

## D.A.V. PUBLIC SCHOOL, BISTUPUR, JAMSHEDPUR

Ref. No. *DAVPS/1051/24*

Date:- *26-9-2024*

### QUOTATION INVITED

Sealed Quotations are invited for the new construction of 12 classrooms of school campus.

The BOQ & Drawing of the Construction work required is attached.

Sealed Quotation should be sent through speed post/regd.post/by hand for 12 classrooms as per BOQ

The last date of submission of sealed quotation is 15/10/2024.

Note:-

1. Site visit is compulsory before quoting otherwise Quotation will be rejected.
2. Contact the office for the same between 9 am to 2 pm.
3. Rules & Regulations applicable and approved by DAVCMC will be followed

Website:- [www.davbistupur.org](http://www.davbistupur.org),

*Abhinav*

Abhinav Chauhan  
J. E (Civil)

*Nikhil*

Nikhil Shukla  
Architect

*Pragya Singh*

Pragya Singh  
PRINCIPAL  
PRINCIPAL  
DAV PUBLIC SCHOOL  
BISTUPUR, JAMSHEDPUR

## BOQ

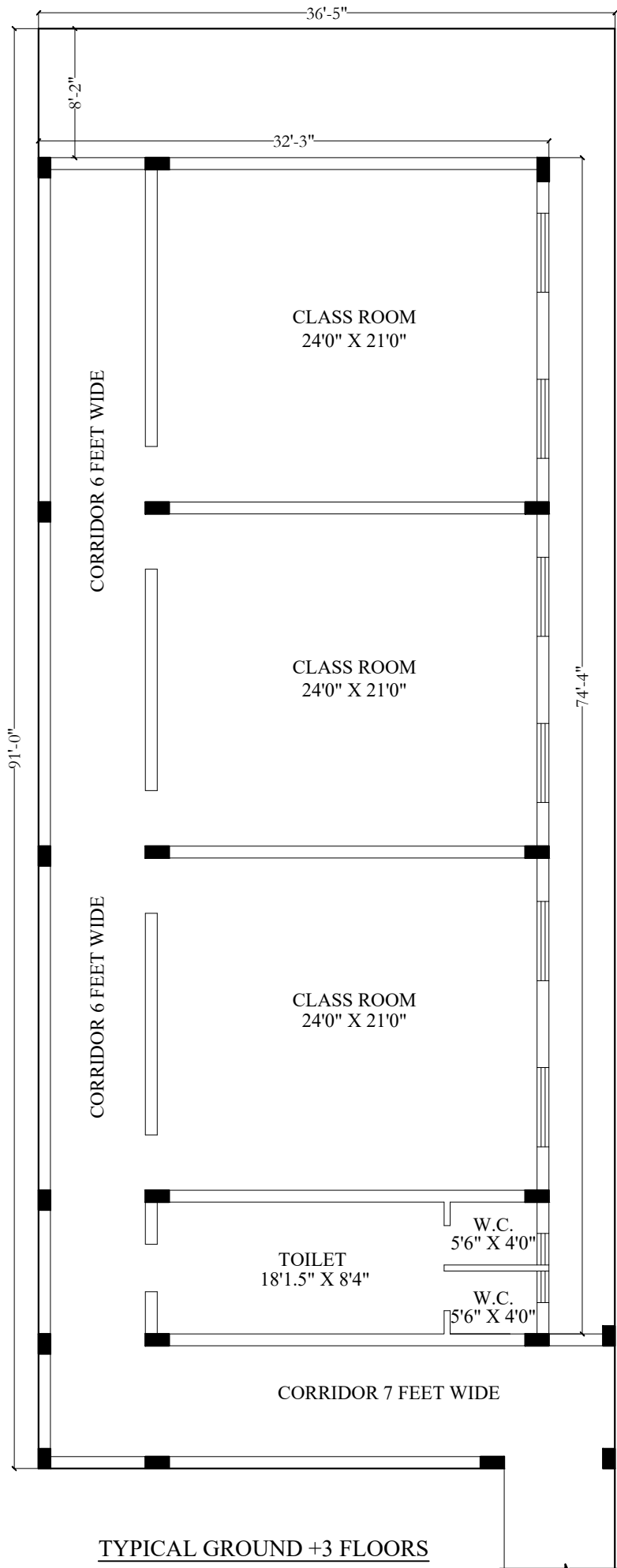
BOQ. NO.		UNIT	QUANTITY	RATE	AMOUNT	REMARKS
	<b>A. SITE GRADING, EARTH WORK &amp; ALLIED WORKS</b>					
A1	Cleaning the proposed power plant site by cutting down plants/trees including grubbing of stumps, roots, etc. and disposal of the same out side the area of work as directed and approved by Engineer.	M <sup>2</sup>	308.01			
A2	Earth work in excavation in foundation trenches or drains (not exceeding 1.5m in width or 10 sqm on plan) including dressing of sides and ramming of bottoms, lift upto 1.5 m . including getting out the excavated soil and disposal of surplus excavated soil as directed, within a lead of 50 m.	M <sup>3</sup>				
	a) In all types of ordinary and hard soils (including soils intermixed with boulders, slag and slushy soils)	M <sup>3</sup>	152.12			
	b) In soft and decomposed rock	M <sup>3</sup>	30.42			
A 3	Excavating, supplying and filling of local earth (including royalty cairriage cost) by mechanical transport upto a lead of 3km also including ramming and watering of the earth in layers not exceeding 20 cm in trenches, plinth, sides of foundation etc. complete. If local earth is	M <sup>3</sup>	257.92			
A4	Earth work in filling for levelling and grading using approved quality of borrowed sand/gravel (borrowed earth to be arranged by the bidder at no extra cost to the Owner) on prepared surface obtained by compacting with mechanical means including setting o	M <sup>3</sup>	24.63			
A5	Supplying and Providing pre-constructional anti-termite treatment, and creating a chemical barrier, under and on sides of trenches, wall footings, top surface of plinth filling, including junction of wall and floor along the perimeter of building, with ap	M <sup>2</sup>	364.50			
	<b>SUB TOTAL OF ITEM UNDER "A"=</b>					
	<b>B. CONCRETE AND ALLIED WOKRS</b>					
B1	Supplying, Providing and laying in position plain cement concrete in levelling course/fill under or around foundations pits, slabs on grade, sumps, manholes, etc. at any depth with 40 mm down graded coarse aggregates including curing, compacting, de-water					
	a)1:4:8 (Min cement content 160Kg/m3)	M <sup>3</sup>	7.53			
	c) 1:2:4 (Min cement content 240Kg/m3)	M <sup>3</sup>	24.99			
B2.	Providing and laying in position specified grade of reinforced cement concrete including the cost of centring,shuttering,finishing etc -All work puto plinth level.					
	a) Concrete grade M20 with 20mm downgraded coarse aggregates for:	M <sup>3</sup>	36.09			
B3.	Supplying, Providing and placing in position reinforced cement concrete for superstructure works at all levels including cost of centring,shuttering vibrating, curing, providing construction joints, leaving cutouts/ pockets for placing of inserts/ embedments, etc., complete, includi					
	a) Concrete grade M20 with 20mm downgraded coarse aggregates for: upto G+3floor lvl.	M <sup>3</sup>	177.97			
	b) Concrete grade M20 with 20mm downgraded coarse aggregates for: lintels, chajja etc.	M <sup>3</sup>	26.26			
B12.	Supplying, Cleaning, cutting, bending, as per drawings and placing in position High yield strength deformed reinforcement bars conforming to IS: 1786 at all locations and levels including binding with soft annealed 18G black wire, etc. complete as shown					
	b) For HYSD bars of grade Fe500 conforming to IS 1786 except for elongation requirements. (Elongation shall be minimum 14.50 %)	Mt.	23.368			
	<b>SUB TOTAL OF ITEM UNDER "B"=</b>					

## BOQ

BOQ. NO.		UNIT	QUANTITY	RATE	AMOUNT	REMARKS
	<b>C. MASONRY &amp; ALLIED WORKS</b>					
C1.	Supplying, Providing and laying brick masonry in cement mortar 1:5 using approved quality bricks of class 3.5 conforming to IS: 1077, scaffolding, curing, raking joints, etc. complete as					
	(a) 230 mm thick upto plinth lvl.	M <sup>3</sup>	3.65			
	(b) 230 mm thick above plinth lvl.	M <sup>3</sup>	105.86			
	(c) 115 mm thick above plinth lvl.	M <sup>2</sup>	10.84			
C2.	a) Supplying, Providing 15 mm thick plain faced internal plaster in cement mortar 1:4 for RCC, brick work, sides, canopies, chajjas with drip moulding, etc. including scaffolding, curing, and including POP punning etc. complete as per specifications and a		2121.54			
	b) Supplying, Providing 18 mm thick external plastering in with water proofing compound) in cement mortar 1:5 for RCC, brick work, including scaffolding, curing, etc. complete as per specif	M <sup>2</sup>	1191.79			
	c) Supplying, Providing 6 mm thick plain-faced cement plaster in cement mortar 1:4 for sides and undersides of slabs, canopies, chajjas with drip moulding, etc. including scaffolding, curing, etc. complete as per specifications.	M <sup>2</sup>	881.70			
	<b>SUB TOTAL OF ITEM UNDER "C"=</b>					
	<b>D. FLOORING, STONE WORKS ETC.</b>					
D1.	Providing and laying vitrified floor tiles in different sizes 600x600 (thickness to be specified by the manufactruer) with water absorption's less than 0.08 % and conforming to IS : 15622 of approved make in all colours and shades, laid on 20 mm thick cement mortar 1:4 (1 cement: 4 coarse sand ) including grouting the joint with white cement and matching pigments etc., complete.	M <sup>2</sup>	870.65			
D2.	Providing and fixing 10 mm thick acid and / or alkali resistant tiles of approved make and colour using acid and / or alkali resisting mortar bedding, and joints filled with acid and / or alkali resisting cement as per IS : 4457, complete as per the direction of Engineer-in-Charge.					
	a) In flooring on a bed of 10 mm thick mortar 1:4 (1 acid proof cement : 4 coarse sand).	M <sup>3</sup>	3554.46			
	b) In dado/skirting using alkali resistant approved tiles Adhesives.	M <sup>3</sup>	214.27			
	<b>SUB TOTAL OF ITEM UNDER "D"=</b>					

