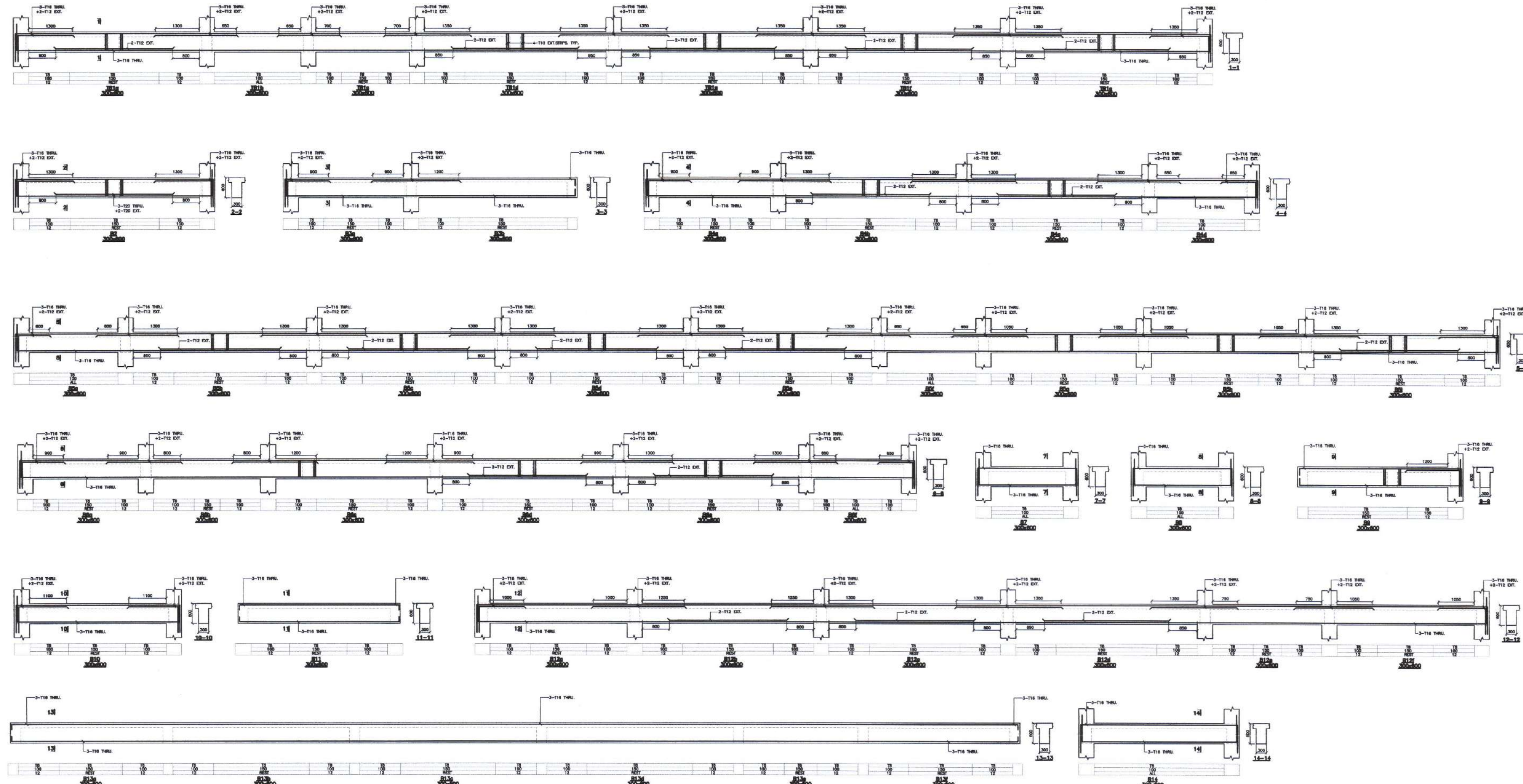


R0



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GENERAL NOTES:

(01) ALL DIMENSIONS ARE IN mm. AND LEVELS ARE TO BE READ & NOT TO BE MEASURED.

(02) ALL R.C.C. SHALL BE MACHINE MIXED & MACHINE VIBRATED. ALL CONC. SHALL BE P.C.C. GRADE OF 20 FOR FLOORING.

(03) FOR REINFORCEMENT CONSIDER SPACE TO 5000. T.A.T. SHALL BE CONFORMING TO IS 1786 - 2008. U.S. BARS CONFORMING TO IS 432 - 1982.

(04) MINIMUM CLEAR COVER TO CONCRETE - 1. FLOORING - 40 mm. 2. COLUMN & BEAM WALL - 40 mm. 3. SLAB - 25 mm.

(05) LAYING OF LIGHTNING RODS SHALL BE STAGGERED TO AVOID CORROSION OF REINFORCEMENT.

(06) FOR ALL DIMENSIONS, LEVELS ETC. SHOULD BE CHECKED WITH ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION. IF FOUND ANY CONFLICT/DISCREPANCY, PLEASE CONSULT TO CONSULTANT IMMEDIATELY.

Dr. Mahesh Mungule
Assistant Professor, (Structural Engg.)
Department of Civil Engineering, IITRAT



PRINTS ISSUED:

DATE	REV.	APPROV.	CLIENT	CONTR.	SITE	TOTAL	REMARK
24.02.23	R0	-	MAIL	-	-	-	FOR APPROVAL
27.02.23	R0	-	01	-	-	01	GFC

NO.	DATE	REVISION HISTORY	REVISED BY	DRAWN BY
1				
2				
3				
4				
5				

GOOD FOR CONSTRUCTION

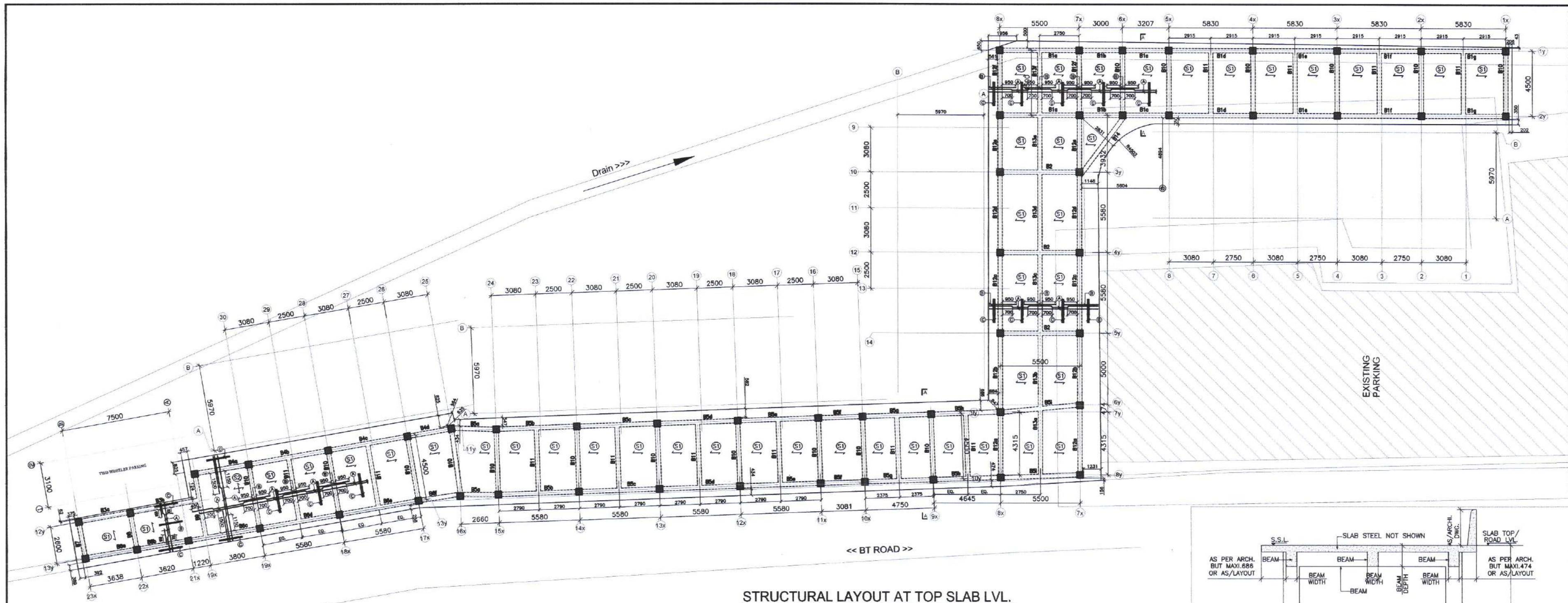
CLIENT NAME:
DEVELOPMENT OF AUTOMATED/
MECHANIZED MULTILEVEL CAR PARKING SYSTEM
AT TALLITAL - NAINITAL

