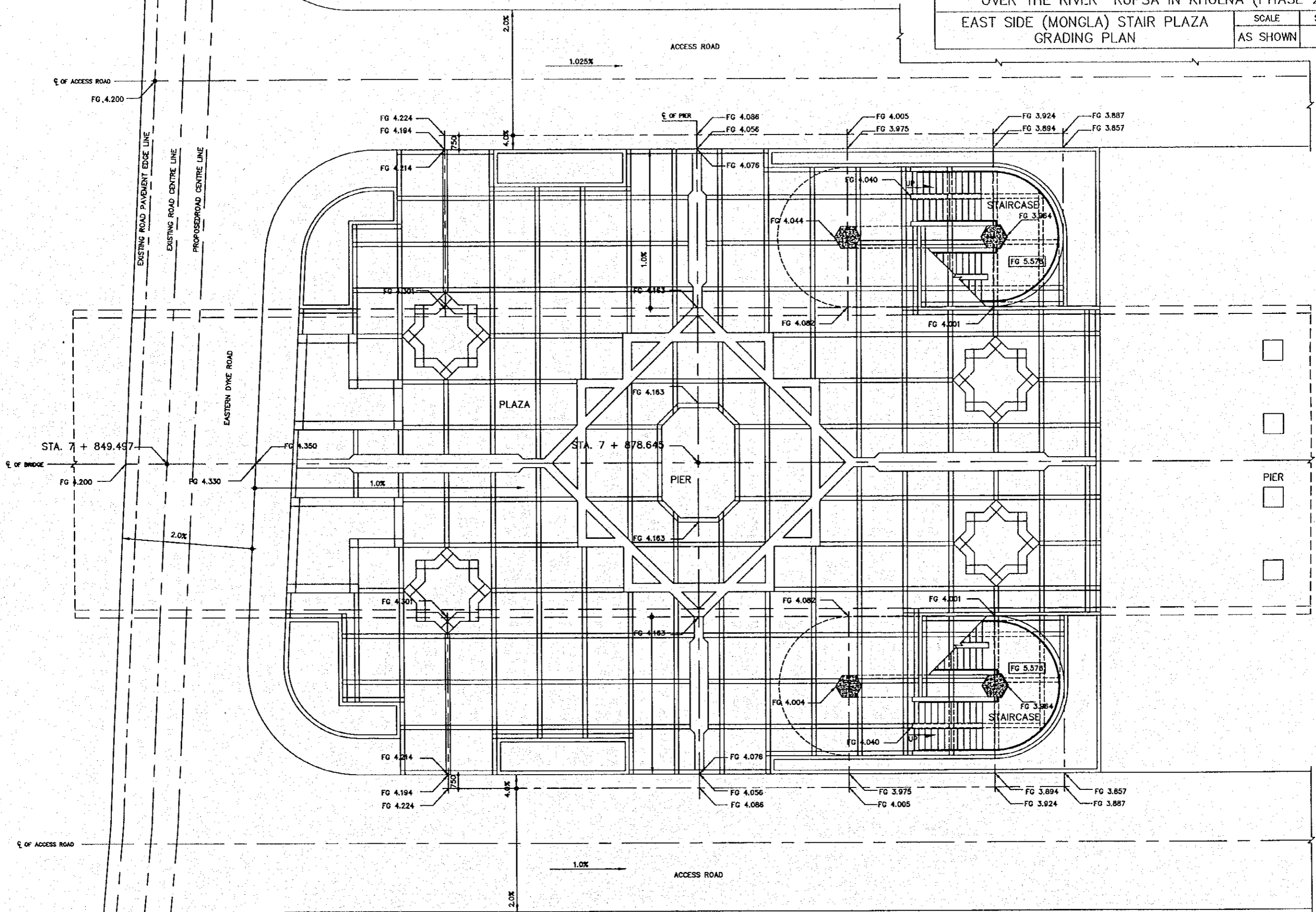


THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)
EAST SIDE (MONGLA) STAIR PLAZA
GRADING PLAN

SCALE	SHEET NO.
AS SHOWN	N-15



1 GRADING PLAN
N-15 SCALE 1:100

THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)
EAST SIDE (MONGLA) STAIR PLAZA
SURFACE WATER DRAINAGE PLAN

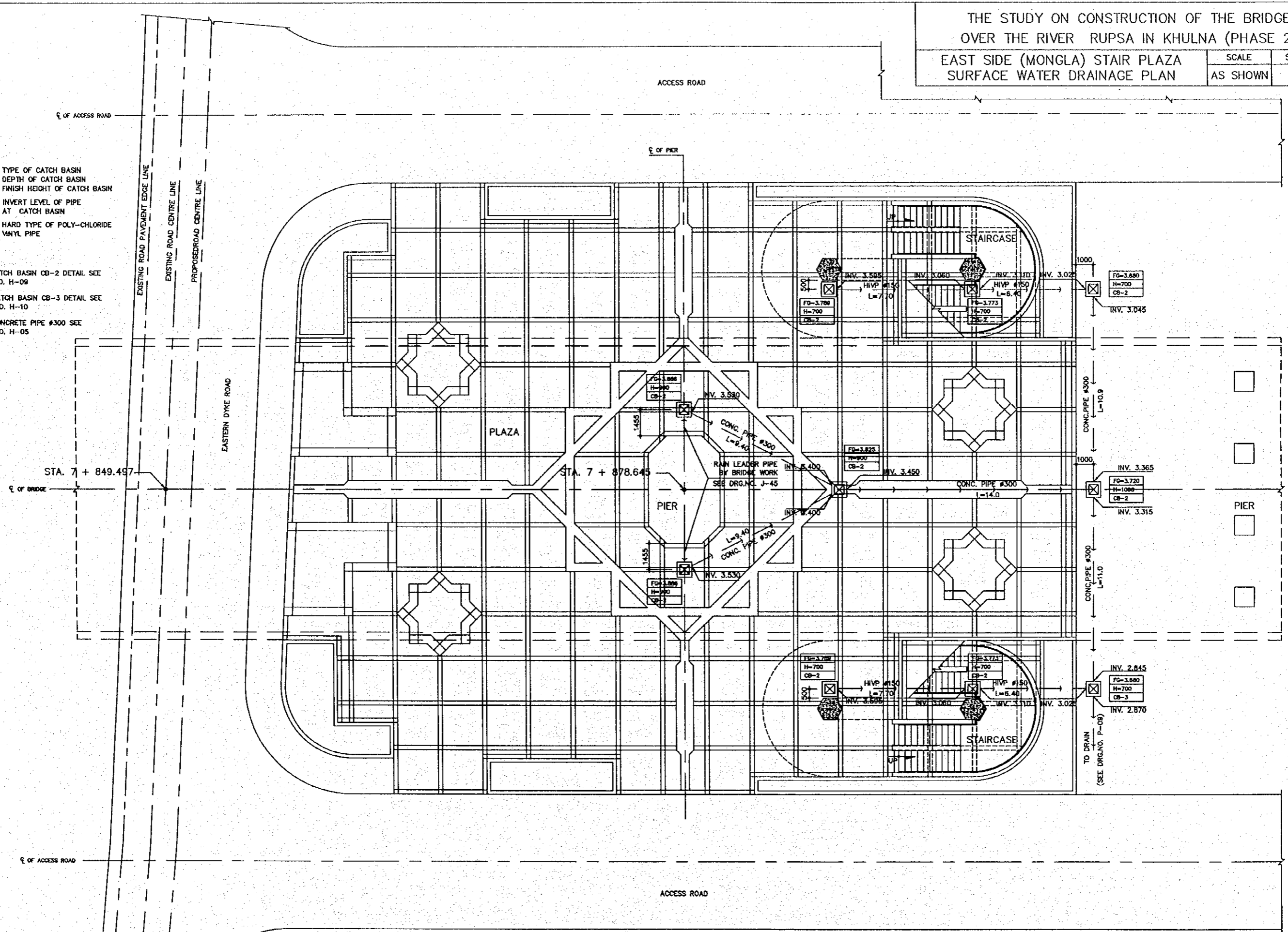
SCALE AS SHOWN
SHEET NO. N-16

LEGEND:

- | | |
|-------|------------------------------|
| FG= | TYPE OF CATCH BASIN |
| H=700 | DEPTH OF CATCH BASIN |
| CB-2 | FINISH HEIGHT OF CATCH BASIN |
- INV.: INVERT LEVEL OF PIPE AT CATCH BASIN
- HVP: HARD TYPE OF POLY-CHLORIDE VINYL PIPE

NOTE:

- FOR CATCH BASIN CB-2 DETAIL SEE DRG. NO. H-09
- FOR CATCH BASIN CB-3 DETAIL SEE DRG. NO. H-10
- FOR CONCRETE PIPE #300 SEE DRG. NO. H-05

