RCC Pile Foundation: -

The load carrying capacities of bored cast in situ uniform diameter piles of 10.0M to 30.0M length with pile diameters 45cm, 50cm and 60cm. respectively are calculated and shown in Table2.

Table2: Safe Load carrying capacity of bored cast in situ uniform diameter pile

Pile Stem Dia. (cm)	Length of Pile from E.G.L. (m)	Pile Cutoff Length (m)	Recommended Safe Load Carrying Capacity (tone)		Safe load on pile in lateral (Metric ton)
			Compression	Uplift	
50	10.00	1	18.50	10.52	6.14
60		1	23.90	13.19	8.83
75		1	33.06	17.55	13.80
50	12.00	1	21.36	13.15	6.14
60		1	27.33	16.49	8.83
75		1	37.35	21.94	13.80
50	14.00	1	24.22	15.78	6.14
60		1	30.76	19.79	8.83
75		1	41.63	26.33	13.80
50	16.00	1	27.08	18.42	6.14
60		1	34.19	23.09	8.83
75		1	45.92	30.71	13.80
50	18.00	1	29.94	21.05	6.14
60		1	37.62	26.39	8.83
75		1	50.21	35.10	13.80
50	20.00	1	32.80	23.68	6.14
60		1	41.05	29.68	8.83
75		1	54.50	39.49	13.80

Pile Stem Dia. (cm)	Length of Pile from E.G.L. (m)	Pile Cutoff Length (m)	Recommended Safe Load Carrying Capacity (tone)		Safe load on pile in lateral (Metric ton)
			Compression	Uplift	
50	22.00	1	35.66	26.31	6.14
60		1	44.48	32.98	8.83
75		1	58.79	43.88	13.80
50	24.00	1	38.52	28.94	6.14
60		1	47.92	36.28	8.83
75		1	63.08	48.27	13.80
50	26.00	1	41.37	31.57	6.14
60		1	51.35	39.58	8.83
75		1	67.36	52.65	13.80
50	28.00	1	44.23	34.20	6.14
60		1	54.78	42.88	8.83
75		1	71.65	57.04	13.80
50	30.00	1	47.09	36.83	6.14
60		1	58.21	46.18	8.83
75		1	75.94	61.43	13.80

10.0 CONCLUSION: Safe bearing capacities of soil as well as pile load capacities are shown in above Tables.

ANNEX -I : Caculation of Net safe bearing capacity (Shear Criteria)

Depth of foundn , Df = **2.5** m

Width(B)M=	**2**	**Length L =**	2

Soil parameter		Saturated density , γ (Metric ton/m3) =	**1.85**
Cohesion, C=	0.45 kg/scm= 4.5 t/sqm	Submerged density , γ (Metric ton/m3) =	**1.85**
Angle of internal friction,Ø(deg)=	8 , shear condition	Local	

Angle of shearing resistance for local failure = $Ø_m = \tan^{-1} 2/3 \tan Ø$

		Bearing capacity factor		
Ø	8	Nc	Nq	Nγ
Ø m	5	6.49	1.57	0.45

Shape, Depth and inclination factor

Shape factor		**Depth factor**		**Inclination factor**		Water table corection factor
Sc=	1.3	dc=	1.27	ic=	1	
Sq=	1.2	dq=	1	iq=	1	W' = 0.5
Sγ =	0.8	dγ =	1	iγ =	1	

Ultimate bearing capacity (qd) (Local shear Condition)

q_d= {2/3 c Nc sc dc ic } + {γ D (Nq – 1)sq dq iq } + {0.5 γ B Nγ sγ dγ iγ W' }

q d = {0.67x 4.5 x 6.49 x 1.3 x 1.27 x 1 }

.+ { 1.85 x 2.5 x (1.57 .- 1) x 1.2 x 1 x 1 }

.+ { 0.5 x 1.85 x 2 x 0.45 x 0.8 x 1 x 1 x 0.5 }

q d = 32.37 .+ 3.1635 .+ 0.333 .= 35.87 Metric tonne/sqm

Net Safe bearing capacity , q_{ns} .= q_d /F = 35.87 Metric tonne/sqm / 3

F= factor of safety = 3.0

q_{ns} =	11.96 Metric tonne/sqm
q_{ns} =	117.2 KN/sqm

Annexure II

Pile Length .(M)	24.000	If Liquified strata than liquified level	No
Pile cutoff Length (m)	2.000	Pile Terminating level	
Angle of Internal Friction at Pile Tip (Degree)	Ø	0	
Cohesion at Pile tip (t/m2)	c	10.0	

Bearing Capacity Factor		
Nc	Nq	Ny
9	0.00	0.00

Ultimate pile capacity , Qu = QP + Qs = { Ap Nc Cp + Ap (1/2 D γ Nγ + PD Nq} +{ Sum (K PDi tan d Asi) + alpha x Ca As }
Qp = End bearing resistnce , Qs = Frictional resistsnce

1 Pile dia (m) = 0.5

Depth from	Depth to	Length below cutoff (m)	Thickness of sand layer	Li	Cav, T/m2	alpha	Pile dia D, m	Circumferential area As, m2	K	phi	Y (metric ton/m3)	Ysub (metric ton/m3)	po' ton/m2	Qs, Tonne	Qp, Tonne	Qu, Tonne	Qsafe in copression , Metric Tonne	Q safe Uplift, Metric Tonne
0.00	2.00			2.00	Ignored													
2.00	24.00			22.00	6.50	0.35	0.50	34.56						78.62				
		22.00					0.50							78.62	17.67	96.29	38.52	28.94

2 Pile dia (m) = 0.6

0.00	2.00			2.00	Ignored													
2.00	24.00			22.00	6.50	0.35	0.60	41.47						94.34				
		22.00					0.60							94.34	25.45	119.79	47.92	36.28

3 Pile dia (m) = 0.75

0.00	2.00			2.00	Ignored													
2.00	24.00			22.00	6.50	0.35	0.75	51.84						117.93				
		22.00					0.75							117.93	39.76	157.69	63.08	48.27

Annexure-II

Settlement Analysis as per IS 8003-1976

Total settlement , St = Si+Sc

St= Total settlement , Si= Immediate (elastic) settlement , Sc = Primary consolidation settlement