DRAWING TITLE:
BEAM DETAILS

DATE	22-02-2023	PROJECT ARCHITECT	AP
SCALE	1:50	CHECKED BY	SP
DRAWN BY	DS	APPROVED BY	NP
ELECTRICAL CONSULTANTS	HVAC		

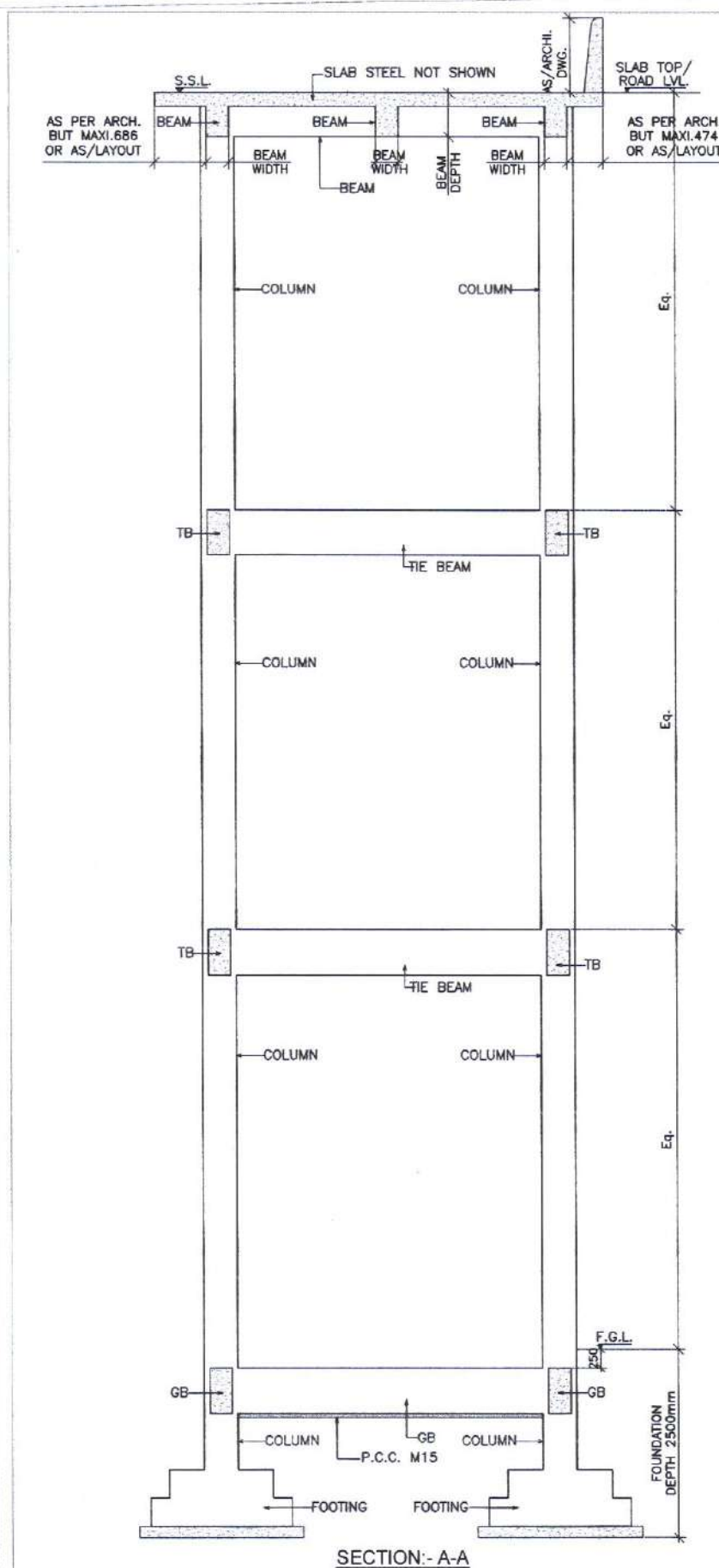
ARCHITECT & STRUCTURAL ENGINEERS
L.J. PURANI AND ASSOCIATES
101, GALL BUSINESS CENTER, ST. MARIE'S COLLEGE CORNER, KANDANPUR, AHMEDABAD 380 004.
TEL. (079) 22446318, FAX. (079) 22446319.
E-MAIL: l.j.purani@ljpurani.com

DRAWING NO.	PROJECT NO.	REVISION
DAMMP-NAI-02-5.01	2211014	R0



STRUCTURAL LAYOUT AT TOP SLAB LVL.

ALL SLAB SHALL BE 200 mm THK. UNLESS OTHERWISE SPECIFIED.



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GENERAL NOTES:

- (01) ALL DIMENSIONS ARE IN mm. AND LEVELS ARE IN MSL. DIMENSIONS ARE TO BE READ AS NOTED OR AS SHOWN.
- (02) ALL R.F.C. SHALL BE MACHINE MADE & MACHINE VIBRATED. ALL CONG. SHALL BE COMPACTED BY MACHINE.
- (03) ALL R.F.C. SHALL BE COMPACTED BY MACHINE. ALL CONG. SHALL BE COMPACTED BY MACHINE.
- (04) MINIMUM CLEARANCE TO CONCRETE: 1. FORMWORK - 50 mm, 2. BEAM - 30 mm, 3. COLUMN & SHEET WALL - 40 mm, 4. SLAB - 25 mm.
- (05) LAPPING OF LONGITUDINAL BARS SHALL BE STAGGERED TO AVOID CONCENTRATION OF JOINTS.
- (06) FOR ALL DIMENSIONS, LEVELS ETC. SHOULD BE CHECKED WITH ARCHITECTURAL DRAWINGS BEFORE EXECUTION. IF FOUND ANY CONFLICT/INCONSISTENCY, PLEASE CONSULT TO CONSULTANT IMMEDIATELY.

SCHEDULE OF SLAB REINFORCEMENT

SYMBOL	SLABS STEEL
A	T12-125 c/c. ALT. BENT UP AT BOTTOM
B	T12-250 c/c. EXTRA TOP AT SUPPORT
C	T8-150 c/c. DISTRIBUTION STEEL

Dr. Mahesh Mungule
Assistant Professor, (Structural Engg.)
Department of Civil Engineering, IITRAM



PRINTS ISSUED:

DATE	REV.	ARCH.	CLIENT	CONTR.	SITE	TOTAL	REMARK
24.02.23	RD	-	MAIL	-	-	-	FOR APPROVAL
27.02.23	RD	-	01	-	-	01	GFC

NO.	DATE	REVISION HISTORY	REVISOR	DRAWN BY
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GOOD FOR CONSTRUCTION

CLIENT NAME: DEVELOPMENT OF AUTOMATED/ MECHANIZED MULTILEVEL CAR PARKING SYSTEM AT TALLITAL - NAINITAL

DRAWING TITLE: TOP SLAB LAYOUT & DETAILS

DATE: 22-02-2023 PROJECT ARCHITECT: AP

SCALE: 1:50 CHECKED BY: SB

DRAWN BY: DS APPROVED BY: NP

ELECTRICAL CONSULTANTS: H.V.A.C.