## BOQ

BOQ. NO.		UNIT	QUANTITY	RATE	AMOUNT	REMARKS
	<b>E. DOORS, WINDOW WORKS ETC.</b>					
E1.	Providing <b>Teak wood</b> 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 including cost of fasteners, painting etc complete.	M <sup>3</sup>	0.98			
E2.	Providing and fixing ISI marked flush <b>door shutters</b> conforming to IS : 2202 (Part I) decorative type, core of block board construction with frame of 1 st class hard wood and well matched teak 3 ply veneering with vertical grains or cross bands and face veneers on both faces of shutters 35 mm thick including stainless steel butt hinges with necessary screws etc complete.	M <sup>2</sup>	39.76			
E3	Supplying providing & fixing aluminium framed Doors for toilet with shutters as specified.	M <sup>2</sup>	8.54			
E4	Supplying providing & fixing aluminium framed window	M <sup>2</sup>	47.58			
E5	Supplying providing & fixing 5mm thk. Glass sheet in doors & windows	M <sup>2</sup>	47.58			
	<b>SUB TOTAL OF ITEM UNDER "E"=</b>					
	<b>F. PAINTING, FALSE CEILING , FINISHING AND ALLIED WORKS</b>					
F1.	Finishing walls with Acrylic Smooth <b>interior</b> paint for required sheds on wall New work (includes cost of two coat of wall putty, Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of primer applied as per manufacturer details.	M <sup>2</sup>	3003.24			
F2.	Finishing walls with Acrylic Smooth <b>exterior</b> paint for required sheds on wall New work (Two or more coat applied @ 1.67 ltr/ 10 sqm over and including priming coat of exterior primer applied as per manufacturer details.	M <sup>2</sup>	1191.79			
F3	Supplying providing & laying <b>SS grill</b> at floor level by using ss-304 & 1.5mm sections , cost of all fixing fastening etc and as per designed approved by site Engineers/Architect etc complete.	Kg	720.00			
	<b>SUB TOTAL OF ITEM UNDER "F"=</b>					
	<b>Grand Total amount (A+B+C+D+E+F)=</b>					
	ADD FOR ELECTRIFICATION @ 2.0%					
	ADD FOR WATER SUPPLY & SANITARY @ 3.0%					
	ADD FOR CONTINGENCY @ 3.50%					
	ADD FOR CONTRACTORS PROFIT @ 15%					
	<b>TOTAL =</b>					
	Plinth area rate					



TYPICAL GROUND +3 FLOORS



**EXTENSION OF CLASSROOMS**

Place:

D.A.V.BISTUPUR

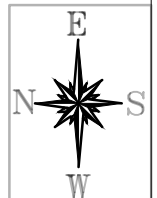
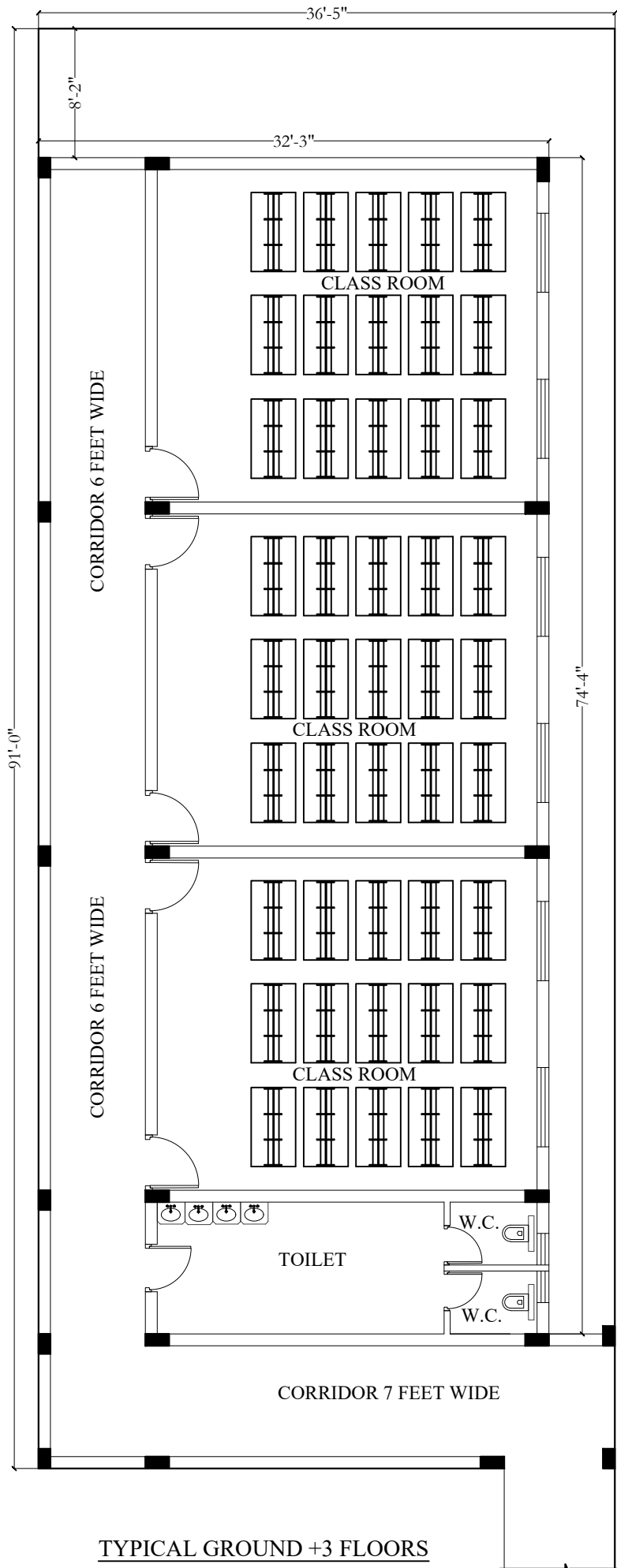
Title:

CONCEPT DRAWING

Date:

19/03/2024

**DX** *design* **XTREME**  
 Architects | Planner | Project Consultants  
 2nd floor, Sana Complex, Aam Bagan  
 Sakchi, Jamshedpur - 831001  
 Contact - M - (+91)9835159732, +91-9234459150  
 Email - nikhil.archi@gmail.com  
 Website - www.designxtreme.in



**EXTENSION OF CLASSROOMS**

Place: D.A.V.BISTUPUR

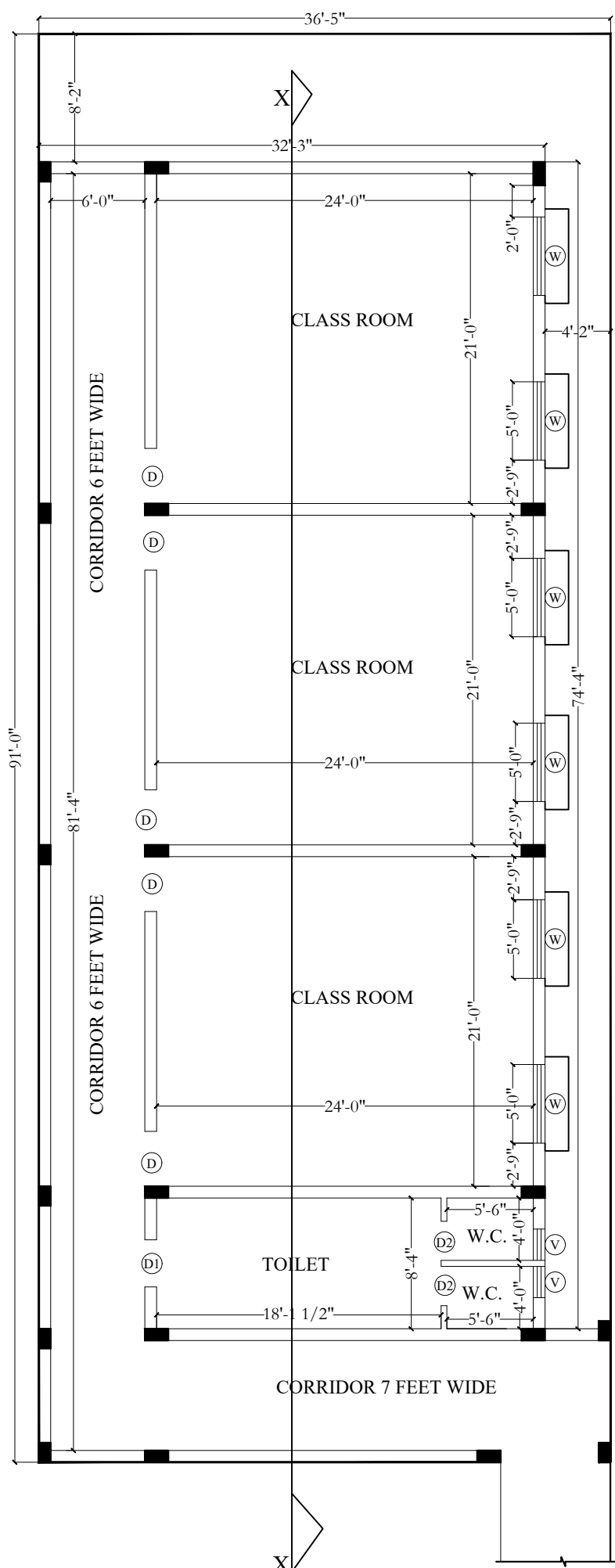
Title: FURNITURE DRAWING

Date: 19/03/2024

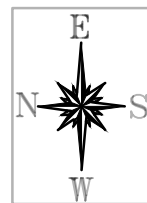
**DX** *design* **XTREME**  
 Architects | Planner | Project Consultants  
 2nd floor, Sana Complex, Aam Bagan  
 Sakchi, Jamshedpur - 831001  
 Contact - M - (+91)9835159732, +91-9234459150  
 Email - nikhil.archi@gmail.com  
 Website - www.designxtreme.in

