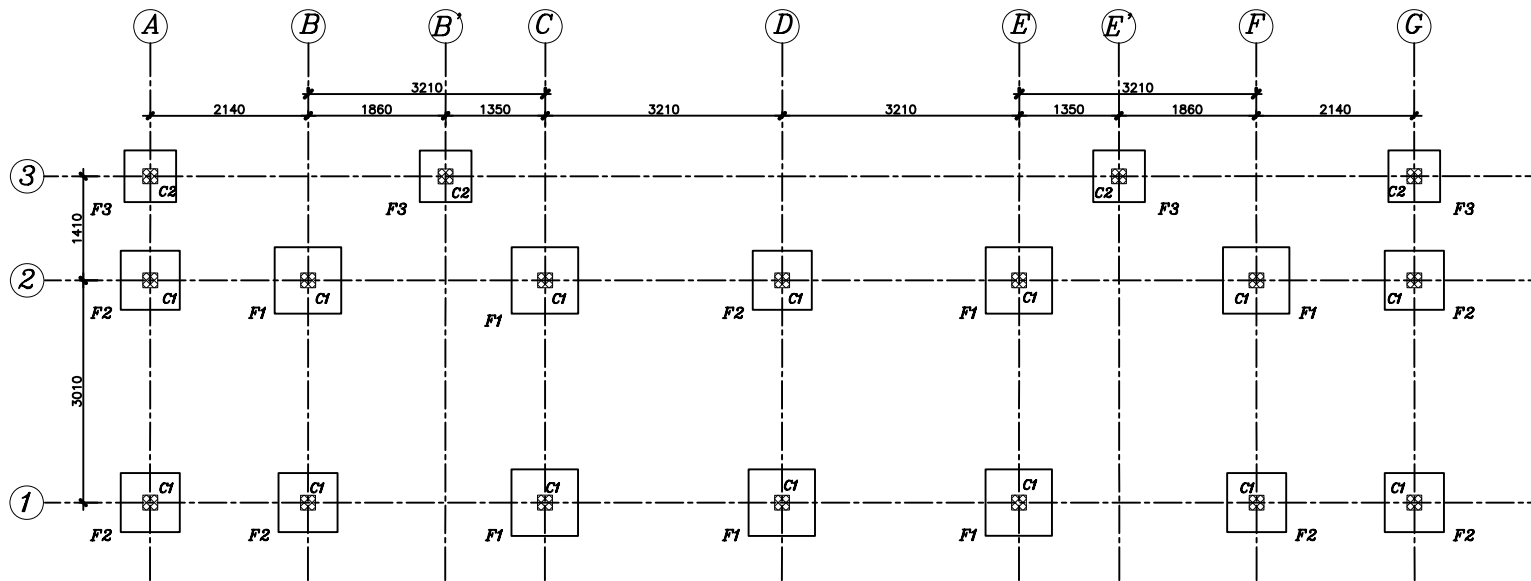
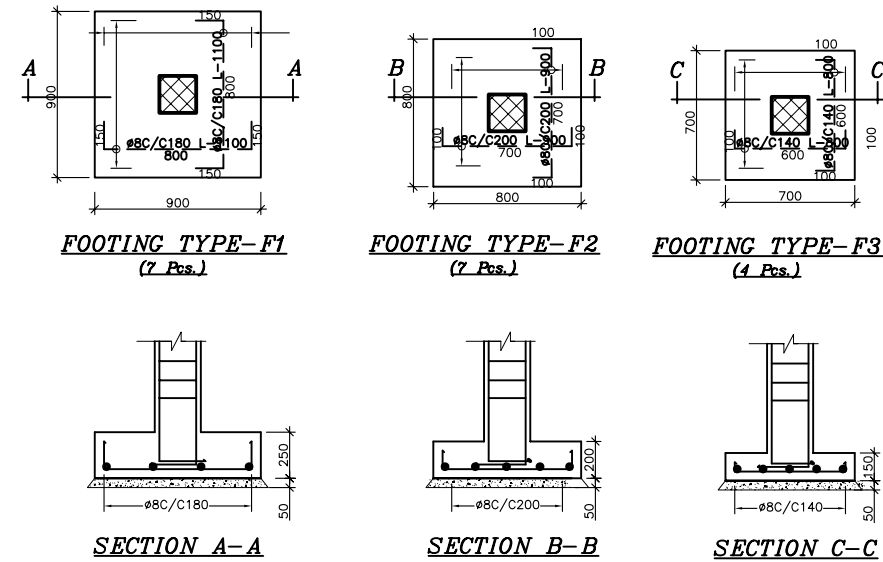


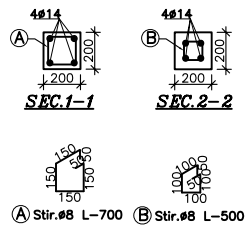
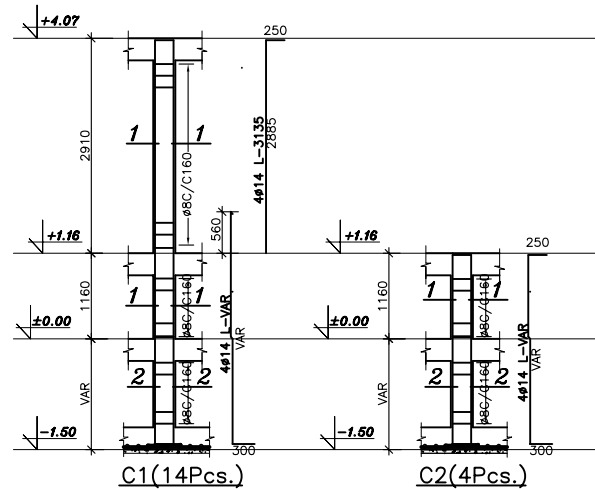
FOR NON-EXPANSIVE SOIL



FOOTING AND COLUMN LAYOUT PLAN AT LEVEL -1.50  
SCALE 1:50



FOOTING REINFORCEMENT & SECTIONS  
Scale 1:20



COLUMN SECTIONS & STIRRUPS DETAIL  
SCALE 1:20

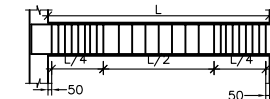
GENERAL NOTES

- CONCRETE QUALITY SHALL BE:-  
FOR ALL STRUCTURES ....f<sub>ck</sub>=25MPa  
FOR LEAN CONCRETE ....f<sub>ck</sub>=5MPa
- REINF. STEEL QUALITY SHALL BE:  
FOR # 10mm GRADE-60 BARS WITH MINIMUM YIELD STRENGTH f<sub>yk</sub>=400MPa  
FOR #10mm GRADE-40 BARS WITH MINIMUM YIELD STRENGTH f<sub>yk</sub>=280MPa
- COVER TO REINFORCEMENT  
FOR SLABS=20mm  
FOR BEAMS AND COLUMNS=25mm
- OVERLAP TO COLUMN REINFOR.=40#
- DISTRIBUTION REINFOR. FOR GROUND FLOOR SLABS SHALL BE #8c/c250
- ACTUAL FOUNDATION DEPTH SHALL BE DECIDED ON SITE.
- ALL MEASUREMENTS ARE IN mm.
- THE MINIMUM ALLOWABLE BEARING CAPACITY OF THE FOUNDATION SHALL BE 250 KPa
- ALL STIRRUP MEASUREMENTS ARE EXTERNAL.

- MINIMUM PIN DIAMETER FOR ALL DRAWINGS SHALL BE AS SHOWN BELOW.

MINIMUM PIN DIAMETER FOR ALL REINFORCING BARS	
BAR # [mm]	Min. Pin # [mm]
8	40
10	50
12	60
14	70
16	80
20	100

- DETAIL FOR VARIABLE STIRRUP SPACING SHALL BE AS SHOWN BELOW.



- SEE DRAWING ST-04/011 FOR STEEL GENERAL NOTE
- REFER TECHNICAL SPECIFICATION FOR FURTHER DETAIL

A	Tender	01.05.08	
NO.	REVISION	DATE	SIGN

UCBPAD-ST-DT-T1-0-EP-001-A

PROJECT IMPLEMENTING AGENCY



**DESIGNED BY:**  
GTZ International Services  
University Capacity Building Program (UCBP)  
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**CLIENT:** MINISTRY OF EDUCATION

**PROJECT:** UCBP University Capacity Building Programme

**URINE DIVERTING DRY TOILET (UDDT) - MALE**

**LOCATION:** ADAMA

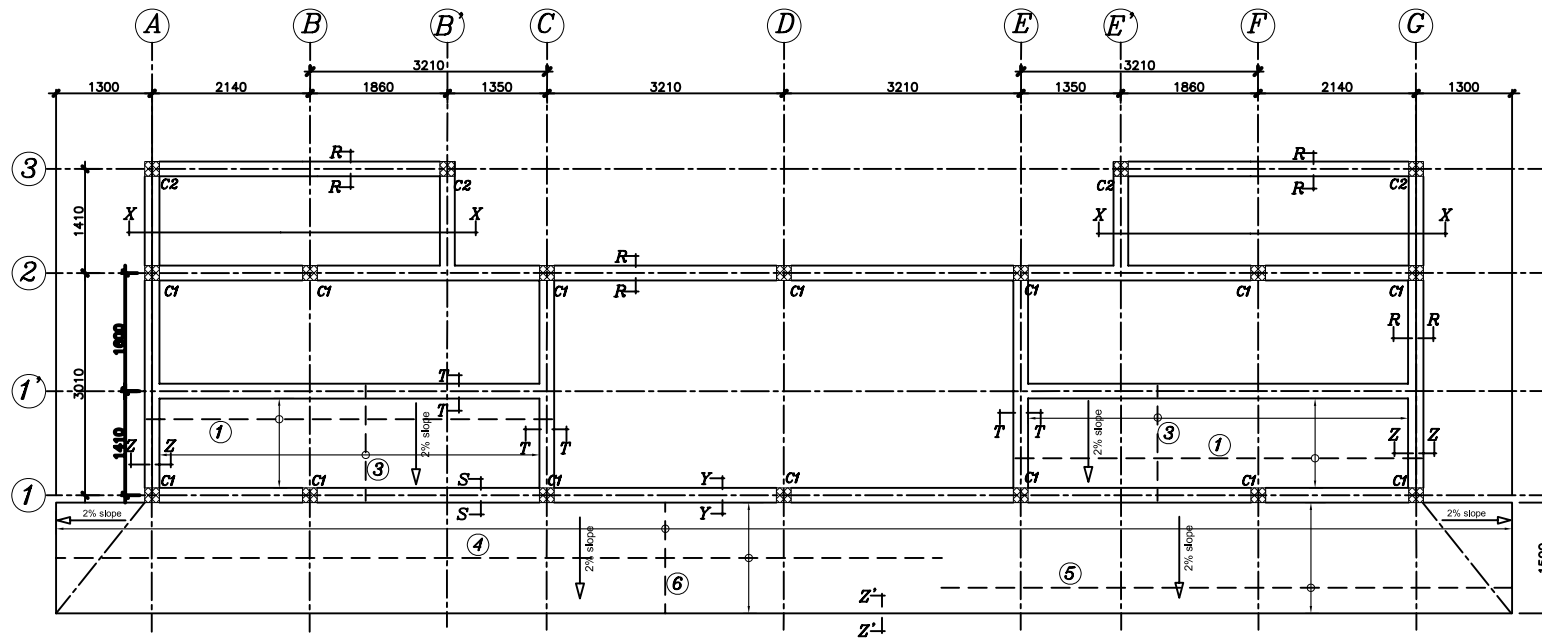
**EARTHQUAKE ZONE:** ZONE 4

**CLIMATE:** Hot & Dry

**DRAWING TITLE:** FOOTING LAYOUT AND COLUMN REINFORCEMENT & SECTION

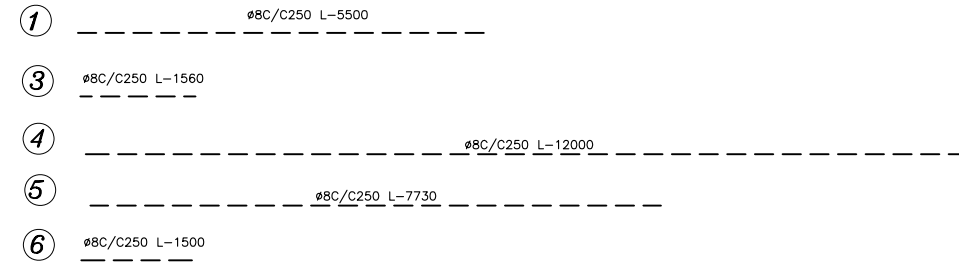
Date of Issue:	Drawn by:	Scale:	Date of Revision:	Category:
01_05_2008				ST
Drawing Number:				Index:
AD-ST-DT-T1-0-EP-001-A				A

FOR NON-EXPANSIVE SOIL

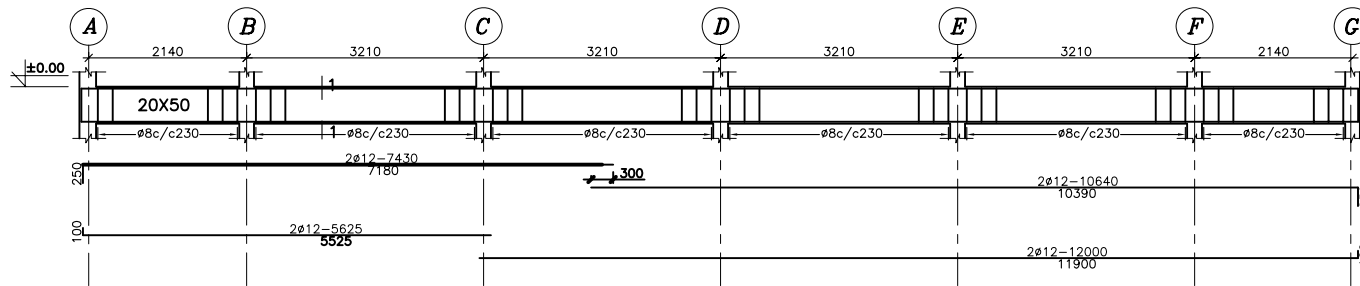


GROUND FLOOR SLAB LAYOUT PLAN AT LEVEL ±0.00  
SCALE 1:50

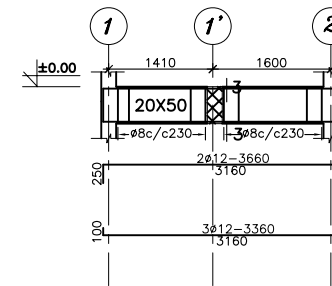
Bar Detail for Ground Floor  
SCALE 1:50



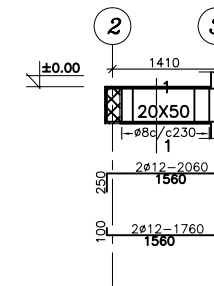
GROUND FLOOR BEAM ON AXIS-1&2



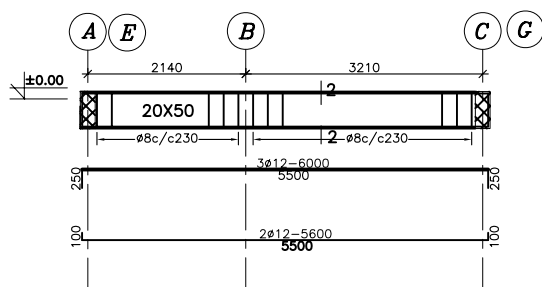
GROUND FLOOR BEAM ON AXIS-C&E



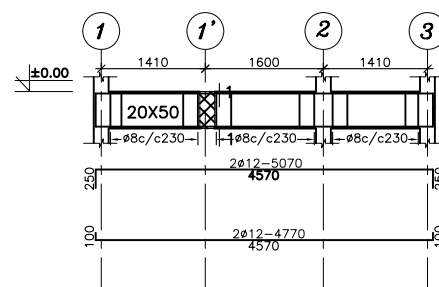
GROUND FLOOR BEAM ON AXIS-B'&E'



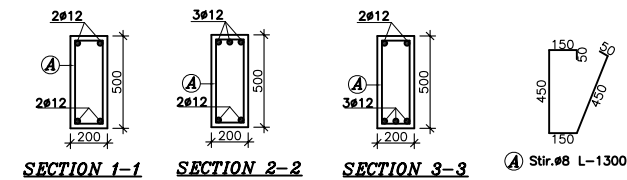
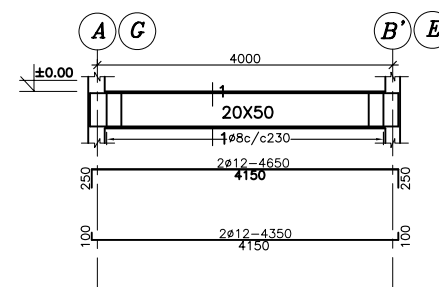
GROUND FLOOR BEAM A-C & E-G ON AXIS-1'