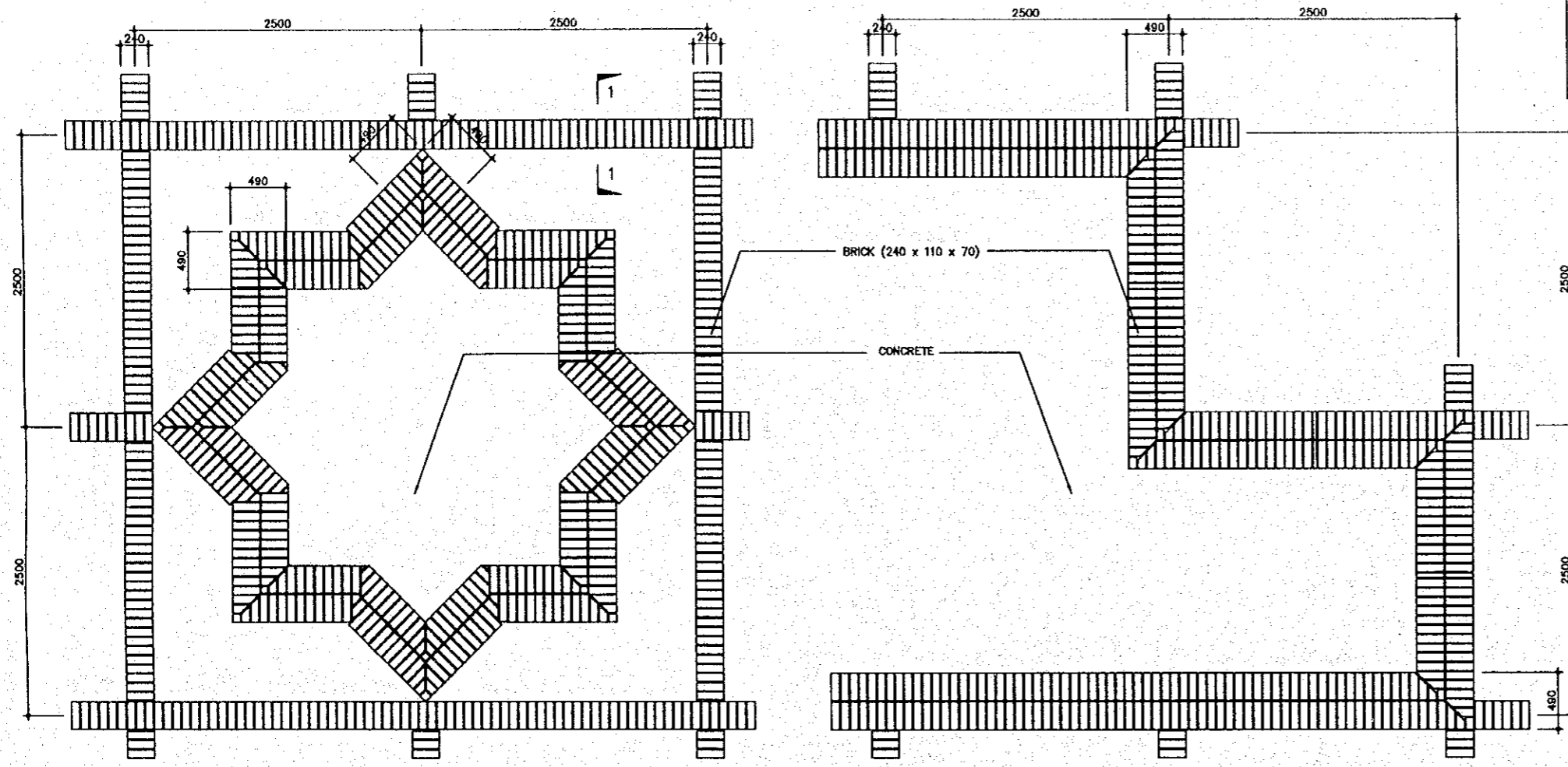


1 SURFACE WATER DRAINAGE PLAN
SCALE 1:100

THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

MISCELLANEOUS WORK DETAILS
OF STAIR CASE PLAZA (SHEET 1 OF 2)

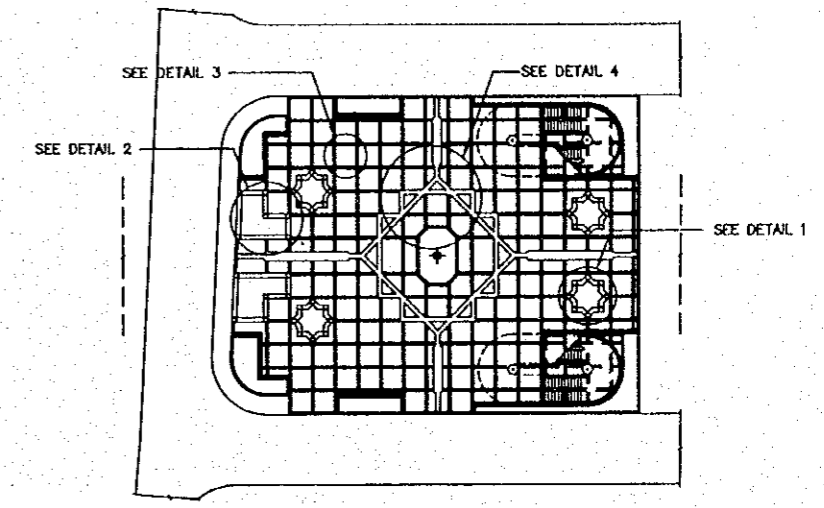
SCALE	SHEET NO.
AS SHOWN	N-17



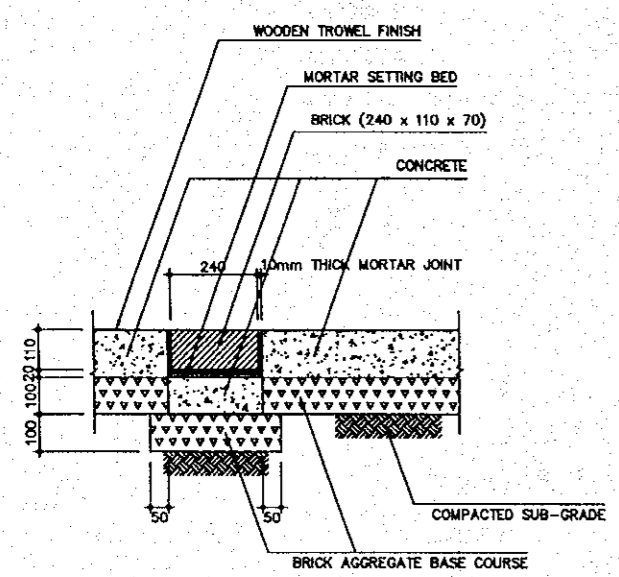
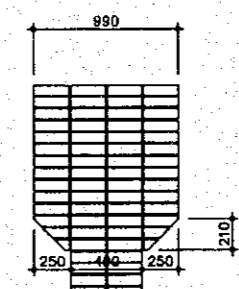
1 DETAIL 1
SCALE 1:25