$Si = pB(1-\mu^2)I/Es$ $\qquad$ Sc = Soed = (Ht/ 1+eo) Cc log10 (po + Δp)/ po

p = Load intensity , B = Width of foundation , μ = Poissons ratio

I = Influence factor , Es = Modulus of elasticity of soil

Ht = Thickness of soil layer , eo = Initial void ratio at mid height of of layer

Cc = Compression Index , Po = Initial effective pressure at mid height of layer

Δp = Average pressure increment due to foundation loading

1. Settlement of clay strata

A. Calculation of Immediate settlement (Si)

Depth of foundation Df (M) =	3
LENGTH (L) in m =	2
BREATH (B) in m =	2
L/B=	1
INFLUNCE FACTOR (If)=	1.12
Load intensity (t/m^2)=	12.63

E (t/m^2)=	1320
μ=	0.5

Settlement (m), Si =	0.016075
Settlement (mm), Si =	16.07455

B.Calculation of Primary consolidation settlement= Sc

Cc=	0.17
eo=	0.84
H (m)=	5
field density (t/m^3)=	1.9
P=	10.45
ΔP = (at H/2 m depth)	2.494815
Settlement Sc (m)=	0.04295
Settlement Sc (mm)=	42.953

Total settlement Sc = A+B = 59.027

Correction factors

i	Depth correction factor from Fig 12 of IS -8009 Pt1. C.F=	0.65
ii	Rigidity factor (for raft foundation) cl 9.5.2	0.800
iii	λ= (Pore pressure correction factor, Cl9.2.3 of IS 8009, Pt1)	0.8

L/B=	1.00		
D/√(LB)=	1.50	√(LB) / D=	0.67

Total Corrected settlement , Sc = 38.36759 mm <40MM Safe

Ref : Appendix-C (cl 6.5.2) of IS 2911 (Part 1/Sec. 2) – 2010

Stiffness factor $R = \sqrt[4]{\frac{EI}{KB}}$ for clay soil

$T = \sqrt[5]{\frac{EI}{\eta h}}$ for sandy soil

E = Modulus of Elasticity of pile material= $5000\sqrt{f_{ck}}$

$E = 25x10^6$ KN/m^2 for concrete for $f_{ck} = 25$ N/mm^2

I = Moment of Inertia = $\pi D^4/64$

B= D = diameter of pile

Deflection of pile

$$y = \frac{H(e+Zf)x1000}{12\,EI}$$

H= lateral load in KN

y = deflection of pile head in mm

e = cantilever length above ground/ bed

E= Modulus of elasticity in KN/m^2

I = Moment of Inertia in m^4

Z_f= Depth of point of fixity in m

Calculation Details (Clay)

		fck=	25	N/mm2	
		E=	25000000	KN/m2	
1	Pile dia	B=D(m)	0.50		
2	Pile Length	L(m)	10.00		
3	Pile Length (soft soil)	L1(m)	0.00		
5	k1= Modulus of subgrade reaction		19400.00	KN/m3	for Cohesive soil (medium stiff)
6	K = k1x0.3/(1.5 xB)		7760.00		
7	I= Moment of inertia		0.00	m4	
8	E = Modulus of elasticity		25000000	KN/m2	
9	R		2.11		
10	L1/R		0.00		
11	2R		4.22		L=12 > 2R
12	3.5R				
13	Lf/R		2.00		
14	Lf		4.22		
15	e (m)	eccentricity	0.00		
16		(Length of fixity)	6.68		
17	y=(Permissible deflection mm)		5.00		
18	**H = lateral load capacity**		**61.35**	**KN =**	**6.14 Ton**

Ref : Appendix-C (cl 6.5.2) of IS 2911 (Part 1/Sec. 2) – 2010

Stiffness factor $R = \sqrt[4]{\frac{EI}{KB}}$ for clay soil

$T = \sqrt[5]{\frac{EI}{\eta h}}$ for sandy soil

E = Modulus of Elasticity of pile material= $5000\sqrt{f_{ck}}$

$E = 25x10^6$ KN/m^2 for concrete for $f_{ck} = 25$ N/mm^2

I = Moment of Inertia = $\pi D^4/64$

B= D = diameter of pile

Deflection of pile

$$y = \frac{H(e+Zf)x1000}{12\ EI}$$

H= lateral load in KN

y = deflection of pile head in mm

e = cantilever length above ground/ bed

E= Modulus of elasticity in KN/m^2

I = Moment of Inertia in m^4

Z_f= Depth of point of fixity in m

Calculation Details (Clay)

		fck=	25 N/mm2	
		E=	25000000 KN/m2	
1	Pile dia	B=D(m)	0.60	
2	Pile Length	L(m)	10.00	
3	Pile Length (soft soil)	L1(m)	0.00	
5	k1= Modulus (		19400.00 KN/m3	for Cohesive soil (medium stiff)
6	K = k1x0.3/(1.5 xB)		6466.67	
7	I= Moment of inertia		0.01 m4	
8	E = Modulus of elasticity		25000000 KN/m2	
9	R		2.53	
10	L1/R		0.00	
11	2R		5.06	L=12 > 2R
12	3.5R			
13	Lf/R		2.00	
14	Lf		5.06	
15	e (m)	eccentricity	0.00	
16		(Length of fixity)	6.68	
17	y=(Permissible deflection mm)		6.00	
18	**H = lateral load capacity**		**88.35 KN =**	**8.83 Ton**