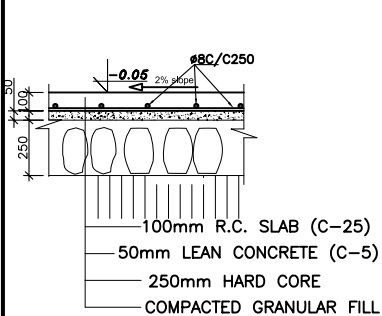
GROUND FLOOR BEAM ON AXIS-A&G



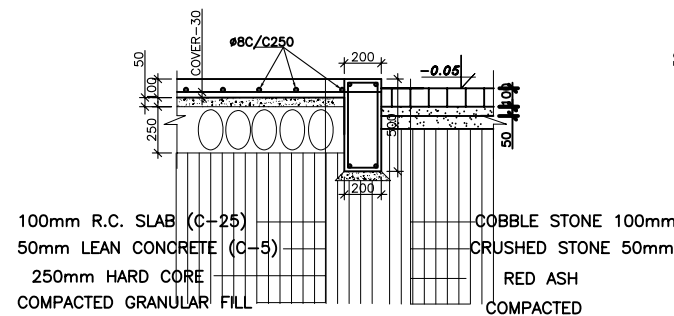
GROUND FLOOR BEAM ON A-B' & G-E' AXIS-3



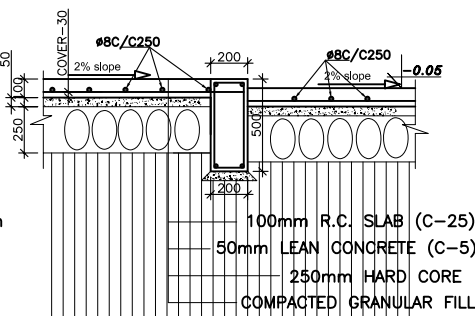
GROUND FLOOR BEAM SECTIONS AND STIRRUPS DETAIL  
SCALE 1:20



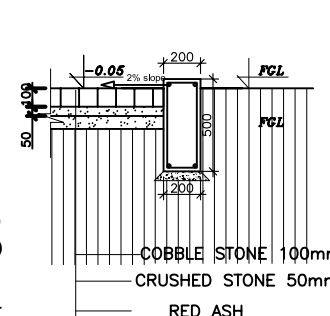
SECTION Z'-Z'  
SCALE 1:20



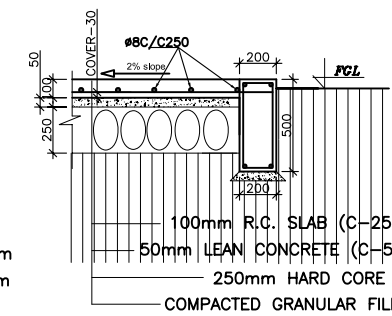
SECTION Z-Z  
SCALE 1:20



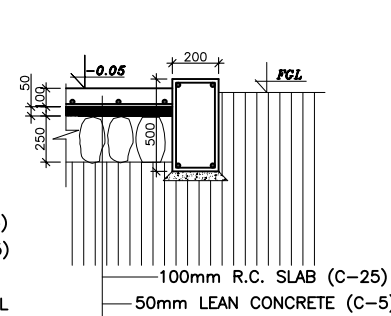
SECTION S-S  
SCALE 1:20



SECTION R-R  
SCALE 1:20



SECTION T-T  
SCALE 1:20



SECTION Y-Y  
SCALE 1:20

A	Tender	01.05.08	
NO.	REVISION	DATE	SIGN

UCBPAD-ST-DT-T1-0-EP-002-A

PROJECT IMPLEMENTING AGENCY



DESIGNED BY:  
GTZ International Services  
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CLIENT: MINISTRY OF EDUCATION

PROJECT: **UCBP** University Capacity Building Programme

URINE DIVERTING DRY TOILET (UDDT) - MALE

LOCATION: ADAMA

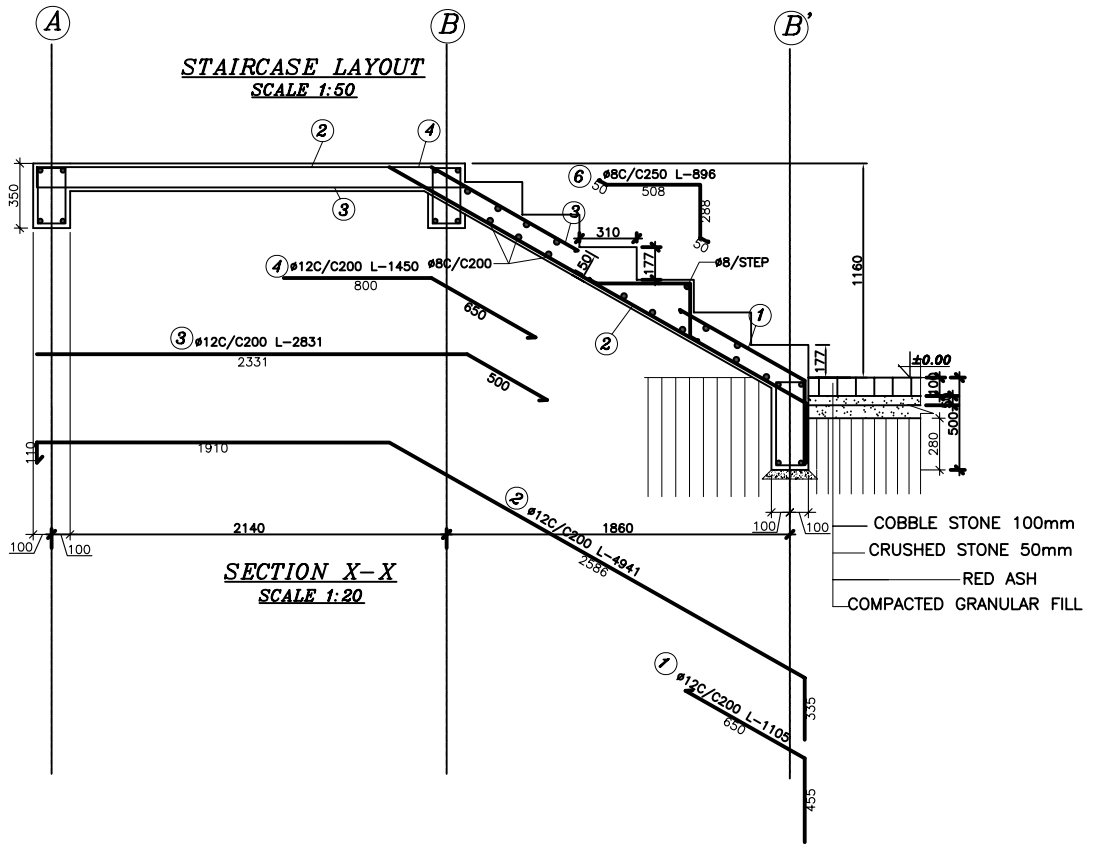
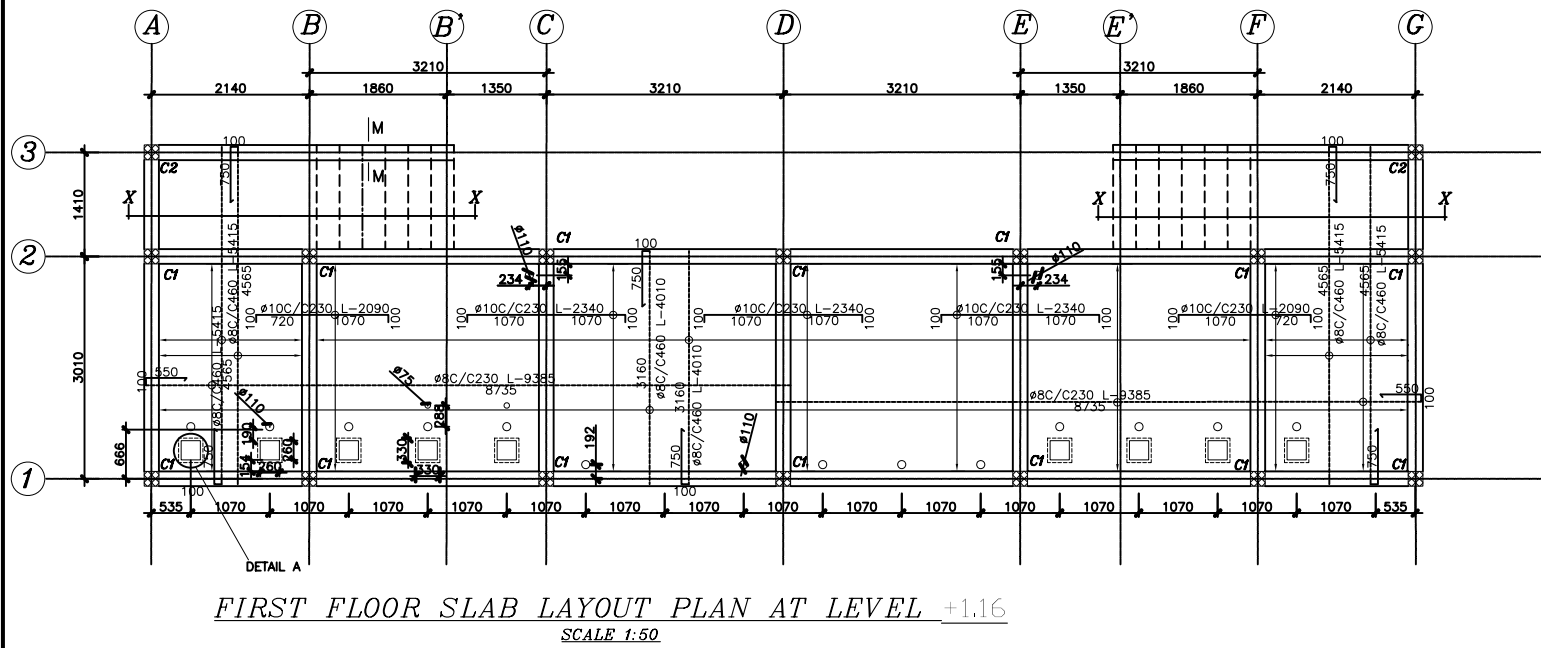
EARTHQUAKE ZONE: ZONE 4

CLIMATE: Hot & Dry

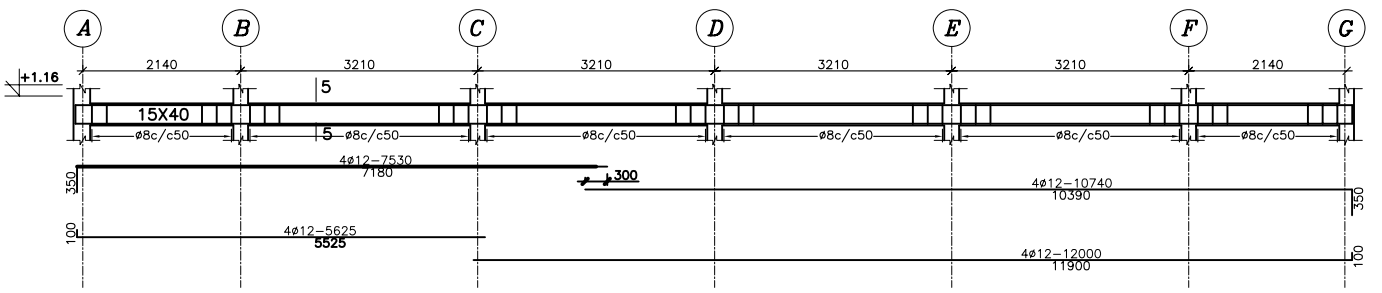
DRAWING TITLE: GROUND FLOOR SLAB LAYOUT & REINFORCEMENT AND BEAM REINFORCEMENT & SECTION

Date of Issue:	01.05.2008	Drawn by:	Scale:	Date of Revision:	Category:
Drawing Number:	AD-ST-DT-T1-0-EP-002-A	Index:			ST A

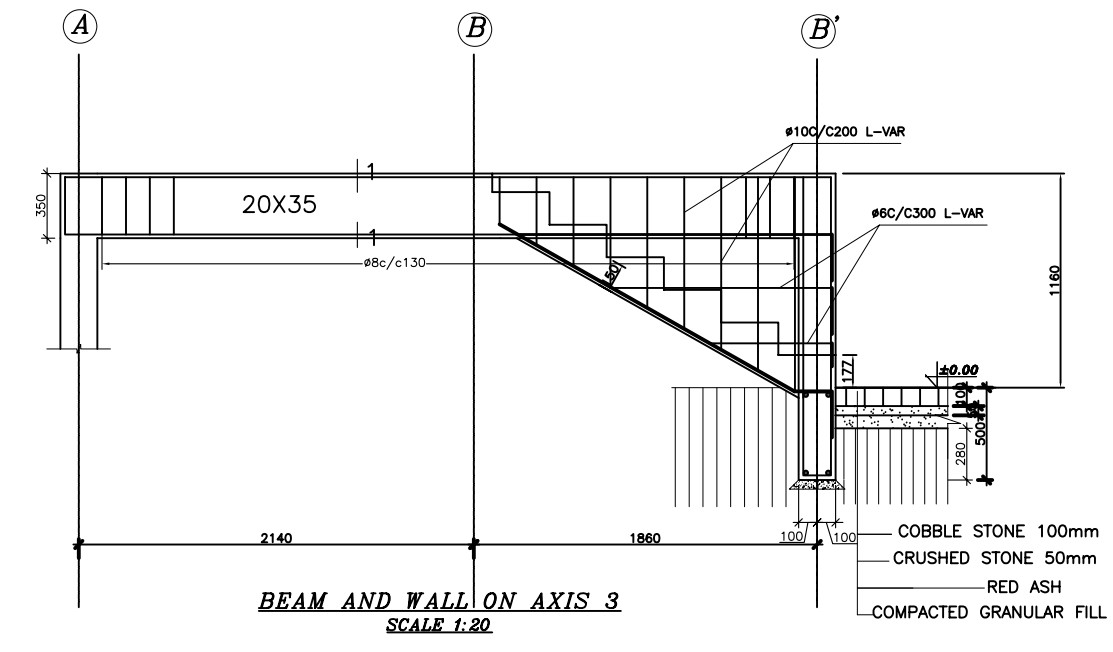
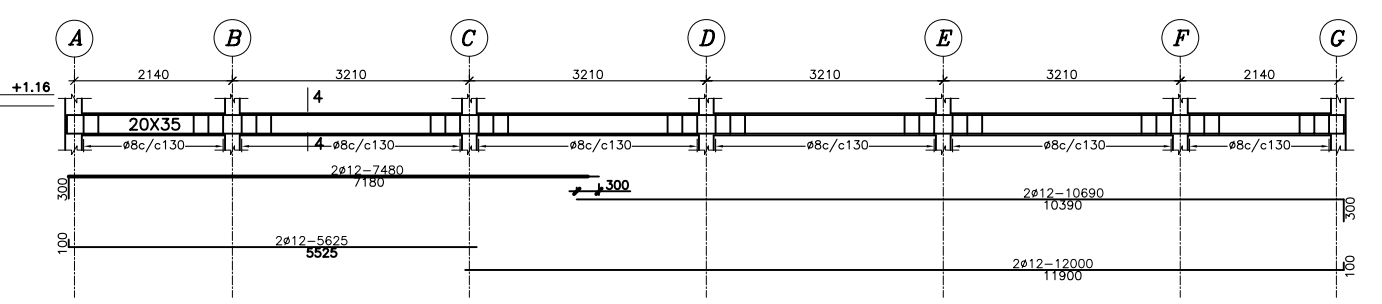
**FOR WEATHERED ROCK & NON-EXPANSIVE SOIL**



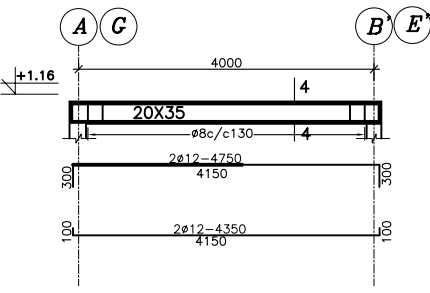
**FIRST FLOOR BEAM ON AXIS-1**



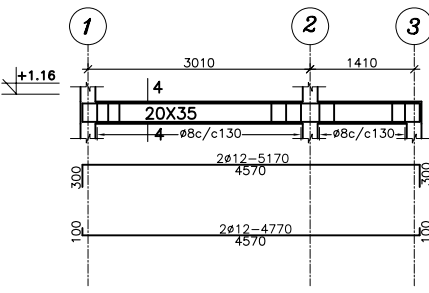
**FIRST FLOOR BEAM ON AXIS-2**



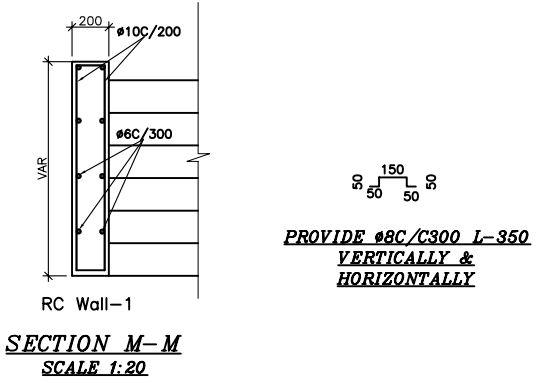
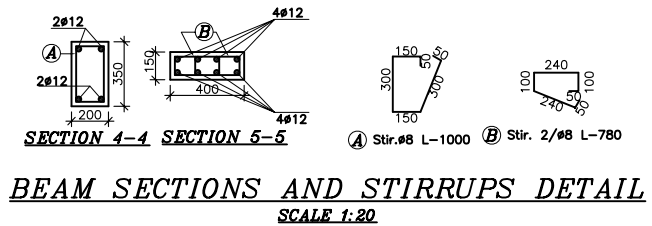
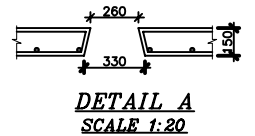
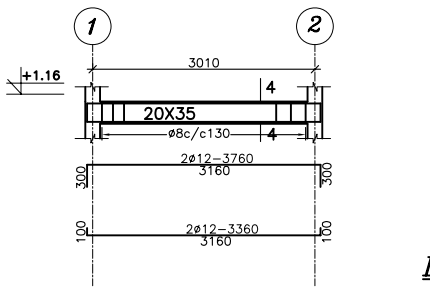
**FIRST FLOOR BEAM ON A-B' & G-E' AXIS-3**



**FIRST FLOOR BEAM ON AXIS-A&G**



**FIRST FLOOR BEAM ON AXIS-B,C,D,E&F**



A	Tender	01.05.08
NO.	REVISION	DATE SIGN

UCBPAD-ST-DT-T1-0-EP-003-A  
PROJECT IMPLEMENTING AGENCY



DESIGNED BY:  
GTZ International Services  
University Capacity Building Program (UCBP)  
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CLIENT: MINISTRY OF EDUCATION