2 DETAIL 2
SCALE 1:25

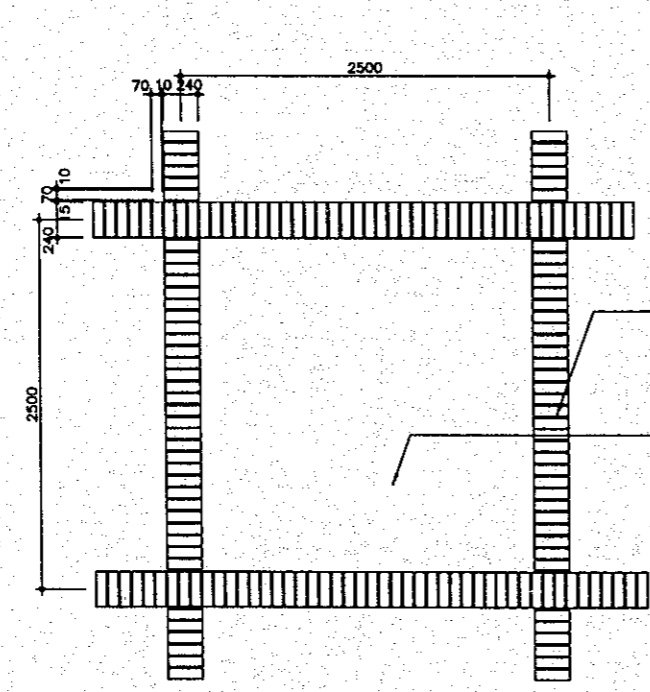
LEGEND: DETAILS



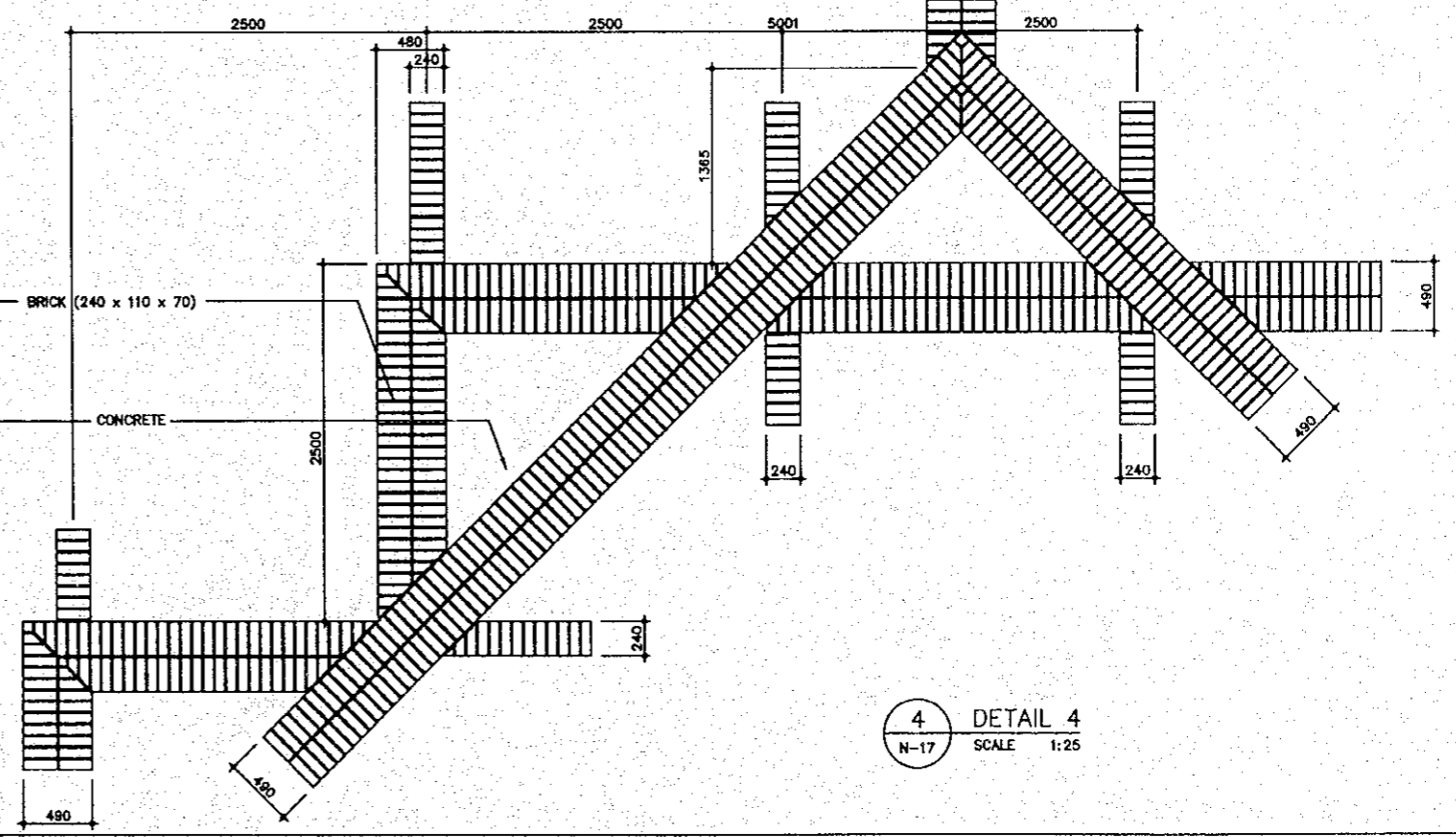
- NOTE:
1. BRICK SHOULD BE MACHINE MADE CERAMIC BRICK OF SIZE 240 x 110 x 70
 2. JOINTS SHOULD BE 10mm MORTAR JOINT AND SHOULD NOT EXCEED 15mm IF NECESSARY.
 3. 28 DAYS CYLINDER STRENGTH OF CONCRETE SHOULD BE 21MPa.



5 SECTION 1-1
SCALE 1:10



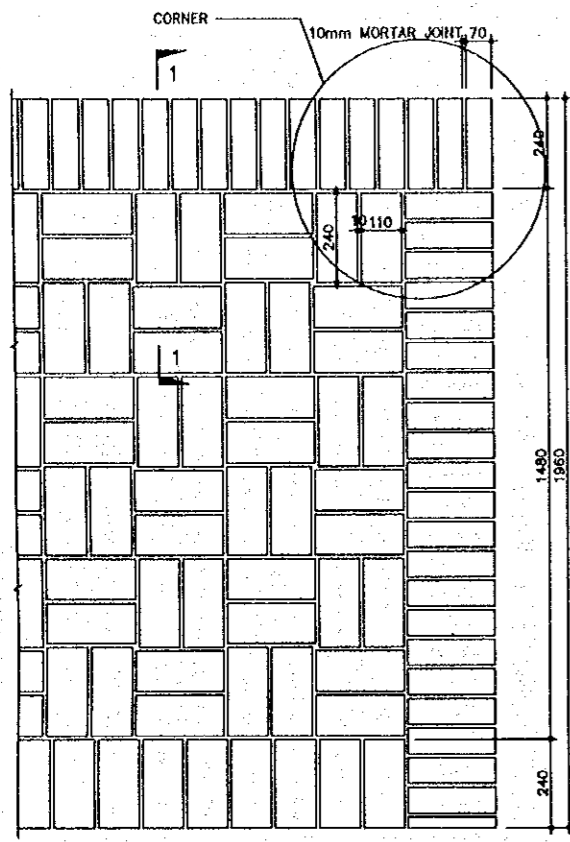
3 DETAIL 3
SCALE 1:25



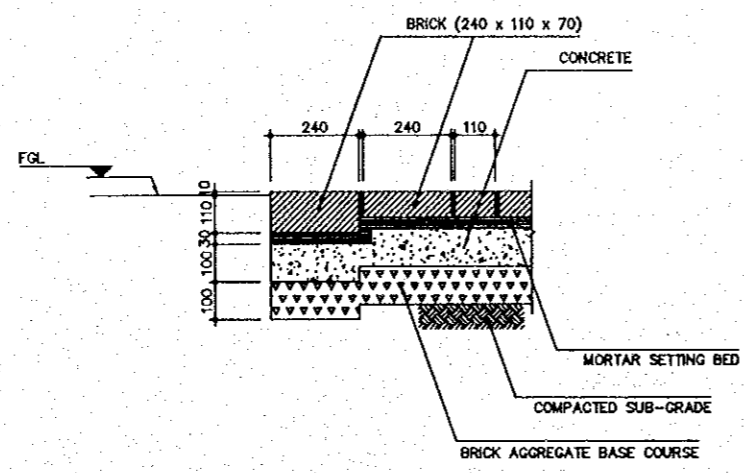
4 DETAIL 4
SCALE 1:25

THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)
MISCELLANEOUS WORK DETAILS
OF STAIR CASE PLAZA (SHEET 2 OF 2)