Ref : Appendix-C (cl 6.5.2) of IS 2911 (Part 1/Sec. 2) – 2010

Stiffness factor $R = \sqrt[4]{\frac{EI}{KB}}$ for clay soil

$T = \sqrt[5]{\frac{EI}{\eta h}}$ for sandy soil

E = Modulus of Elasticity of pile material= $5000\sqrt{f_{ck}}$

$E = 25x10^6$ KN/m^2 for concrete for $f_{ck} = 25$ N/mm^2

I = Moment of Inertia = $\pi D^4/64$

B= D = diameter of pile

Deflection of pile

$$y = \frac{H(e+Zf)x1000}{12\,EI}$$

H= lateral load in KN

y = deflection of pile head in mm

e = cantilever length above ground/ bed

E= Modulus of elasticity in KN/m^2

I = Moment of Inertia in m^4

Z_f= Depth of point of fixity in m

Calculation Details (Clay)

		fck=	25 N/mm2	
		E=	25000000 KN/m2	
1	Pile dia	B=D(m)	0.75	
2	Pile Length	L(m)	10.00	
3	Pile Length (soft soil)	L1(m)	0.00	
5	k1= Modulus of subgrade reaction		19400.00 KN/m3	for Cohesive soil (medium stiff)
6	K = k1x0.3/(1.5 xB)		5173.33	
7	I= Moment of inertia		0.02 m4	
8	E = Modulus of elasticity		25000000 KN/m2	
9	R		3.16	
10	L1/R		0.00	
11	2R		6.32	L=12 > 2R
12	3.5R			
13	Lf/R		2.00	
14	Lf		6.32	
15	e (m)	eccentricity	0.00	
16		(Length of fixity)	6.68	
17	y=(Permissible deflection mm)		7.50	
18	**H = lateral load capacity**		**138.04 KN =**	**13.80 Ton**

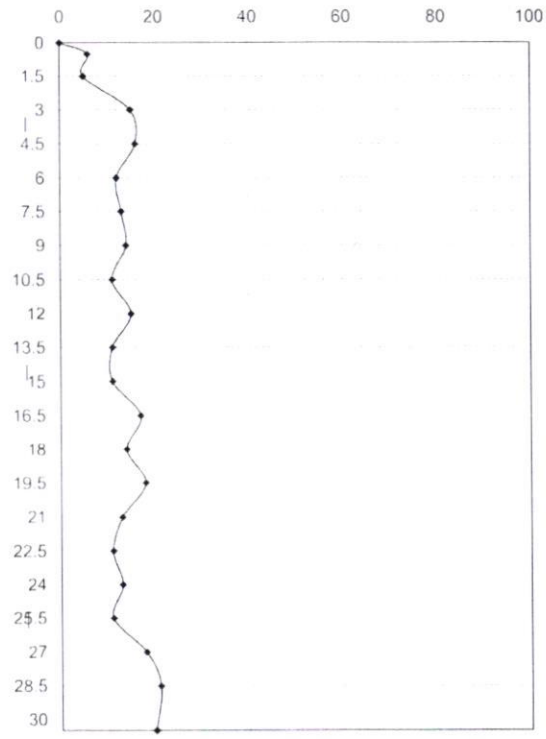
Name of Project :GEO-TECHNICAL INVESTIGATION WORK FOR PROPOSED CONSTRUCTION OF BOUNDARY WALL, NEGG PIPE LINE AT BARPALAHA, BEZERA ASSAM

BORE LOG CHART

BORE HOLE NO: 19	DATE OF STARTING: 09-07-2022 DATE OF COMPLETION: 09-07-2022	GROUND WATER LEVEL Above 0.15 from EGL	AUGER & WASH BORING

DEPTH (M)	TYPE OF SAMPLE	SPT 15 CM	SPT 15 CM	SPT 15 CM	N-Value	VISUAL DESCRIPTION OF SOIL	LOG
0.50-0.95	P	2	3	3	6	Brownish SILTY CLAY	
1	U						
1.5-1.95	P	3	3	2	5		
2	U					3.10M	
3.0-3.45	P	5	7	8	15	Brownish Fine SAND	
3.5	D						
4.5-4.95	P	6	8	8	16		
5	D					5.20M	
6.0-6.45	P	5	6	6	12	Grayish SILTY CLAY	
6.5	U						
7.5-7.95	P	6	5	8	13		
8	U						
9.0-9.45	P	5	7	7	14		
9.5	U						
10.5-10.95	P	6	6	5	11		
11	U						
12.0-12.45	P	7	7	8	15		
12.5	U						
13.5-13.95	P	5	6	5	11		
14	U						
15.0-15.45	P	4	6	5	11		
15.5	U						
16.5-16.95	P	7	8	9	17		
17	U						
18.0-18.45	P	6	6	8	14		
18.5	U						
19.50-19.95	P	7	9	9	18		
20	U						
21.0-21.45	P	6	5	8	13		
21.5	U						
22.5-22.95	P	5	5	6	11		
23	U						
24.0-24.45	P	6	6	7	13		
24.5	U						
25.5-25.95	P	7	6	5	11		
26	U						
27.0-27.45	P	8	8	10	18		
27.5	U						
28.5-28.95	P	8	9	12	21		
29	U						
30.0-30.45	P	8	8	12	20		
30.5	U					30.0M	

GRAPHICAL REPRESENTATION OF N-Value



U: UNDISTURBED SAMPLE:: D: DISTURBED SAMPLE:: P: STANDARD PENETRATION TEST::

EGL: EXISTING GROUND LEVEL R:REFUSAL;N>100::

BORE LOG CUM LABORATORY TEST RESULT

Name of Project:: GEO-TECHNICAL INVESTIGATION WORK FOR PROPOSED CONSTRUCTION OF BOUNDARY WALL, NEGG PIPE LINE AT BARPALAHA, BEZERA ASSAM

Boring method: Auger & wash boring | Boring dia: 150mm | Date Commenced: 09-07-2022 | Date completed: 09-07-2022

BH: 19 | DEPTH OF WATER TABLE:-Above 0.15M above EGL

Depth in meters below reference	Types of Sample	Observed N-Value	Corrected N-Value	Group Symbol	Visual description of soil	% Gravel > 4.75 mm	% Sand 4.75-0.075 mm	% Silt and Clay 0.075mm	Field density, gms/cm³	Dry density, gms/cm3	Specific Gravity	Void Ratio	Natural moisture content	Unconfined compressive Strength (Kg/cm²)	Cohesion 'c' Kg/cm²	Angle of shearing resistance (Φ°)	Compression Index Cc	LL%	PL%	PI%
0.50-0.95	P	6	6	CL	Brownish SILTY CLAY															
1	U							100	1.84	1.48	2.64	0.79	24.44		0.40	7	0.15	34.55	24.37	10.18
1.5-1.95	P	5	5																	
2	U				3.10M			100	1.80	1.43	2.64	0.84	25.53		0.33	8	0.17	35.44	24.63	10.81
3.0-3.45	P	15	17	SP	Brownish Fine SAND															
3.5	D						100		1.84							32				
4.5-4.95	P	16	17																	
5	D				5.20M		100													
6.0-6.45	P	12	12	CL	Grayish SILTY CLAY															
6.5	U							100	1.98		2.65				0.76	7				
7.5-7.95	P	13	13																	
8	U							100	2.02		2.65			1.74	0.87					
9.0-9.45	P	14	14																	
9.5	U							100												
10.5-10.95	P	11	11																	
11	U							100	1.98		2.66			1.44	0.72					
12.0-12.45	P	15	15																	
12.5	U							100												
13.5-13.95	P	11	11																	
14	U							100												
15.0-15.45	P	11	11																	
15.5	U				15.50M			100	2.00		2.66			1.46	0.73					