PROJECT: UCBP University Capacity Building Programme

URINE DIVERTING DRY TOILET (UDDT) - MALE

LOCATION: ADAMA

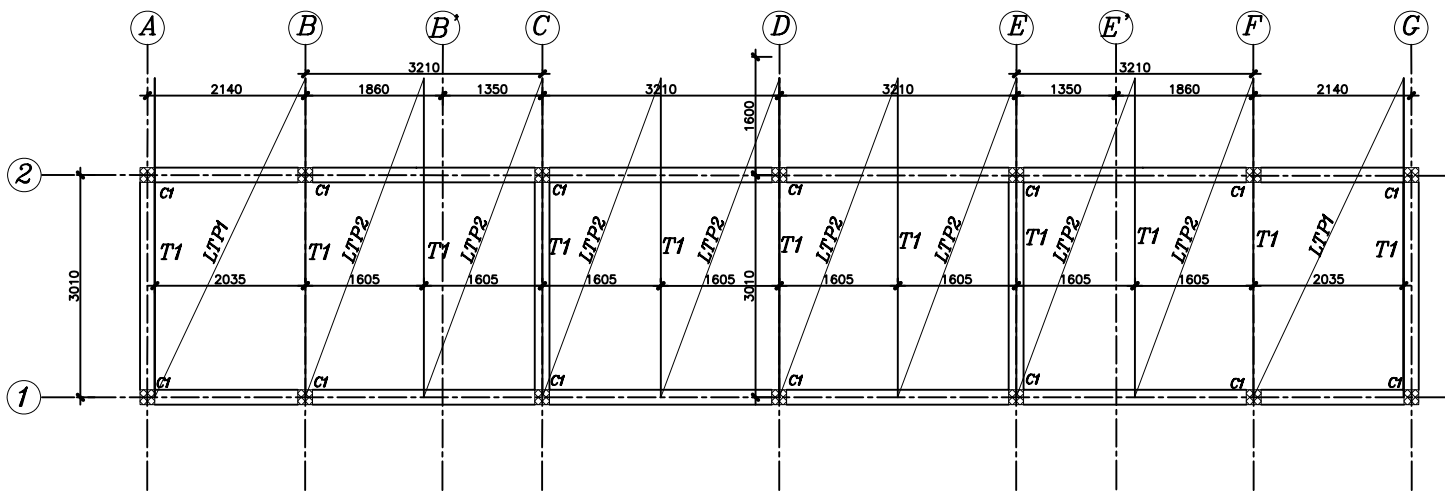
EARTHQUAKE ZONE: ZONE 4

CLIMATE: Hot & Dry

DRAWING TITLE:  
FIRST FLOOR SLAB REINFORCEMENT, BEAM REINFORCEMENT & SECTION AND STAIRCASE REINFORCEMENT

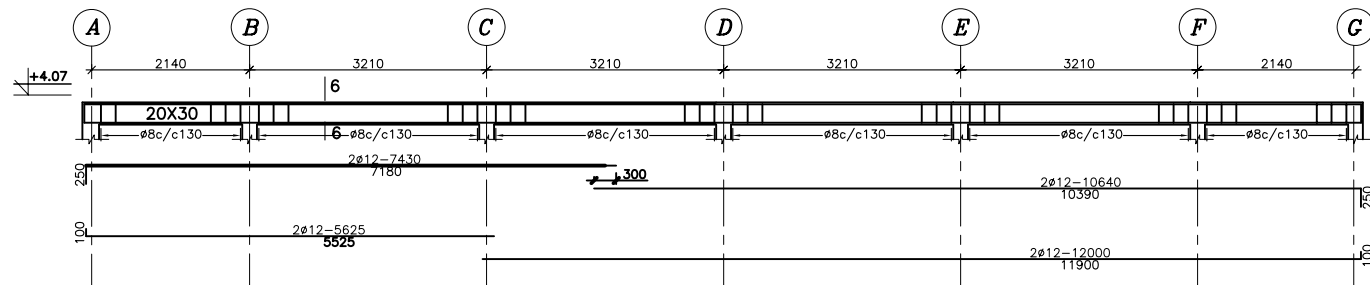
Date of Issue:	Drawn by:	Scale:	Date of Revision:	Category:
01.05.2008				ST
Index:	A			

AD-ST-DT-T1-0-EP-003-A

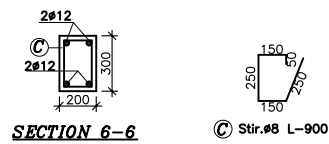
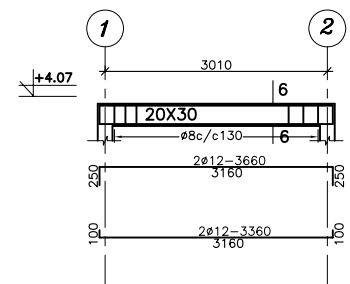


TOP TIE BEAM LAYOUT PLAN AT LEVEL +4.07  
SCALE 1:50

TOP TIE BEAM ON AXIS-1&2



TOP TIE BEAM ON  
AXIS- A,C,E&G

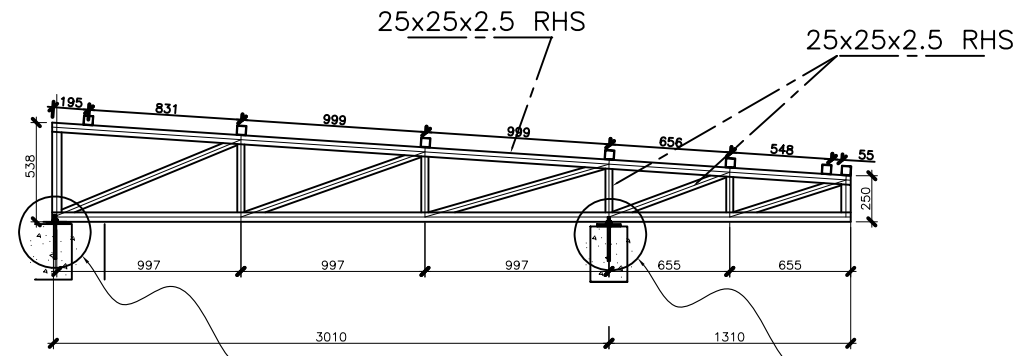


BEAM SECTIONS AND STIRRUPS DETAIL  
SCALE 1:20

GENERAL NOTES

MATERIALS USED FOR ROOF STRUCTURE

- TOP & BOTTOM MEMBERS 25X25X2.5mm
- INTERNAL MEMBERS 25X25X2.5mm
- \*Minimum thickness of weld 3mm
- \*Bolt strength Fe-360
- \*All Measurements are in mm. unless specified
- \*No scaling
- Roofing - EGA-400 t=0.6mm
- \*Trusses should be welded when connected to each other



DETAIL A DETAIL B  
TRUSS TYPE-T1(11Pcs)  
SCALE 1:20

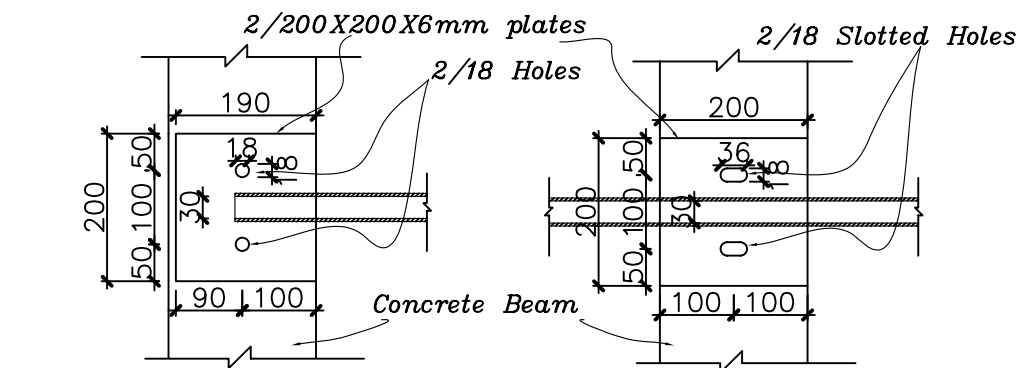
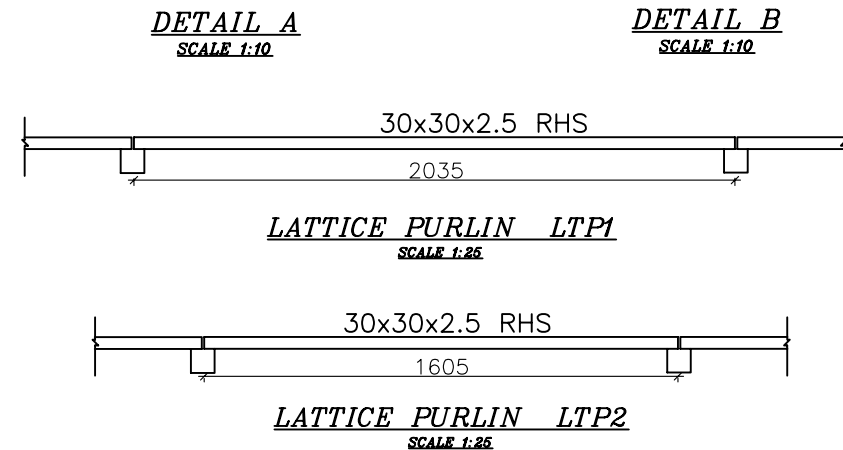
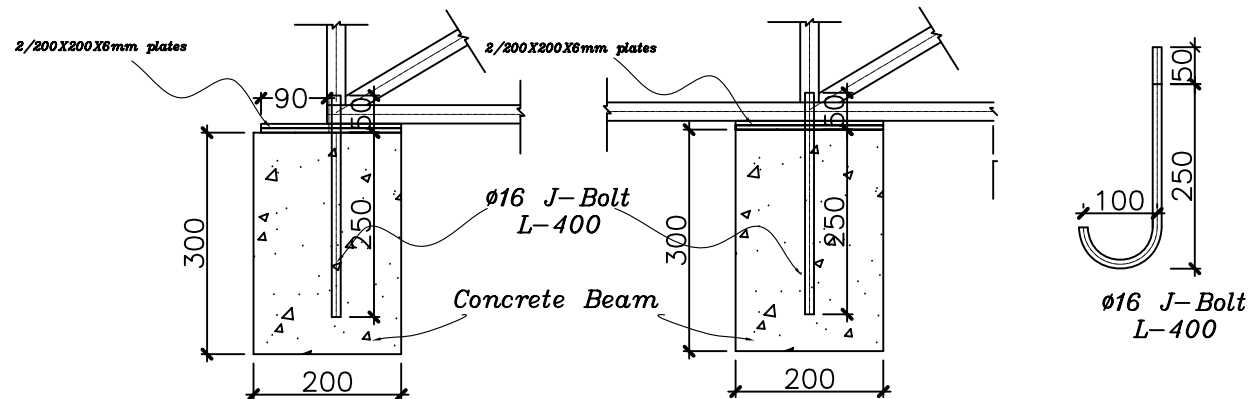


PLATE AND BOLT DETAIL A PLATE AND BOLT DETAIL B  
SCALE 1:10 SCALE 1:10



LATTICE PURLIN LTP1 SCALE 1:25  
LATTICE PURLIN LTP2 SCALE 1:25

A	Tender	01.05.08	
NO.	REVISION	DATE	SIGN

UCBP AD-ST-DT-T1-0-EP-004-A

PROJECT IMPLEMENTING AGENCY

DESIGNED BY:  
GTZ International Services  
University Capacity Building Program (UCBP)  
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CLIENT: MINISTRY OF EDUCATION  
PROJECT: UCBP University Capacity Building Programme

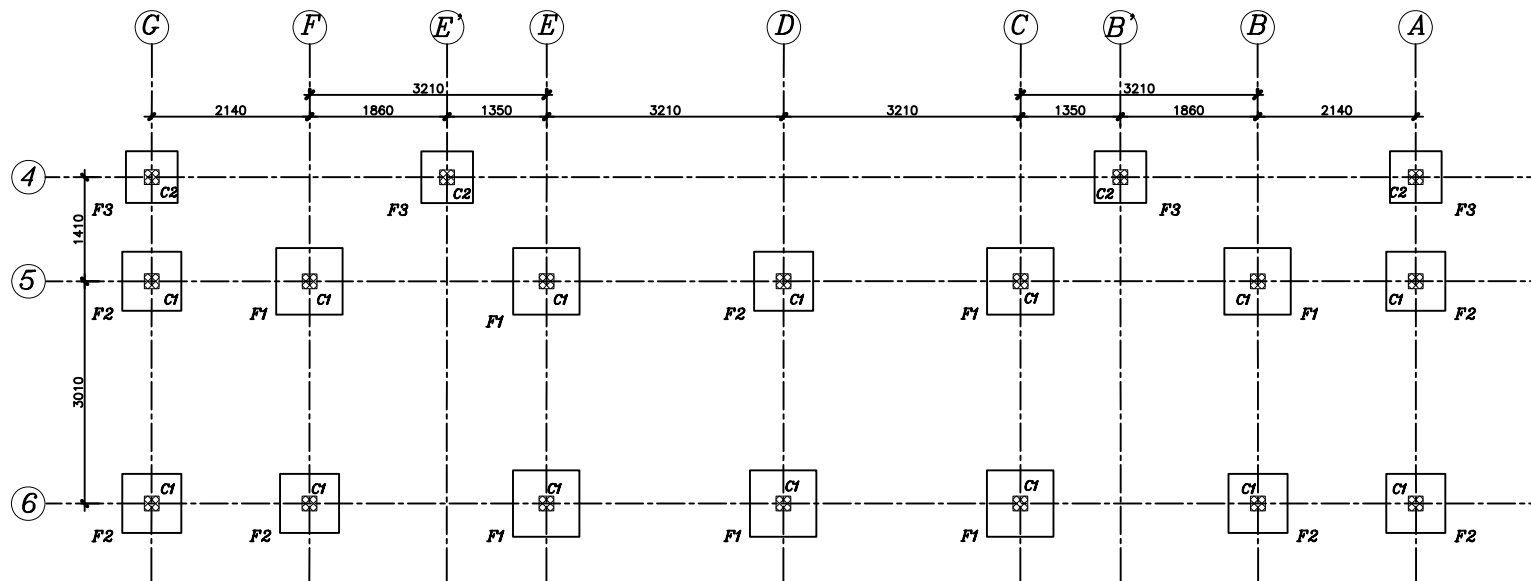
URINE DIVERTING DRY TOILET (UDDT) - MALE

LOCATION: ADAMA  
EARTHQUAKE ZONE: ZONE 4  
CLIMATE: Hot & Dry

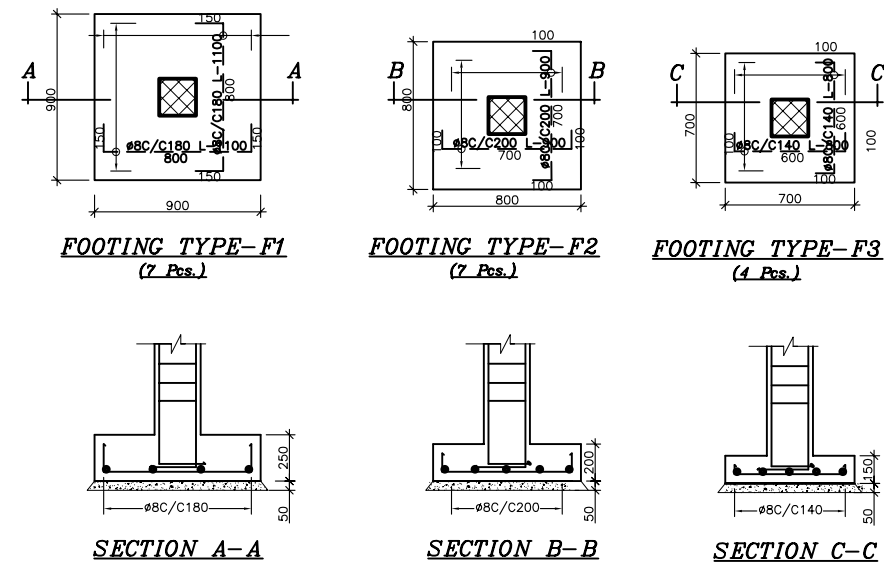
DRAWING TITLE:  
TOP TIE BEAM LAYOUT, TIE BEAM REINFORCEMENT & SECTION AND TRUSS LAYOUT

Date of Issue:	01.05.2008	Drawn by:	Scale:	Date of Revision:	Category:
Drawing Number:	AD-ST-DT-T1-0-EP-004-A	Index:			ST A

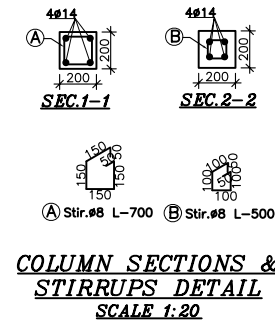
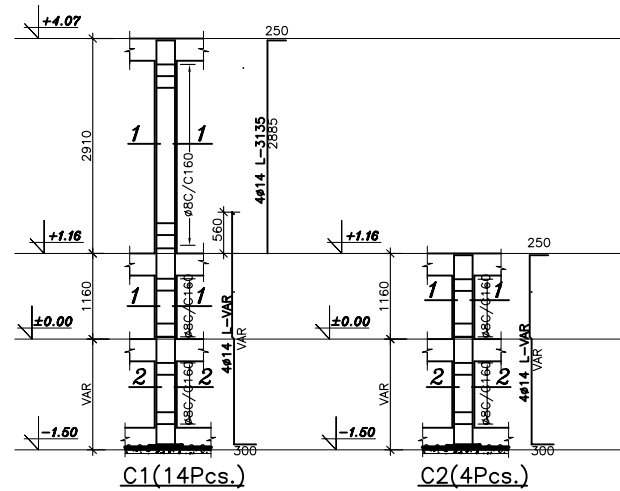
**FOR NON-EXPANSIVE SOIL**



**FOOTING AND COLUMN LAYOUT PLAN AT LEVEL -1.50**  
SCALE 1:50



**FOOTING REINFORCEMENT & SECTIONS**  
Scale 1:20



**COLUMN SECTIONS & STIRRUPS DETAIL**  
SCALE 1:20

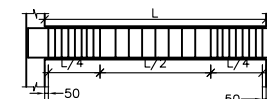
**GENERAL NOTES**

- CONCRETE QUALITY SHALL BE:-  
FOR ALL STRUCTURES .... $f_{ck}=25MPa$   
FOR LEAN CONCRETE .... $f_{ck}=5MPa$
- REINF. STEEL QUALITY SHALL BE:  
FOR  $\phi$  10mm GRADE-60 BARS WITH MINIMUM YIELD STRENGTH  $f_{yk}=400MPa$   
FOR  $\phi$  10mm GRADE-40 BARS WITH MINIMUM YIELD STRENGTH  $f_{yk}=280MPa$
- COVER TO REINFORCEMENT  
FOR SLABS=20mm  
FOR BEAMS AND COLUMNS=25mm
- OVERLAP TO COLUMN REINFOR.=40 $\phi$
- DISTRIBUTION REINFOR. FOR GROUND FLOOR SLABS SHALL BE  $\phi 8c/c250$
- ACTUAL FOUNDATION DEPTH SHALL BE DECIDED ON SITE.
- ALL MEASUREMENTS ARE IN mm.
- THE MINIMUM ALLOWABLE BEARING CAPACITY OF THE FOUNDATION SHALL BE 250 KPa
- ALL STIRRUP MEASUREMENTS ARE EXTERNAL.

- MINIMUM PIN DIAMETER FOR ALL DRAWINGS SHALL BE AS SHOWN BELOW.

MINIMUM PIN DIAMETER FOR ALL REINFORCING BARS	
BAR $\phi$ [mm]	Min. Pin $\phi$ [mm]
8	40
10	50
12	60
14	70
16	80
20	100

- DETAIL FOR VARIABLE STIRRUP SPACING SHALL BE AS SHOWN BELOW.



