for the full quantity as described above. Corrections if any shall be made by crossing out re-writing with initial and date.
- The rate should inclusive of all taxes, levies, transports etc.Unloading shall be done by District Nirmithikendra.
- Usual deduction of taxes will be made from the gross amount of bill.
- The rate quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- The price should be quoted in Indian rupees only.

3) Each bidder shall submit only one Tender.

4) Validity of tender

.Tender shall remain valid for a period not less than 45 days after the dead line date specified for submission

5) Evaluation of tender

The purchaser will evaluate and compare the tenders determined to be substantially responsive ie which

- Are properly signed
- Confirm to the terms and conditions and specification.

6) Award of Contract

a) The purchaser will award the contract to the bidder whose tenders has been determined to be substantially responsive and who has offered the lowest evaluated tender price

- Not with standing above, the purchaser reserves the right to accept or reject any tenders and to cancel the bidding process and reject all tenders at any time prior to the award of the contract

- c) The bidder whose bid is accepted will be notified of the award of the contract by the purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
- 7) The amount will be released after verification of the material in physical quality and receipt of invoice in this office according to the availability of funds. Individual or authorized dealers/agents are only eligible.
- 8) You are requested to provide your offer latest by 12 hours on **05.08.2021** and the tender will be opened at **05.08.2021**

We look forward to receiving your tenders and thank for your interest in this work.




Project Manager

Format of Tender

Sl No	Description	Qty	Unit	Rate	AMOUNT	
					Amount in figures	Amount in words
1	Earth work in excavation by mechanical means (Hydraulic excavator) /manual means in foundation trenches or drains (not exceeding 1.5 m in width or 10 sqm on plan), including dressing of sides and ramming of bottoms, lift up to 1.5 m, including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m. All kinds of soil	4.800	cum			
2	Dismantling tile work in floors and roofs laid in cement mortar including stacking material within 50 metres lead. For thickness of tiles 10 mm to 25 mm	4	sqm			
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14	Floor painting with floor enamel paint of approved brand and manufacture of required colour to give an even shade:Two or more coats on new work	14.95	sqm			
15	Centering and shuttering including strutting, etc. and removal of form for:Suspended floors, roofs,landings, balconies and access platform	17.66	sqm			
16	Providing wood work in frames of doors, windows, clerestory windows and other frames, wrought framed and fixed in position with hold fast lugs or with dash fasteners of required dia & length (hold fast lugs or dash fastener shall be paid for separately), using good quality Anjili wood /jack wood	0.028	cum			

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17	Providing and fixing panelled or panelled and glazed shutters for doors, windows and clerestory windows, including ISI marked M.S. pressed butt hinges bright finished of required size with necessary screws, excluding panelling which will be paid for separately, all complete as per direction of Engineer - in-charge. 30 mm thick shutters	2.640	sqm			
18	Supplying and laying high strength flexible geogrids (HSFG) as soil reinforcement / basal reinforcement as per MORTH 3100 and IRC 113, made of high tenacity polyester core with polyethylene coating with Minimum Long Term Design Strength (LTDS) of more than 50% of ultimate tensile strength at 30 degree Celcius corresponding to 12 % strain. Ultimate tensile strength- 600 kN/m	17.50	sqm			
19	Steel work in built up tubular (round, square or rectangular hollow tubes etc.) trusses etc., including cutting, hoisting, fixing position and applying a priming coat of approved steel primer, including welding and bolted with special shaped washers etc. complete. Hot finished welded type tubes	3605.3 21	kg			
20	Providing at all heights, levels and locations Aluminium profile industrial troughed sheet of Alloy 31500/31000/40800, conforming to IS 1254, IS 737, IS 2676. The sheet shall be fixed using self drilling/self tapping SS screws of size 5x65 mm with EPDM seal complete upto required pitch in horizontal, vertical or curved surfaces i/c cutting to size and shape where required as per specifications, detail drawings and direction of Engineer-in-Charge. The rates shall be inclusive of all screws, seal, ridge, labour, scaffolding, machinery for fixing and approved sealant where required etc. but excluding the cost of purlins, rafters and trusses. 0.71 mm thick, the profile detail width 1044/920 mm, cover width 1000/875 mm.	57.30	sqm			
21	Providing and fixing factory made uPVC door frame made of uPVC extruded sections having an overall dimension as below (tolerance ± 1 mm), with wall thickness 2.0 mm (± 0.2 mm), corners of the door frame to be jointed with galvanized brackets and stainless steel screws, joints mitred and plastic welded. The hinge side vertical of the frames reinforced by galvanized M.S. tube of size 19 x 19 mm and 1 mm (± 0.1 mm) wall thickness and 3 nos. stainless steel hinges fixed to the frame complete as per manufacturer's specification and direction of Engineer-in-charge. Extruded section profile size 42x50 mm	15	m			