U: Undisturbed Sample:: D: Disturbed Sample:: P: Standard Penetration test:: EGL: Existing Ground Level :: R : Refusal N>100, NP: Non plastic

BORE LOG CUM LABORATORY TEST RESULT

Name of Project : GEO-TECHNICAL INVESTIGATION WORK FOR PROPOSED CONSTRUCTION OF BOUNDARY WALL, NEGG PIPE LINE AT BARPALATHA, BEZERA ASSAM

Boring method: Auger & wash boring | Boring dia: 150mm | Date Commenced: 09-07-2022 | Date completed: 09-07-2022

BH: 19 | DEPTH OF WATER TABLE=0.15M above EGL

Depth in meters below reference	Types of Sample	Observed N-Value	Corrected N Value	Group Symbol	Visual description of soil	% Gravel > 4.75 mm	% Sand 4.75-0.075 mm	% Silt and Clay 0.075mm	Field density, gms/cm³	Dry density, gms/cm³	Specific Gravity	Void Ratio	Natural moisture content	Unconfined compressive Strength (Kg/cm²)	Cohesion 'c' Kg/cm²	Angle of shearing resistance (Φ°)	Compression Index Cc	LL %	PL %	PI%
16.5-16.95	P	17	17	CL	Brownish SILTY CLAY															
17	U							100	2.09		2.65			2.26	1.13					
18.0-18.45	P	14	14																	
18.5	U							100												
19.50-19.95	P	18	18																	
20	U							100												
21.0-21.45	P	13	13																	
21.5	U							100												
22.5-22.95	P	11	11																	
23	U							100	1.98		2.65			1.46	0.73					
24.0-24.45	P	13	13																	
24.5	U							100												
25.5-25.95	P	11	11																	
26	U							100	1.98		2.65			1.46	0.73					
27.0-27.45	P	18	18																	
27.5	U							100	2.10											
28.5-28.95	P	21	21																	
29	U							100	2.12		2.66			2.80	1.40					
30.0-30.45	P	20	20																	
30.5	U				30.0M			100												

U: Undisturbed Sample:: D: Disturbed Sample:: P: Standard Penetration test:: EGL: Existing Ground Level :: R : Refusal N>100, NP: Non plastic

CHEMICAL ANALYSIS OF SOIL & WATER

***Name of Test*: Chemical Analysis Of Water Sample**

Source: Ground water

SL NO	DETAILS OF TESTS	RESULT OBTAINED
1	Chlorides (as Cl)	232 mg/lit
2	Sulphates (as SO_4)	181mg/lit
3	PH	6.6

Name of Test: Chemical Analysis Of Soil Sample

Depth of sample: 1.0m from existing ground level

SL NO.	DETAILS OF TESTS	RESULT OBTAINED (% by Weight)
1	Sulphate content	0.17
2	Chloride content	0.14
3	Carbonate	Practically Nil
4	Organic matter	Practically Nil

LABORATORY C.B.R. TEST DATA SHEET (As per IS : 2720 part XVI)

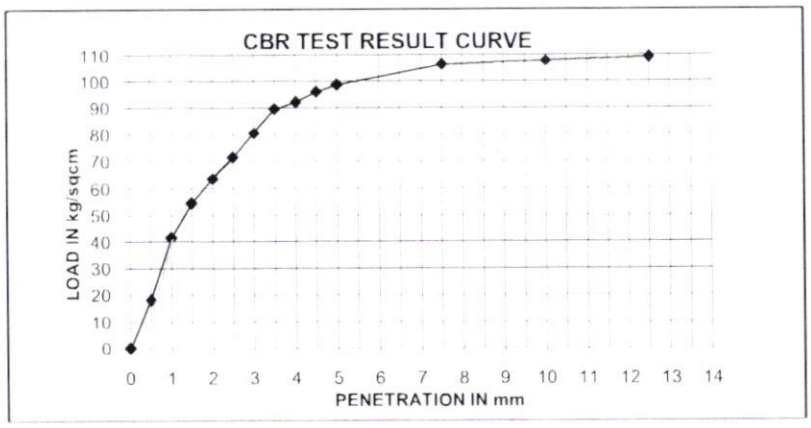
Test condition: Soaked

Nature of Sample: Compacted in 3 layers with 55 blows of 2.6 kg rammer having 31 cm drop at OMC and 100% Proctor Density (approx)

Size of Mould = 15cm dia x 12.73 cm height Sample Taken = 6 kg

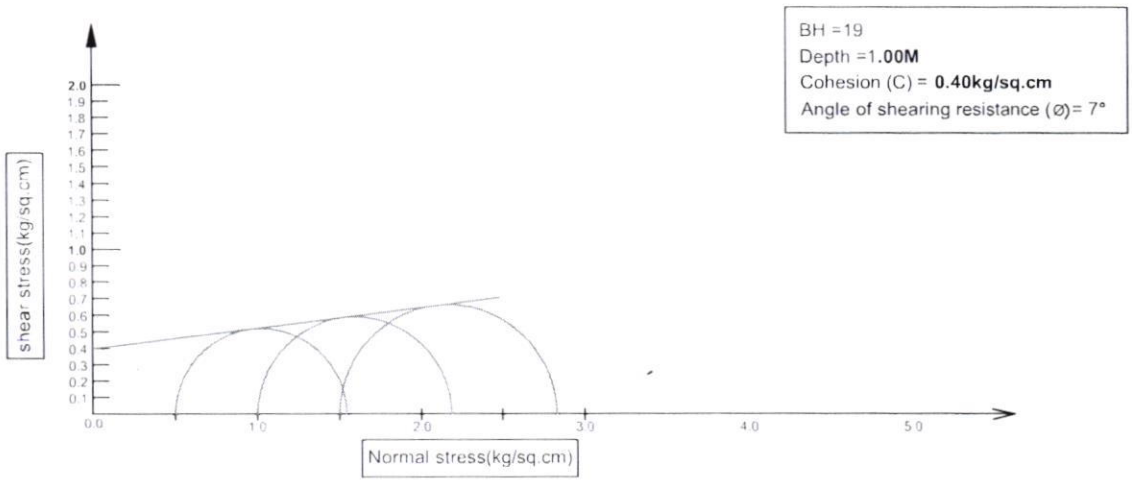
Penetration Data **Proving Ring Used: 1000kg**