- SEE DRAWING ST-01/03 FOR STEEL GENERAL NOTE
- REFER TECHNICAL SPECIFICATION FOR FURTHER DETAIL

A	Tender	01.05.08	
NO.	REVISION	DATE	SIGN

UCBP AD-ST-DT-T1-0-EP-005-A

PROJECT IMPLEMENTING AGENCY



**DESIGNED BY:**  
GTZ International Services  
University Capacity Building Program (UCBP)  
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**CLIENT:** MINISTRY OF EDUCATION

**PROJECT:** UCBP University Capacity Building Programme

**URINE DIVERTING DRY TOILET (UDDT) - FEMALE**

**LOCATION:** ADAMA

**EARTHQUAKE ZONE:** ZONE 4

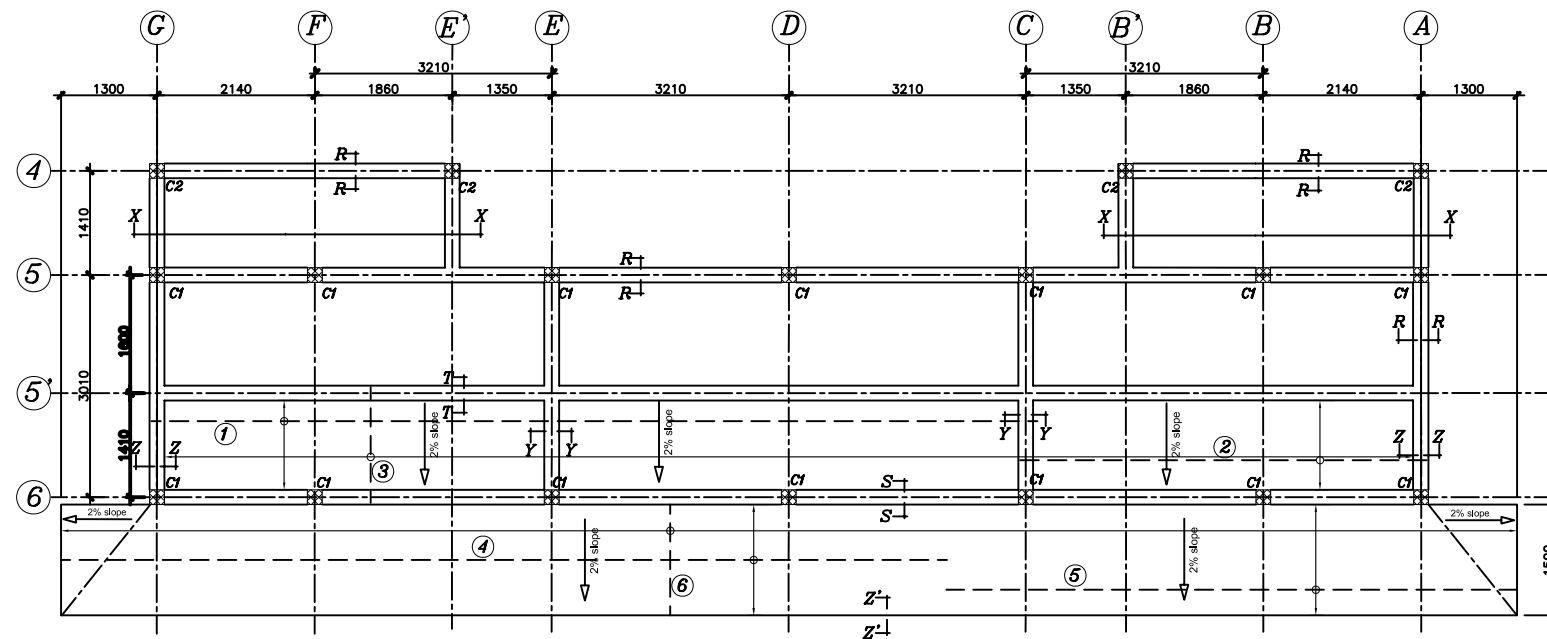
**CLIMATE:** Hot & Dry

**DRAWING TITLE:** FOOTING LAYOUT AND COLUMN REINFORCEMENT & SECTION

Date of Issue:	Drawn by:	Scale:	Date of Revision:	Category:
01.05.2008				ST
Index:	A			

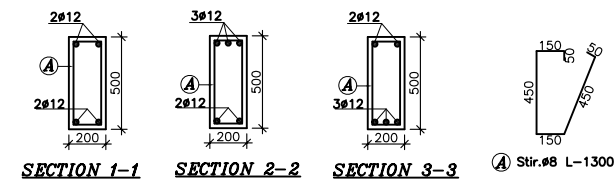
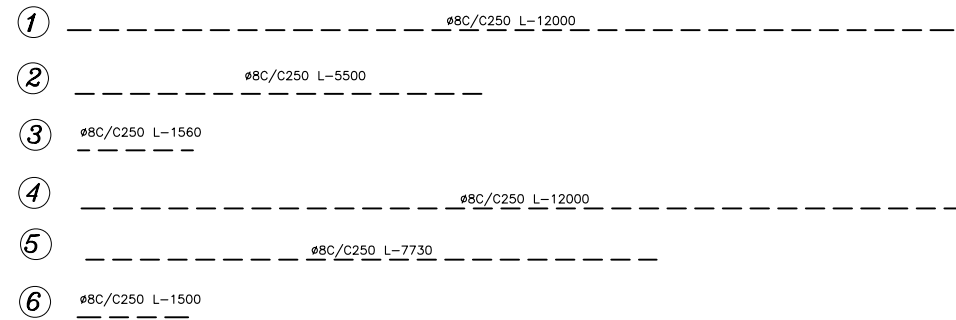
AD-ST-DT-T1-0-EP-005-A

**FOR NON-EXPANSIVE SOIL**



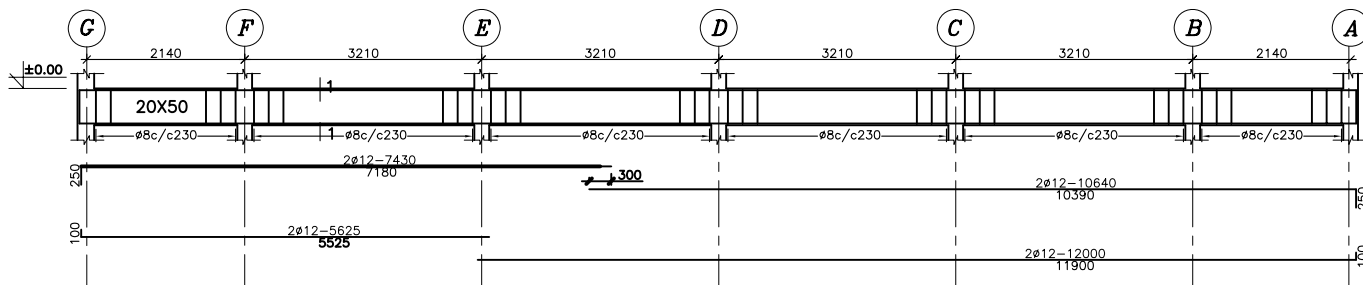
**GROUND FLOOR SLAB LAYOUT PLAN AT LEVEL ±0.00**  
SCALE 1:50

**Bar Detail for Ground Floor Slab**  
SCALE 1:50

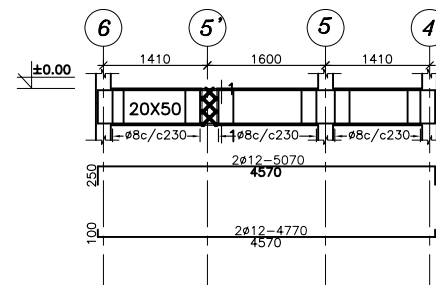


**GROUND FLOOR BEAM SECTIONS AND STIRRUPS DETAIL**  
SCALE 1:20

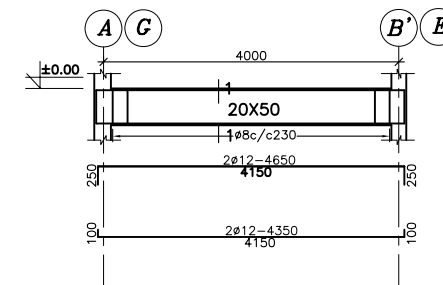
**GROUND FLOOR BEAM ON AXIS-5&6**



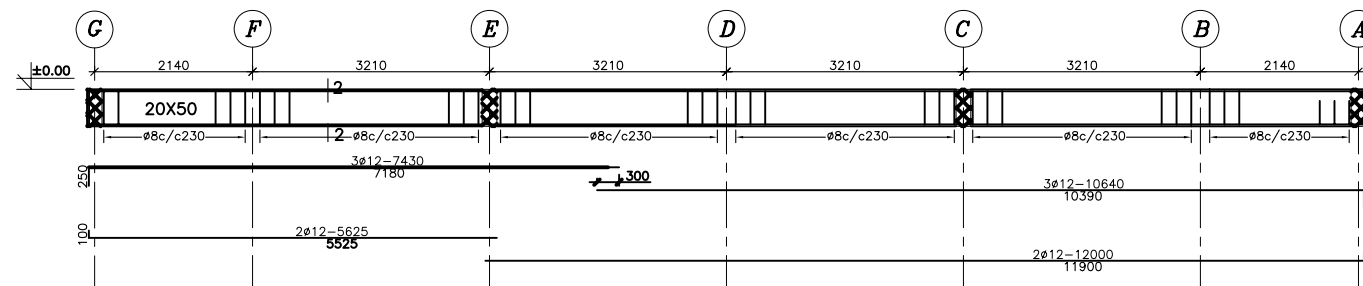
**GROUND FLOOR BEAM ON AXIS-A&G**



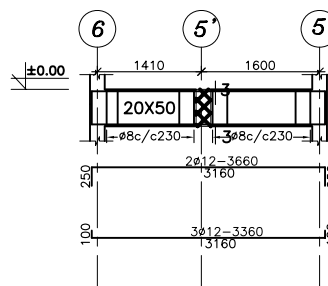
**GROUND FLOOR BEAM ON A-B' & G-E' AXIS-4**



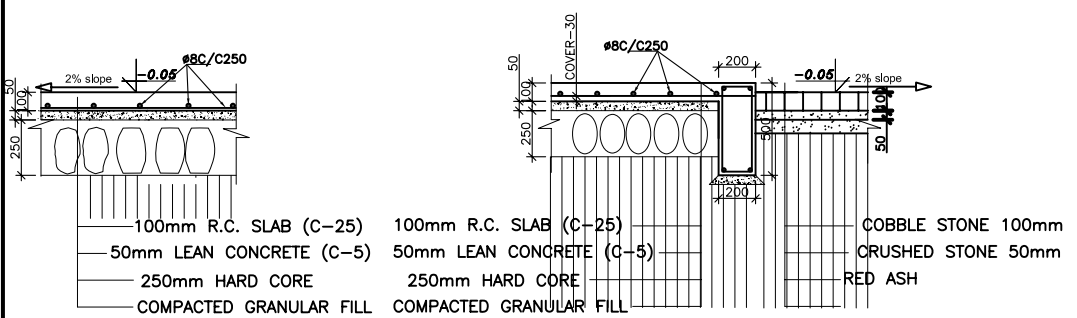
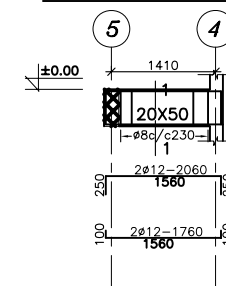
**GROUND FLOOR BEAM ON AXIS-5'**



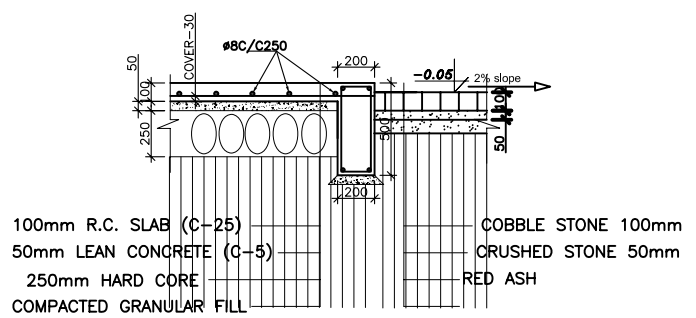
**BEAM ON AXIS-C&E**



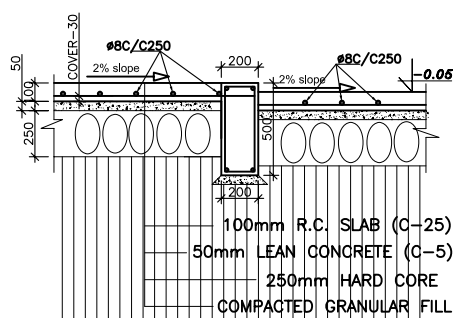
**GROUND FLOOR BEAM ON AXIS-B' & E'**



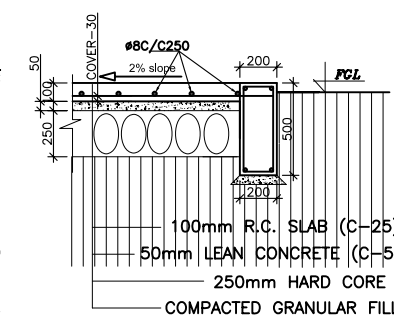
**SECTION Z'-Z'**  
SCALE 1:20



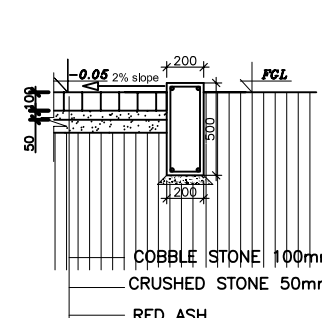
**SECTION Z-Z'**  
SCALE 1:20



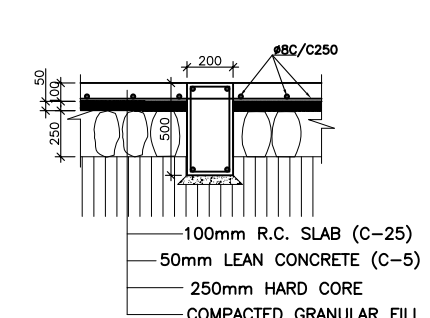
**SECTION S-S**  
SCALE 1:20



**SECTION T-T**  
SCALE 1:20



**SECTION R-R**  
SCALE 1:20



**SECTION Y-Y**  
SCALE 1:20

A	Tender	01.05.08	
NO.	REVISION	DATE	SIGN

UCBP AD-ST-DT-T1-0-EP-006-A  
PROJECT IMPLEMENTING AGENCY



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**CLIENT:** MINISTRY OF EDUCATION  
**PROJECT:** **UCBP** University Capacity Building Programme

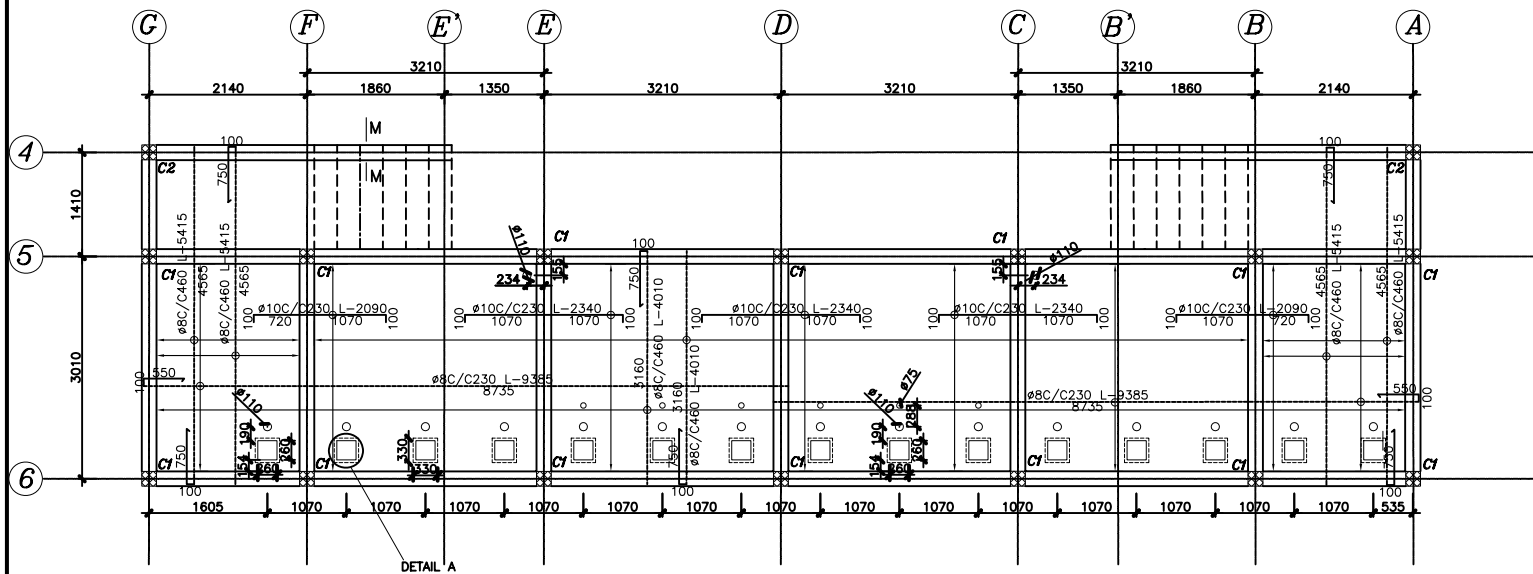
**URINE DIVERTING DRY TOILET (UDDT) - FEMALE**

**LOCATION:** ADAMA  
**EARTHQUAKE ZONE:** ZONE 4  
**CLIMATE:** Hot & Dry

**DRAWING TITLE:** GROUND FLOOR SLAB LAYOUT & REINFORCEMENT AND BEAM REINFORCEMENT & SECTION

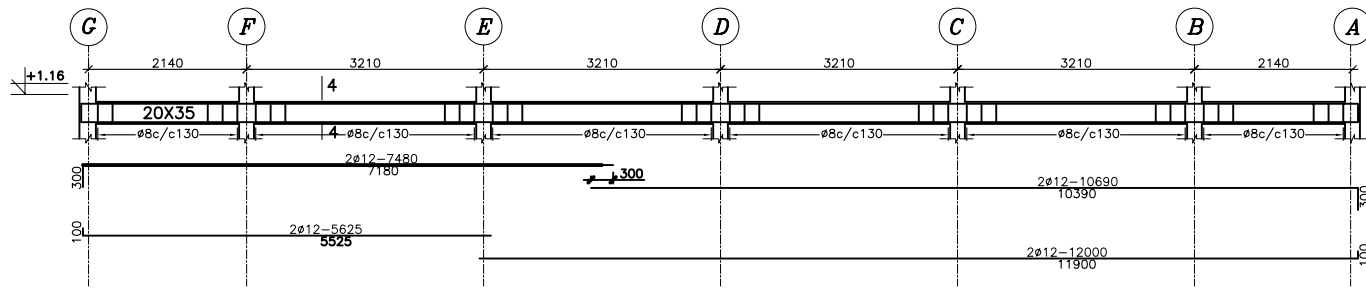
Date of Issue:	Drawn by:	Scale:	Date of Revision:	Category:
01_05_2008				ST
Drawing Number:				Index:
AD-ST-DT-T1-0-EP-006-A				A