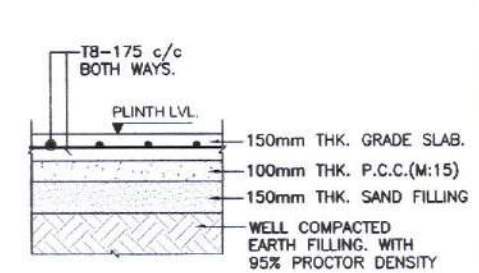
ARCHITECT & STRUCTURAL ENGINEERS
L.J. PURANI AND ASSOCIATES
303, BALA BUSINESS CENTER, ST. SAVEN'S COLLEGE CORNER, BAYANAPURA, ANKURABAD 585 009.
TEL. (0781) 2444318, FAX. (0781) 2444319.
E-MAIL: info@ljpurani.com, lpurani@ljpurani.com

DAMMP-NAI-02-5.00 2211014 R0

TYPICAL CROSS SECTIONAL DETAILS FOR PLACEMENT OF MAIN REINFORCEMENT IN BEAMS

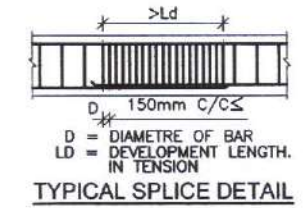
NOTES:

1. VERTICAL CLEAR SPACING BETWEEN TWO LAYERS OF BARS SHALL BE 25 mm OR LARGER BAR DIAMETER, WHICH EVER IS MORE.
2. BARS WITH HIGHER DIAMETER SHALL BE PLACED IN OUTER LAYER, WHERE EVER POSSIBLE.

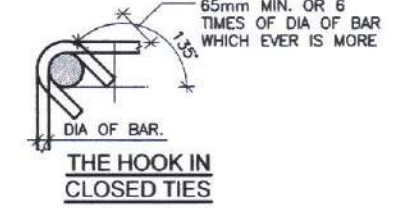


TYP. DETAIL FOR GRADE SLAB (UNO)

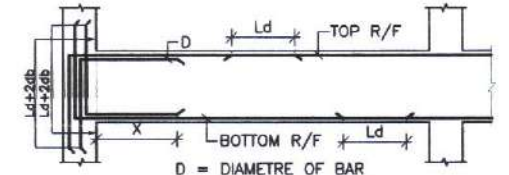
- * BLACK COTTON SOIL SHALL NOT BE USED FOR BACK FILLING PURPOSES.
- * BACK FILLING SHOULD BE DONE IN LAYERS OF 150mm THROUGH OUT AND IT IS COMPACTED TO 95% PROCTOR DENSITY.



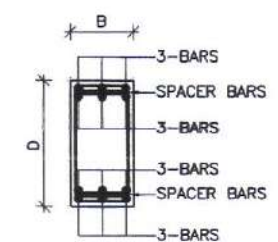
TYPICAL SPLICE DETAIL



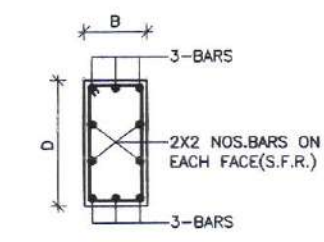
THE HOOK IN CLOSED TIES



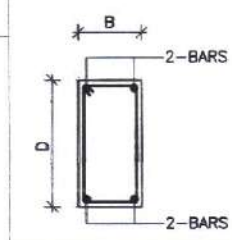
TYPICAL BEAM DETAIL FOR MAIN BEAM



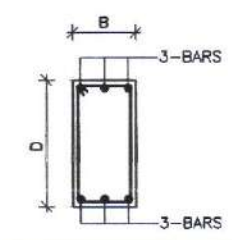
FOR 6-BARS (3+3-BARS)



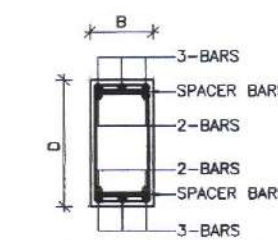
TYP. SIDE FACE REINFORCEMENT



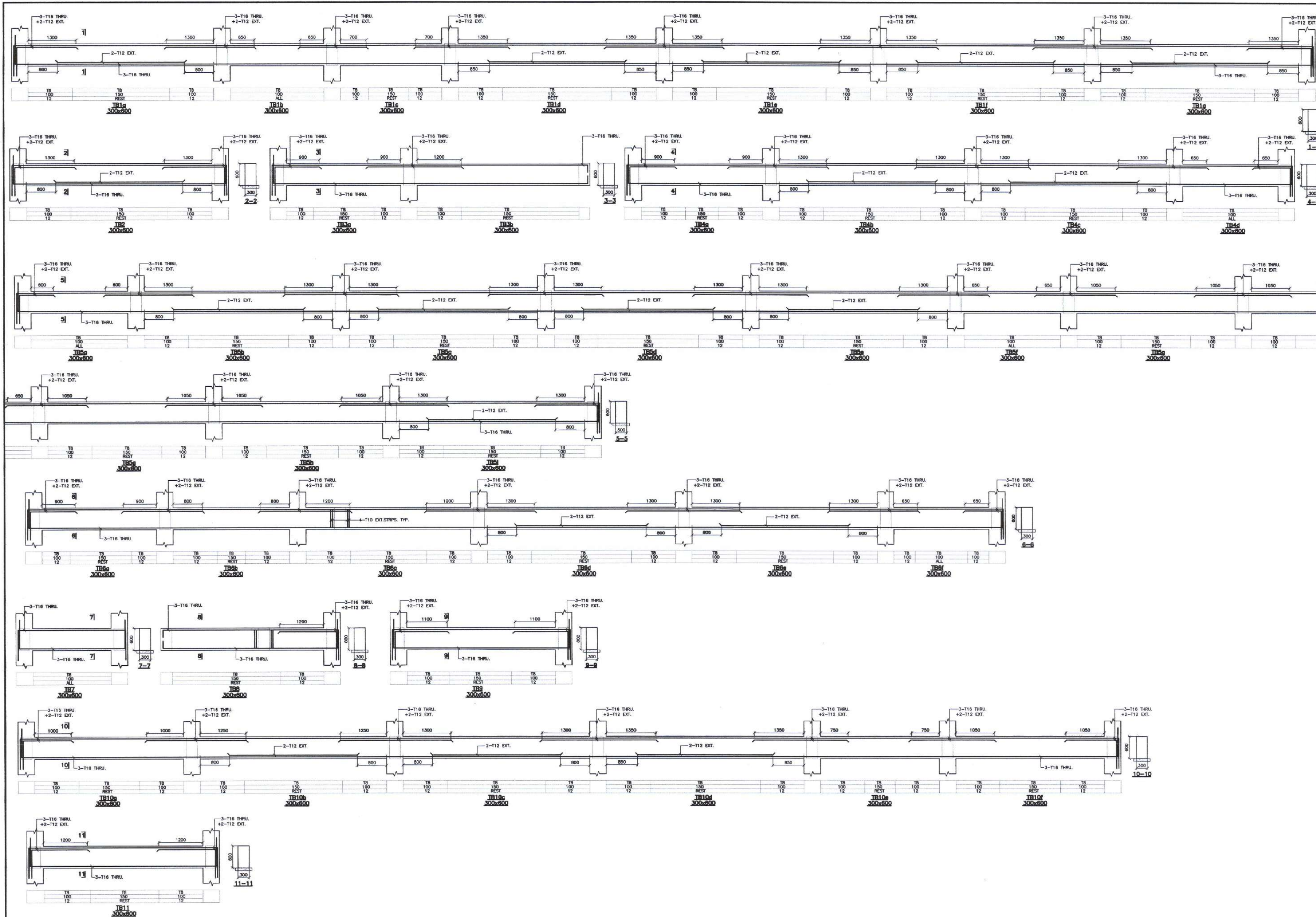
FOR 2-BARS



FOR 3-BARS



FOR 5-BARS (3+2-BARS)



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GENERAL NOTES:

(01) ALL DIMENSIONS ARE IN mm. AND LEVELS ARE MSL. DIMENSIONS ARE TO BE READ & NOT TO BE ASSUMED.

(02) ALL R.C.C. SHALL BE MACHINE MIXED & MACHINE VIBRATED. ALL CONC. SHALL BE COMPACTED BY ROLLERS OR VIBRATORS.

(03) FOR REINFORCEMENT COVERING SHALL BE 50mm TO TOP & 25mm TO BOTTOM.

(04) MINIMUM CLEAR COVER TO REINFORCEMENT SHALL BE 50mm TO TOP & 25mm TO BOTTOM.