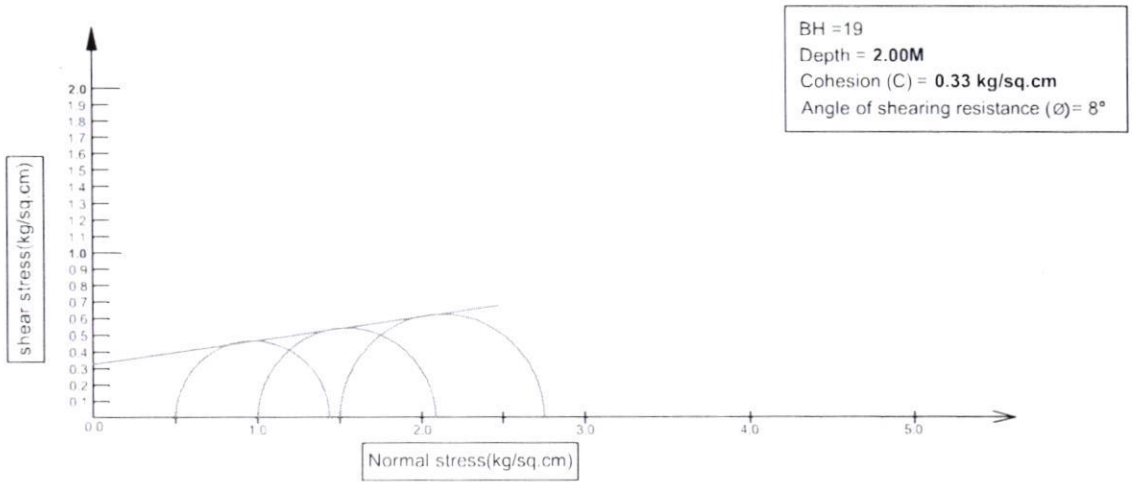
Penetration (mm)	TEST LOAD (kg)		Corrected load (kg)	Standard Load (kg)	% standard load (%)	C.B.R.
	Proving ring Reading	Load				
0	0	0				
0.5	16	18				
1.0	37	42				
1.5	49	55				
2.0	57	64				
2.5	64	71	73.5	1370	5.4	
3.0	72	81				5.4
3.5	80	90				
4.0	82	92				
4.5	86	96				
5.0	88	99	103.2	2055	5.0	
7.5	95	107				
10.0	96	108				
12.5	97	109				