**FOR WEATHERED ROCK & NON-EXPANSIVE SOIL**

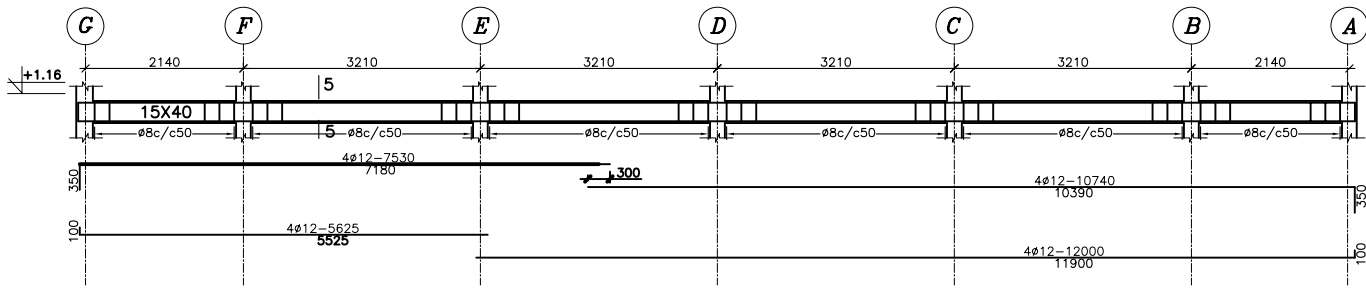


**FIRST FLOOR SLAB LAYOUT PLAN AT LEVEL +1.16**  
SCALE 1:50

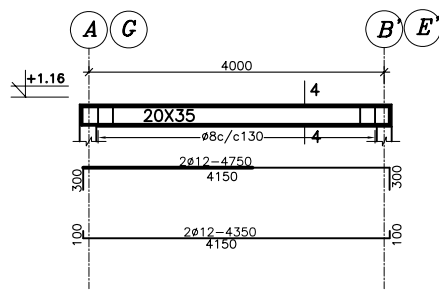
**FIRST FLOOR BEAM ON AXIS-5**



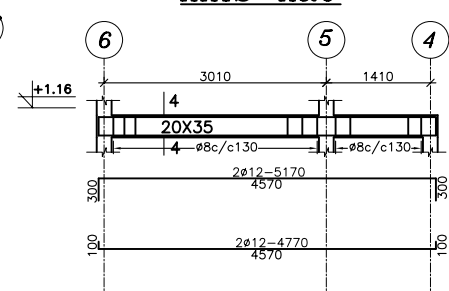
**FIRST FLOOR BEAM ON AXIS-6**



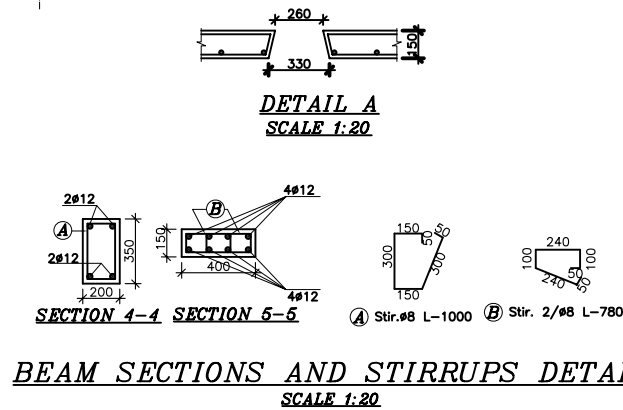
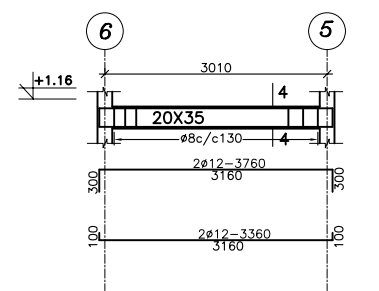
**FIRST FLOOR BEAM ON A-B' & G-E' AXIS-4**



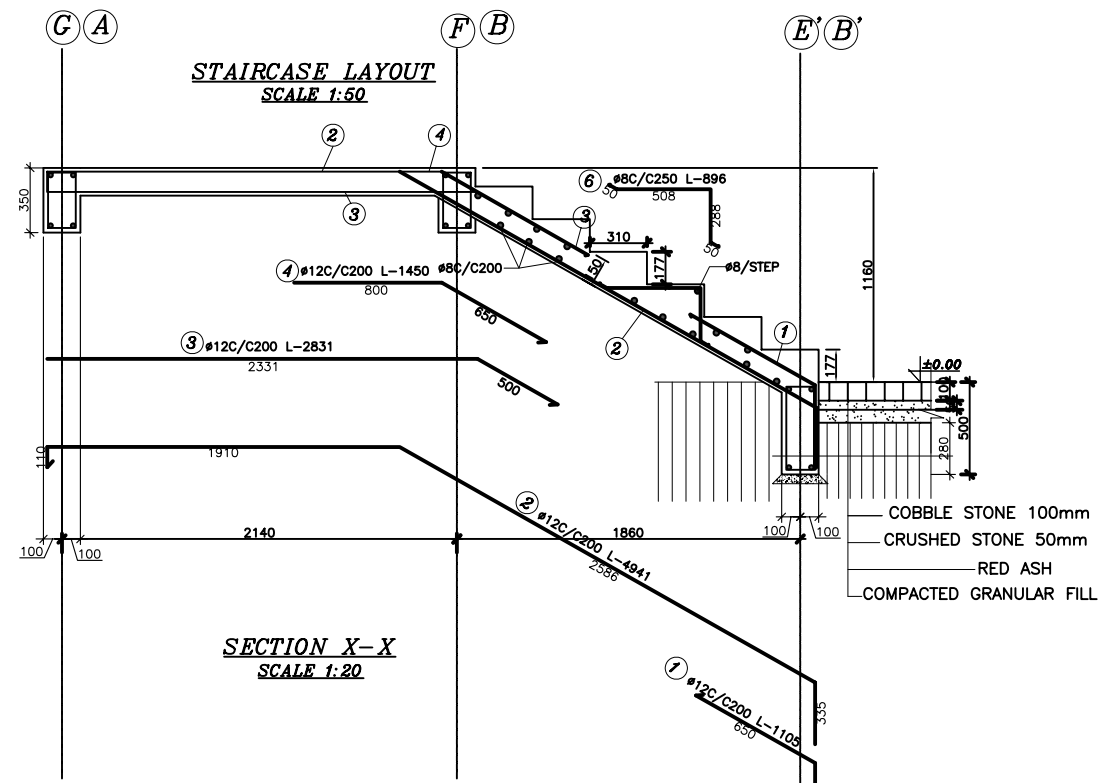
**FIRST FLOOR BEAM ON AXIS-A&G**



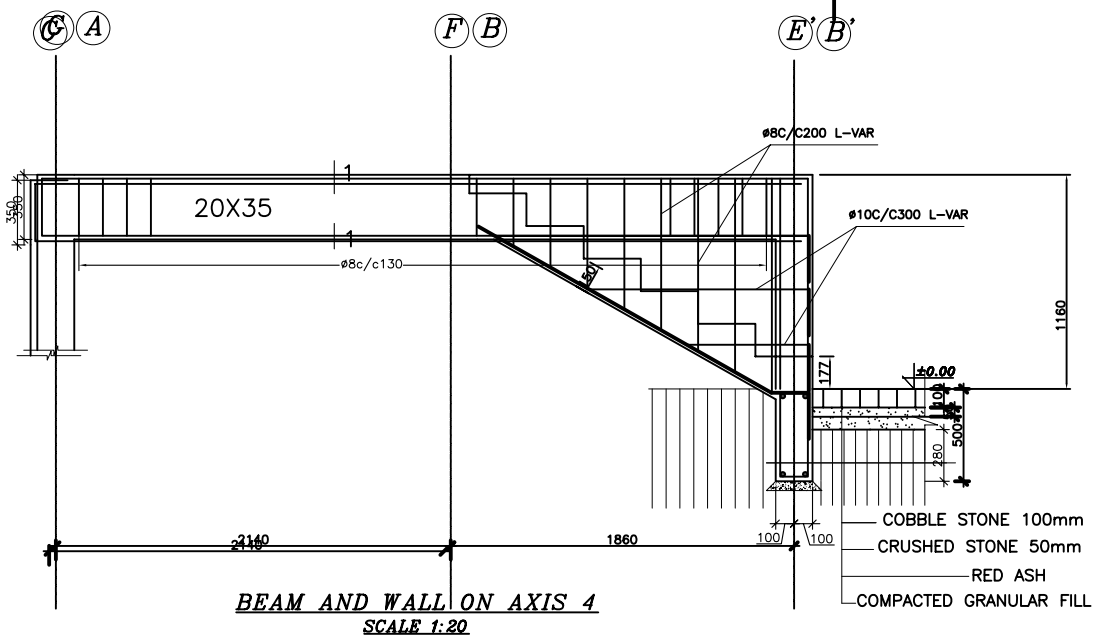
**FIRST FLOOR BEAM ON AXIS-B,C,D,E&F**



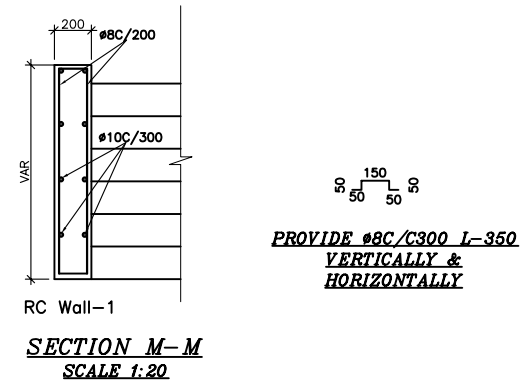
**BEAM SECTIONS AND STIRRUPS DETAIL**  
SCALE 1:20



**SECTION X-X**  
SCALE 1:20



**BEAM AND WALL ON AXIS 4**  
SCALE 1:20



**SECTION M-M**  
SCALE 1:20

A	Tender	01.05.08
NO.	REVISION	DATE SIGN

UCBP AD-ST-DT-T1-0-EP-007-A  
PROJECT IMPLEMENTING AGENCY



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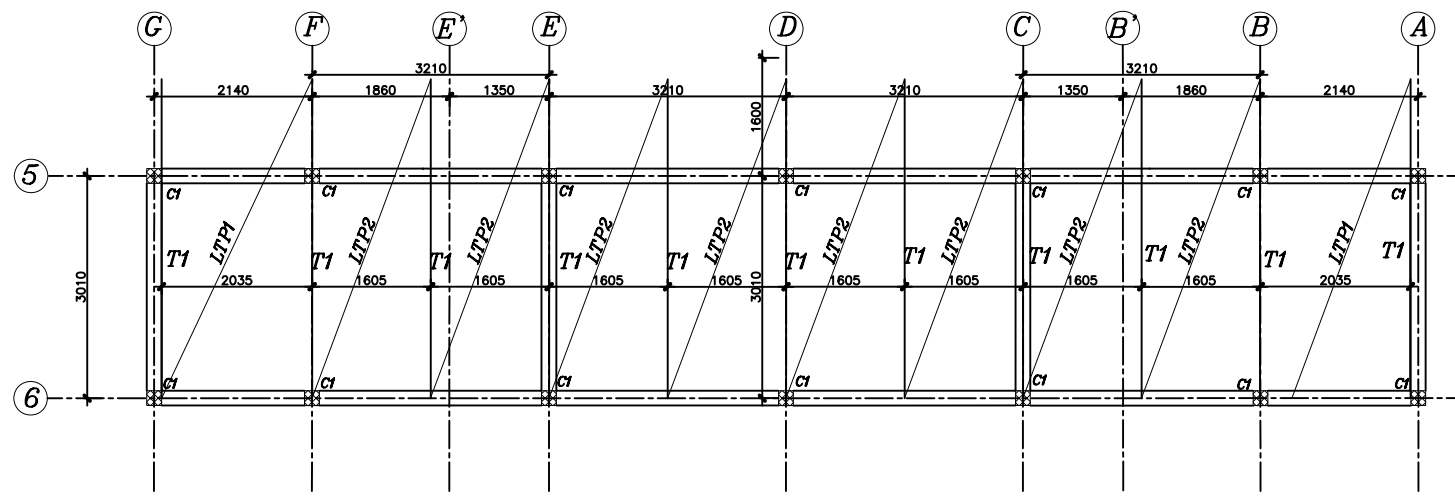
CLIENT: MINISTRY OF EDUCATION  
PROJECT: UCBP University Capacity Building Programme

URINE DIVERTING DRY TOILET (UDDT) - FEMALE

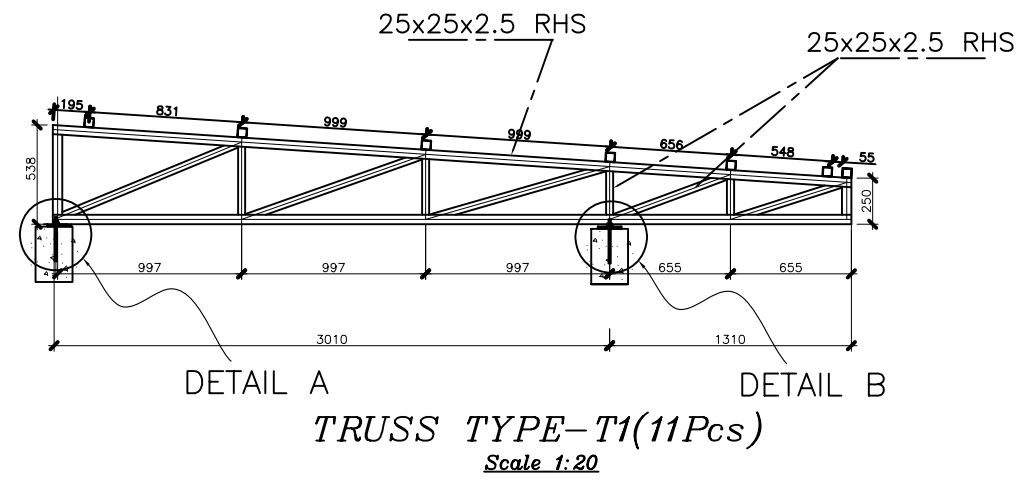
LOCATION: ADAMA  
EARTHQUAKE ZONE: ZONE 4  
CLIMATE: Hot & Dry

DRAWING TITLE: FIRST FLOOR SLAB REINFORCEMENT, BEAM REINFORCEMENT & SECTION AND STAIRCASE REINFORCEMENT

Date of Issue:	01.05.2008	Drawn by:	Scale:	Date of Revision:	Category:
Drawing Number:	AD-ST-DT-T1-0-EP-007-A	Index:	A		ST

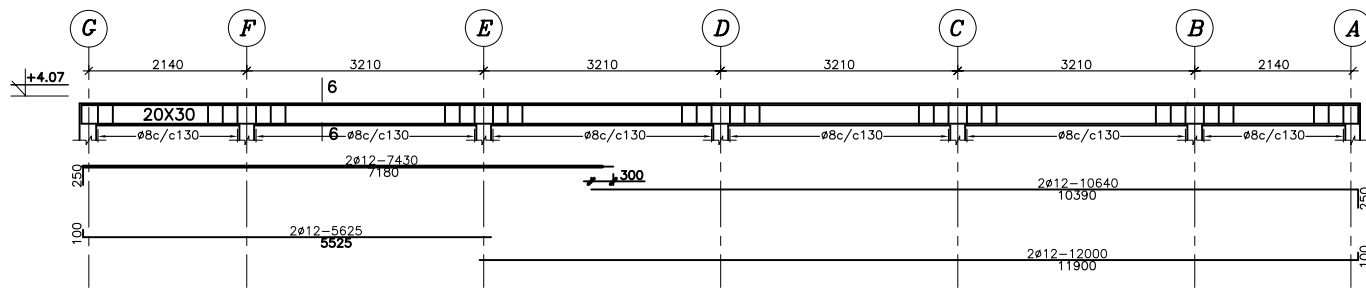


TOP TIE BEAM LAYOUT PLAN AT LEVEL +4.07  
SCALE 1:50

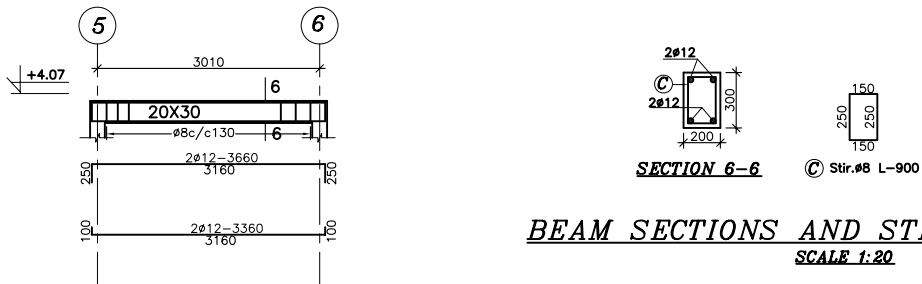


DETAIL A DETAIL B  
TRUSS TYPE-T1(11Pcs)  
Scale 1:20

TOP TIE BEAM ON AXIS-5&6



TOP TIE BEAM ON  
AXIS-A,C,E&G



BEAM SECTIONS AND STIRRUPS DETAIL  
SCALE 1:20

GENERAL NOTES

**MATERIALS USED FOR ROOF STRUCTURE**

- TOP & BOTTOM MEMBERS 25X25X2.5mm
- INTERNAL MEMBERS 25X25X2.5mm
- \*Minimum thickness of weld 3mm
- \*Bolt strength Fe-360
- \*All Measurements are in mm. unless specified.
- \*No scaling
- Roofing - EGA-400 t=0.6mm
- \*Trusses should be welded when connected to each other