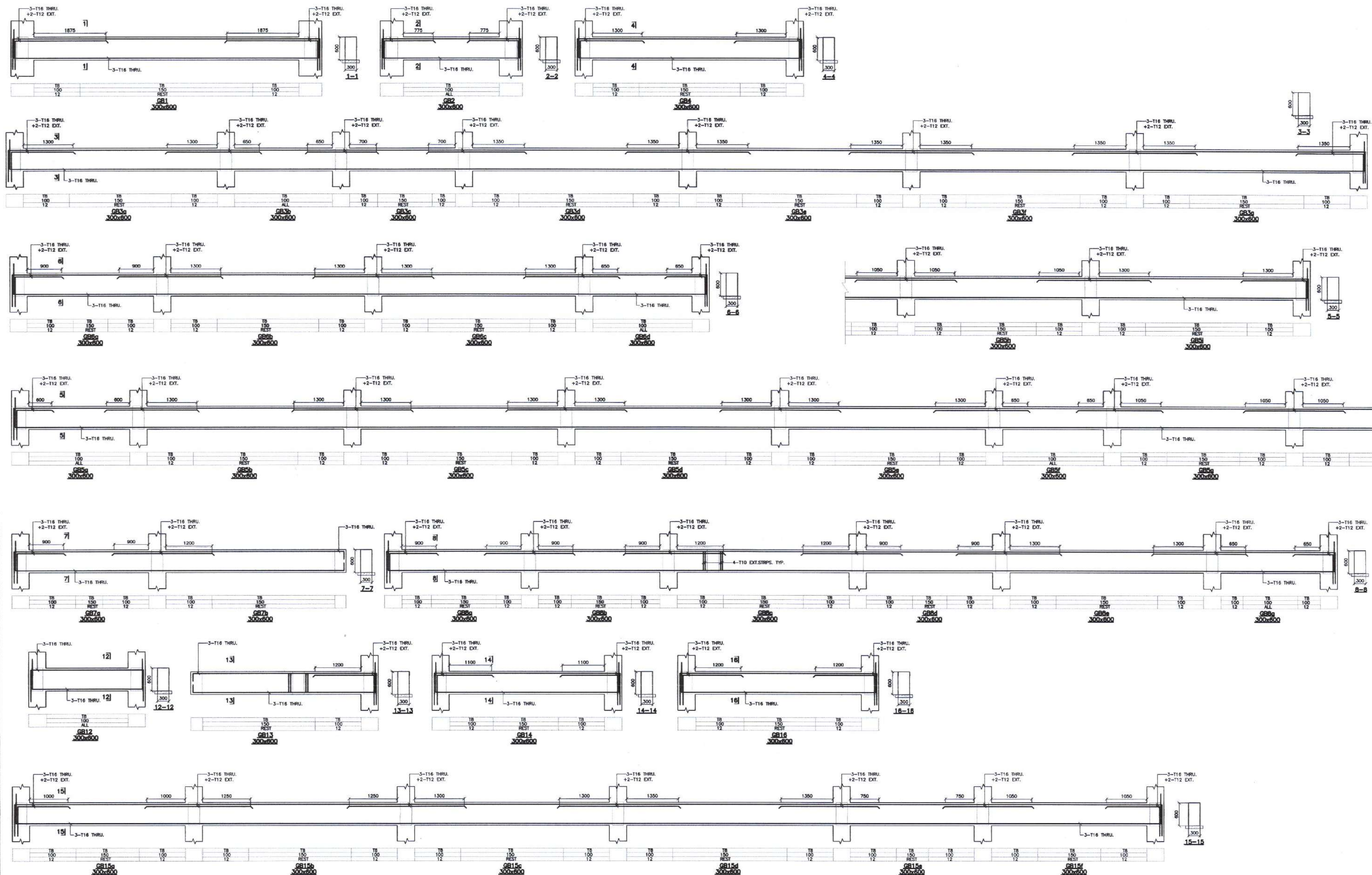
(05) LAPPING OF REINFORCEMENT SHALL BE STAGGERED TO AVOID CONCENTRATION OF REINFORCEMENT.

(06) FOR ALL DIMENSIONS, LEVELS ETC. SHOULD BE CHECKED WITH ARCHITECTURAL DRAWINGS BEFORE EXECUTION. IF FOUND ANY CONFLICT/INCONSISTENCY PLEASE CONSULT TO CONSULTANT IMMEDIATELY.

Dr. Mahesh Mungole
Assistant Professor, (Structural Engg.)
Department of Civil Engineering, IITRAM



PRINTS ISSUED:						
DATE	REV.	ARCH.	CLIENT	CONTR.	SITE	TOTAL
24.02.23	RD	--	MML	--	--	01
27.02.23	RD	--	01	--	--	01
GOOD FOR CONSTRUCTION						
NO. DATE REVISION HISTORY						REVISED BY DRAWN BY
CLIENT NAME: DEVELOPMENT OF AUTOMATED/ MECHANIZED MULTILEVEL CAR PARKING SYSTEM AT TALLITAL - NAINITAL						
DRAWING TITLE: TIE BEAMS DETAILS						
DATE : 24-02-2023						
SCALE :			PROJECT ARCHITECT : AP			
DRAWN BY : AP			CHECKED BY : SB			
ELECTRICAL CONSULTANTS:			APPROVED BY : NP			
			H.V.A.C			
ARCHITECT & STRUCTURAL ENGINEER L.J. PURANI AND ASSOCIATES 303, GALA BUSINESS CENTER, ST. XAVIER'S COLLEGE CORNER, NAYANAPURA, AHMEDABAD 380 005 TEL. (079) 28443318, FAX. (079) 28443317 E-MAIL: info@ljpurani.com, www.ljpurani.com						
DRAWING NO.			PROJECT NO.		REVISION	
DAMMP-NAI-02-4.01					2211014 R0	



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GENERAL NOTES:

- (01) ALL DIMENSIONS ARE IN mm. AND LEVELS ARE IN MSL. DIMENSIONS ARE TO BE READ AS NOT TO BE MEASURED.
- (02) ALL A.C.C. SHALL BE MACHINE MIXED & MACHINE VIBRATED. ALL CONC. SHALL BE P.O.C. SHALL BE AS PER FOLLOWING.
- (03) ALL CONC. - M20. P.O.C. - M20. UNLESS OTHERWISE SPECIFIED.
- (04) FOR REINFORCEMENT CORROSION PROTECTION, RE. SHALL BE T.A.T. SHALL BE CONFORMED TO IS. 1786 - 2008. ALL BARS CONFORM TO IS. 432 - 1986.
- (05) MINIMUM CLEARANCE TO CONCRETE - 25 mm.
- (06) COLUMN & BEAM WALL - 40 mm.
- (07) LAYING OF LONGITUDINAL BARS SHALL BE STAGGED TO AVOID CORROSION OF REINFORCEMENT.
- (08) FOR ALL DIMENSIONS, LEVELS ETC. SHOULD BE CHECK WITH ARCHITECTURAL DRAWINGS BEFORE EXECUTION. IF FOUND ANY CONCRETE/STRUCTURAL, PLEASE CONSULT TO CONSULTANT IMMEDIATELY.

Dr. Mahesh Mungule
Assistant Professor, (Structural Engg.)
Department of Civil Engineering, IITMAM



DATE	REV.	ARCH.	CLIENT	CONTR.	SITE	TOTAL	REMARK
24.02.23	01	—	NAME	—	—	—	FOR APPROVAL
27.02.23	01	—	01	—	—	01	OPC

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NO. DATE REVISION HISTORY REVISED BY DRAWN BY

GOOD FOR CONSTRUCTION

CLIENT NAME:

DEVELOPMENT OF AUTOMATED/
MECHANIZED MULTILEVEL CAR PARKING SYSTEM
AT TALLITAL - NAINITAL

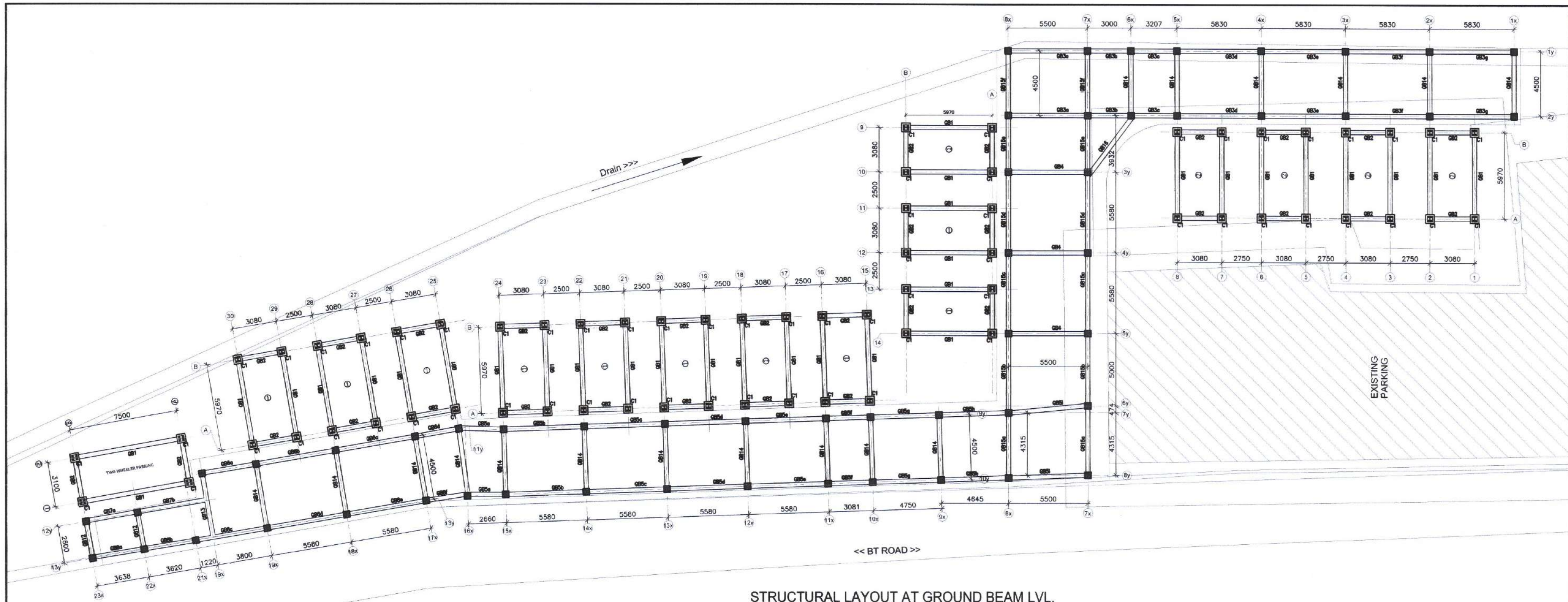
DRAWING TITLE:

GROUND BEAM DETAILS

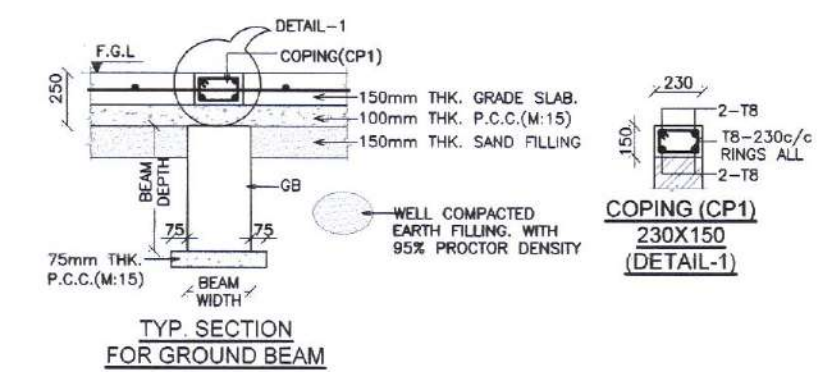
DATE : 24-02-2023 PROJECT ARCHITECT : AP
SCALE : — CHECKED BY : SB
DRAWN BY : AP APPROVED BY : NP
ELECTRICAL CONSULTANTS : HVAC

ARCHITECT & STRUCTURAL ENGINEERS
L.J. PURANI AND ASSOCIATES
303, GALLA BUSINESS CENTER, ST. XAVIER'S COLLEGE CORNER, NAVAROPUR, AHMEDABAD 380 005.
TEL. (079) 22444318, FAX. (079) 22444319,
E-MAIL : l.j.purani@ljpurani.com

DRAWING NO.	PROJECT NO.	REVISION
DAMMP-NAI-02-3.01	2211014	R0



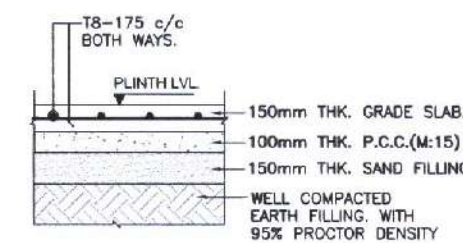
STRUCTURAL LAYOUT AT GROUND BEAM LVL.



TYPICAL CROSS SECTIONAL DETAILS FOR PLACEMENT OF MAIN REINFORCEMENT IN BEAMS

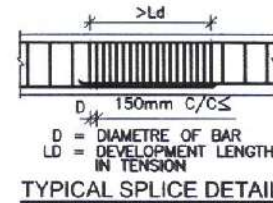
NOTES:

1. VERTICAL CLEAR SPACING BETWEEN TWO LAYERS OF BARS SHALL BE 25 MM OR LARGER BAR DIAMETER, WHICH EVER IS MORE.
2. BARS WITH HIGHER DIAMETER SHALL BE PLACED IN OUTER LAYER, WHERE EVER POSSIBLE.

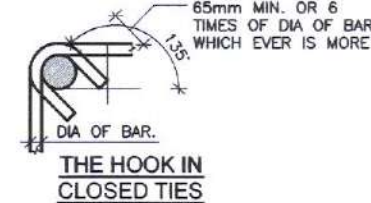


TYP. DETAIL FOR GRADE SLAB (UNO)

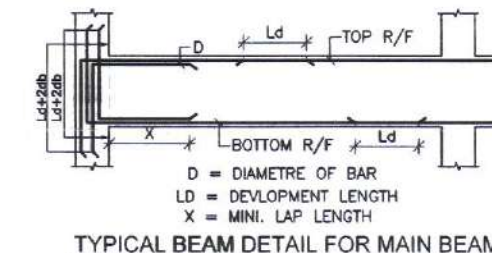
- * BLACK COTTON SOIL SHALL NOT BE USED FOR BACK FILLING PURPOSED.
- * BACK FILLING SHOULD BE DONE IN LAYERS OF 150mm THROUGH OUT AND IT IS COMPACTED TO 95% PROCTOR DENSITY.



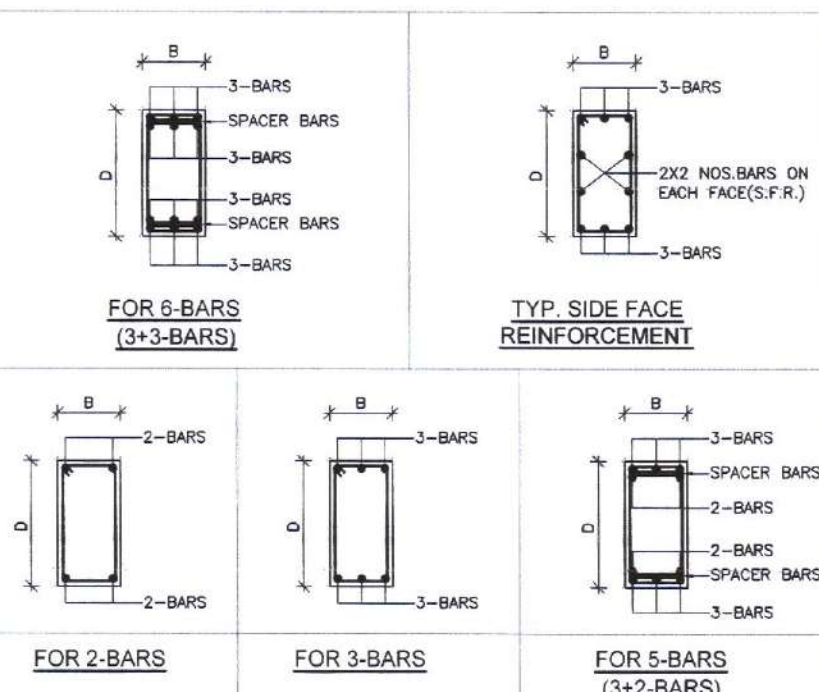
TYPICAL SPLICE DETAIL



THE HOOK IN CLOSED TIES



TYPICAL BEAM DETAIL FOR MAIN BEAM



TYP. SIDE FACE REINFORCEMENT

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GENERAL NOTES:

- (01) ALL DIMENSIONS ARE IN MM. AND LEVELS ARE TO BE READ & NOT TO BE MEASURED.
- (02) ALL R.C.C. SHALL BE MACHINE MIXED & MACHINE VIBRATED. ALL CONC. SHALL BE P.C.C. (M:15) OR AS PER FOLLOWING.
- (03) FOR REINFORCEMENT CONCRETE SHALL BE 1000 - 2000 M.S. BARS CONFORMING TO IS 1786 - 2008.
- (04) MINIMUM CLEAR COVER TO CONCRETE: 1. FLOORING - 50 mm, 2. COLUMN & SHEAR WALL - 40 mm, 3. BEAM - 30 mm, 4. SLAB - 25 mm.
- (05) LAPPING OF LONGITUDINAL BARS SHALL BE STAGGERED TO AVOID CONCENTRATION OF REINFORCEMENT.
- (06) FOR ALL DIMENSIONS, LEVELS ETC. SHOULD BE CHECKED WITH ARCHITECTURAL DRAWINGS BEFORE CONSTRUCTION. IF FOUND ANY CONFLICT/INCONSISTENCY PLEASE CONSULT TO CONSULTANT IMMEDIATELY.

BEAM : GB9, GB10, GB11, GB16 OMITTED

Dr. Mahesh Mungule
Assistant Professor, (Structural Engg.)
Department of Civil Engineering, IITP.



DATE	REV.	ARCH.	CLIENT	CONTR.	SITE	TOTAL	REMARK
24.02.23	RO	-	MAIL	-	-	-	FOR APPROVAL
27.02.23	RO	-	01	-	-	01	GFC

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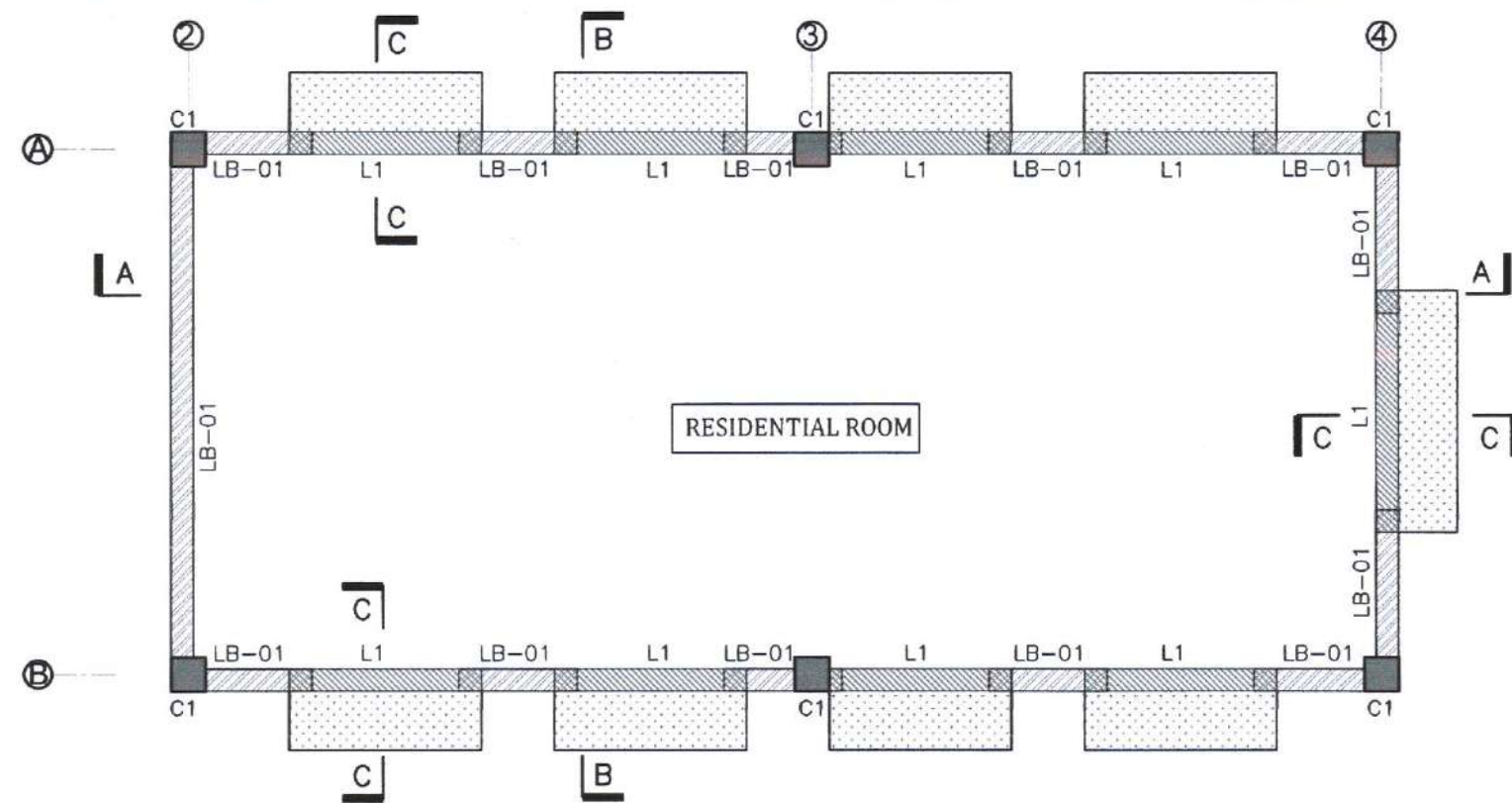
GOOD FOR CONSTRUCTION

CLIENT NAME: DEVELOPMENT OF AUTOMATED/ MECHANIZED MULTILEVEL CAR PARKING SYSTEM AT TALLITAL - NAINITAL

DRAWING TITLE: GROUND BEAM LAYOUT & DETAILS

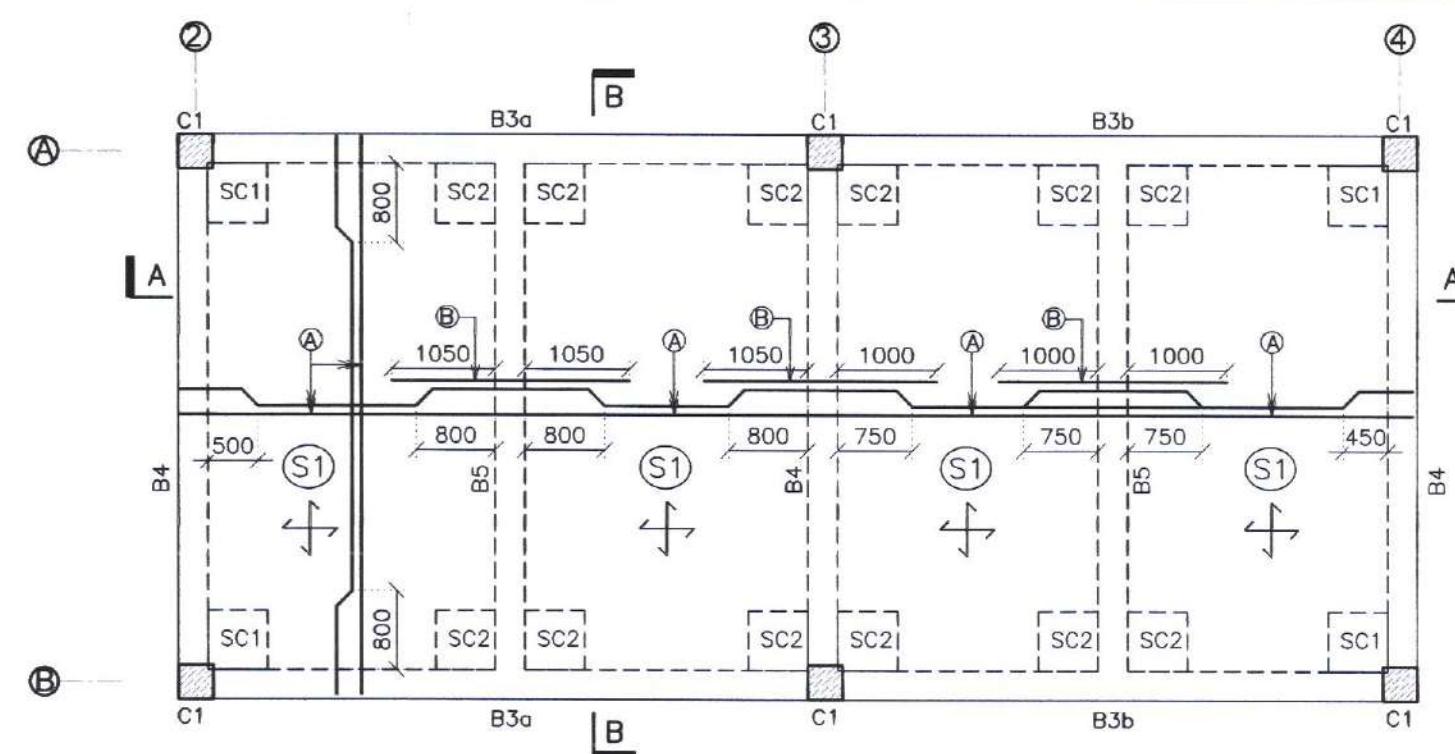
DATE : 24-02-2023	PROJECT ARCHITECT : AP
SCALE : 1 : 50	CHECKED BY : SD
DRAWN BY : AP	APPROVED BY : NP
ELECTRICAL CONSULTANTS :	HVAC