22	<p>Providing and fixing factory made uPVC white colour sliding glazed window upto 1.50 m in height dimension comprising of uPVC multi-chambered frame with in-built roller track and sash extruded profiles duly reinforced with 1.60 +/- 0.2 mm thick galvanized mild steel section made from roll forming process of required length (shape & size according to uPVC profile), appropriate dimension of uPVC extruded glazing beads and uPVC extruded interlocks, EPDM gasket, wool pile, zinc alloy (white powder coated) touch locks with hook, zinc alloy body with single nylon rollers (weight bearing capacity to be 40 kg), G.I fasteners 100 x 8 mm size for fixing frame to finished wall and necessary stainless steel screws etc. Profile of frame & sash shall be mitred cut and fusion welded at all corners, including drilling of holes for fixing hardware's and drainage of water etc. After fixing frame the gap between frame and adjacent finished wall shall be filled with weather proof silicon sealant over backer rod of required size and of approved quality, all complete as per approved drawing & direction of Engineer-in-Charge. (Single / double glass panes, wire mesh and silicon sealant shall be paid separately) Note: For uPVC frame and sash extruded profiles minus 5% tolerance in dimension i.e. in depth & width of profile shall be acceptable. Two track two panels sliding window made of (small series) frame 52 x 44 mm & sash 32 x 60mm both having wall thickness of 1.9 +/- 0.2 mm and single glazing bead of appropriate dimension. (Area of window upto 1.75 sqm)</p>	6	sqm				
23	<p>2 Electrical items :- 4 core 35mm cable 75m, 4 core 25mm cable 20 m, End termination 25 mm & amp; amp; amp; 35mm 4nos, 10 SWG cu wire 40m, 4 way VDB 1no, 25A SP MCB 3nos, panel board 1nos</p>		L.S				

Gross Total Cost: - Rs.....

(In words) We agree to supply the above goods in accordance with the technical Specification for a total price of Rs.....(amount in figure).....(amount in words) with in the period specified in the invitation for tenders.