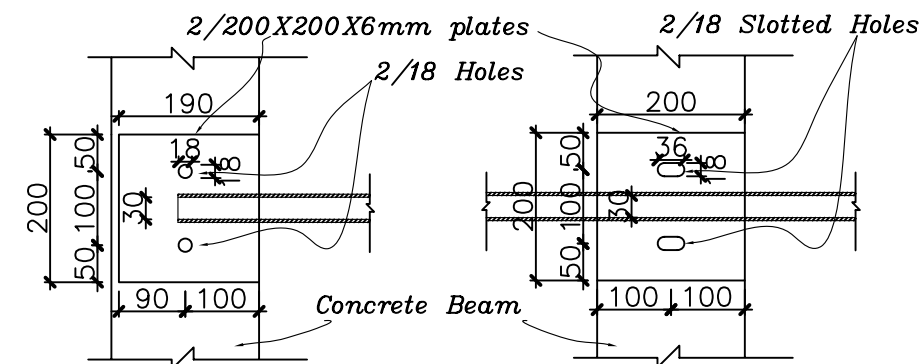
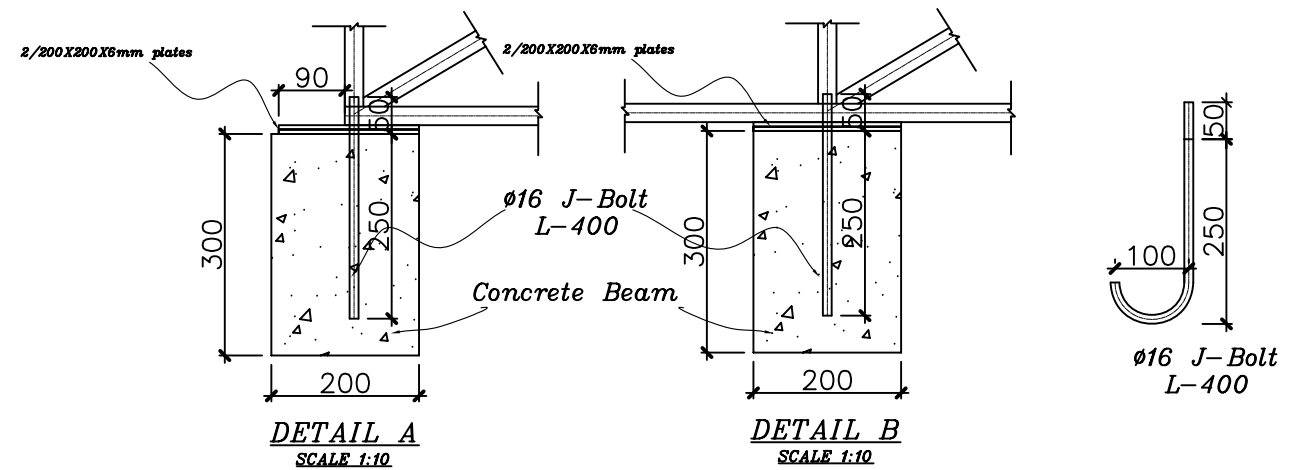
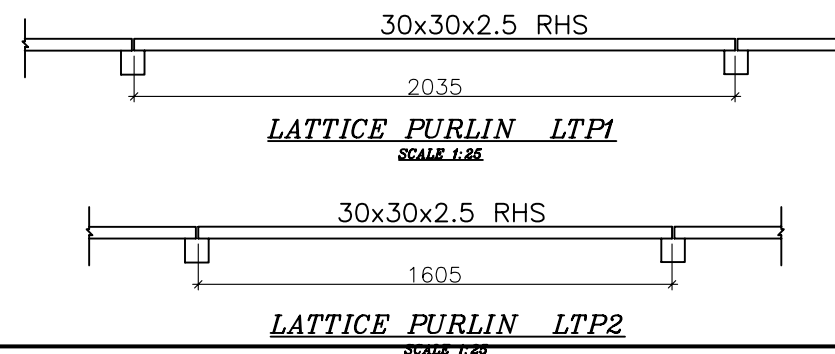


PLATE AND BOLT DETAIL A PLATE AND BOLT DETAIL B  
SCALE 1:10 SCALE 1:10



DETAIL A DETAIL B  
SCALE 1:10 SCALE 1:10



LATTICE PURLIN LTP1  
SCALE 1:20  
LATTICE PURLIN LTP2  
SCALE 1:20

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UCBP AD-ST-DT-T1-0-EP-008-A  
PROJECT IMPLEMENTING AGENCY



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CLIENT: MINISTRY OF EDUCATION  
PROJECT: UCBP University Capacity Building Programme

URINE DIVERTING DRY TOILET (UDDT) - FEMALE

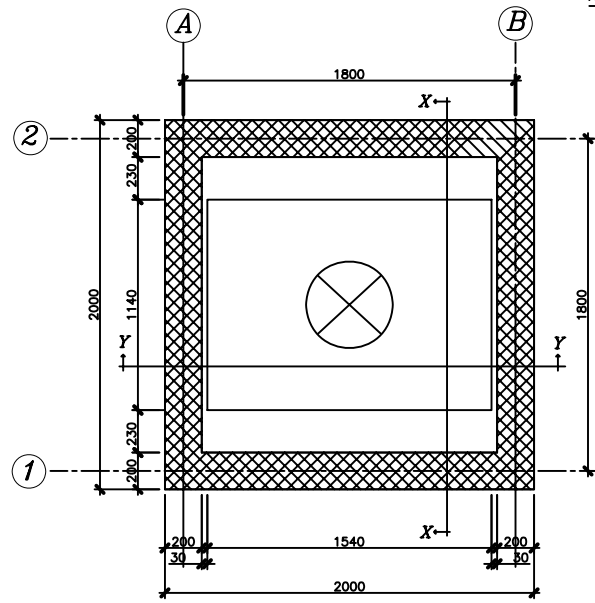
LOCATION: ADAMA  
EARTHQUAKE ZONE: ZONE 4  
CLIMATE: Hot & Dry

DRAWING TITLE:  
TOP TIE BEAM LAYOUT, BEAM REINFORCEMENT & SECTION AND TRUSS LAYOUT

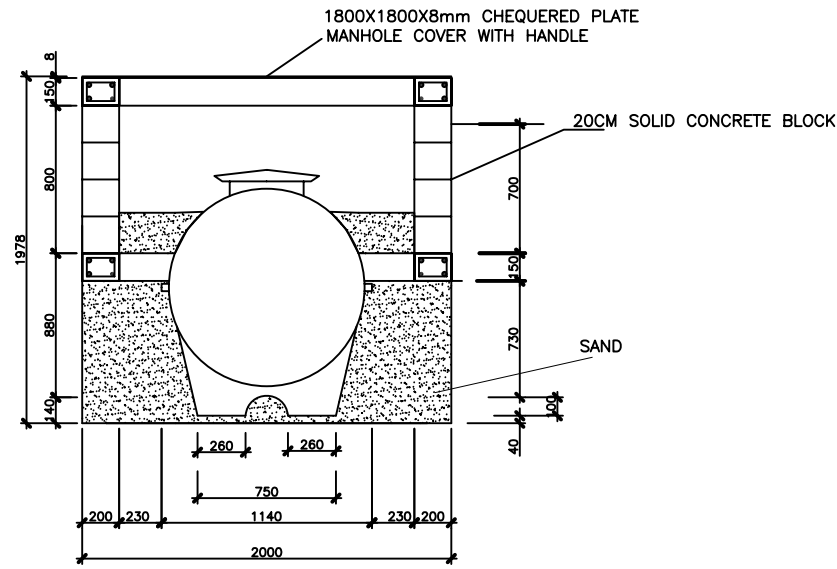
Date of Issue:	Drawn by:	Scale:	Date of Revision:	Category:
01.05.2008				ST
Drawing Number:				Index:
AD-ST-DT-T1-0-EP-008-A				A



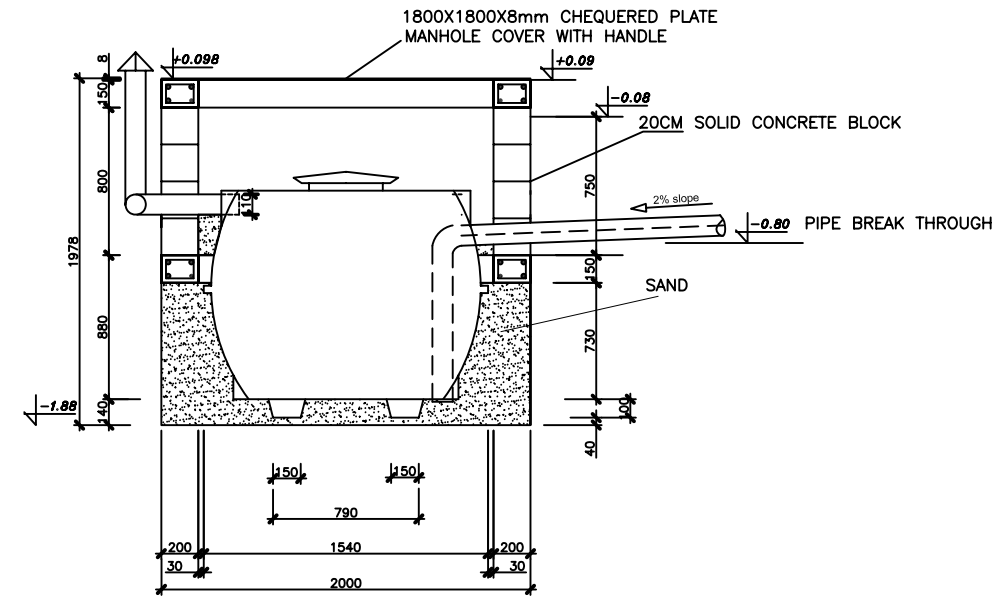
# SHORT TERM URINE TANK



URINE TANK LAYOUT  
SCALE 1:20

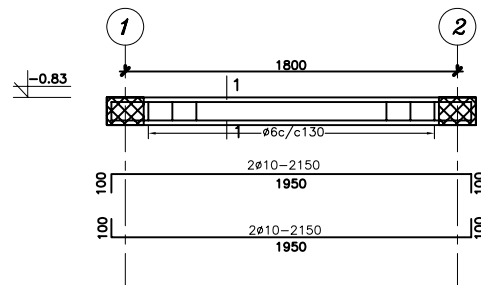


SECTION X-X  
SCALE 1:20

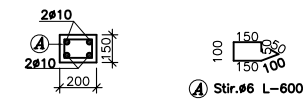
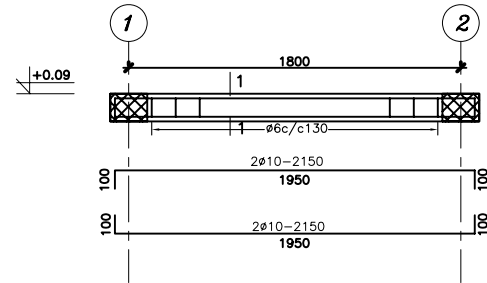


SECTION Y-Y  
SCALE 1:20

## BEAM ON AXIS-A&B

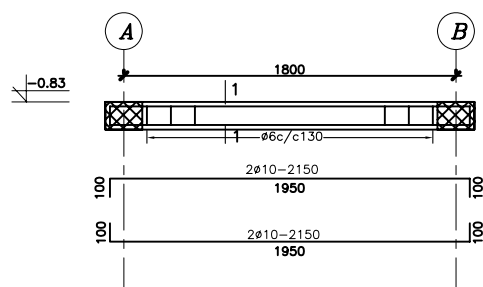


## BEAM ON AXIS-A&B

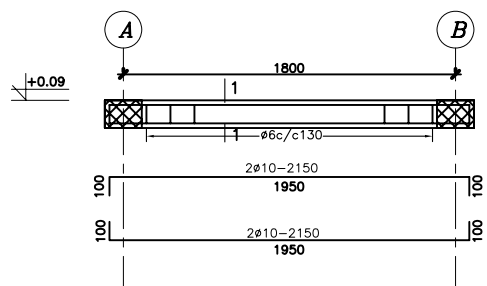


SECTION 1-1  
BEAM SECTIONS AND  
STIRRUPS DETAIL  
SCALE 1:20

## BEAM ON AXIS-1&2



## BEAM ON AXIS-1&2



## GENERAL NOTES

- CONCRETE QUALITY SHALL BE:-  
FOR ALL STRUCTURES .... $f_{ck}=25MPa$   
FOR LEAN CONCRETE .... $f_{ck}=5MPa$
- REINF. STEEL QUALITY SHALL BE:  
FOR  $\phi \geq 10mm$  GRADE-60 BARS WITH MINIMUM YIELD STRENGTH  $f_{yk}=360MPa$   
FOR  $\phi < 10mm$  GRADE-40 BARS WITH MINIMUM YIELD STRENGTH  $f_{yk}=280MPa$
- COVER TO REINFORCEMENT  
FOR SLABS & WALLS =50mm  
FOR TOP COVER SLAB=15mm
- ALL MEASUREMENTS ARE IN mm.

- MINIMUM PIN DIAMETER FOR ALL DRAWINGS SHALL BE AS SHOWN BELOW.

MINIMUM PIN DIAMETER FOR ALL REINFORCING BARS	
BAR $\phi$ [mm]	Min. Pin $\phi$ [mm]
8	40
10	50
12	60
14	70
16	80
20	100

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UCBP AD-ST-DT-T1-0-EP-001-A

PROJECT IMPLEMENTING AGENCY



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CLIENT: MINISTRY OF EDUCATION

PROJECT: **UCBP** University Capacity Building Programme

URINE DIVERTING DRY TOILET (UDDT)

LOCATION: ADAMA

EARTHQUAKE ZONE: ZONE 4

CLIMATE: Hot & Dry

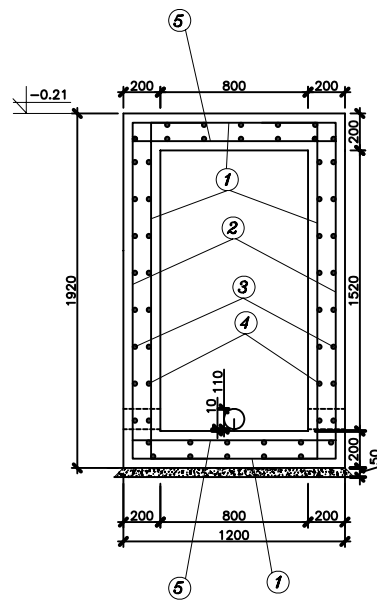
DRAWING TITLE:

SHORT TERM URINE TANK LAYOUT AND BEAM REINFORCEMENT & SECTION

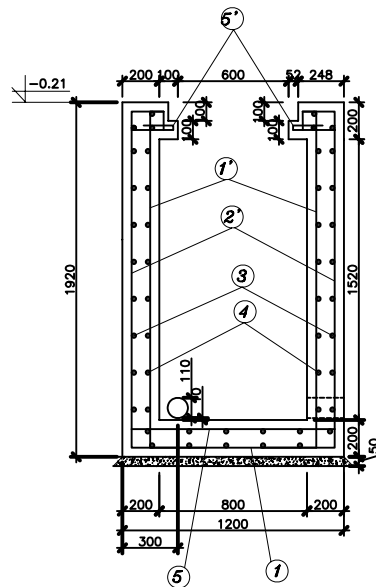
Date of Issue:	Drawn by:	Scale:	Date of Revision:	Category:
01,05,2008				ST
Index:	A			

AD-ST-DT-T1-0-EP-009-A

# MANHOLES

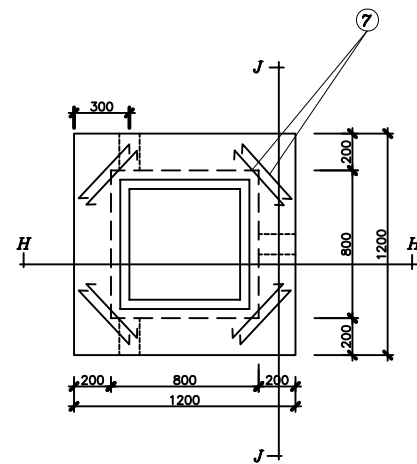


SECTION J-J  
SCALE 1:20

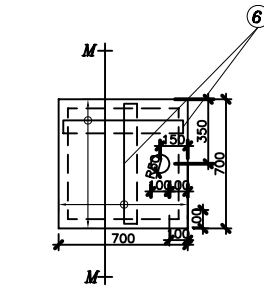


SECTION H-H  
SCALE 1:20

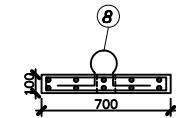
MANHOLE UMH2 FOR MALE  
SCALE 1:20



MANHOLE LAYOUT PLAN  
SCALE 1:20

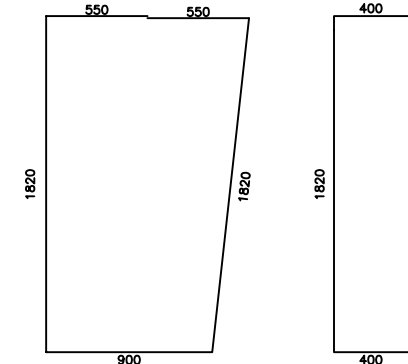


TOP COVER SLAB  
SCALE 1:20

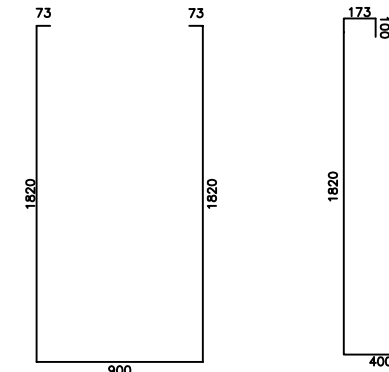


SECTION M-M  
SCALE 1:20

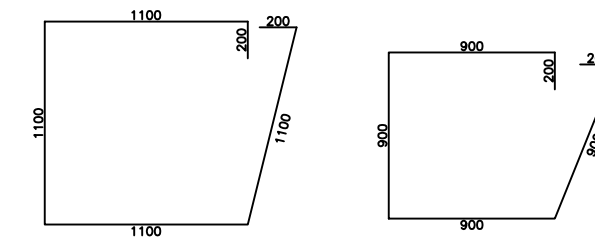
MANHOLE BAR DETAILS  
SCALE 1:20



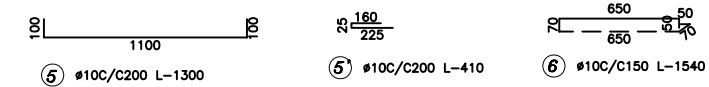
① #12C/C200 L-5640      ② #12C/C200 L-2620