ARCHITECT & STRUCTURAL ENGINEERS L.J. PURANI AND ASSOCIATES 101, DASH BUSINESS CENTER, 1ST FLOOR, DASH COMPLEX, KANHARGA, HINGNAD 440 104. TEL. (078) 2444318, FAX. (078) 2444319. E-MAIL : ljpurani@rediffmail.com	DRAWING NO. : 2211014	PROJECT NO. : DAMMP-NAI-02-3.00	REVISION : RO
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STRUCTURE LAYOUT AT GF LINTEL LEVEL. (RESIDENTIAL ROOM)

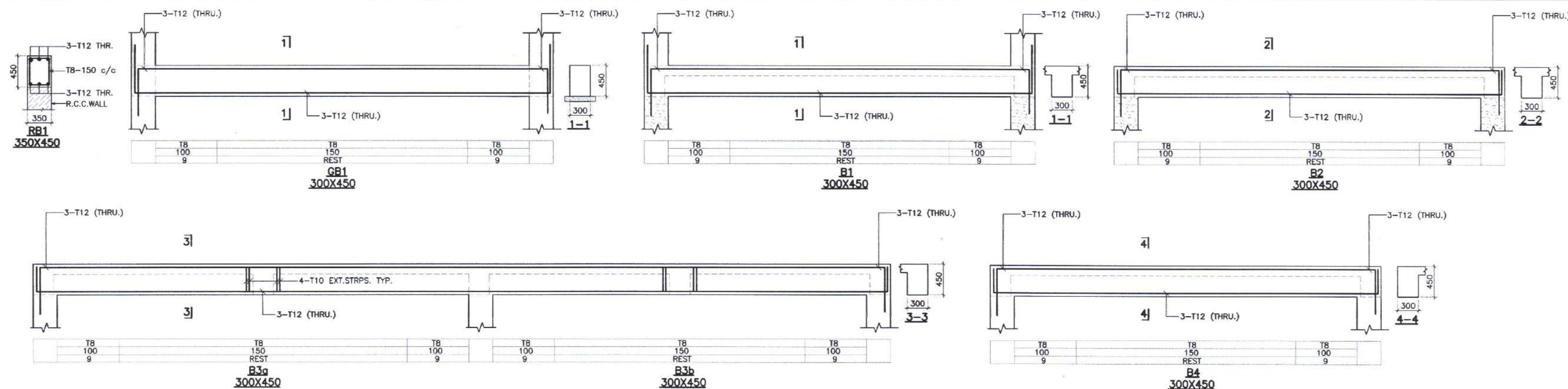
IMP NOTE: SHUTTERING OF LINTEL SHALL NOT BE REMOVED UNTIL THE SUFFICIENT WEIGHT SHALL BE PROVIDED



STRUCTURE LAYOUT AT GF. SLAB LEVEL (RESIDENTIAL ROOM)

ALL SLAB SHALL BE 150mm THK. UNLESS OTHERWISE SPECIFIED.

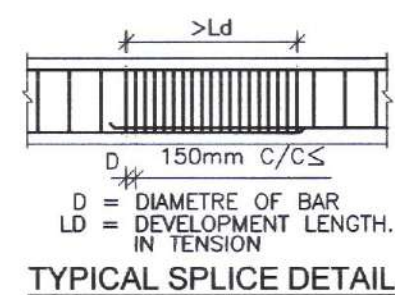
THUS MARKED R.C.C. COLUMN END.



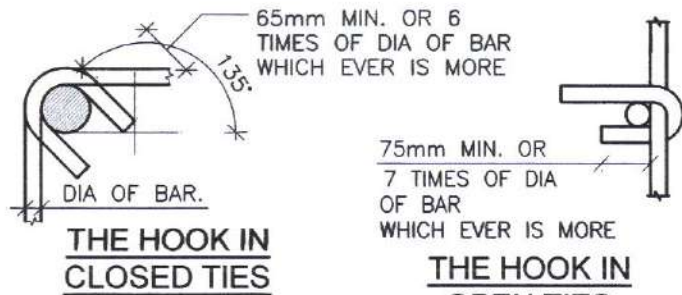
TYPICAL CROSS SECTIONAL DETAILS FOR PLACEMENT OF MAIN REINFORCEMENT IN BEAMS

NOTES :

1. VERTICAL CLEAR SPACING BETWEEN TWO LAYERS OF BARS SHALL BE 25 MM OR LARGER BAR DIAMETER, WHICH EVER IS MORE.
2. BARS WITH HIGHER DIAMETER SHALL BE PLACED IN OUTER LAYER, WHERE EVER POSSIBLE.



TYPICAL SPLICE DETAIL

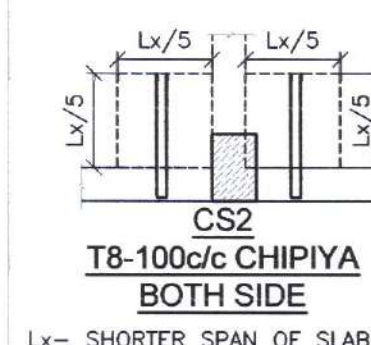


THE HOOK IN CLOSED TIES

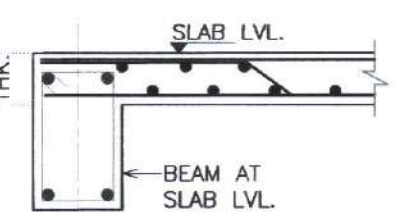
THE HOOK IN OPEN TIES



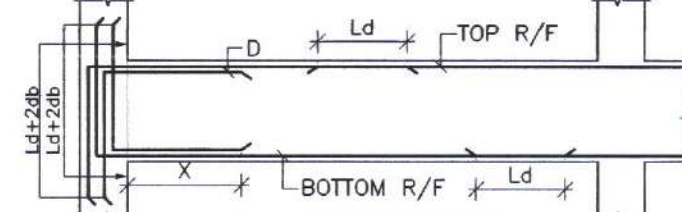
CS1 T8-100c/c CHIPIYA BOTH SIDE



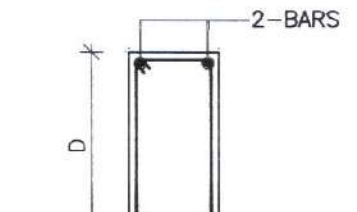
CS2 T8-100c/c CHIPIYA BOTH SIDE



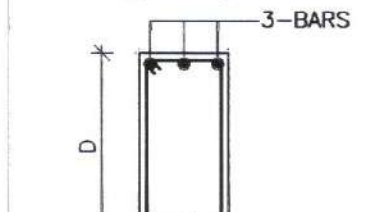
TYPICAL SECTION FOR SLAB END.