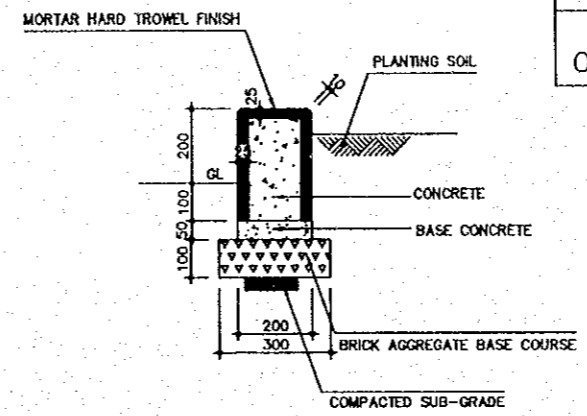
SCALE	SHEET NO.
AS SHOWN	N-18



1 DETAIL: SIDEWALK BRICK PAVING
N-18 SCALE 1:10

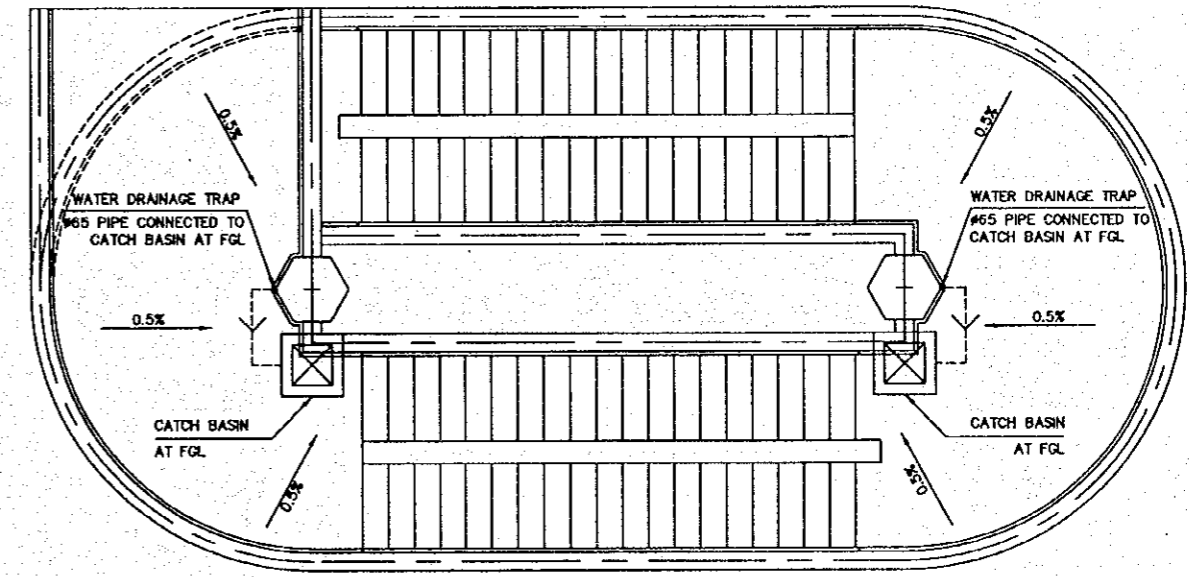


2 SECTION 1-1
N-18 SCALE 1:10



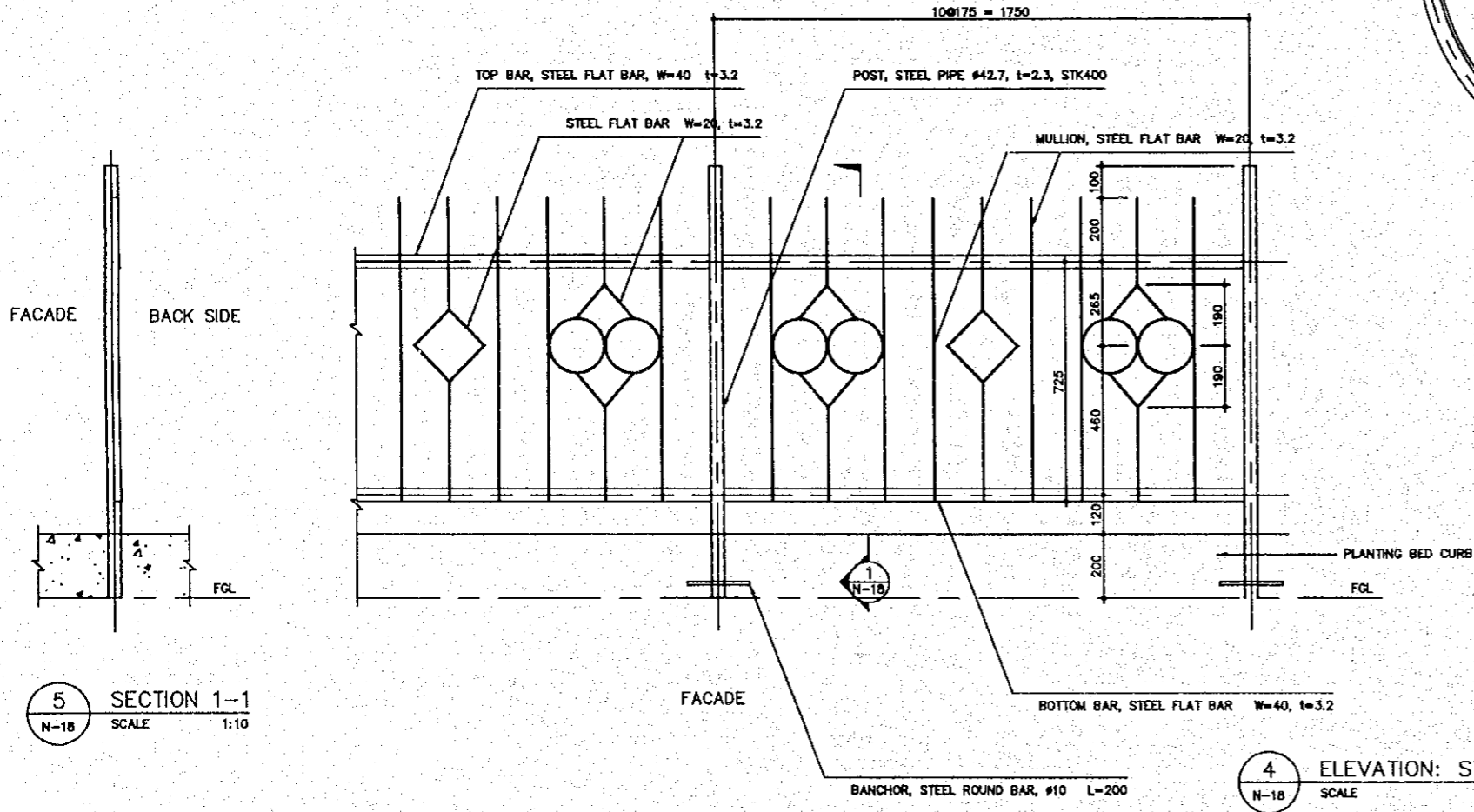
3 DETAIL: PLANTING BED CONCRETE CURB
N-18 SCALE 1:10

- NOTE:
1. BRICK SHOULD BE MACHINE MADE CERAMIC BRICK OF SIZE 240 x 110 x 70
 2. JOINTS SHOULD BE 10mm MORTAR JOINT AND SHOULD NOT EXCEED 15mm IF NECESSARY.
 3. 28 DAYS CYLINDER STRENGTH OF CONCRETE SHOULD BE 21MPa.



- NOTE: WATER DRAINAGE
1. THIS DRAWING IS APPLICABLE TO BOTH EAST AND WEST SIDES
 2. FOR STAIR PLAZA SURFACE WATER DRAINAGE PLAN SEE DRG.NO'S. N-11 AND N-16
 3. VERTICAL DRAIN PIPES THROUGH COLUMNS #150

6 LAYOUT PLAN: STAIR CASE SURFACE DRAIN
N-18 SCALE 1:50



4 ELEVATION: STEEL FENCE (BOTTOM OF STAIR CASE)
N-18 SCALE 1:10

- NOTES: STEEL FENCE
1. ALL JOINT SECTIONS OF THE RAILING SHALL BE TIGHTLY WELDED AT PRODUCTION FACTORY.
 2. ALL THE FENCE PORTION SHALL BE TREATED BY RUST INHIBITIVE PRIMER AFTER SMOOTHING SURFACE OF ALL PORTIONS. OIL PAINT FOR EXTERIOR USE SHOULD BE UTILIZED FOR FINISHING AFTER COMPLETE DRYING OF PRIMER.
 3. BOTH WORKS SHOULD BE MADE IN THE PRODUCTION FACTORY GENERALLY.

5 SECTION 1-1
N-18 SCALE 1:10

THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

STAIR PLAZA PLANTING WORK

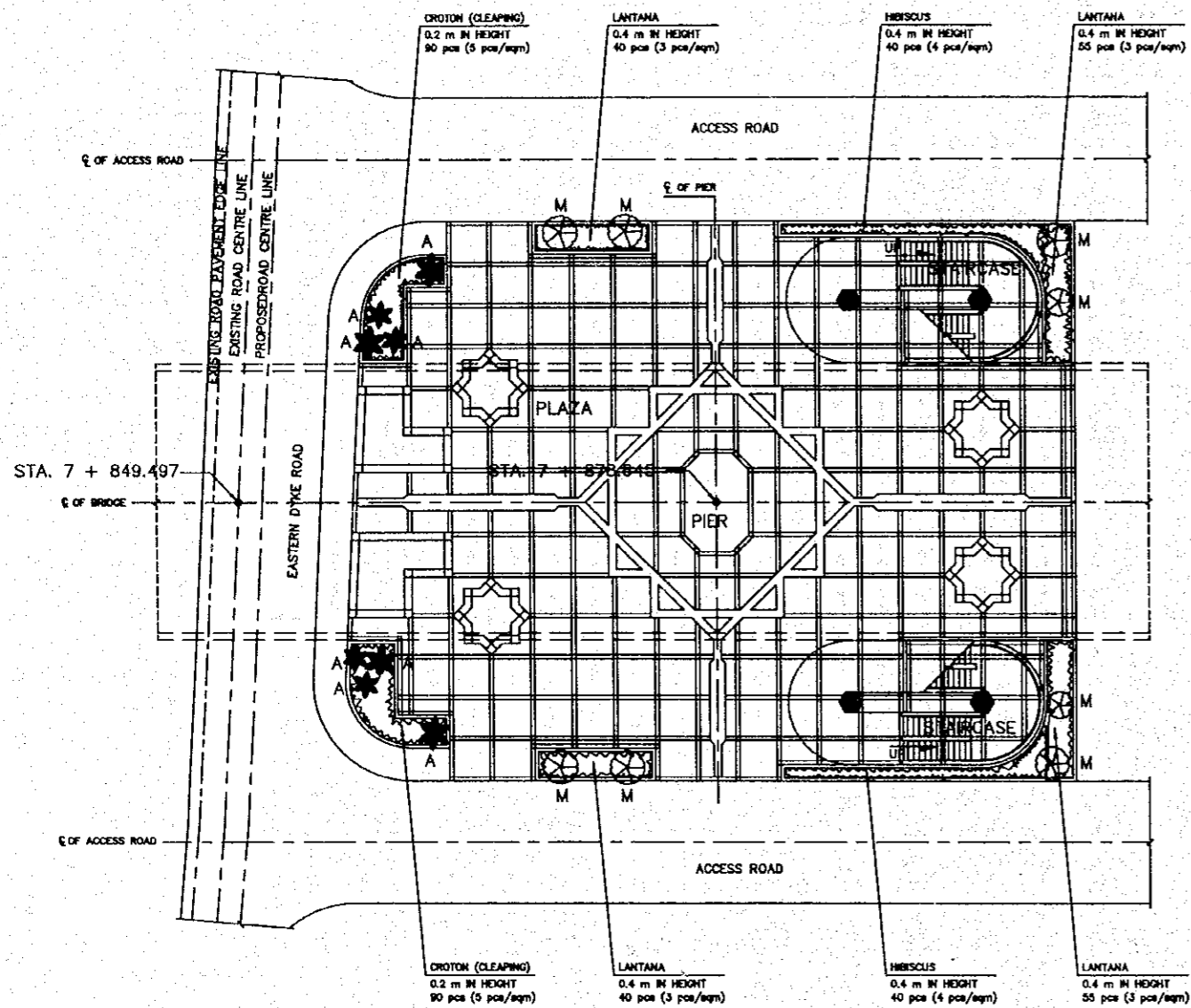
SCALE	SHEET NO.
AS SHOWN	N-19

LEGEND:

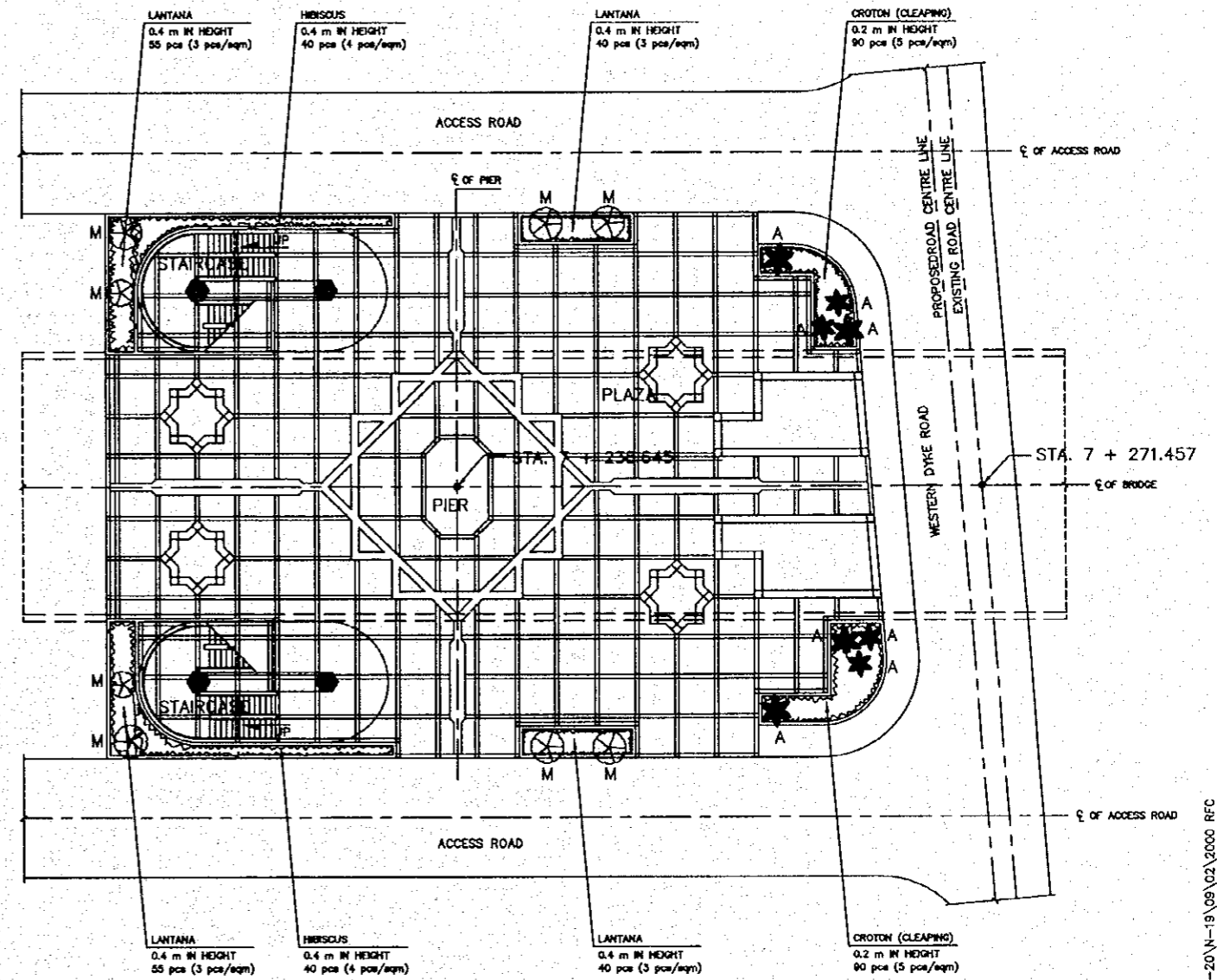
- A ARECA PALM
- M MAHOGANY
- SHRUBS/GROUND COVER

NOTE:

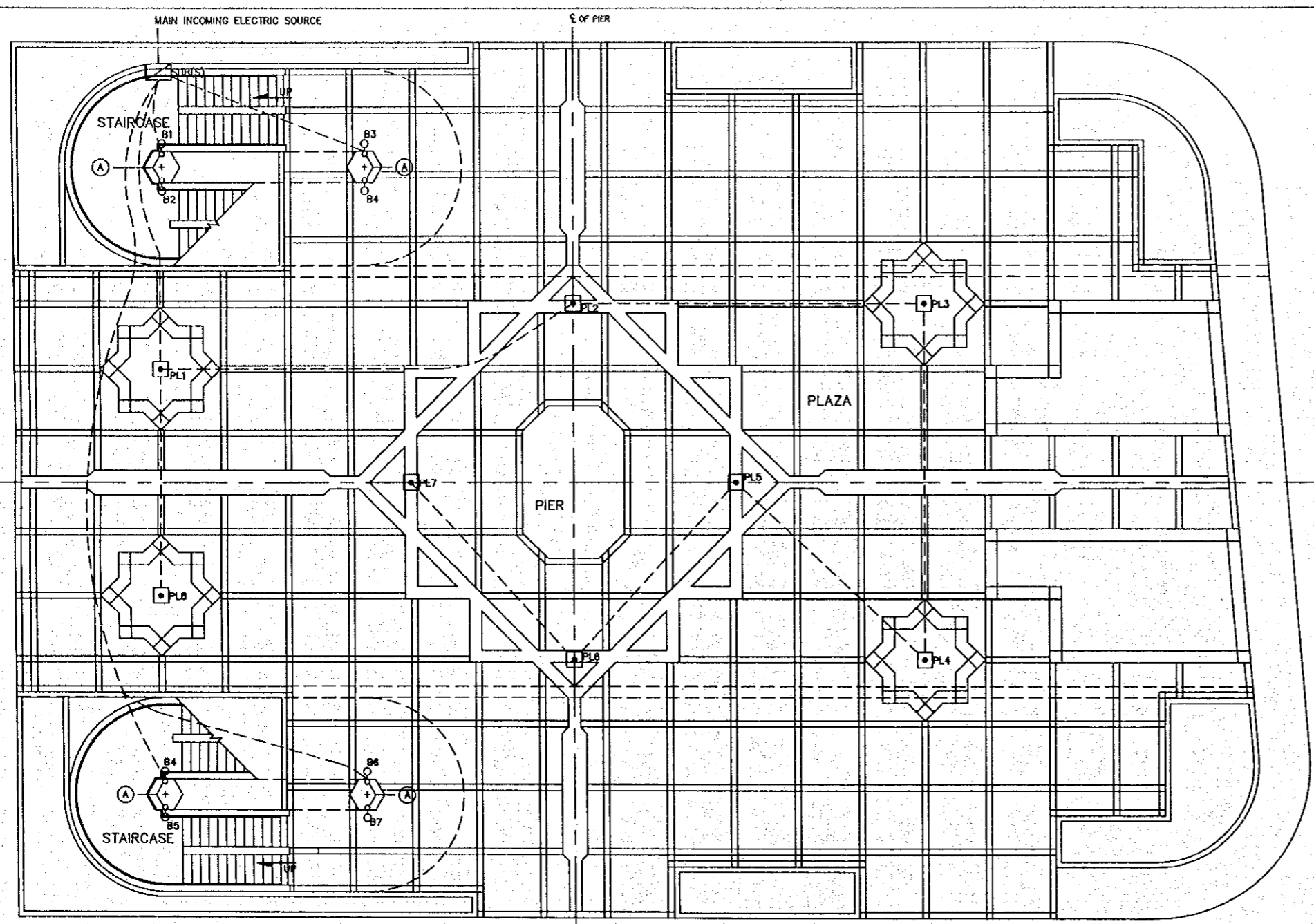
1. ARECA PALM SHALL BE 3.0m ~ 4.0m IN HEIGHT.
2. MAHOGANY SHALL BE 3.0m ~ 4.0m IN HEIGHT.
3. SHRUBS AND GROUND COVERS SHALL BE REFERED NUMBER OF PLANTING EACH AREA AND AVERAGE NUMBER OF PLANTING PER SQUARE METER.