SCHEDULE OF DOORS & WINDOW

NO.	MARKED	SILL LEVEL	LINTEL LEVEL	WIDTH	DISCRPTION
1	D	0'0"	7'0"	3'6"	WOODEN FLUSH DOOR
2	D1	0'0"	7'0"	3'0"	WOODEN FLUSH DOOR
3	D2	0'0"	7'0"	2'6"	WOODEN FLUSH DOOR
4	W	3'0"	7'0"	5'0"	WOODEN FLUSH DOOR
5	V	5'0"	7'0"	2'0"	GLAZED VENTILATOR



TYPICAL GROUND +3 FLOORS



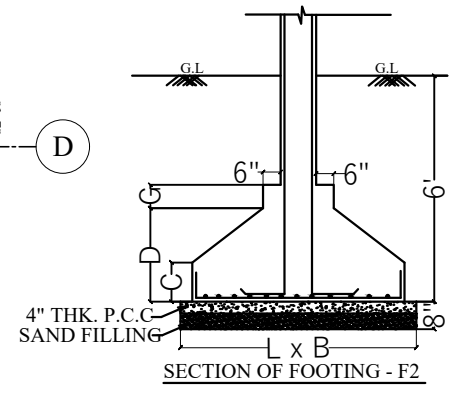
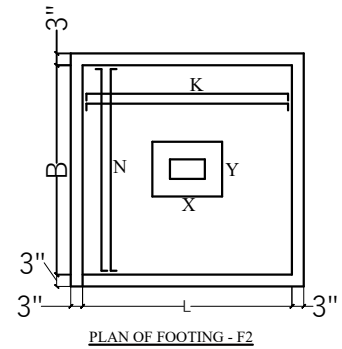
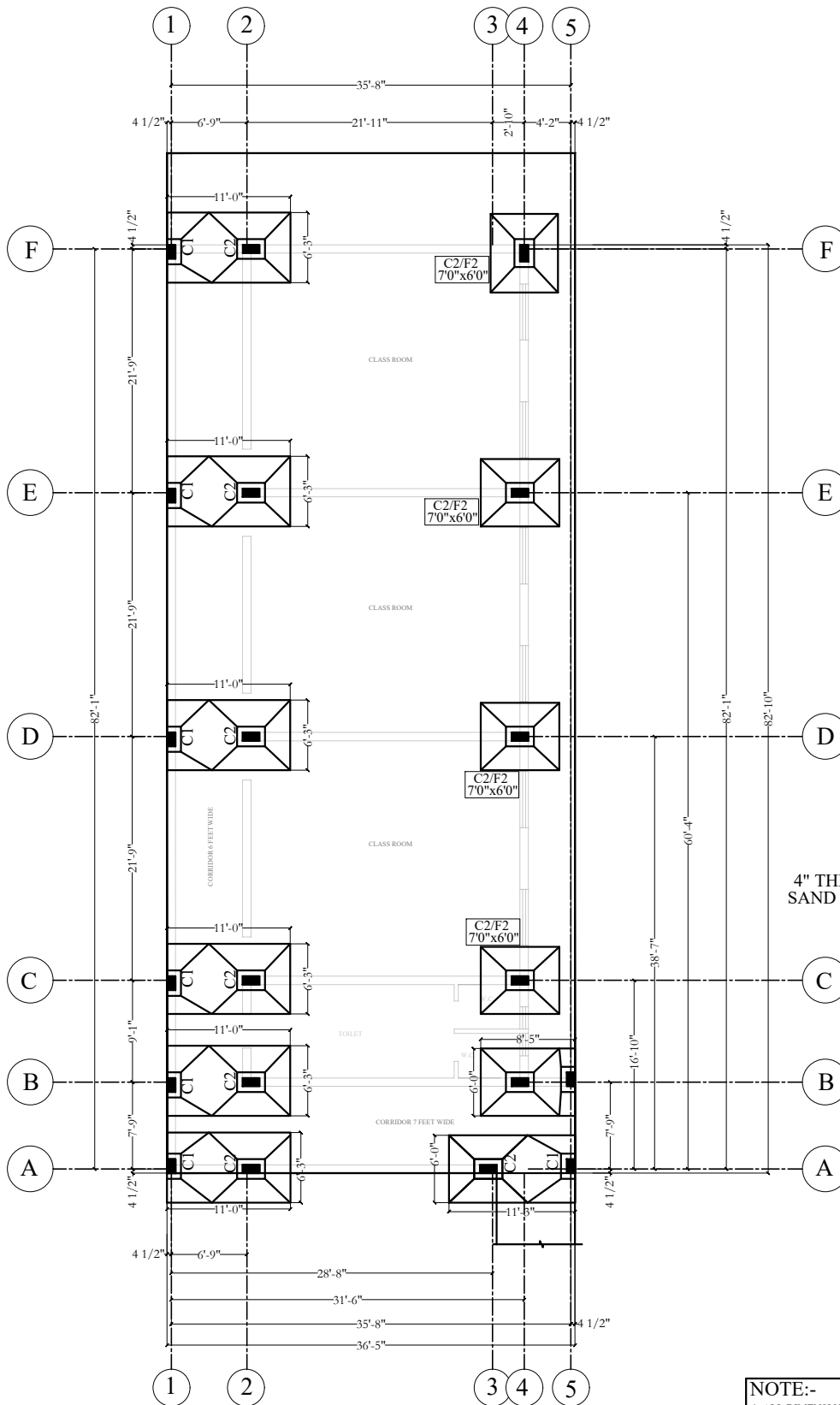
**EXTENSION OF CLASSROOMS**

Place: D.A.V.BISTUPUR

Title: WORKING DRAWING

Date: 19/03/2024

**DXXTREME** design  
 Architects | Planner | Project Consultants  
 2nd floor, Sana Complex, Aam Bagan  
 Sakchi, Jamshedpur - 831001  
 Contact - M - (+91)9835159732, +91-9234459150  
 Email - nikhil.archi@gmail.com  
 Website - www.designxtreme.in



**FOOTING LAYOUT**

- NOTE:-**
1. ALL DIMENSION ARE IN FEET AND INCHES .
  2. ALL CONCRETE MIX M20 UNLESS OTHERWISE SPECIFIED.
  3. MILD STEEL YIELD STRENGTH 250 N / mm<sup>2</sup>
  4. TOR STEEL YIELD STRENGTH 500 N/mm<sup>2</sup>
  5. ALL CONCRETE SHALL BE MACHINE MIXED AND MACHINE VIBRATED .
  6. CLEAR COVER TO MAIN STEEL 40 mm. IN COLUMN , 25 mm. IN BEAM & 15 mm. IN SLAB.
  7. ALL DIMENSION ARE TO BE READ NOT TO BE MEASURED .
  8. ALL DISTRIBUTION BARS WHEREVER REQUIRED BUT NOT CALLED OUT SHALL BE 8 Ø @ 250 C/C.
  9. THIS DRAWING SHALL BE READ WITH ARCHITECTURAL DRAWINGS.
  10. BEARING CAPACITY OF SOIL ADOPTED AS 18 T/M<sup>2</sup>.
  11. DEPTH OF FOUNDATION SHALL BE 2000 mm. BELOW EXISTING GROUND .
- LAP LENGTH > Ld OR 30 TIMES OF BAR DIA  
 db=DIA OF MAIN BAR  
 Ldc=EFFECTIVE DEVELOP. LENGTH CONSIDERING COMPRESSION= 37XBAR DIA  
 Ldt=EFFECTIVE DEVELOPMENT LENGTH CONSIDERING TENSION= 47 X BAR DIA.

**DRAWING :-**  
**FOOTING LAYOUT**

**DATE :-**19 /03/2024

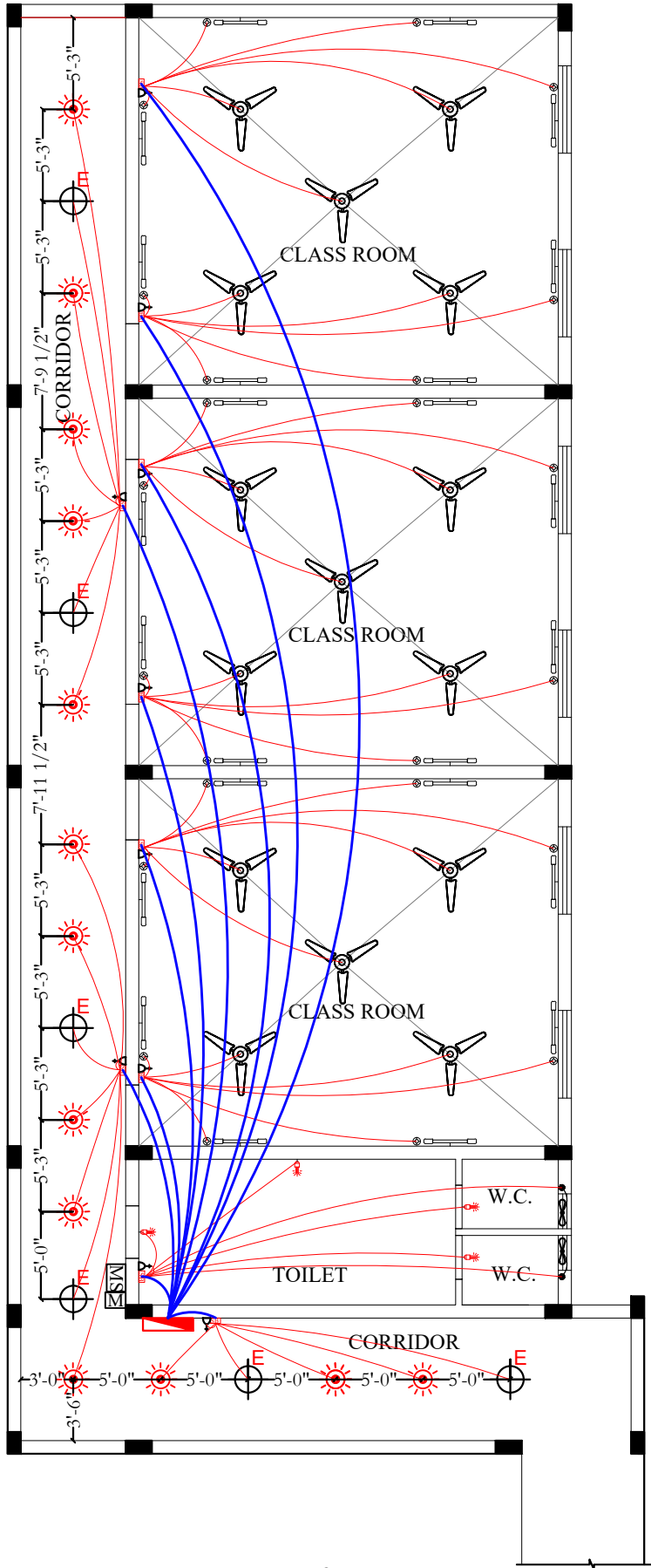
**PROJECT :-** D.A.V.BISTUPUR

FOOTING SCHEDULE										
S.NO.	FOOTING MARKED	FOOTING SIZE		D	C	PEDESTAL		SIZE	REINFORCEMENT	
		L	B			X	Y		N	K
1.	F2	7'-0"	6'-0"	18"	6"	24"	21"	6"	12 TOR @ 5"C/C FOOTING WAYS	12 TOR @ 5"C/C FOOTING WAYS