Signature of Tenderor

COLUMNS ISHB 350



COLUMNS ISHB 350

DWG NO: 01

STR SHEET 1.1

DATE: 28.07.2021

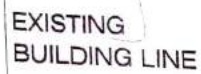
CLIENT : FORT TH - STEEL STRUCTURE FOR
OXYGEN GENERATOR UNIT

NAME OF DRAWING : EXISTING BUILDING PLAN
SHOWING PROPOSED FOOTING & COLUMNS

REVISION No: & DATE

R1 NO CHANGE

- 12 -

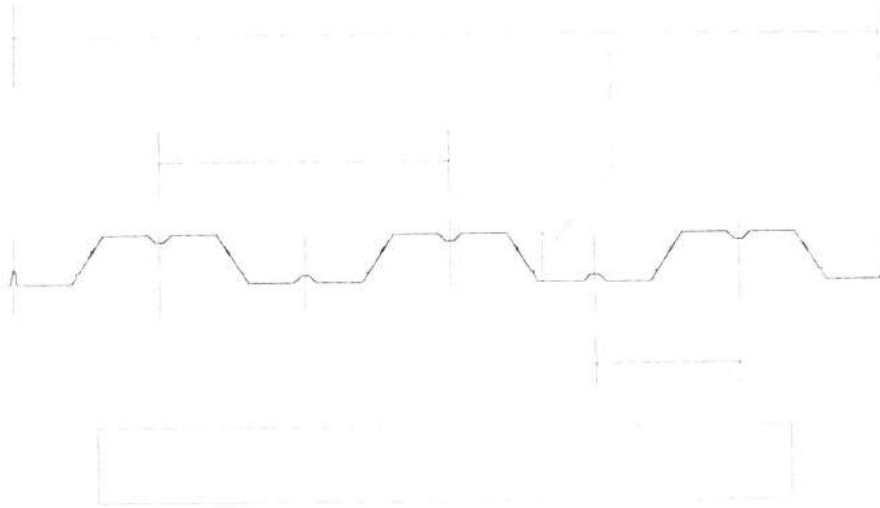


STR SHEET 2.1

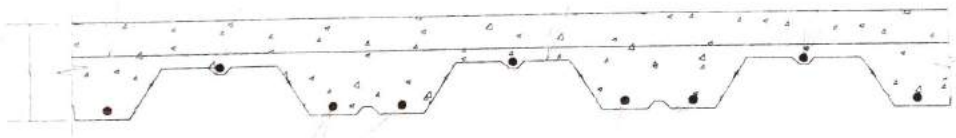
**CLIENT : FORT TH - STEEL STRUCTURE FOR
OXYGEN GENERATOR UNIT**

R1 NO CHANGE

**NAME OF DRAWING : PROPOSED STEEL STRUCTURE
& PLATFORM LAYOUT AT FIRST FLOOR LEVEL**



DECK PANEL DETAIL



TYPICAL DETAIL OF DECK PANEL FILLED WITH CONCRETE ABOVE

DWG NO: 04

STR SHEET 2.2

**CLIENT : FORT TH - STEEL STRUCTURE FOR
OXYGEN GENERATOR UNIT**

REVISION No: & DATE

R1 NO CHANGE

**DATE: 28.07.2021 NAME OF DRAWING : PROPOSED DECKING PANEL
SLAB DETAILS**



6300 c/c

ROOF DETAIL

(EXISTING BUILDING SHALL NOT BE LOADED IN ANY CASE)