1 PLAN: PLANTING (EAST SIDE -- MONGLA)
N-19 SCALE 1:200



2 PLAN: PLANTING (WEST SIDE -- KHULNA)
N-19 SCALE 1:200



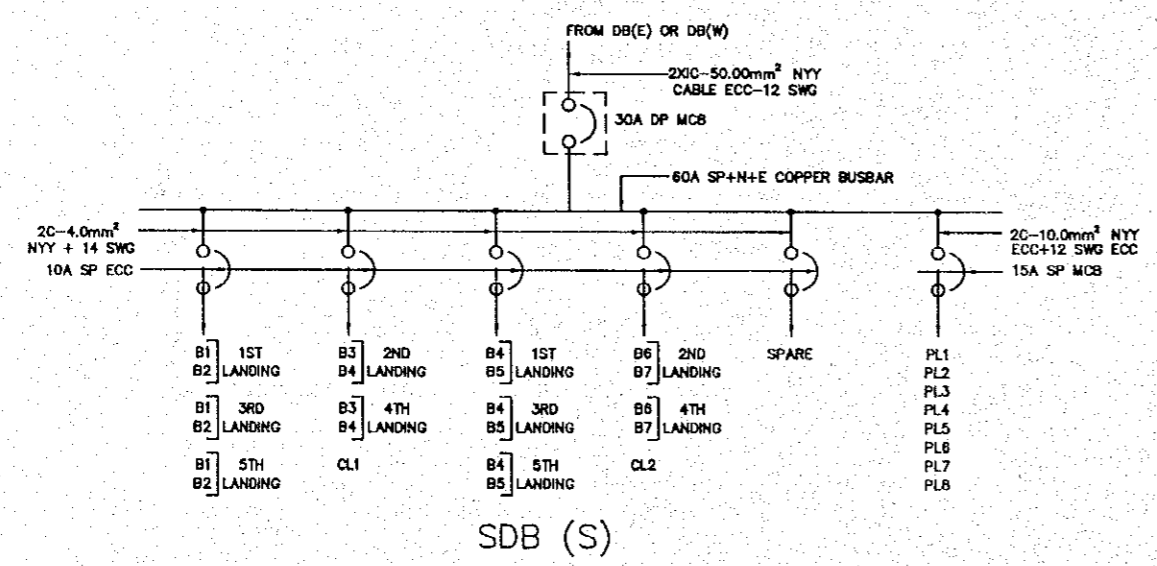
NOTE

- (A) = 1-30mm # WATER GRADE PVC PIPE GOING UPWARD FOR STAIR LIGHT CONNECTION.
- MAIN INCOMING ELECTRIC SOURCE FOR WEST WILL BE COME FROM DB(W) AT STA. 6+890 THROUGH UNDER GROUND.
- MAIN INCOMING ELECTRIC SOURCE FOR EAST BANK STAIR & PLAZA AREA WILL COME FROM DB(E) AT STA. 8+230 THROUGH UNDER GROUND.
- ELECTRICAL LAYOUT FOR STAIR AND PLAZA (EAST SIDE) WILL BE SIMILAR TO WEST SIDE.
- LIGHT FITTING FOR PLAZA SHALL BE 125 WATT HIGH PRESSURE MERCURY PHILLIPS MODEL CPS 200HP OR APPROVED EQUIVALENT.
- COLUMN MOUNTED BRACKET LIGHT FITTING TYPE-CL SHALL BE HIGH PRESSURE SODIUM 70 WATT PHILLIPS MODEL NO. SGS-113/070 OR APPROVED EQUIVALENT.
- TYPE-CL LIGHT FITTING SHALL BE HIGH PRESSURE SODIUM 70WATT WATT PHILLIPS MODEL NO. HPP133PE OR APPROVED EQUIVALENT.
- DEGREE OF PROTECTION FOR ALL LIGHT FITTING SHALL BE IP-54(MINIMUM)
- FOR FOUNDATION DETAIL OF LIGHT POLE FOR PLAZA REFER TO DRG. NO. P-01
- 2C-25mm² NYY EQUIVALENT TO EASTERN/PARADISE CABLE FOR LUMINAIRES TO JUNCTION BOX.

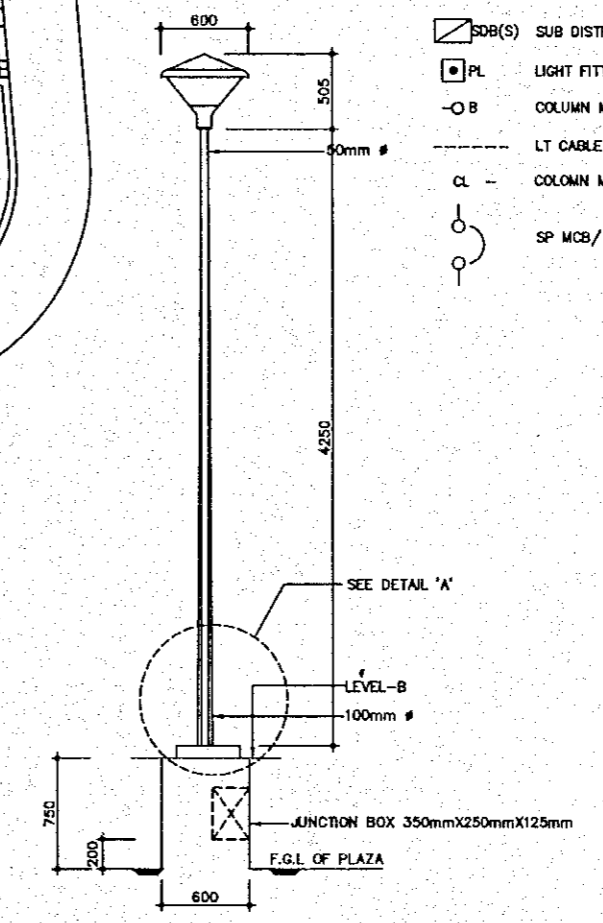
LEGEND

- ▭ SDB(S) SUB DISTRIBUTION BOARD FOR STAIR & PLAZA
- ⊙ PL LIGHT FITTING FOR PLAZA
- B COLUMN MOUNTED BRACKET LIGHT FITTING
- - - LT CABLE ROUTE
- CL - COLUMN MOUNTED LIGHT FITTING (TYPE-CL)
- ⊙ SP MCB/ DP MCB

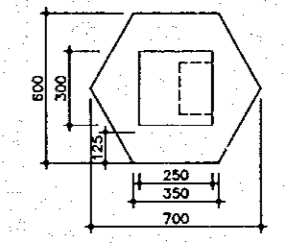
1 ELECTRICAL LAYOUT FOR STAIR & PLAZA (WEST SIDE)
N-20 SCALE 1:100



2 LIGHT COLUMN DETAIL
N-20 SCALE NOT TO SCALE



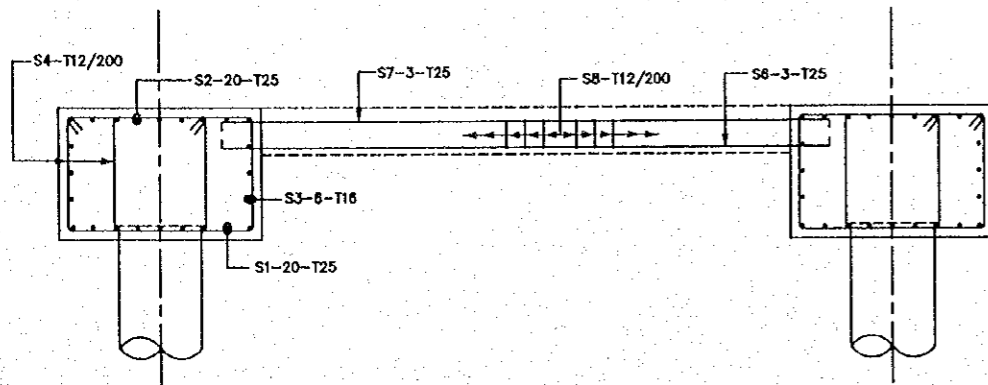
3 PLAN AT LEVEL-B
N-20 SCALE NOT TO SCALE



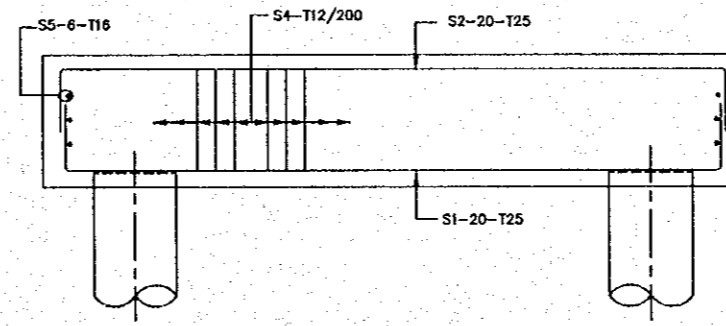
THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

RC DETAILS OF STAIRCASE
(SHEET 1 OF 3)