LEGEND : ( Electrical )

S. No.	SYMBOL	DESCRIPTION
1.		LIGHT POINT/ WALL BRACKET
2.		CEILING LIGHT (SURFACE)
3.		EMERGENCY CEILING LIGHT (SURFACE)
4.		CEILING FAN
5.		CEILING ROSE
6.		5 AMP PLUG POINT
7.		5 /15 AMP POWER POINT
8.		TELEPHONE POINT
9.		T.V JUNCTION BOX
10.		SWITCH BOARD
11.		BULK HEAD (INSIDE LIFT SHAFT)
12.		DISTRIBUTION BOARD (BOTTOM LEVEL)
13.		INDICATES CONTROLLING OF LIGHT/FAN FROM SWITCH BOARD
14.		INDICATES WIRING FROM DISTRIBUTION BOARD
15.		BELL SWITCH POINT
16.		BUZZER POINT
17.		TUBELIGHT
18.		A.C. POINT
19.		MITTER
20.		MAIN SWITCH
21.		EXHAUST FAN / CEILING ROSE



TYPICAL GROUND +3 FLOORS



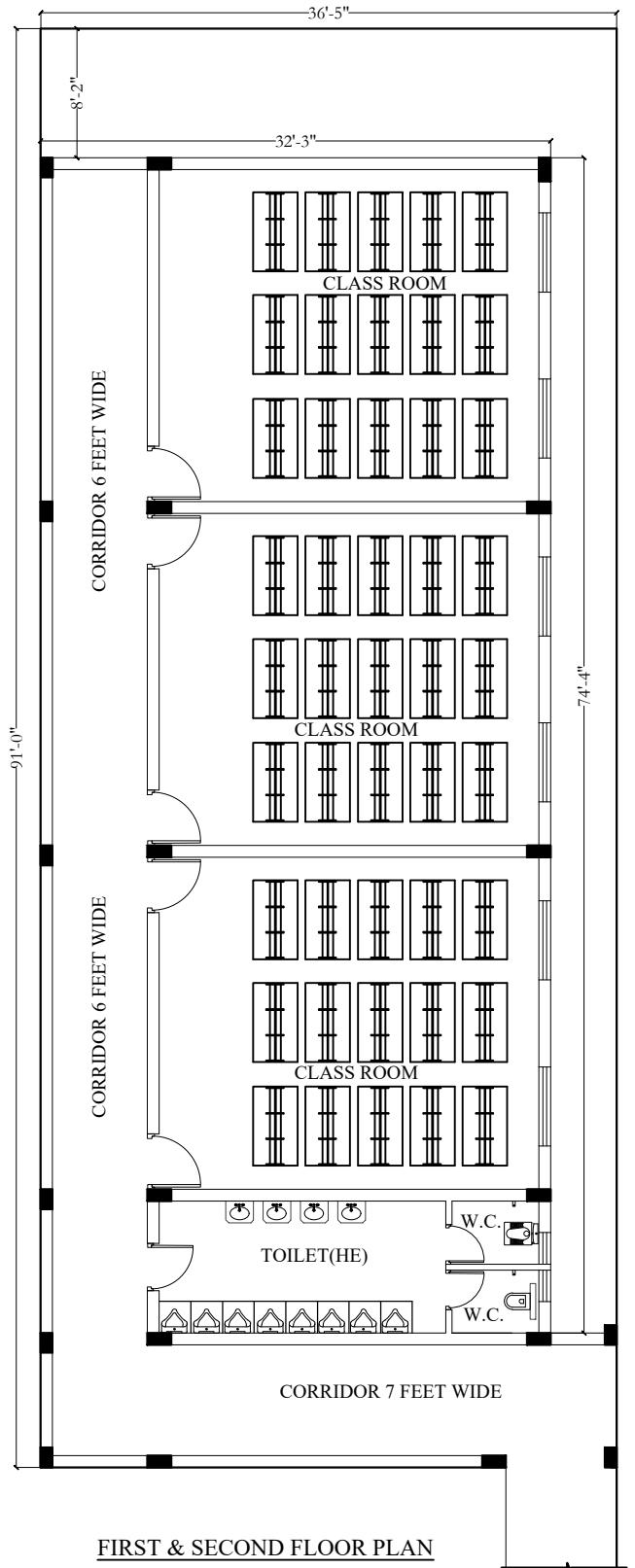
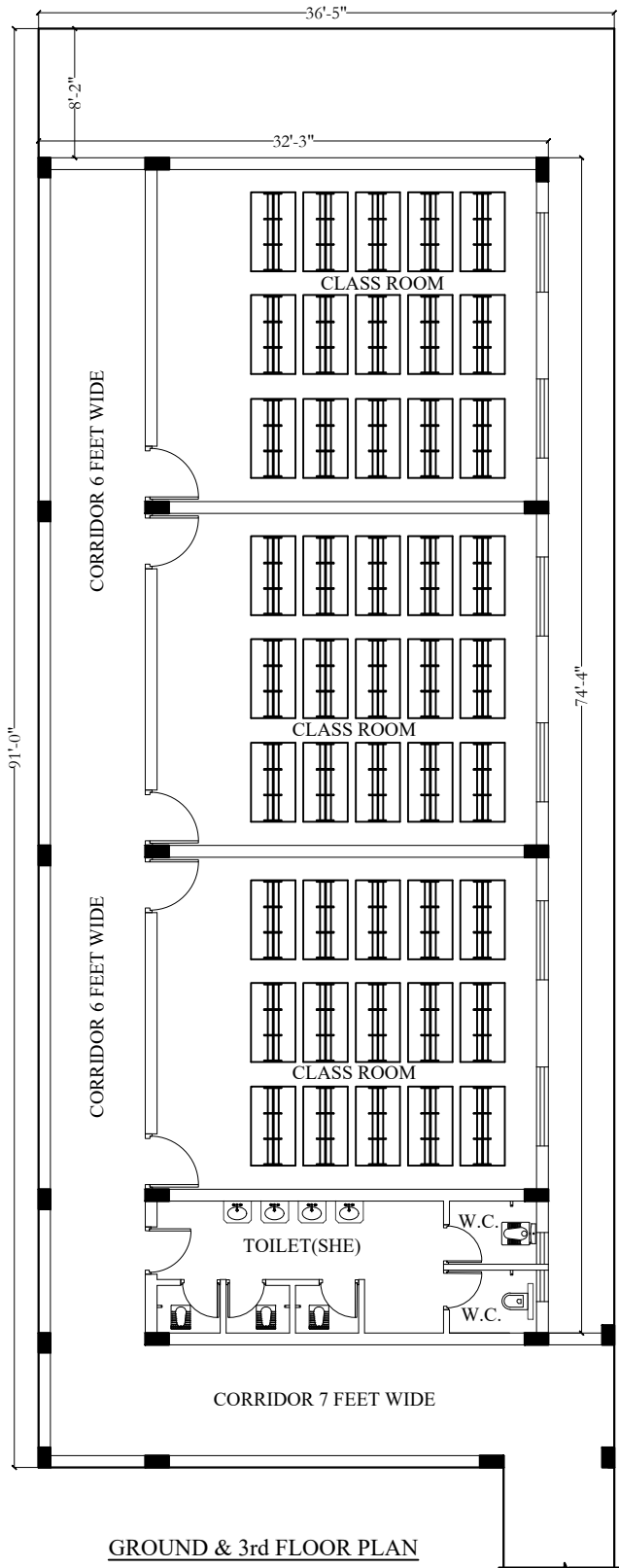
EXTENSION OF CLASSROOMS

Place: D.A.V.BISTUPUR

Title: ELECTRICAL DRAWING

Date: 19/03/2024

**DX** *design*  
 Architects | Planner | Project Consultants  
 2nd floor, Sana Complex, Aam Bagan  
 Sakchi, Jamshedpur - 831001  
 Contact - M - (+91)9835159732, +91-9234459150  
 Email - nikhil.archi@gmail.com  
 Website - www.designxtreme.in



EXTENSION OF CLASSROOMS

Place:

D.A.V.BISTUPUR

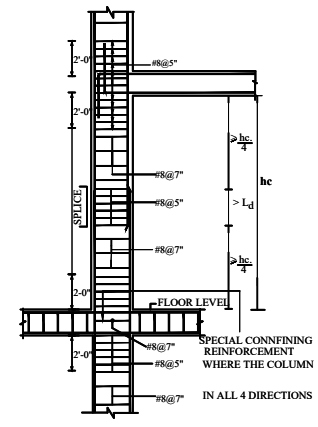
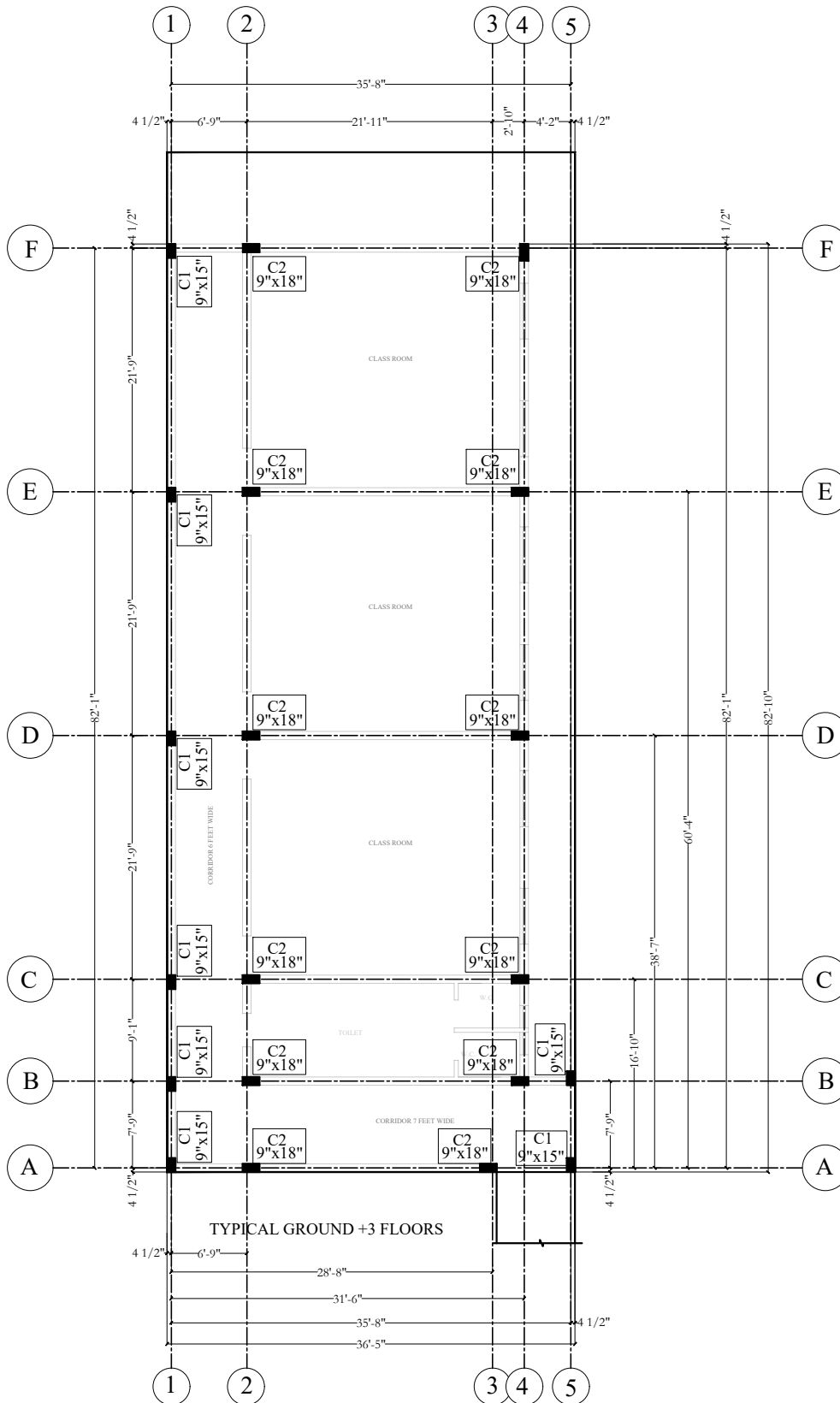
Title:

FURNITURE DRAWING

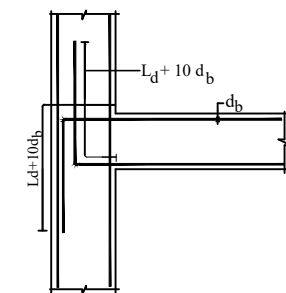
Date:

19/03/2024

**DX** **XTREME** design  
 Architects | Planner | Project Consultants  
 2nd floor, Sana Complex, Aam Bagan  
 Sakchi, Jamshedpur - 831001  
 Contact - M. (+91-9835159732, +91-9234459150)  
 Email - mkhil.archi@gmail.com  
 Website - www.designxtreme.in



**TYP. DETAILS OF COLUMN**



**TYP. DETAILS OF EXTERNAL JOINT**

**CENTER LINE**

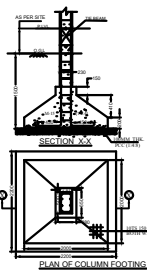
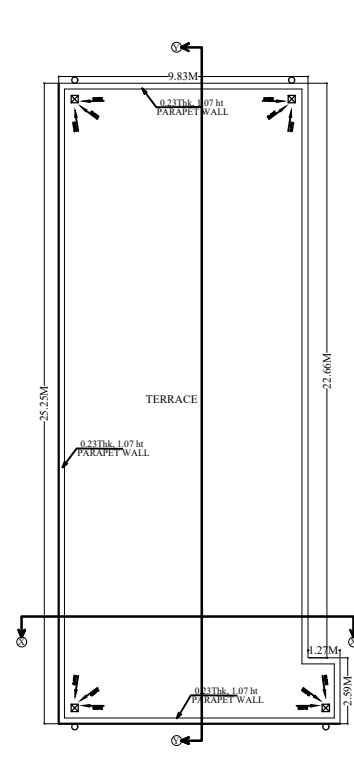
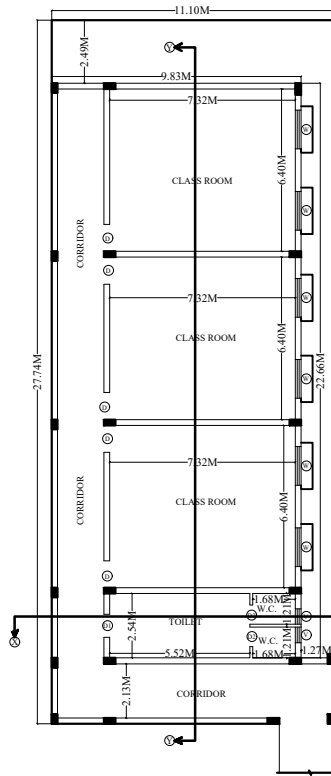
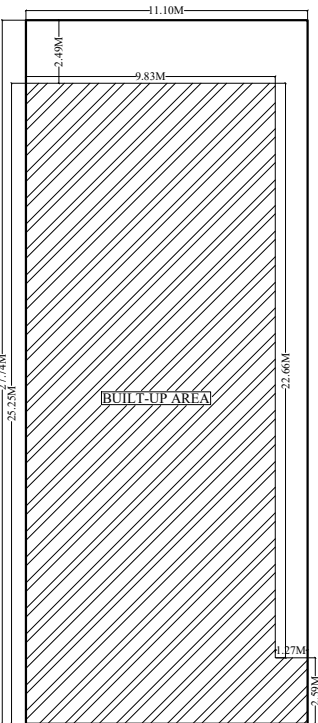
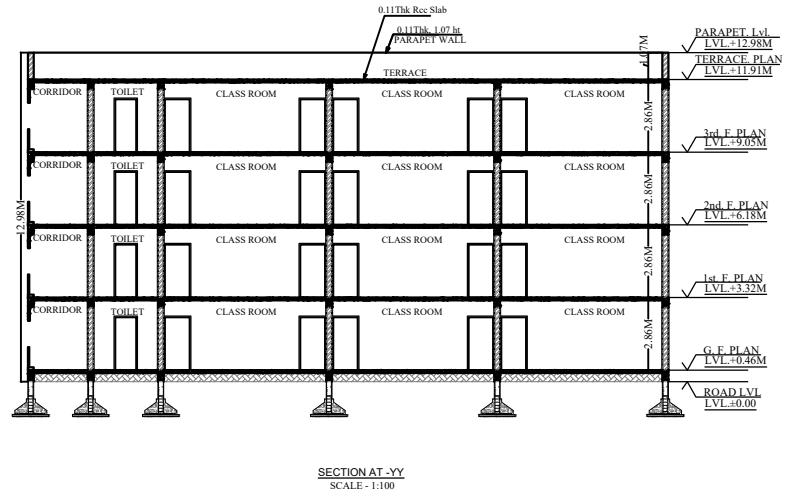
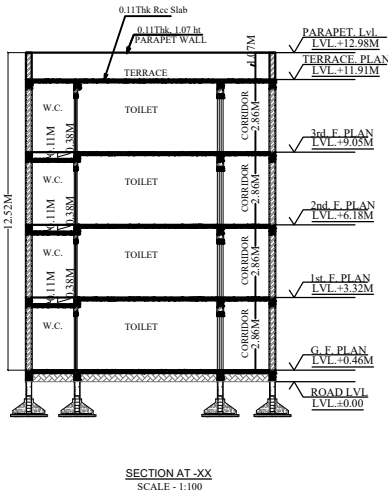
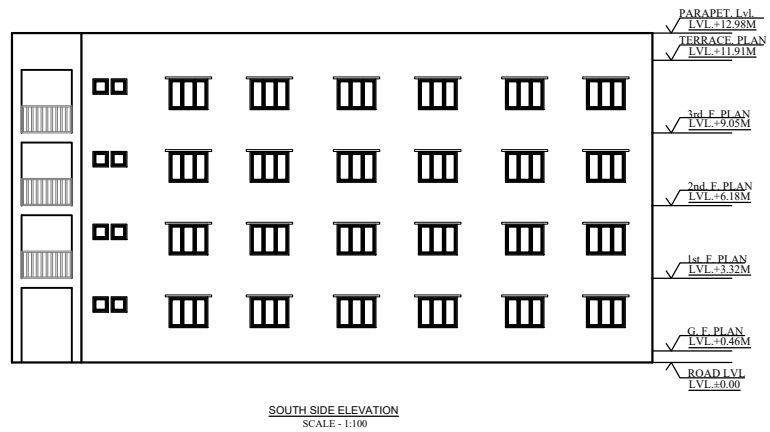
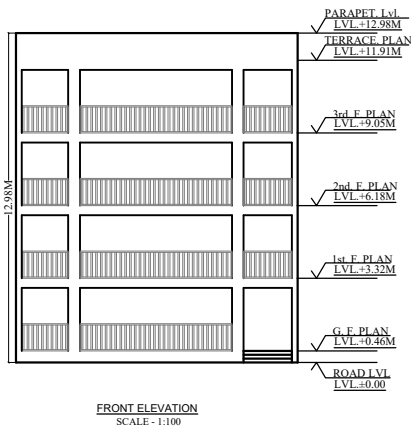
- NOTE:-**
1. ALL DIMENSION ARE IN FEET AND INCHES .
  2. ALL CONCRETE MIX M20 UNLESS OTHERWISE SPECIFIED.
  3. MILD STEEL YIELD STRENGTH 250 N / mm<sup>2</sup>
  4. TOR STEEL YIELD STRENGTH 500 N/mm<sup>2</sup>
  5. ALL CONCRETE SHALL BE MACHINE MIXED AND MACHINE VIBRATED .
  6. CLEAR COVER TO MAIN STEEL 40 mm. IN COLUMN , 25 mm. IN BEAM & 15 mm. IN SLAB.
  7. ALL DIMENSION ARE TO BE READ NOT TO BE MEASURED .
  8. ALL DISTRIBUTION BARS WHEREVER REQUIRED BUT NOT CALLED OUT SHALL BE 8 Ø @ 250 C/C.
  9. THIS DRAWING SHALL BE READ WITH ARCHITECTURAL DRAWINGS.
  10. BEARING CAPACITY OF SOIL ADOPTED AS 18 T/M<sup>2</sup>.
  11. DEPTH OF FOUNDATION SHALL BE 2000 mm. BELOW EXISTING GROUND .
- LAP LENGTH > Ld OR 30 TIMES OF BAR DIA  
 db=DIA OF MAIN BAR  
 Ldc=EFFECTIVE DEVELOP. LENGTH CONSIDERING COMPRESSION= 37XBAR DIA  
 Ldt=EFFECTIVE DEVELOPMENT LENGTH CONSIDERING TENSION= 47 X BAR DIA.