DWG NO: 05

CLIENT : FORT TH - STEEL STRUCTURE FOR
OXYGEN GENERATOR UNIT

REVISION No: & DATE

STR SHEET 3.1

R1 NO CHANGE

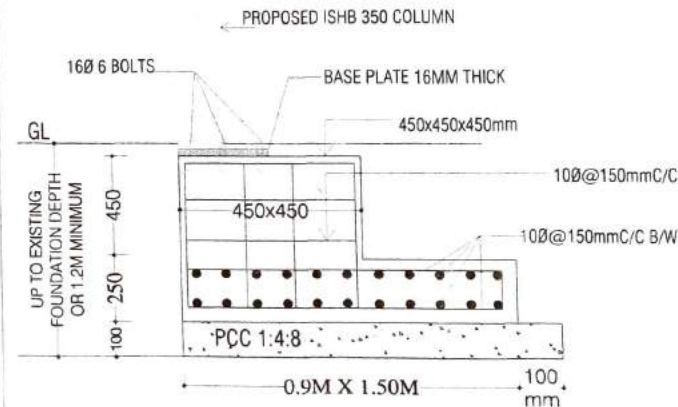
DATE: 28.07.2021 NAME OF DRAWING : PROPOSED STEEL
ROOF LAYOUT

GENERAL NOTE:-

1. THE EXISTING STRUCTURE SHALL NOT BE LOADED IN ANY CASE (DURING & AFTER CONSTRUCTION). CARE SHOULD BE TAKEN THAT SUPPORT FOR FIRST FLOOR LEVEL STEEL FRAMEWORK SHALL NOT BE SUPPORTED ON EXISTING STRUCTURE.
2. FOOTING FOR THE PROPOSED STRUCTURE SHALL BE EXCAVATED AT SAFE DISTANCE FROM THE EXISTING FOUNDATION (ACCORDING TO THE SITE CONDITIONS)
3. SAFE BEARING CAPACITY OF SOIL ASSUMED AS 15T/SQM
4. CONCRETE MIX
- FOR ALL ITEMS M20 MIX UNLESS OTHERWISE SPECIFIED
5. COVER TO MAIN REINFORCEMENT
- 50MM FOR FOOTING
6. STEEL REINFORCEMENT OF FE500 GRADE OF STANDARD QUALITY AND SPECIFICATION SHALL ONLY BE USED FOR THE RCC WORK.
7. STRUCTURAL STEEL OF TATA MAKE AND OF GRADE Yst 250 IS RECOMMENDED.
8. ADDITIONAL LOADS CONSIDERED FOR DESIGN
 - LIGHT WEIGHT SHEET ROOF COVERING
 - 1.0m high solid block work on proposed sheet area
 - WIND LOAD
 - OXYGEN GENERATOR LOAD (1500KG + 1200KG)
 - DECKING PANEL WITH 150MM RCC SLAB LOAD

SITE NOTE:-

1. THE STRUCTURAL DRAWINGS HAVE BEEN PREPARED IN ACCORDANCE WITH DETAILS PROVIDED (SBC OF SOIL, GROUND WATER TABLE LEVEL, PRESENT CONDITION OF EXISTING SINGLE STORIED BUILDING ETC HAVE BEEN COMMUNICATED OVER PHONE)
2. ALL MEASUREMENTS ARE TO BE READ AND NOT MEASURED
3. ANY DISCREPANCIES IN DRAWING SHALL BE INFORMED TO THE CONCERNED ENGINEER/ARCHITECT
4. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED
5. CONTINUOUS WELDS SHALL BE ADOPTED FOR WELDED JOINTS.