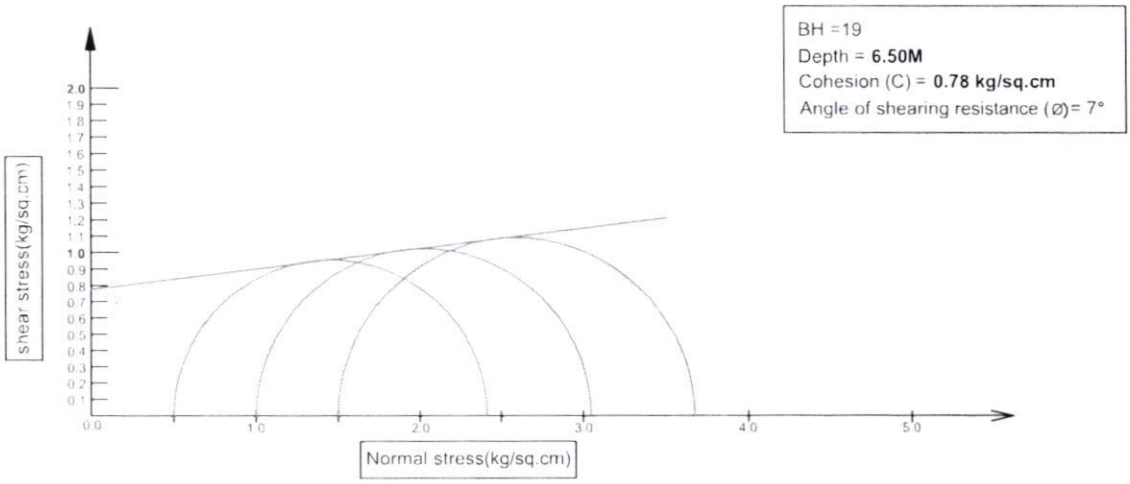


CONSOLIDATED UNDRAINED TEST RESULT

BH NO.	Depth(m)	C	Φ
19	1.00	0.40	7
	2.00	0.33	8
	6.50	0.78	7

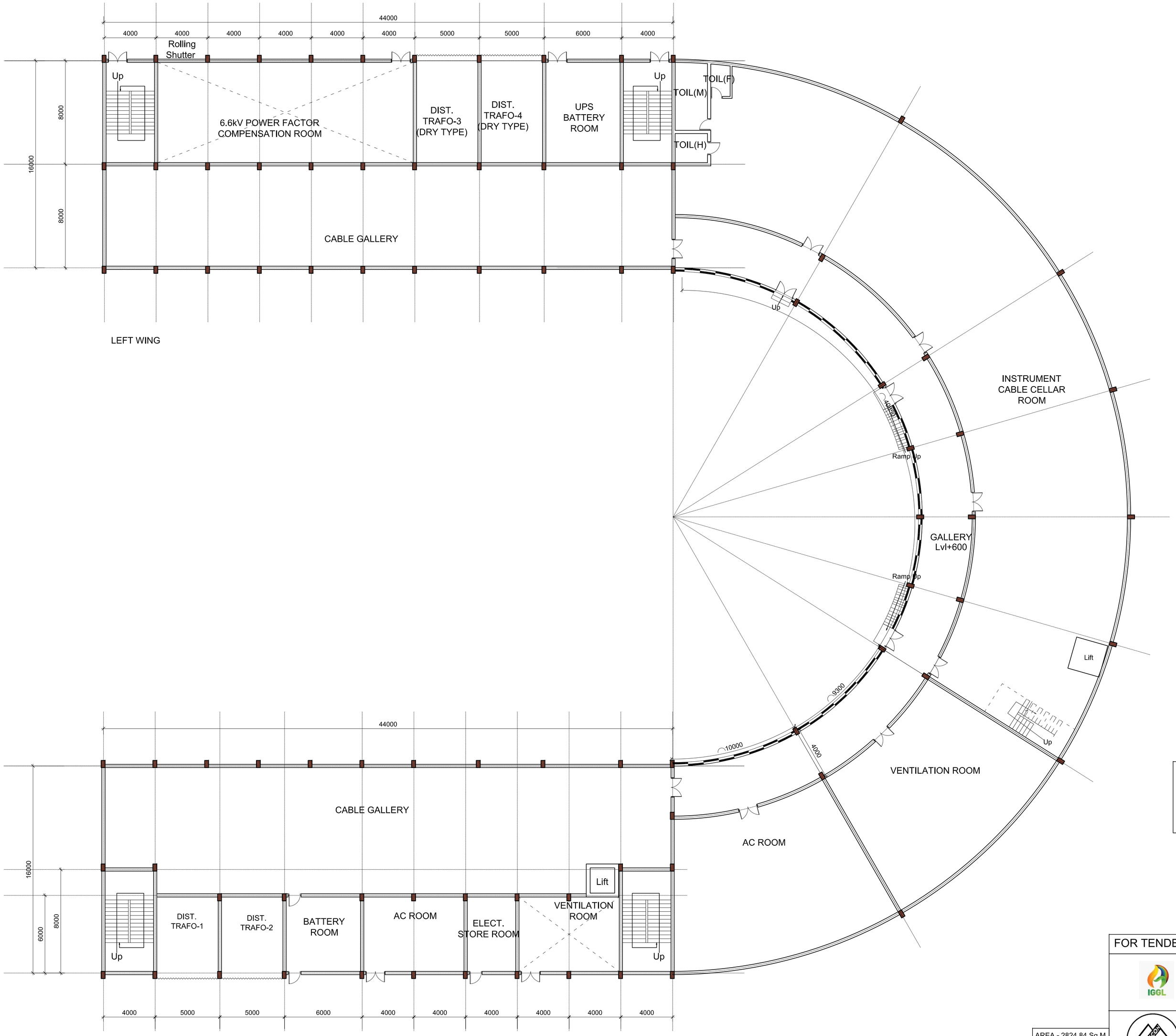

BH =19
Depth =1.00M
Cohesion (C) = 0.40kg/sq.cm
Angle of shearing resistance (Ø)= 7°
shear stress(kg/sq.cm)
Normal stress(kg/sq.cm)


BH =19
Depth = 2.00M
Cohesion (C) = 0.33 kg/sq.cm
Angle of shearing resistance (Ø)= 8°
shear stress(kg/sq.cm)
Normal stress(kg/sq.cm)


BH =19
Depth = 6.50M
Cohesion (C) = 0.78 kg/sq.cm
Angle of shearing resistance (Ø)= 7°
shear stress(kg/sq.cm)
Normal stress(kg/sq.cm)

ANNEXURE-1A, 1B & 1C

DRG.NO.:-MEC/05/28/23UU/NGCS/TD/005



LEGEND

- 12mm th. Toughened glass upto lintel lvl
- 12mm th. Toughened glass from +600 of FFL upto lintel lvl

AREA - 2824.84 Sq M.

SCHEDULE OF FINISHES(OUTSIDE) - Granite & zinc cladding

1. 250MM WIDE BRICKS TO BE USED FOR WALLS.
2. ALL PAINTS TO BE ECO-FRIENDLY WITH LOW V.O.C.
3. CERAMIC TILES WITH RECYCLED CONTENTS TO BE USED.
4. LOW FLOW TOILET FIXTURES TO BE USED.
5. ±0.00 CORRESPONDS TO FINISHED ROAD TOP LEVEL
6. 12 MM DROP IN FINISH/SLAB TO BE MAINTAINED FROM INSIDE THE ROOM TO THE VERANDAH/BALCONY/TERRACE ETC.
7.1:80 MM SLOPE APPROXIMATELY TO BE MAINTAINED FOR DRAINAGE AT ROOF LVL.
8.ALL FINISH FLOOR LEVELS (EXTERNAL/INTERNAL) MUST BE LAID IN PROPER SLOPE & DIRECTION AS MAY BE REQUIRED AS/NORMAL ENGINEERING PRACTISE.

REV	DATE	ZONE	DESCRIPTION	BY	VERIFIED
A	21.03.22		revised as per comments from Instrumentation section,Ranchi on 17.03.22	Vibha	Vibha

REVISION

REFERENCES | DRG.NO.

REV / SEC

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FOR TENDER PURPOSE

INDRADHANUSH GAS GRID LTD.

मेकॉन लिमिटेड

MECON LIMITED

SECTION	ARCHITECTURE
LOCATION	DELHI
DESIGNED	VIBHA
DRAWN	VIBHA
CHECKED AND VERIFIED	S.BASU
APPROVED	SIG DR.R.K.DUTTA
	DATE : 15.03.2022