COLUMN SIZE	L		B	
	C1	9"	C2	9"
CONCRETE MIX		15"		18"
		M20		M20
SECTION WITH MAIN STEEL		4-16mm.Tor + 2-12mm.Tor		8-16 mm Tor.
LINKS				
8 mm. Tor @ 5" & 7" C/C				

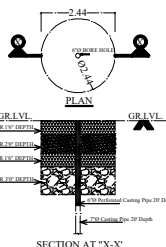
**DRAWING :-**  
**CENTER LINE**

**DATE :-** 19 /03/2024

**PROJECT :-** D.A.V.BISTUPUR



**SITE PLAN**  
SCALE - 1:100



**GENERAL SPECIFICATION:-**

FOUNDATION	Plain Cement Concrete As Per Design.
SUPER STRUCTURE	R.C.C Column Footing & Column As Per Structure Design. R.C.C Column And Beam As Per Structure Design. 225MM Thk External Wall & 150 Thk Partition Wall In Cement Mortar. R.C.C Roof Slab As Per Structure Design.
FLOOR	L.P.S Flooring On P.C. Bed All Over Floor.
INTERNAL FINISH	White Washing Over Cement Plaster.
SANITARY	1. Waster Chain Sundry Ware. 2. G.I. Pipe Work Supply. 3. C.I. Pipe For Disposal.
DOORS & WINDOWS	As Per Schedule.
ELECTRICAL	Copper Conductor With P.V.C. Conduit.

**SCHEDULE OF DOORS & WINDOWS**

SL.NO	NAME	SIZE	DESCRIPTION
D	1.07M X 2.13M	Paneled Single Shutter door.	
D1	0.91M X 2.13M	Paneled Single Shutter door.	
D2	0.84M X 2.13M	Paneled Single Shutter door.	
D3	0.76M X 2.13M	Paneled Single Shutter door.	
W	1.52M X 1.22M	Glazed Steel Frame Window 3. Shutter.	
W1	1.22M X 1.22M	Glazed Steel Frame Window 3. Shutter.	
V	0.61M X 0.61M	Top Hung Steel Ventilator.	

**PROPOSED BUILDING FOR:-**  
1.SMT.  
W/O.  
  
KHATA NO.-  
NEW PLOT NO.-  
MOUZA .-  
THANA NO.-  
THANA .-  
HALKA NO.-  
JAMSHEDPUR, EAST SINGHBHUM.

SIGNATURE OF OWNER/ATTORNEY HOLDER

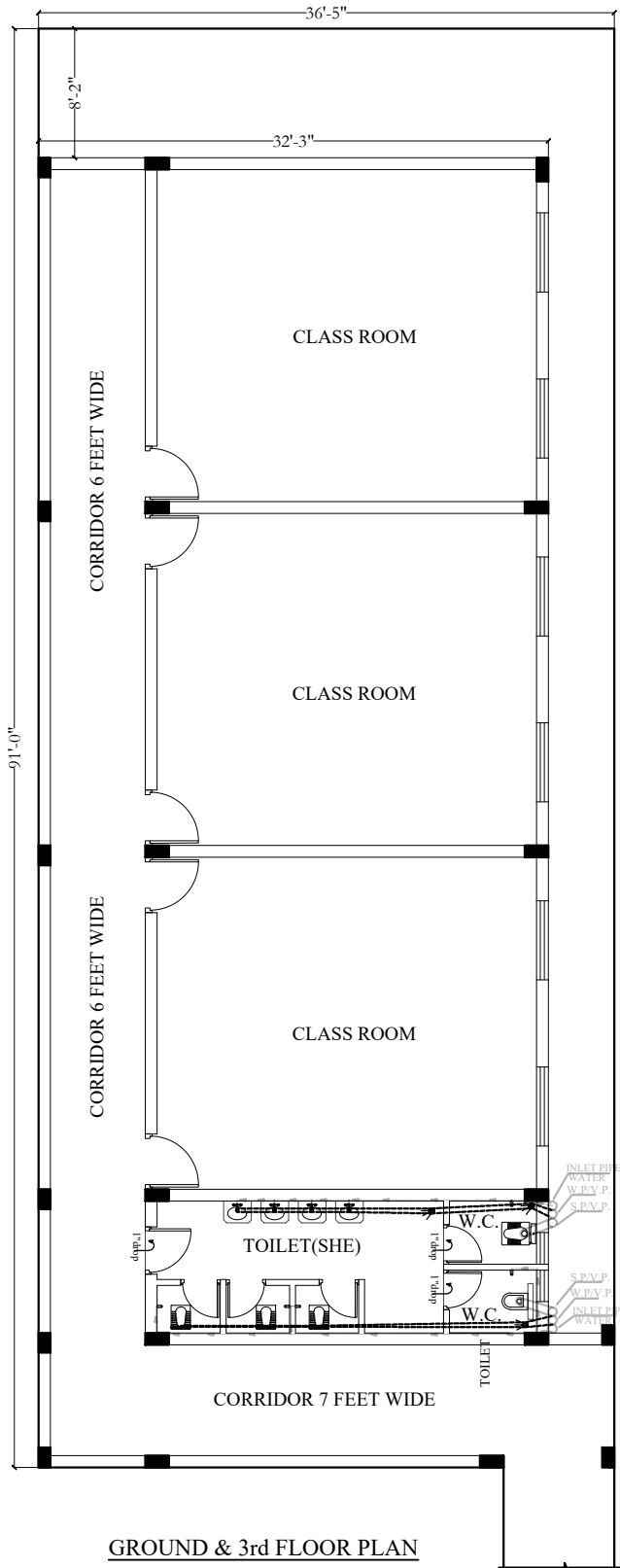
SIGNATURE OF ENGINEER/ ARCHITECT

SITE PLAN, FLOOR PLANS, ELEVATIONS (2-nos.),  
SECTIONS (2-nos.), AREA CALCULATION,  
LOCATION  
PLAN, DRAINAGE PLAN, FOOTING DETAILS,  
WATER TANK & SEPTIC TANK CALCULATION.