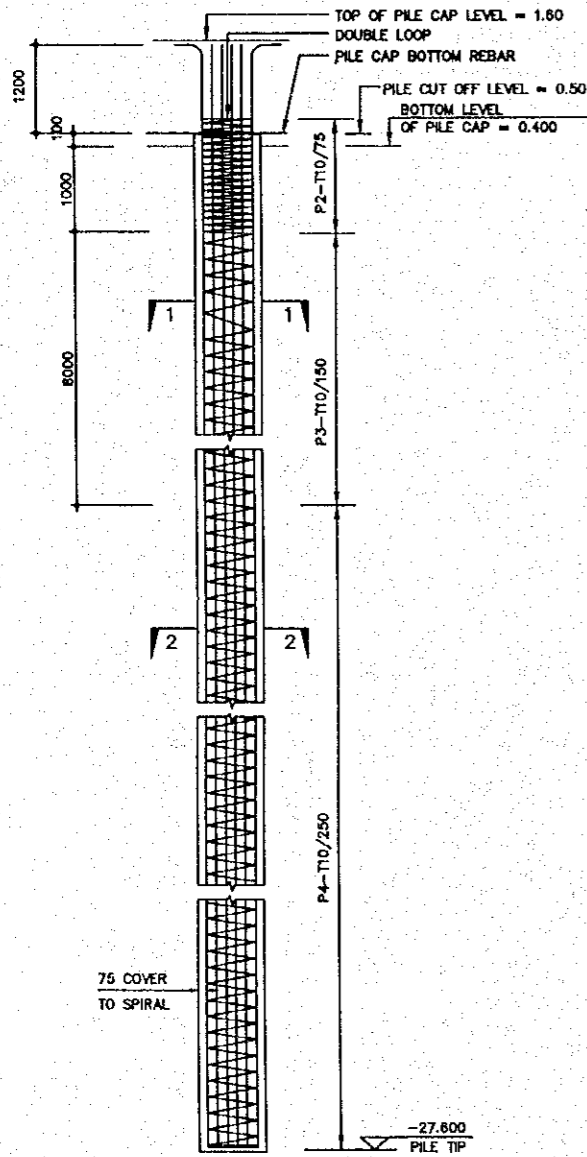
SCALE	SHEET NO.
AS SHOWN	N-21



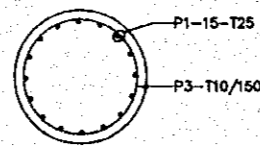
4 SECTION 3-3
N-21 SCALE 1:25



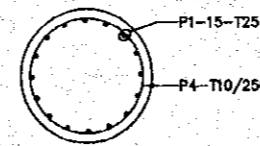
5 SECTION 4-4
N-21 SCALE 1:25



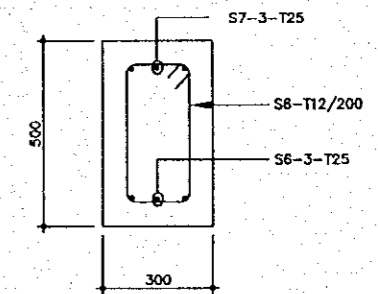
1 PILE REINF. DETAILS
N-21 SCALE 1:50



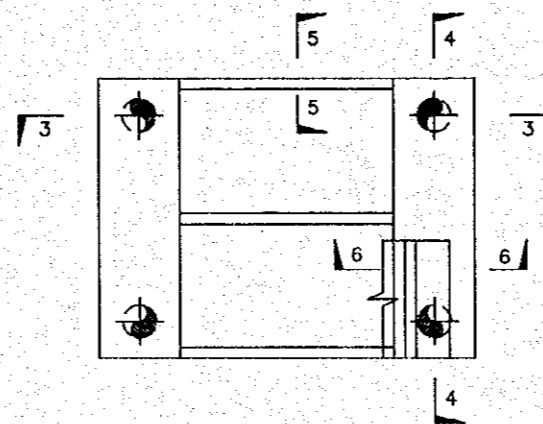
2 SECTION 1-1
N-21 SCALE 1:25



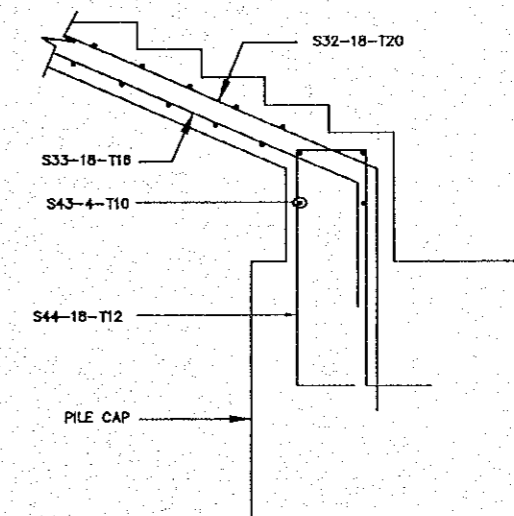
3 SECTION 2-2
N-21 SCALE 1:25



8 SECTION 5-5
N-21 SCALE 1:10



6 PLAN
N-21 SCALE 1:100

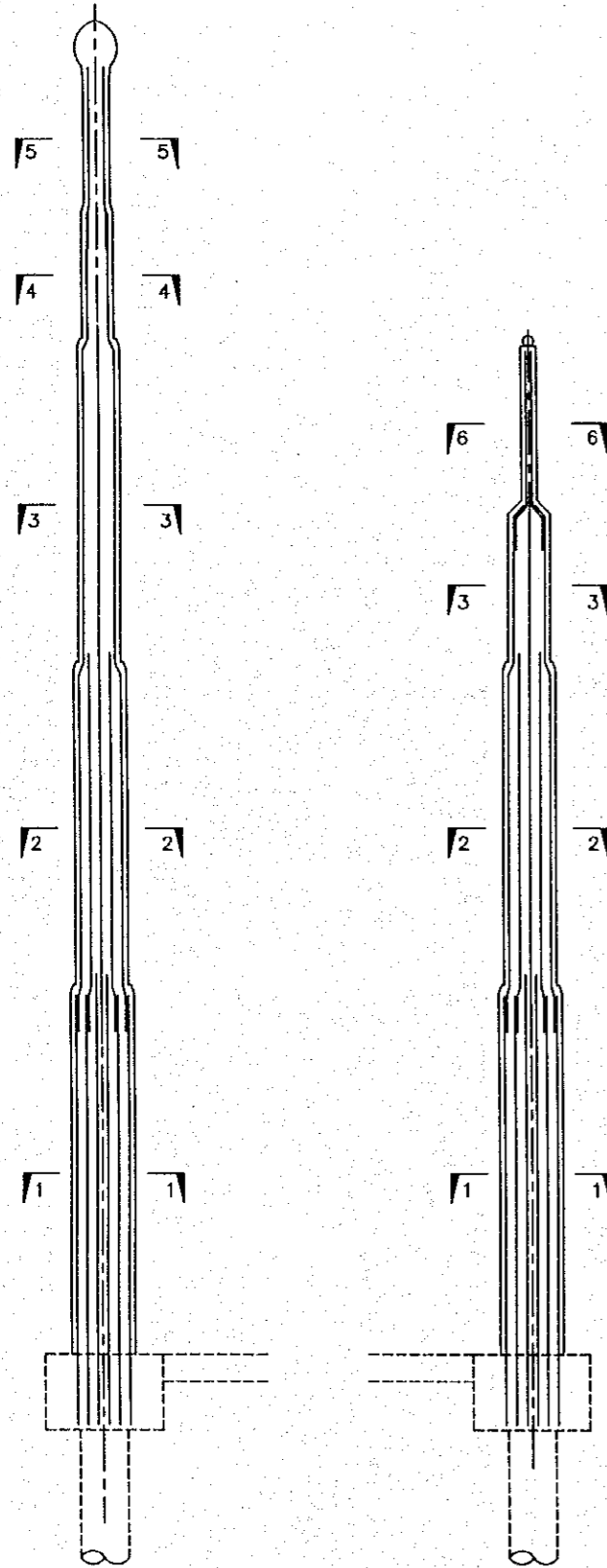


7 SECTION 6-6
N-21 SCALE 1:10

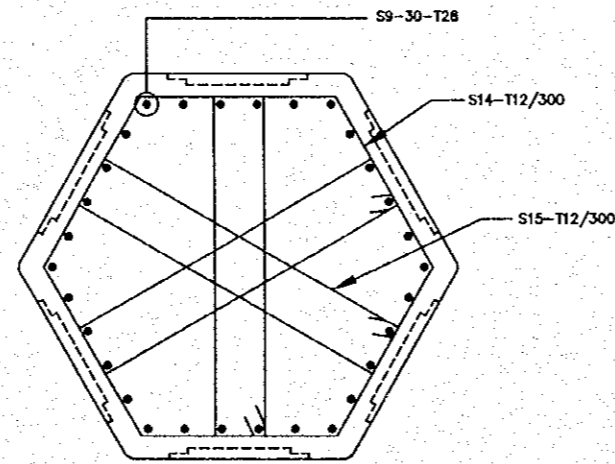
THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

RC DETAIL OF STAIR CASE
(SHEET 2 OF 3)