①' #12C/C150 L-4686      ②' #12C/C150 L-2493



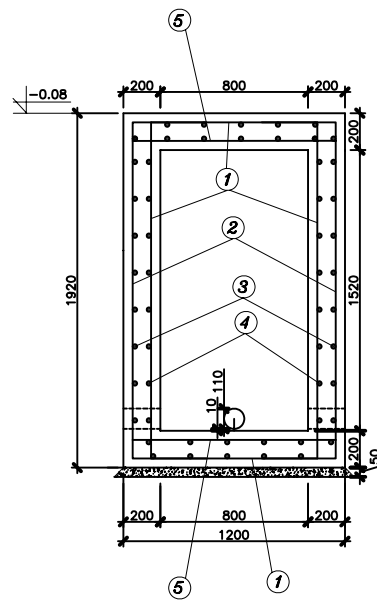
③ #10C/C200 L-4800      ④ #10C/C200 L-4000



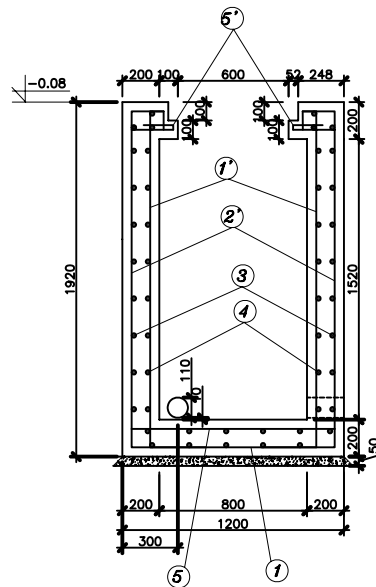
⑤ #10C/C200 L-1300      ⑥ #10C/C200 L-410      ⑥ #10C/C150 L-1540



⑦ 2#10 L-400 NEAR SLAB OPENING AT CORNERS      ⑧ 2/#8 L-880

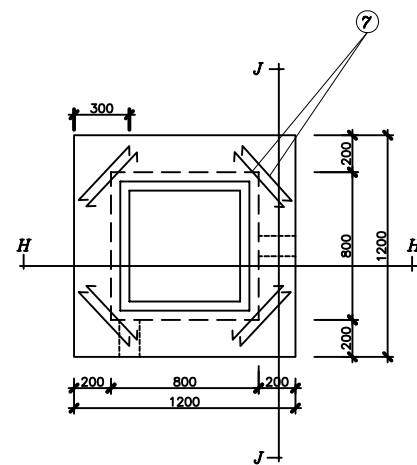


SECTION J-J  
SCALE 1:20

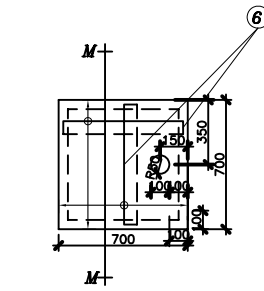


SECTION H-H  
SCALE 1:20

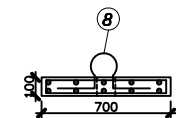
MANHOLE UMH1 FOR FEMALE  
SCALE 1:20



MANHOLE LAYOUT PLAN  
SCALE 1:20



TOP COVER SLAB  
SCALE 1:20



SECTION M-M  
SCALE 1:20

N.B. PROVIDE REINFORCEMENT 1', 2' & 5' NEAR SLAB OPENINGS  
REFER TO SANITARY DRAWINGS FOR THE LEVEL OF PIPES

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NO.	REVISION	DATE	SIGN

UCBP AD-ST-DT-T1-0-EP-010-A

PROJECT IMPLEMENTING AGENCY



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CLIENT: MINISTRY OF EDUCATION

PROJECT: **UCBP** University Capacity Building Programme

**URINE DIVERTING DRY TOILET (UDDT)**

LOCATION: ADAMA

EARTHQUAKE ZONE: ZONE 4

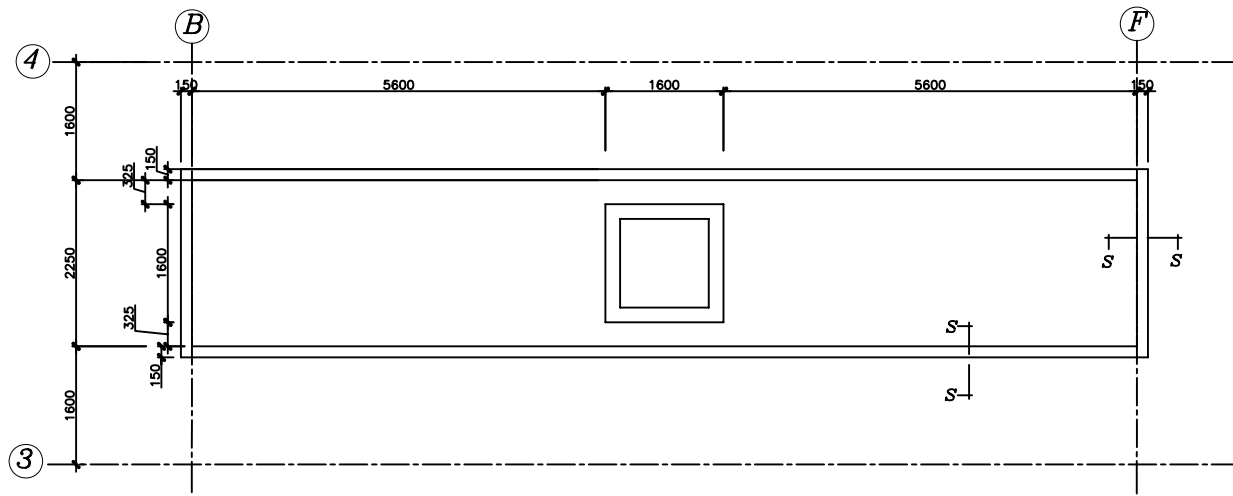
CLIMATE: Hot & Dry

DRAWING TITLE: MANHOLE LAYOUT, REINFORCEMENT & SECTION

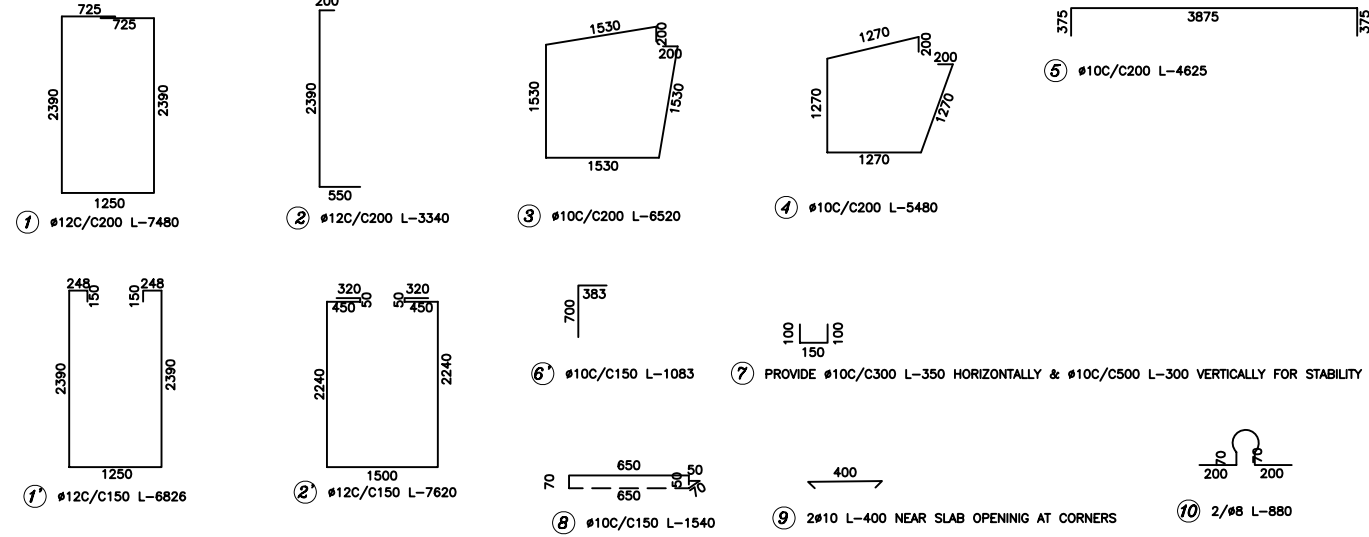
Date of Issue:	Drawn by:	Scale:	Date of Revision:	Category:
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Drawing Number:				Index:
AD-ST-DT-T1-0-EP-010-A				A

# SEDIMENTATION TANK

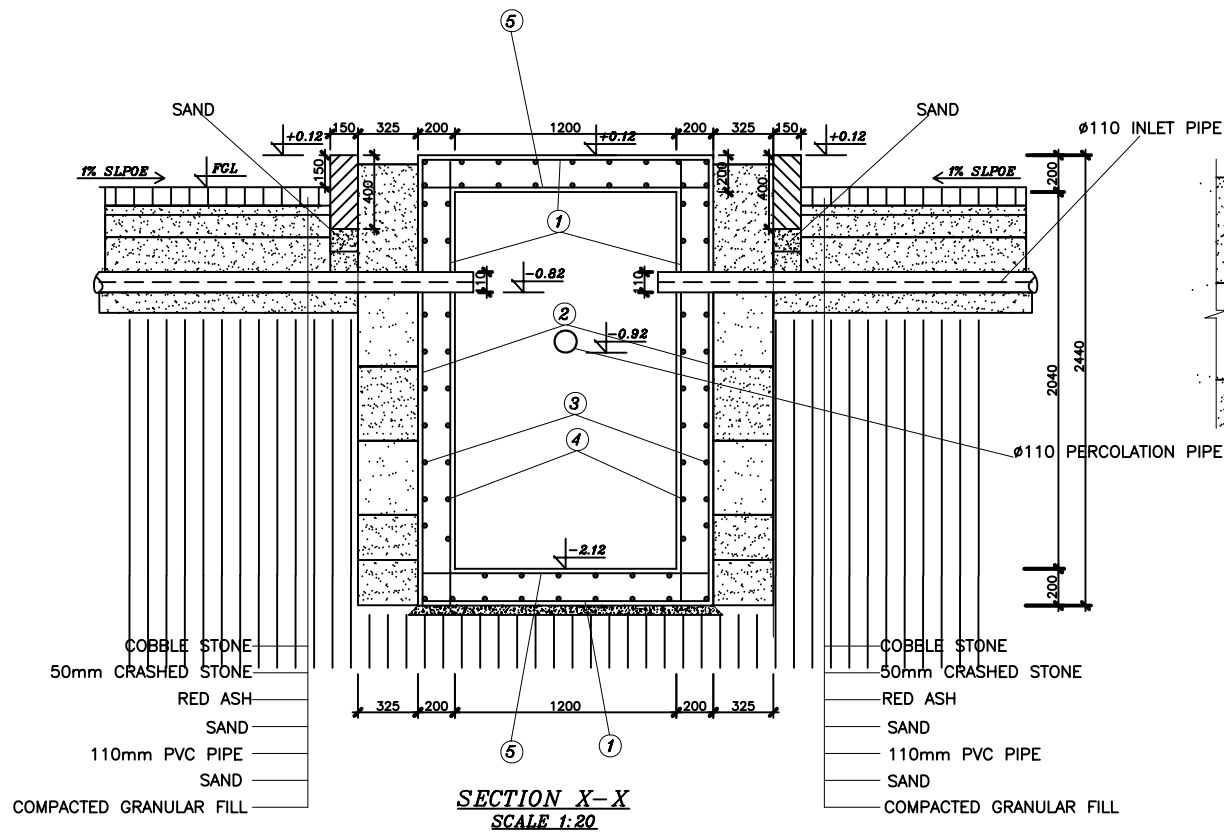
## BAR DETAILS SCALE 1:50



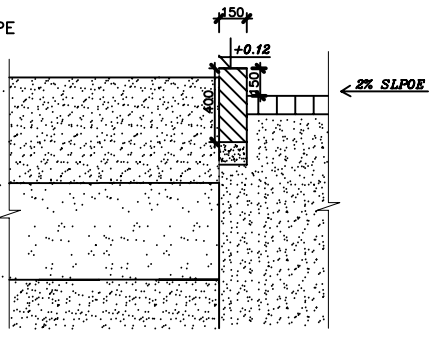
SEDIMENTATION TANK LAYOUT  
SCALE 1:20



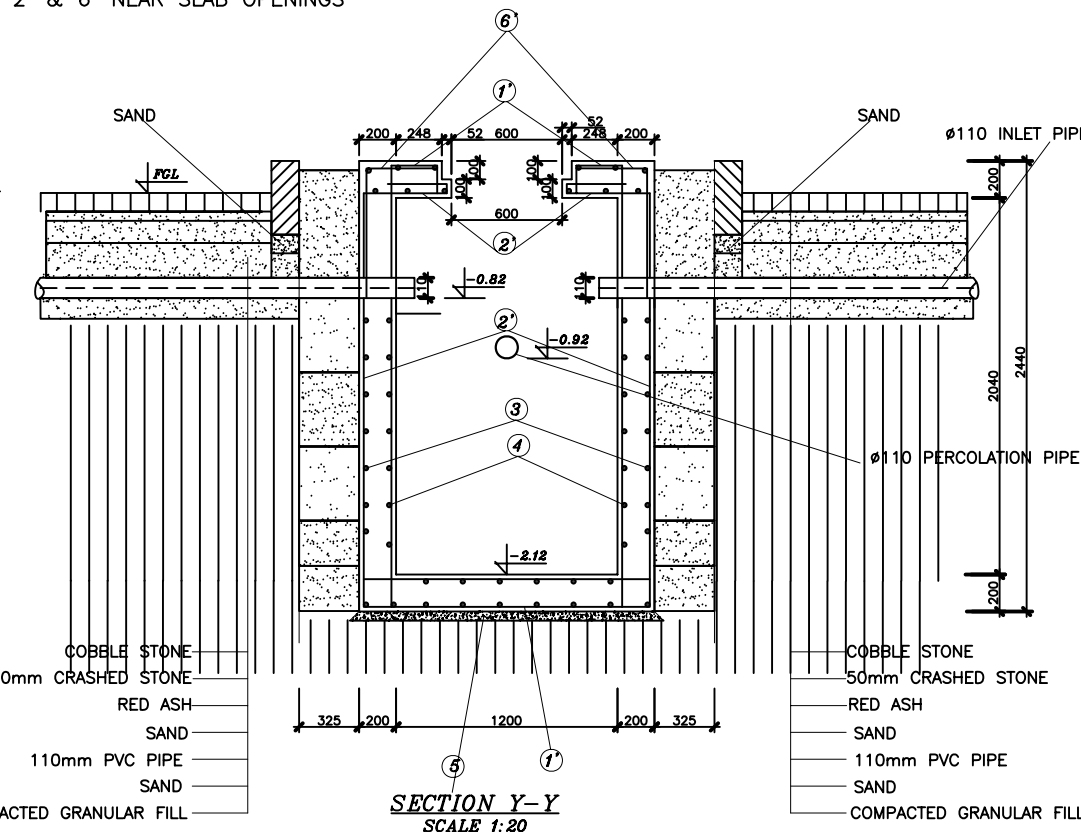
N.B. PROVIDE REINFORCEMENT 1', 2' & 6' NEAR SLAB OPENINGS



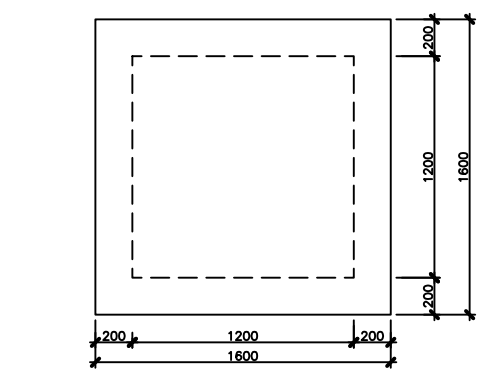
SECTION X-X  
SCALE 1:20



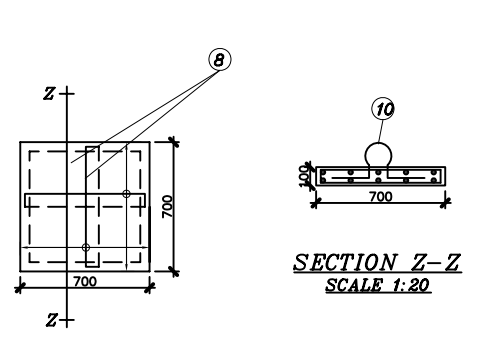
SECTION S-S  
SCALE 1:20



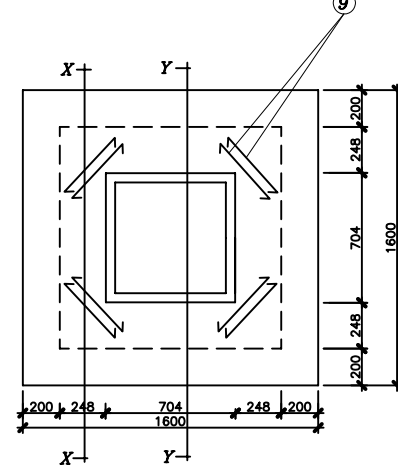
SECTION Y-Y  
SCALE 1:20



TOP COVER SLAB  
SCALE 1:20



SECTION Z-Z  
SCALE 1:20



TOP SLAB  
SCALE 1:20

### GENERAL NOTES

- CONCRETE QUALITY SHALL BE:-  
FOR ALL STRUCTURES ....fck=25MPa  
FOR LEAN CONCRETE ....fck=5MPa
- REINF. STEEL QUALITY SHALL BE:  
FOR  $\phi \geq 10$ mm GRADE-60 BARS WITH MINIMUM YIELD STRENGTH  $f_yk=360$ MPa  
FOR  $\phi < 10$ mm GRADE-40 BARS WITH MINIMUM YIELD STRENGTH  $f_yk=280$ MPa
- COVER TO REINFORCEMENT  
FOR SLABS=25mm  
FOR TOP COVER SLAB=15mm
- ALL MEASUREMENTS ARE IN mm.