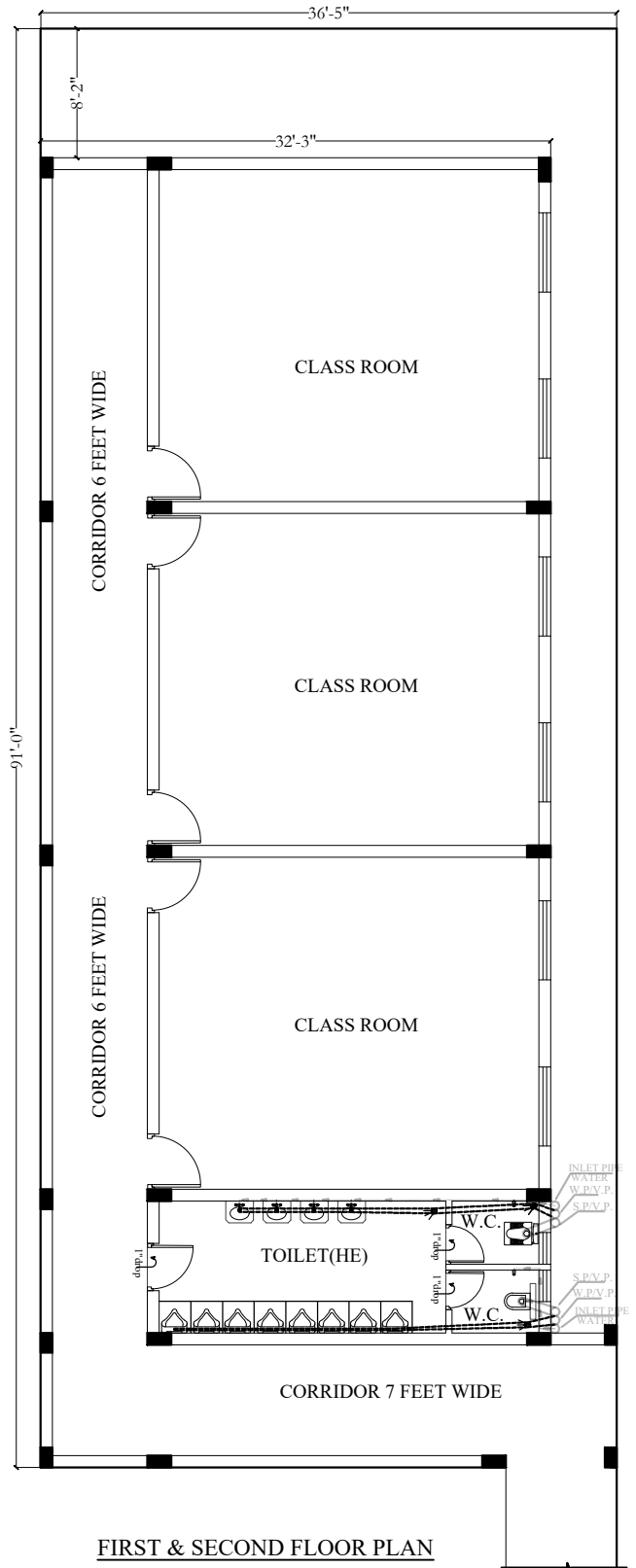
SHEET NO. = 01 OF 01

APPROVED





GROUND & 3rd FLOOR PLAN



FIRST & SECOND FLOOR PLAN



LEGEND		
SN	SYMBOL	PARTICULARS
1.	●	2" SOIL STACK (P.V.C)
2.	●	2" P.V.C. WASTE - RAIN STACK
3.	●	2" NAHND-TRAP
4.	●	2" P-F-TRAP
5.	●	GL. DOWN COMER
6.	+	STOP COCK
7.	+	SHOWER
8.	○	2" P.P.W.C. PIPE FOR BALCONY DRAINAGE
9.	○	GEYSER
10.	—	TOWEL RAIL
11.	□	WASH BASIN
12.	□	WATER CLOSET

EXTENSION OF CLASSROOMS

Place:

Title:

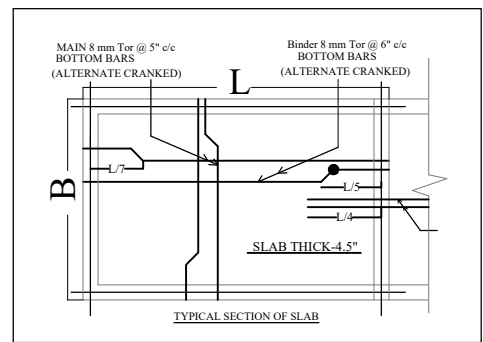
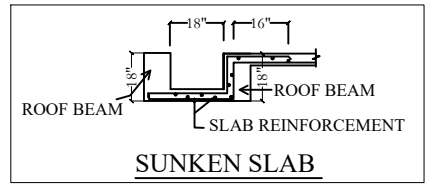
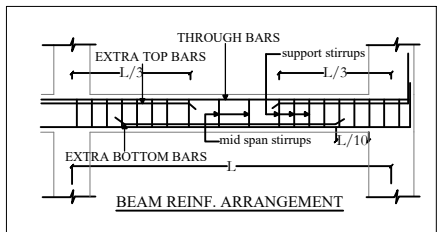
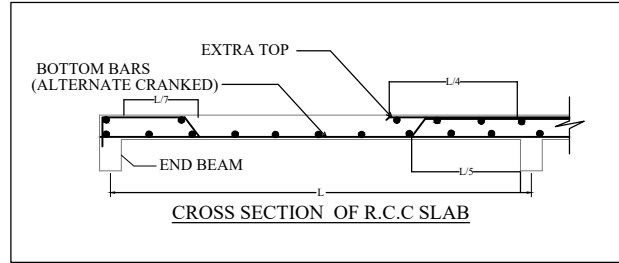
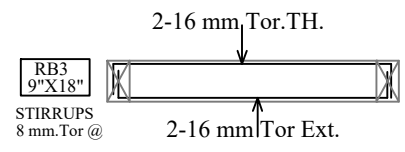
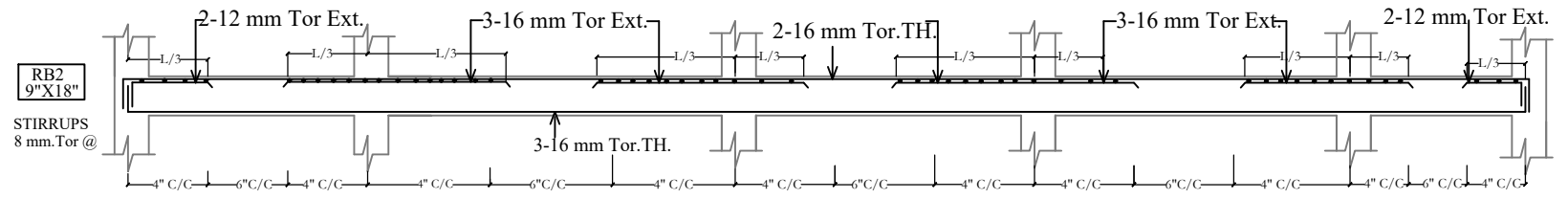
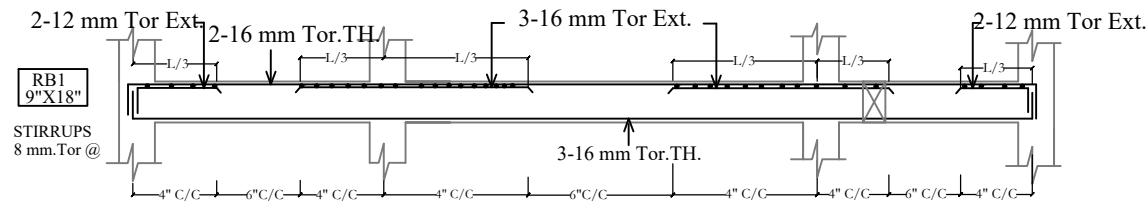
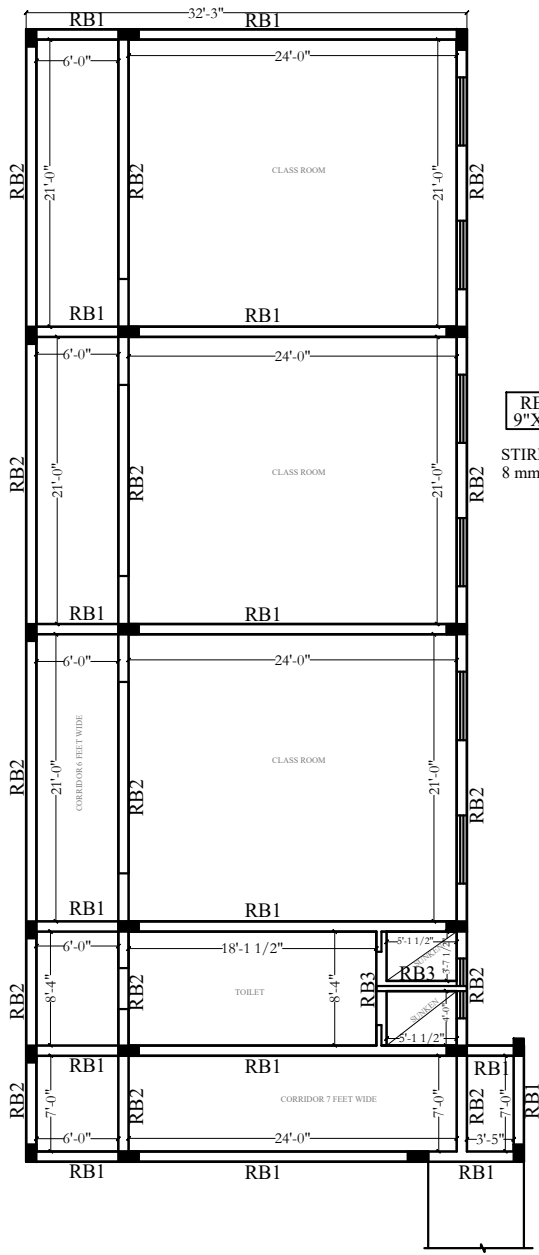
Date:

D.A.V.BISTUPUR

PLUMBING DRAWING

19/03/2024

**DX XTREME**  
 Architects | Planner | Project Consultants  
 2nd floor, Sana Complex, Aam Bagan  
 Sakchi, Jamshedpur - 831001  
 Contact - M - (+91-9835159732, +91-9234459150)  
 Email - mihir.arch@gmail.com  
 Website - www.designxtreme.in