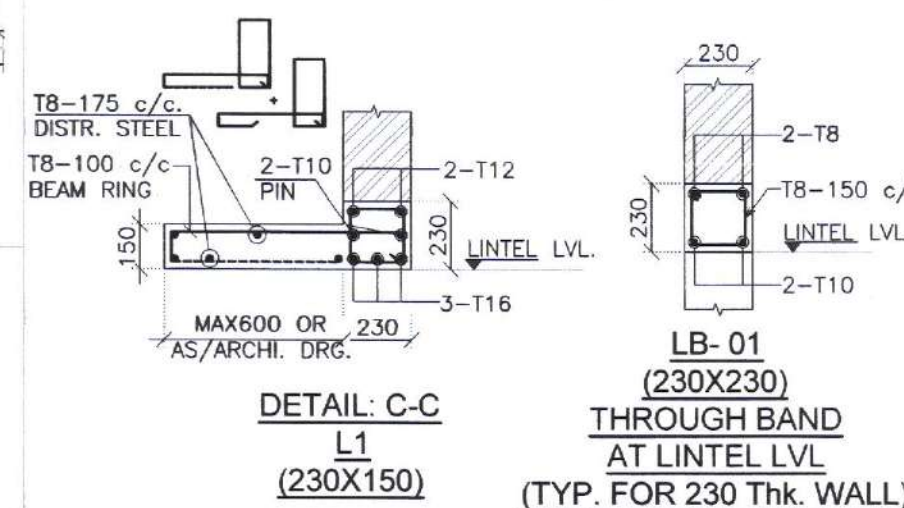
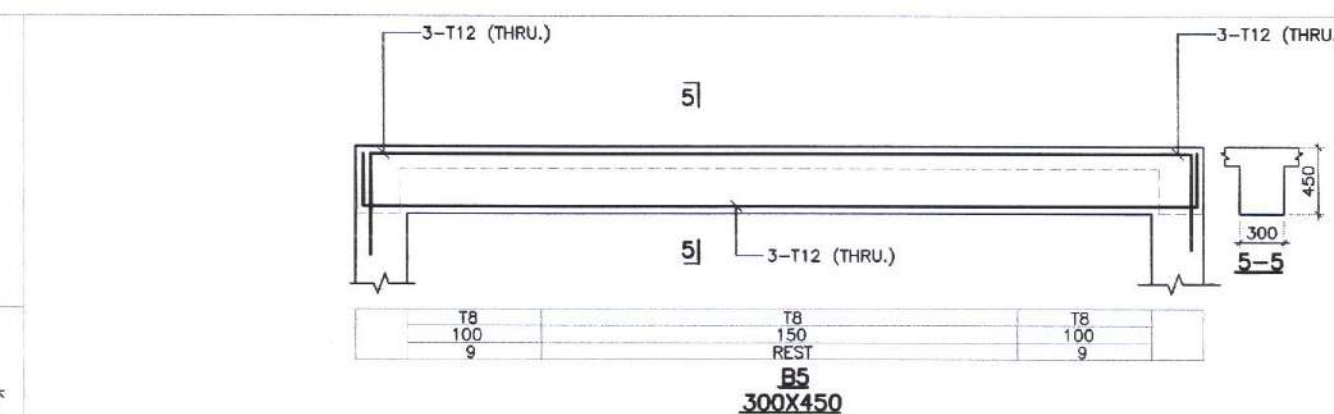
TYPICAL BEAM DETAIL FOR MAIN BEAM



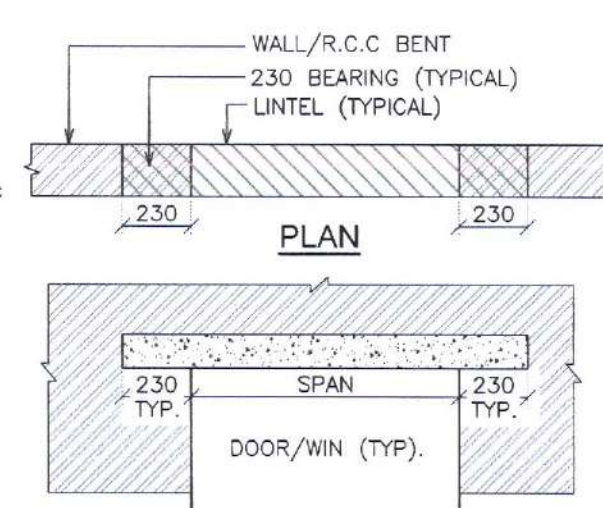
FOR 2-BARS



FOR 3-BARS



DETAIL: C-C L1 (230X150)



DETAIL: LB-01 (230X230) THROUGH BAND AT LINTEL LVL (TYP. FOR 230 THK. WALL)

ELEVATION DETAIL FOR OVER LAPING LINTEL ON WALL (TYPICAL)

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GENERAL NOTES :- REFER IMP NOTES & STANDARD DETAIL DWG. DAMMP-NAI-02-2.00

(01) ALL DIMENSIONS ARE IN mm, AND LEVELS ARE m. DIMENSIONS ARE TO BE READ & NOT TO BE MEASURED.

(02) ALL R.C.C. SHALL BE MACHINE MIXED & MACHINE VIBRATED. ALL CONC. MIX FOR R.C.C. SHALL BE AS PER FOLLOWS.

(03) FOR REINFORCEMENT CONSIDER GRADE FE 500D. - P.C.C. = 1:2:4 UNLESS OTHERWISE SPECIFIED. T.M.T. BARS CONFORMING TO I.S. 1786 - 2008. M.S. BARS CONFORMING TO I.S. 432 - 1962.

(04) MINIMUM CLEAR COVER TO CONCRETE :- 1. FOOTING - 50 mm 3. BEAM - 30 mm 4. SLAB - 25 mm 2. COLUMN & SHEAR WALL - 40 mm

(05) LAPPING OF LONGITUDINAL BARS SHALL BE STAGGERED TO AVOID CONJUNCTION OF REINFORCEMENT.

(06) FOR ALL DIMENSIONS, LEVELS ETC. SHOULD BE CHECKED WITH ARCHITECTURAL DRAWINGS BEFORE EXECUTION. IF FOUND ANY CONGESTION/DISCREPANCY, PLEASE CONSULT TO CONSULTANT IMMEDIATELY.

SCHEDULE OF SLAB REINFORCEMENT

SYMBOL	SLABS STEEL
A	T10-125 c/c. ALT BENT UP AT BOTTOM
B	T10-250 c/c. EXTRA TOP AT SUPPORT

Dr. Mahesh Mungale
Assistant Professor, (Structural Engg.)
Department of Civil Engineering, IITRAM



PRINTS ISSUED:

DATE	REV.	ARCH.	CLIENT	CONTR.	SITE	TOTAL	REMARK
24.02.23	RO	-	MAIL	-	-	-	FOR APPROVAL
27.02.23	RO	-	01	-	-	01	GFC

NO.	DATE	REVISION HISTORY	REVISED BY	DRAWN BY
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

GOOD FOR CONSTRUCTION

CLIENT NAME: DEVELOPMENT OF AUTOMATED/ MECHANIZED MULTILEVEL CAR PARKING SYSTEM AT TALLITAL - NAINITAL

DRAWING TITLE: STRUCTURAL LAYOUT & BEAM DETAILS AT LINTEL & GF SLAB LVL. FOR RESIDENTIAL ROOM.

DATE : 24-02-2023	PROJECT ARCHITECT : AP
SCALE : -	CHECKED BY : SB
DRAWN BY : DS	APPROVED BY : NP
ELECTRICAL CONSULTANTS :	HVAC

ARCHITECT & STRUCTURAL ENGINEERS
L.J. PURANI AND ASSOCIATES

303, GALA BUSINESS CENTER, ST. XAVIER'S COLLEGE CORNER, NAVRANGPURA, AHMEDABAD 380 009.
TEL. (079) 26446318, FAX. (079) 26565191.
e-mail : info@ljpurani.com

DRAWING NO.	PROJECT NO.	REVISION
DAMMP-NAI-02-6.02	2211014	R0