5. MINIMUM PIN DIAMETER FOR ALL DRAWINGS SHALL BE AS SHOWN BELOW.

BAR # [mm]	Min. Pin # [mm]
8	40
10	50
12	60
14	70
16	80
20	100

SEDIMENTATION TANK LAYOUT  
PLAN AT LEVEL -2.12  
SCALE 1:20

A	Tender	01.05.08
NO.	REVISION	DATE SIGN

UCBP AD-ST-DT-T1-0-EP-011-A  
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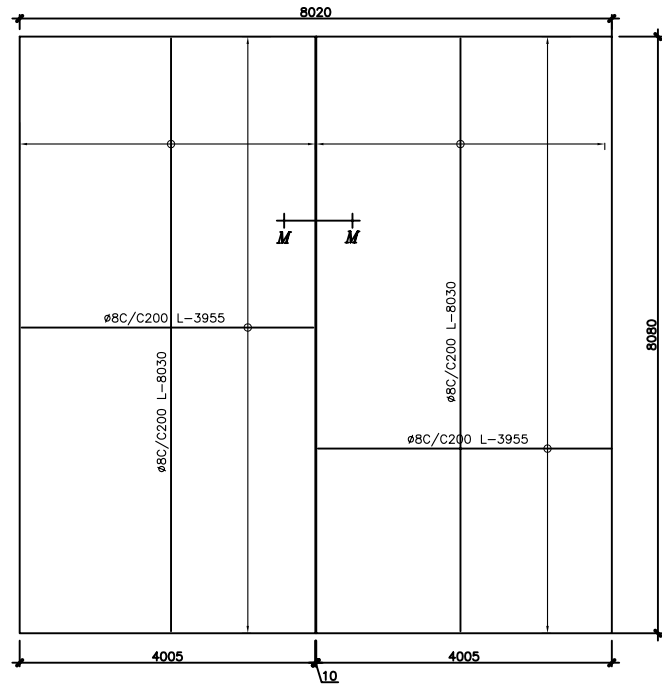
CLIENT: MINISTRY OF EDUCATION  
PROJECT: UCBP University Capacity Building Programme

URINE DIVERTING DRY TOILET (UDDT)

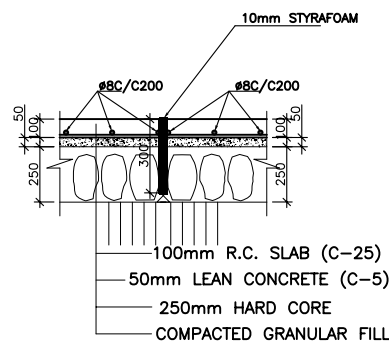
LOCATION: ADAMA  
EARTHQUAKE ZONE: ZONE 4  
CLIMATE: Hot & Dry  
DRAWING TITLE: SEDIMENTATION TANK LAYOUT, REINFORCEMENT AND SECTION

Date of Issue:	01,05,2008	Drawn by:	Scale:	Date of Revision:	Category:
Drawing Number:	AD-ST-DT-T1-0-EP-11-A	Index:	A		

# RC SLAB FOR LONG TERM URINE TANK

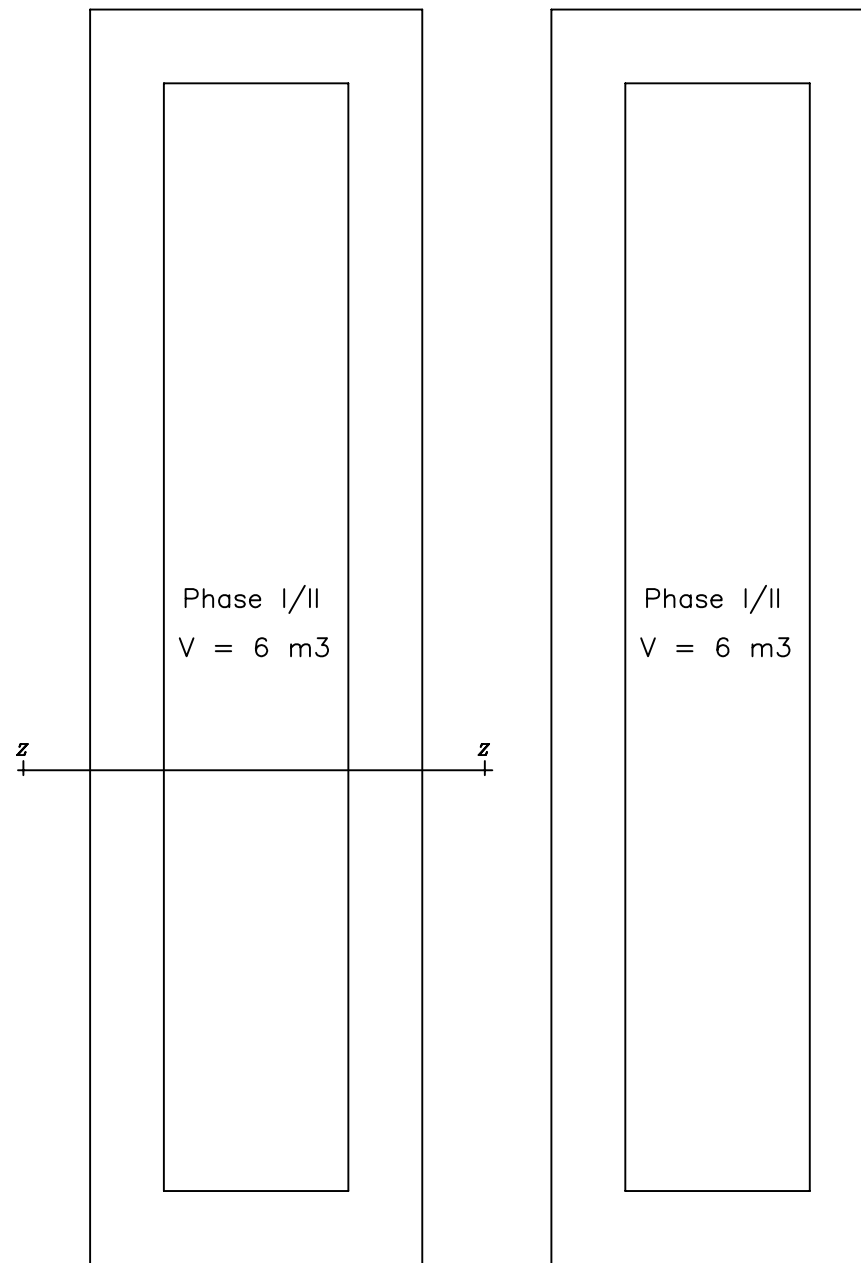


GROUND FLOOR SLAB LAYOUT PLAN AT LEVEL 1474.77 AMSL  
SCALE 1:50

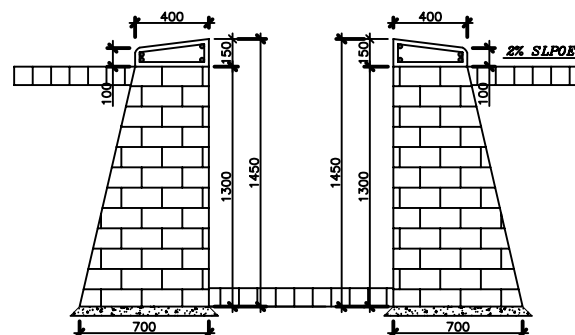


SECTION M-M  
SCALE 1:20

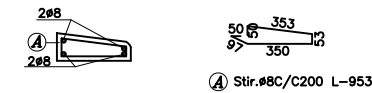
# COMPOST DITCHES



PART OF COMPOST SITE  
SCALE 1:50



SECTION Z-Z  
SCALE 1:20



SECTION 1-1  
BEAM SECTIONS AND STIRRUPS DETAIL  
SCALE 1:20

A	Tender	01.05.08	
NO.	REVISION	DATE	SIGN

UCBP AD-ST-DT-T1-0-EP-012-A

PROJECT IMPLEMENTING AGENCY



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**CLIENT:** MINISTRY OF EDUCATION

**PROJECT:** UCBP University Capacity Building Programme

**URINE DIVERTING DRY TOILET (UDDT)**

**LOCATION:** ADAMA

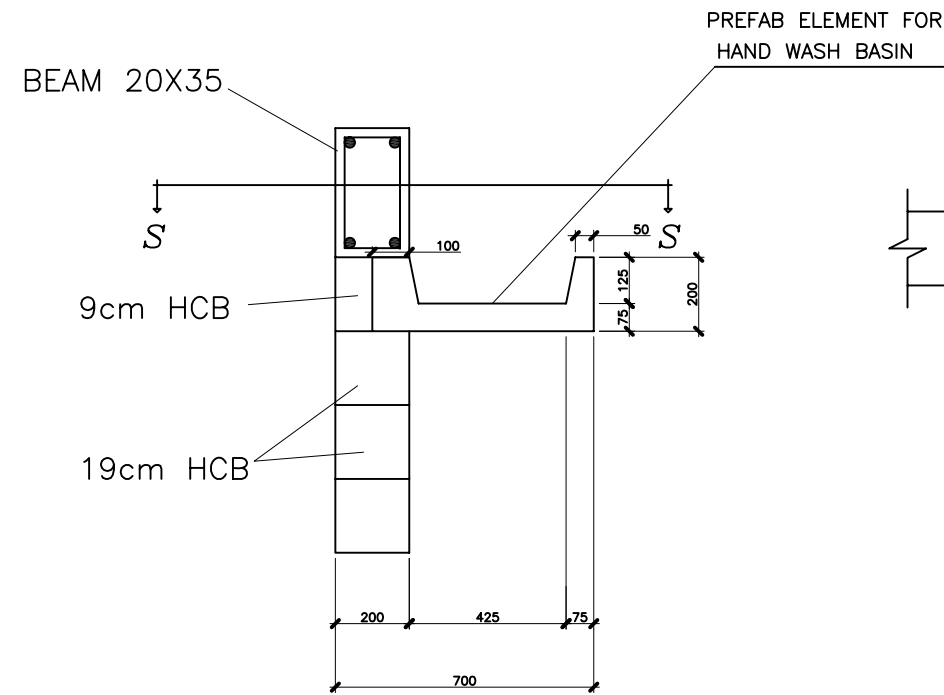
**EARTHQUAKE ZONE:** ZONE 4

**CLIMATE:** Hot & Dry

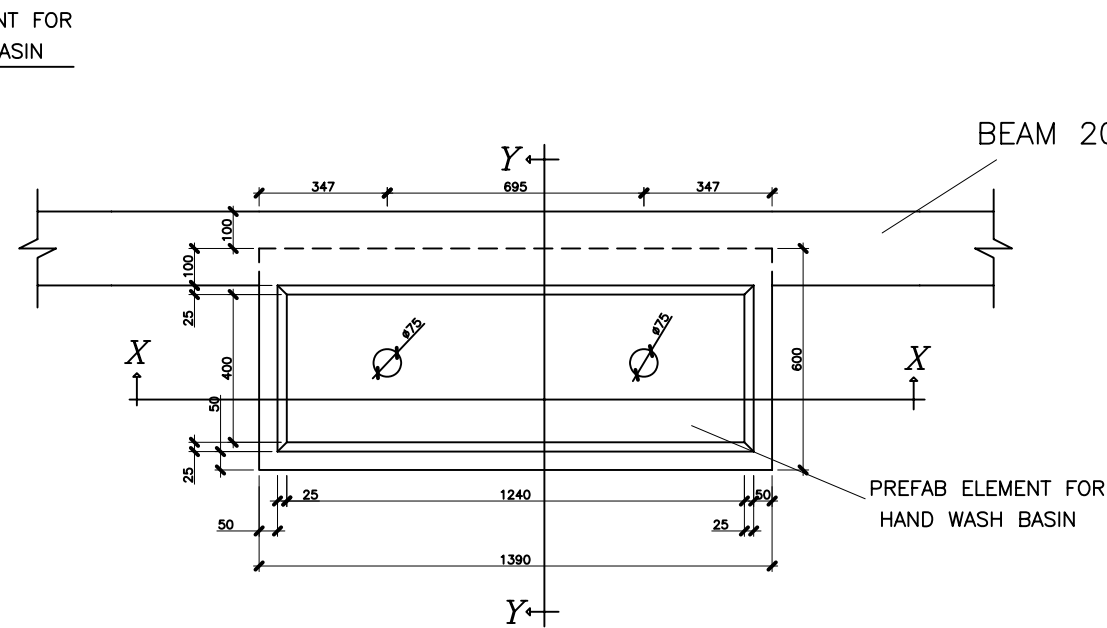
**DRAWING TITLE:** REINFORCED CONCRETE SLAB FOR LONG TERM URINE TANK & COMPOST SITE

Date of Issue:	Drawn by:	Scale:	Date of Revision:	Category:
01.05.2008				ST
Drawing Number:				Index:
AD-ST-DT-T1-0-EP-012-A				A

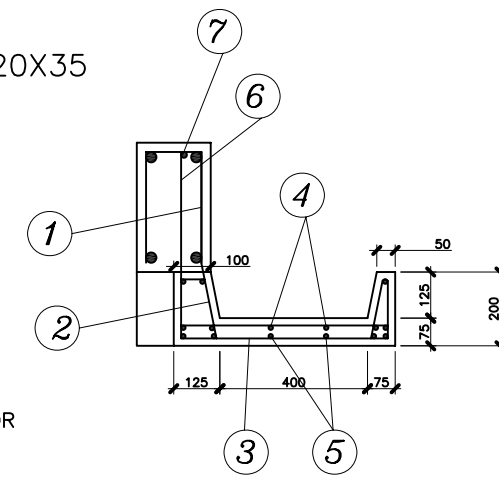
# STRUCTURAL DETAIL FOR PREFAB HAND WASH BASIN



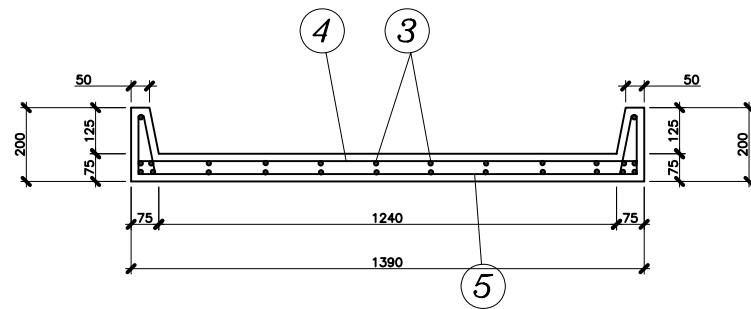
**HAND WASH BASIN**  
SCALE 1:10



**SECTION X-X**  
SCALE 1:10



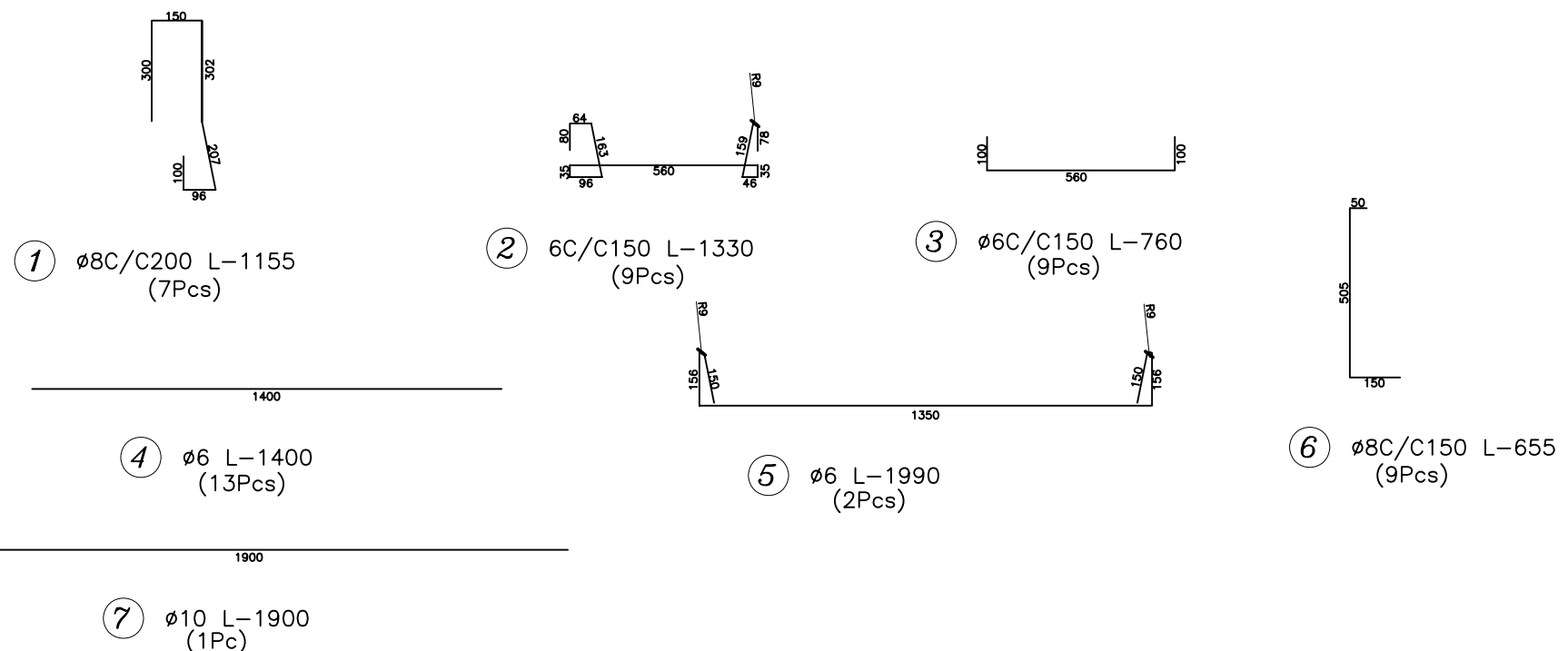
**SECTION Y-Y**  
SCALE 1:10



**SECTION X-X**  
SCALE 1:10

## BAR DETAILS

SCALE 1:10



N.B. – PROVIDE REINFORCEMENT FOR BAR No. ④ & ⑤ BASED ON THE SECTION DRAWING  
 – CONCRETE QUALITY FOR PREFAB ELEMENT IS C-30

A	Tender	01.05.08	
NO.	REVISION	DATE	SIGN

UCBP AD-ST-DT-T1-0-EP-013-A

PROJECT IMPLEMENTING AGENCY



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CLIENT: MINISTRY OF EDUCATION

PROJECT: **UCBP** University Capacity Building Programme

**URINE DIVERTING DRY TOILET (UDDT)**

LOCATION: ADAMA

EARTHQUAKE ZONE: ZONE 4

CLIMATE: Hot & Dry

DRAWING TITLE: PREFAB HAND WASH BASIN

Date of Issue:	Drawn by:	Scale:	Date of Revision:	Category:
01,05,2008				ST
Drawing Number:				Index:
AD-ST-DT-T1-0-EP-013-A				A