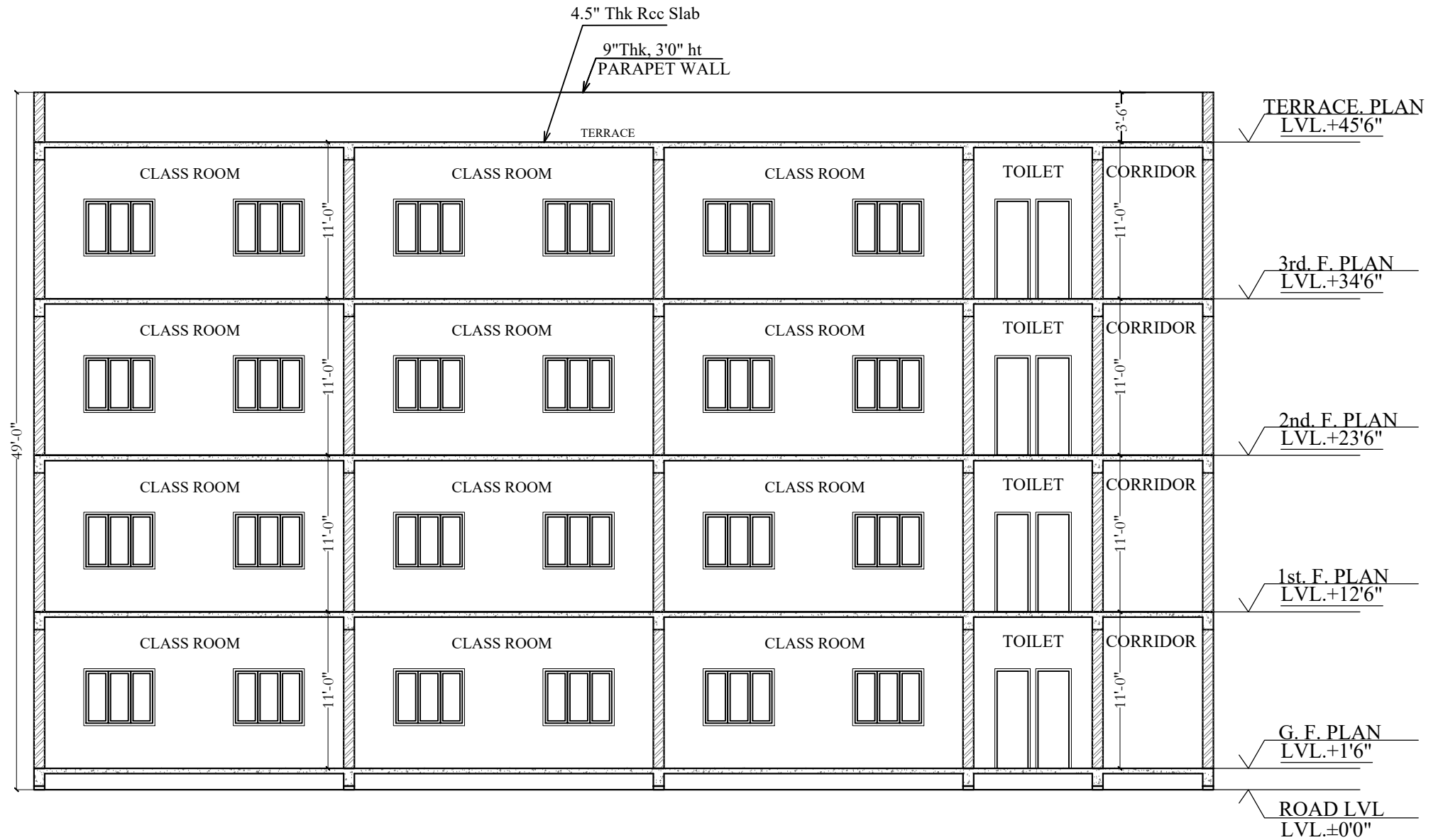


- NOTE:-**
1. ALL DIMENSION ARE IN FEET AND INCHES.
  2. ALL CONCRETE MIX M20 UNLESS OTHERWISE SPECIFIED.
  3. MILD STEEL YIELD STRENGTH 250 N / mm<sup>2</sup>
  4. TOR STEEL YIELD STRENGTH 500 N/mm<sup>2</sup>
  5. ALL CONCRETE SHALL BE MACHINE MIXED AND MACHINE VIBRATED.
  6. CLEAR COVER TO MAIN STEEL 40 mm. IN COLUMN , 25 mm.
  7. IN BEAM & 15 mm. IN SLAB.
  8. ALL DISTRIBUTION BARS WHEREVER REQUIRED BUT NOT CALLED OUT SHALL BE 8 Ø @ 250 C/C.
  9. THIS DRAWING SHALL BE READ WITH ARCHITECTURAL DRAWINGS.
  10. BEARING CAPACITY OF SOIL ADOPTED AS 18 T/M<sup>2</sup>.
  11. DEPTH OF FOUNDATION SHALL BE 2000 mm. BELOW EXISTING GROUND .
- LAP LENGTH > Ld OR 30 TIMES OF BAR DIA  
 d<sub>b</sub> = DIA OF MAIN BAR  
 L<sub>d</sub> = EFFECTIVE DEVELOP. LENGTH CONSIDERING COMPRESSION= 37XBAR DIA  
 L<sub>d</sub> = EFFECTIVE DEVELOPMENT LENGTH CONSIDERING TENSION= 47 X BAR DIA.

**DRAWING :-**  
**ROOF BEAM DETAIL**

**DATE :-** 19 /03/2024

**PROJECT :-** D.A.V.BISTUPUR



EXTENSION OF CLASSROOMS

Place:

D.A.V.BISTUPUR

Title:

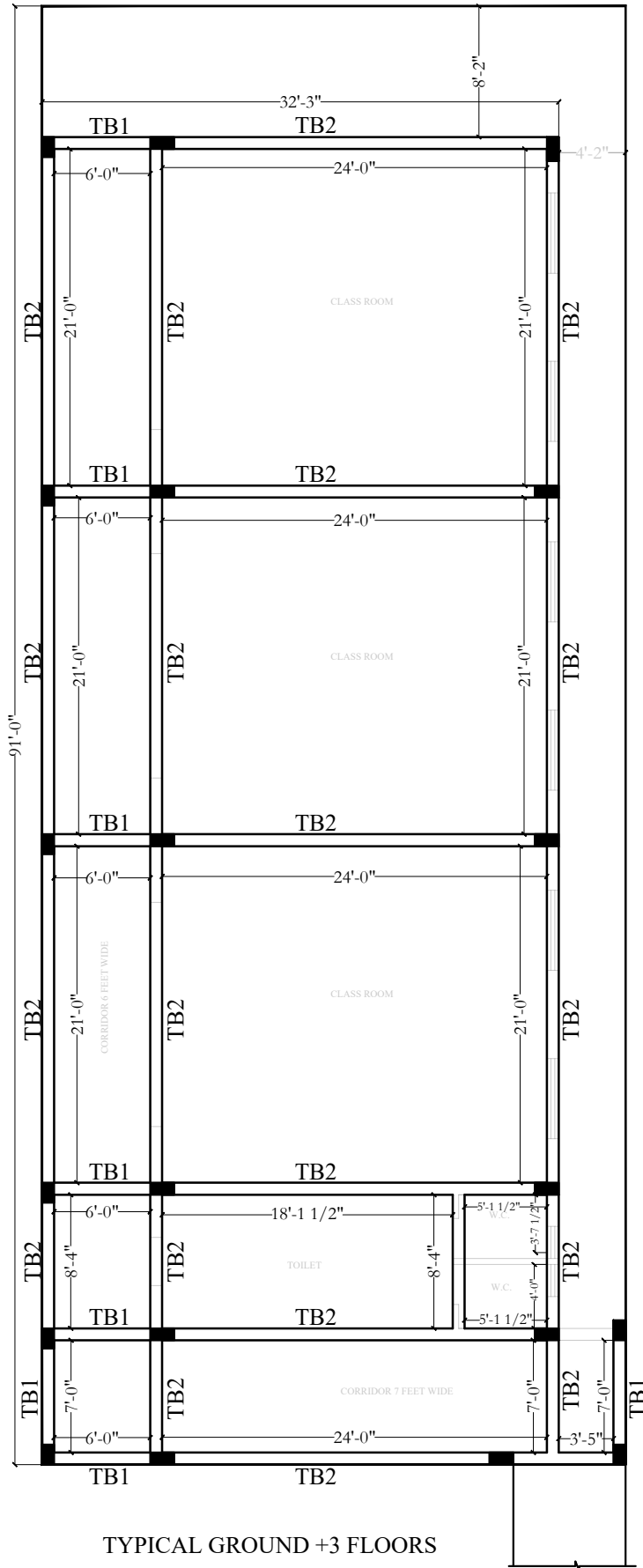
SECTION

Date:

19/03/2024

**DX** *design*  
**XTREME**

Architects | Planner | Project Consultants  
2nd floor, Sana Complex, Aam Bagan  
Sakchi, Jamshedpur -831001  
Contact - M - (+91-9835159732, +91-9234459150)  
Email - nikhil.archi@gmail.com  
Website -www.designxtreme.in



TIE BEAM SIZE	L		B	
	9"	16"	9"	16"
CONCRETE MIX	M20		M20	
SECTION WITH MAIN STEEL				
LINKS	8 mm. Tor @ 8" & 9" C/C		8 mm. Tor @ 8" & 9" C/C	

**NOTE:-**

1. ALL DIMENSION ARE IN FEET AND INCHES .
  2. ALL CONCRETE MIX M20 UNLESS OTHERWISE SPECIFIED.
  3. MILD STEEL YIELD STRENGTH 250 N / mm<sup>2</sup>
  4. TOR STEEL YIELD STRENGTH 500 N/mm<sup>2</sup>
  5. ALL CONCRETE SHALL BE MACHINE MIXED AND MACHINE VIBRATED .
  6. CLEAR COVER TO MAIN STEEL 40 mm. IN COLUMN , 25 mm. IN BEAM & 15 mm. IN SLAB.
  7. ALL DIMENSION ARE TO BE READ NOT TO BE MEASURED .
  8. ALL DISTRIBUTION BARS WHEREVER REQUIRED BUT NOT CALLED OUT SHALL BE 8 Ø @ 250 C/C.
  9. THIS DRAWING SHALL BE READ WITH ARCHITECTURAL DRAWINGS.
  10. BEARING CAPACITY OF SOIL ADOPTED AS 18 T/ M<sup>2</sup>.
  11. DEPTH OF FOUNDATION SHALL BE 2000 mm. BELOW EXISTING GROUND .
- LAP LENGTH > L<sub>d</sub> OR 30 TIMES OF BAR DIA  
 db=DIA OF MAIN BAR  
 L<sub>dc</sub>=EFFECTIVE DEVELOP. LENGTH CONSIDERING COMPRESSION= 37XBAR DIA  
 L<sub>dt</sub>=EFFECTIVE DEVELOPMENT LEGNTH CONSIDERING TENSION= 47 X BAR DIA.

**DRAWING : -  
TIE BEAM**

**DATE :-19 /03/2024**

**PROJECT : - D.A.V.BISTUPUR**