SECTION OF FOOTING FOR

DWG NO: 02

STR SHEET 1.2

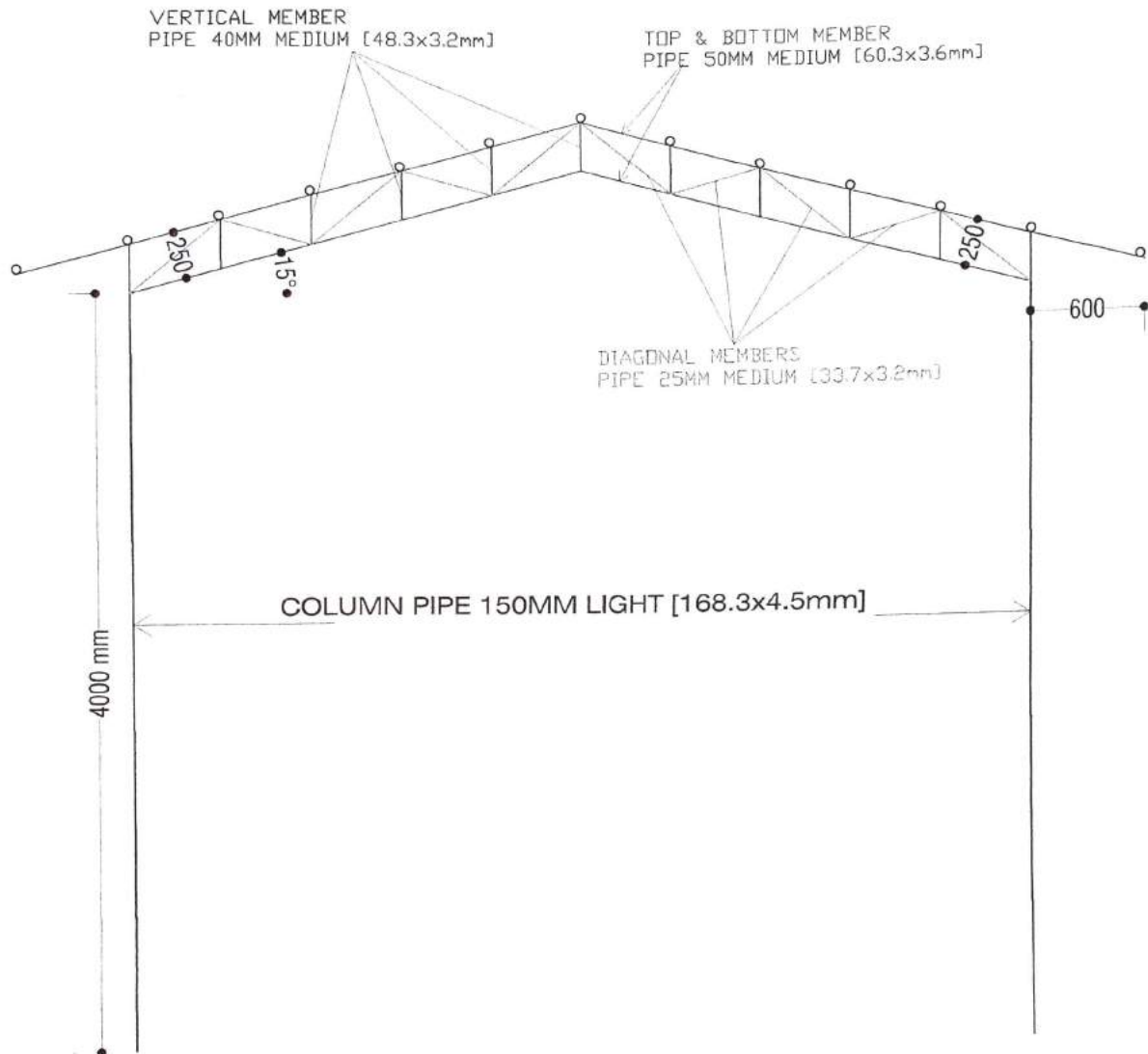
DATE: 28.07.2021

**CLIENT : FORT TH - STEEL STRUCTURE FOR
OXYGEN GENERATOR UNIT**

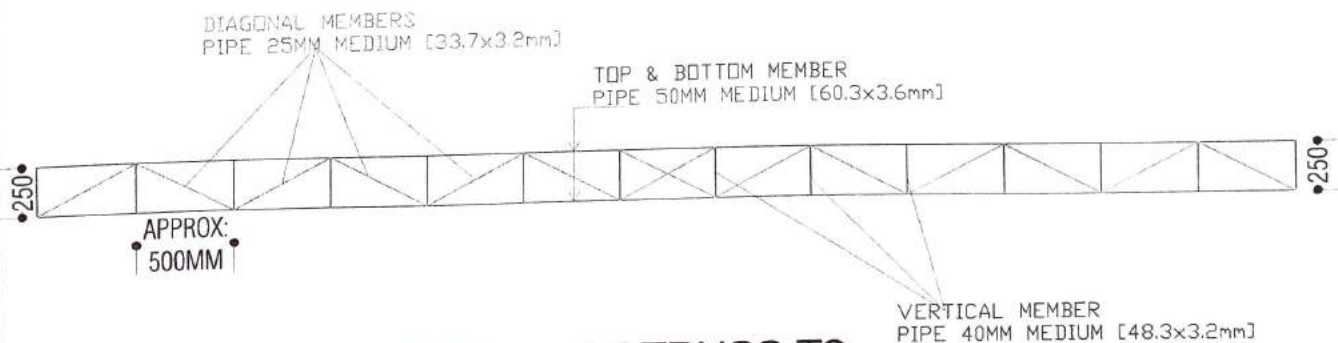
**NAME OF DRAWING : FOOTING DETAILS
+
SITE & GENERAL NOTES**

REVISION No: & DATE

R1 NO CHANGE



DETAIL OF TRUSS T1



DETAIL OF TRUSS T2

DWG NO: 06

STR SHEET 3.2

CLIENT : FORT TH - STEEL STRUCTURE FOR
OXYGEN GENERATOR UNIT

REVISION No: & DATE

R1 NO CHANGE

DATE: 28.07.2021 NAME OF DRAWING : DETAIL OF TRUSS
AT ROOF LEVEL