NORTH - EAST GAS GRID PIPELINE PROJECT

CONTROL ROOM BUILDING FOR COMPRESSOR STATION AT GUWAHATI

GROUND FLOOR PLAN

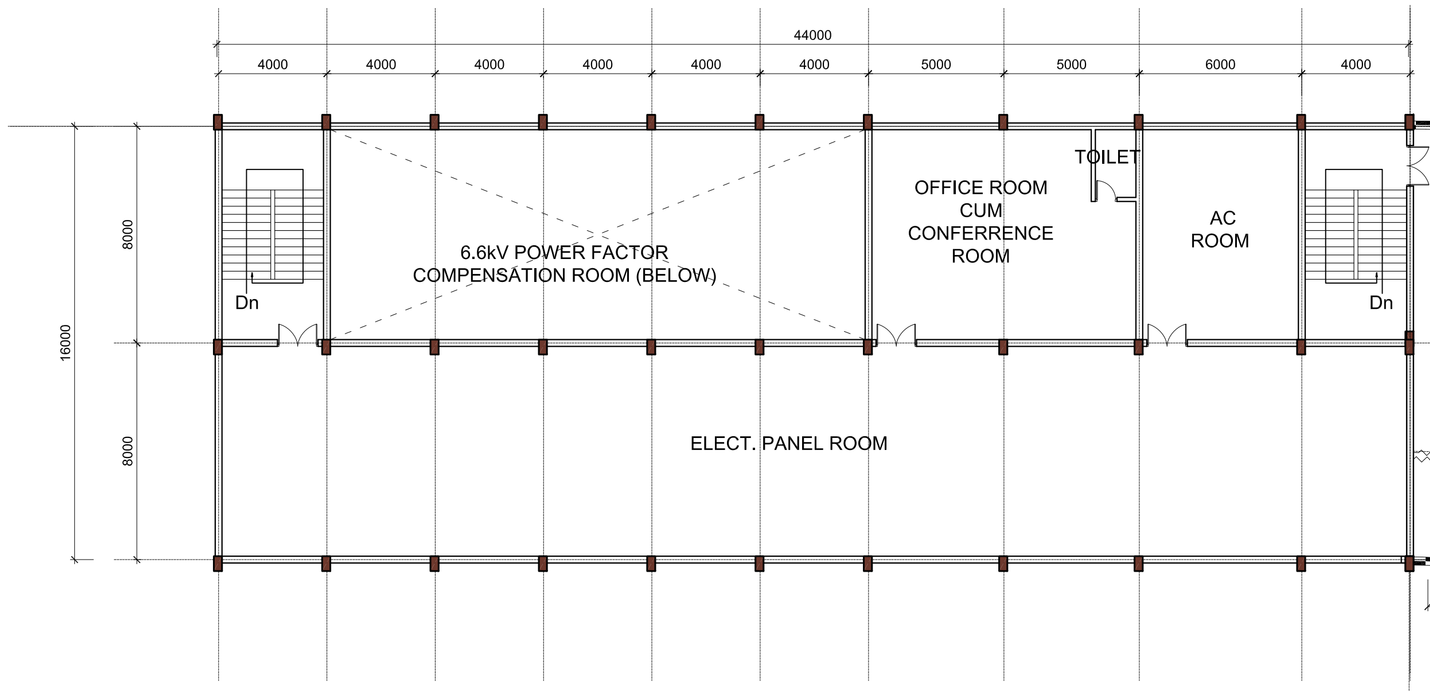
SCALE :- 1:100

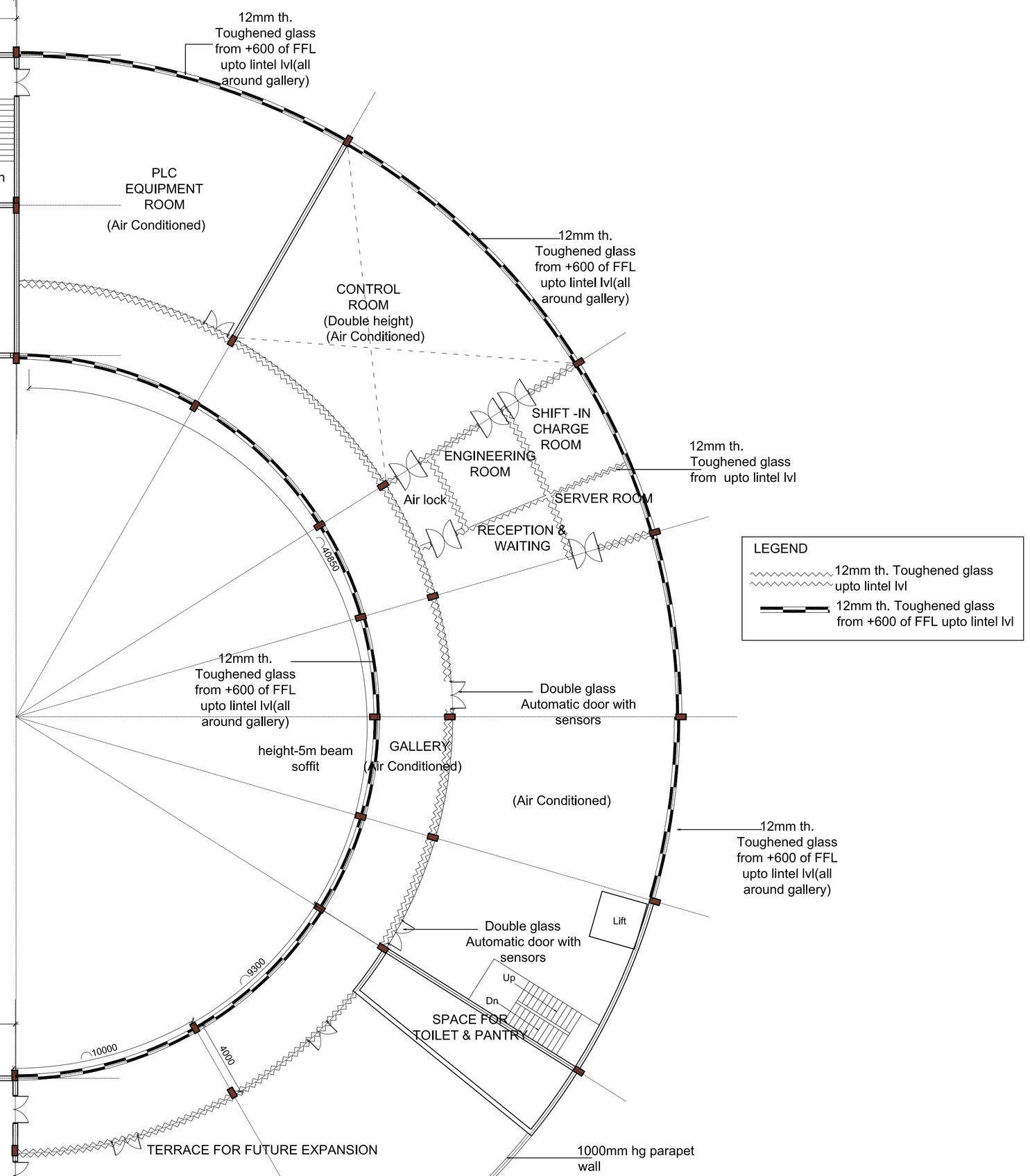
DRG.NO.:-MEC/05/28/23UU/NGCS/TD/005

SHEET	REV
1 OF 1	1

DRG.NO.:-MEC/05/28/23UU/NGCS/TD/006

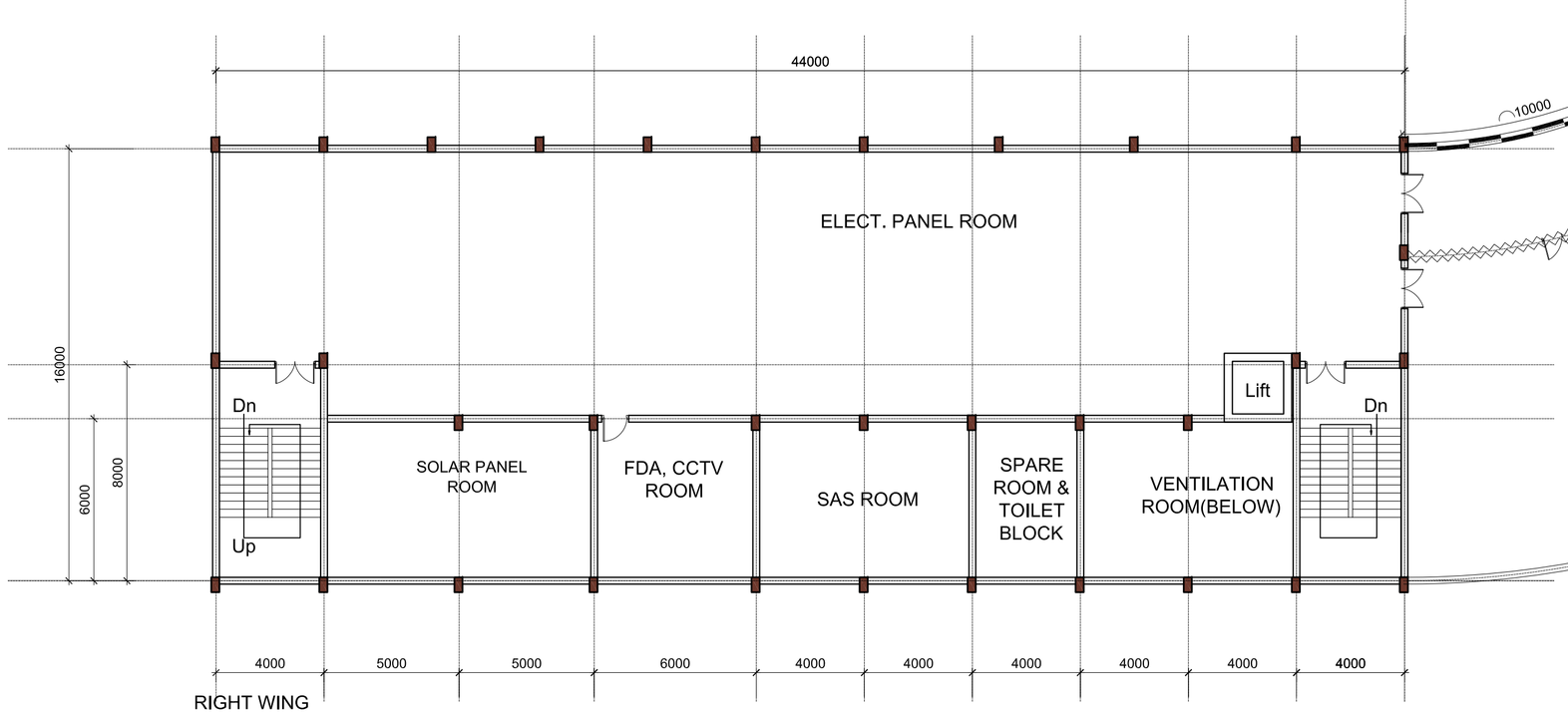
LEFT WING





LEGEND

- 12mm th. Toughened glass upto lintel lvl
- 12mm th. Toughened glass from +600 of FFL upto lintel lvl



RIGHT WING

FIRST FLOOR PLAN

AREA - 2,204.84 Sq M.

SCHEDULE OF FINISHES(OUTSIDE) - Granite & zinc cladding

1. 250MM WIDE BRICKS TO BE USED FOR WALLS.
2. ALL PAINTS TO BE ECO-FRIENDLY WITH LOW V.O.C.
3. CERAMIC TILES WITH RECYCLED CONTENTS TO BE USED.
4. LOW FLOW TOILET FIXTURES TO BE USED.
5. ±0.00 CORRESPONDS TO FINISHED ROAD TOP LEVEL
6. 12 MM DROP IN FINISH/SLAB TO BE MAINTAINED FROM INSIDE THE ROOM TO THE VERANDAH/BALCONY/TERRACE ETC.
7.1:80 MM SLOPE APPROXIMATELY TO BE MAINTAINED FOR DRAINAGE AT ROOF LVL.
8.ALL FINISH FLOOR LEVELS (EXTERNAL/INTERNAL) MUST BE LAID IN PROPER SLOPE & DIRECTION AS MAY BE REQUIRED AS/NORMAL ENGINEERING PRACTISE.

REV	DATE	ZONE	DESCRIPTION	BY	VERIFIED
A	21.03.22		revised as per comments from Instrumentation section,Ranchi on 17.03.22	Vibha	Vibha

REVISION

REFERENCES

DRG.NO.

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SECTION	ARCHITECTURE
LOCATION	DELHI
DESIGNED	VIBHA
DRAWN	VIBHA
CHECKED AND VERIFIED	S.BASU
APPROVED	SIG DR.R.K.DUTTA
	DATE : 15.03.2022

NORTH - EAST GAS GRID PIPELINE PROJECT

CONTROL ROOM BUILDING FOR COMPRESSOR STATION AT GUWAHATI

FIRST FLOOR PLAN

SCALE :- 1:100

DRG.NO.:-MEC/05/28/23UU/NGCS/TD/006

SHEET 1 OF 1

REV 1