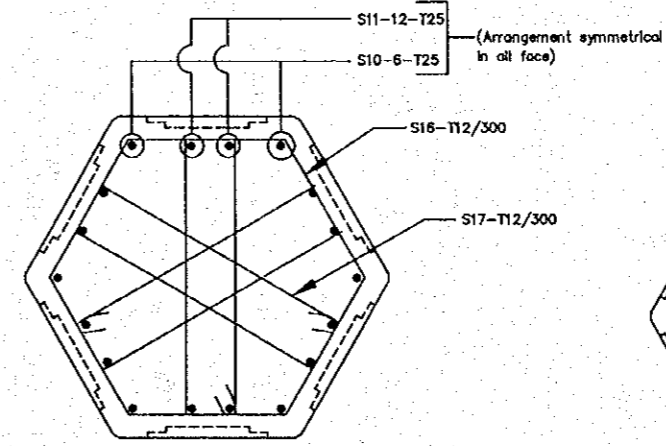
SCALE	SHEET NO.
AS SHOWN	N-22



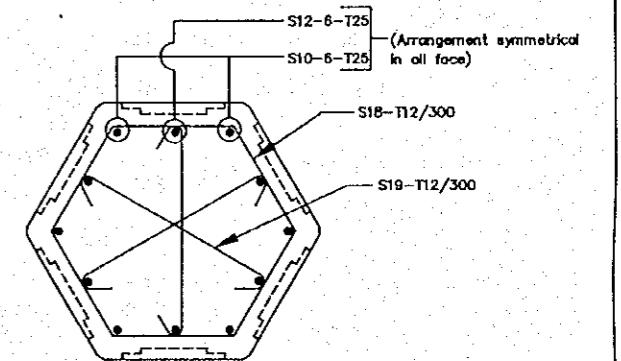
1 SECTION X-X
SCALE 1:150



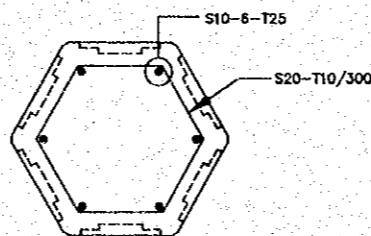
2 SECTION 1-1
SCALE NTS



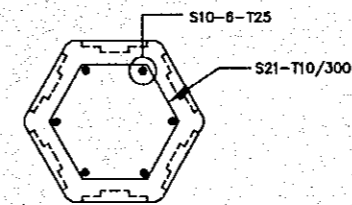
3 SECTION 2-2
SCALE NTS



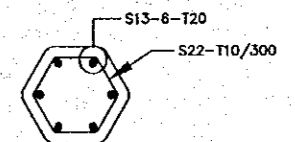
4 SECTION 3-3
SCALE NTS



5 SECTION 4-4
SCALE NTS



6 SECTION 5-5
SCALE NTS

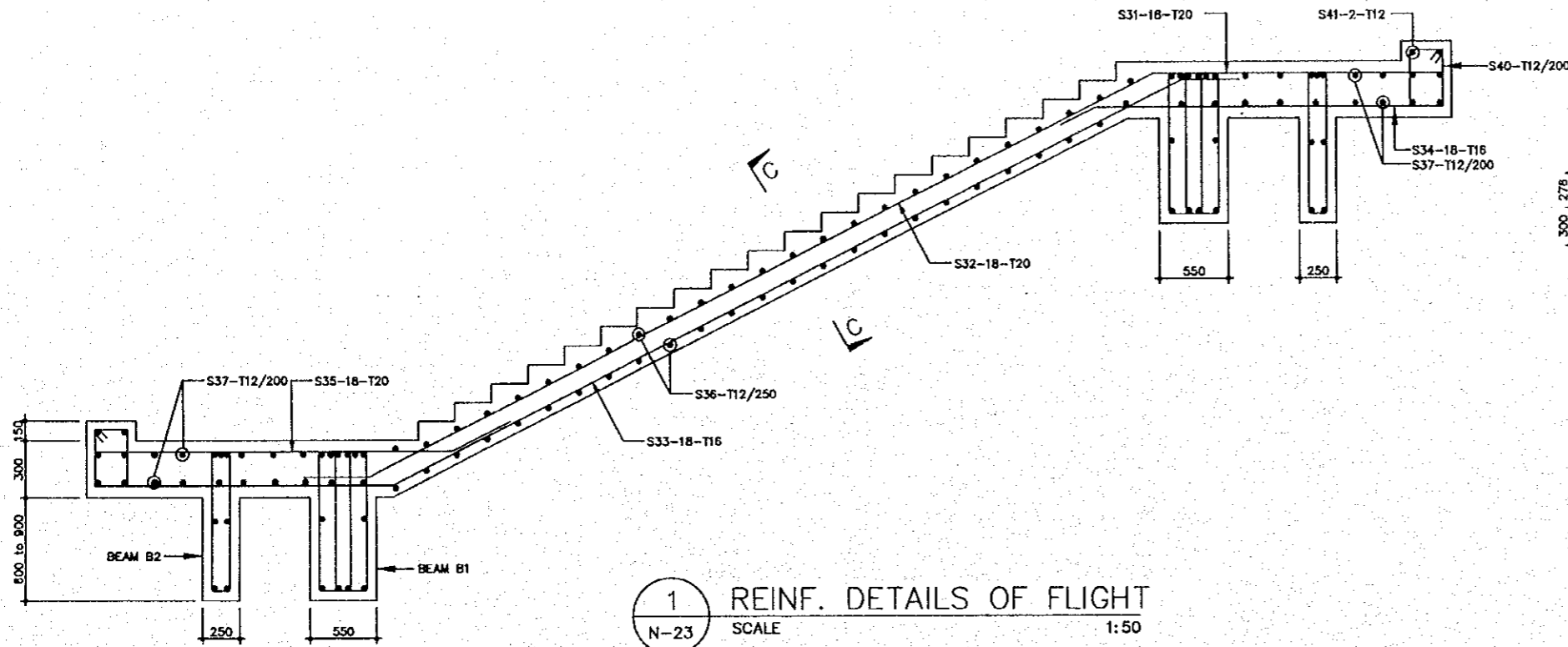


7 SECTION 6-6
SCALE NTS

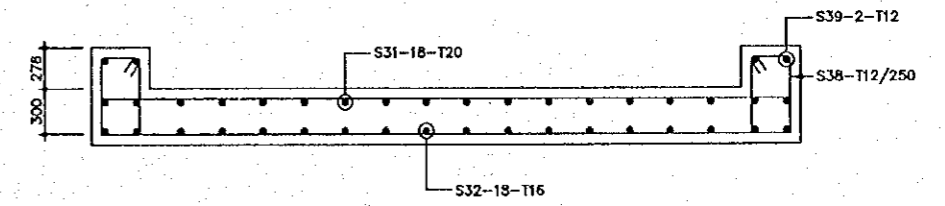
THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

RC DETAILS OF STAIRCASE
(SHEET 3 OF 3)

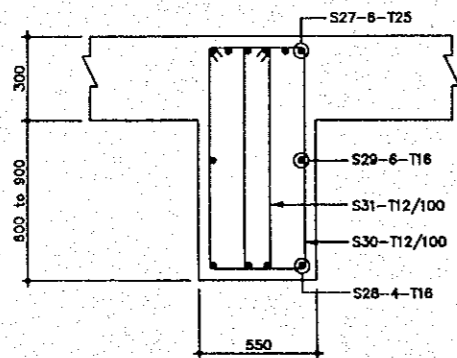
SCALE	SHEET NO.
AS SHOWN	N-23



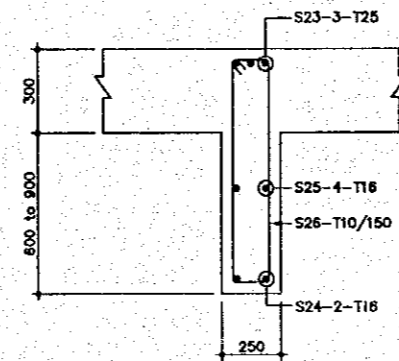
1 REINF. DETAILS OF FLIGHT
N-23 SCALE 1:50



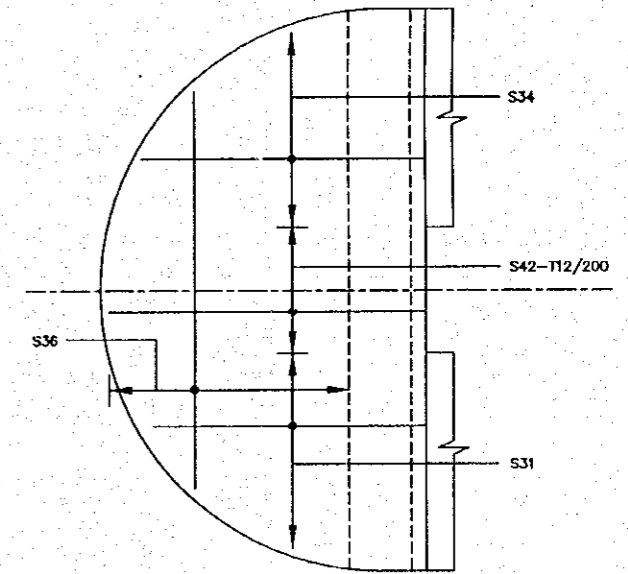
2 SECTION C-C
N-23 SCALE 1:25



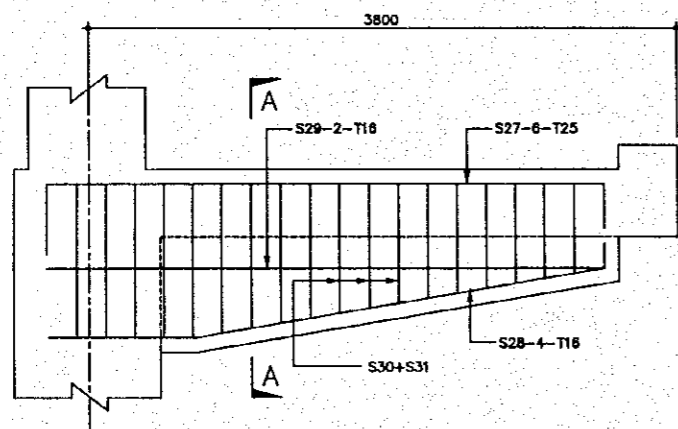
4 SECTION A-A
N-23 SCALE 1:20



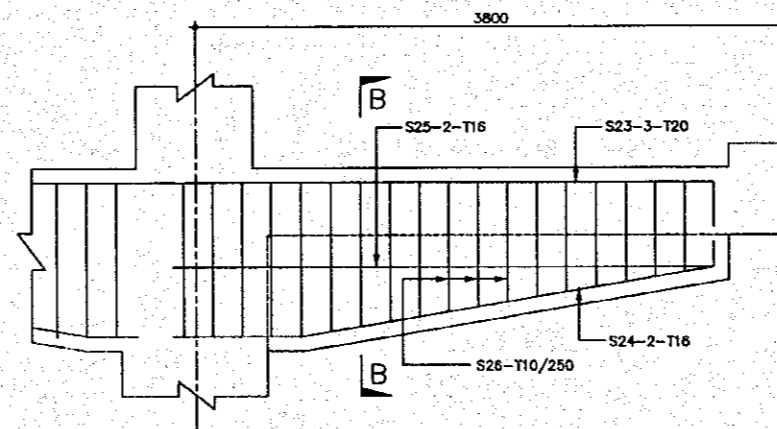
6 SECTION B-B
N-23 SCALE 1:20



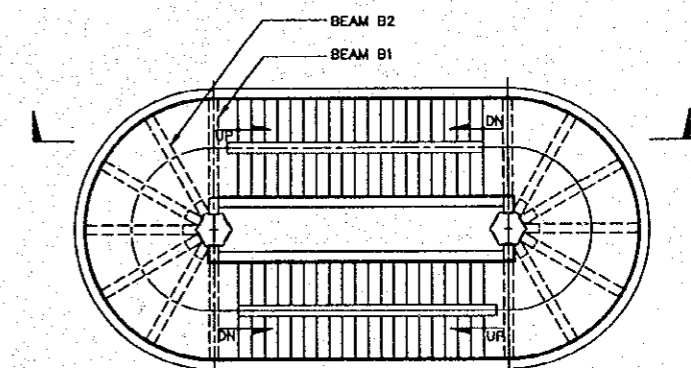
8 REINF. DETAILS OF LANDING
N-23 SCALE 1:50



3 REINF. DETAILS OF BEAM B1
N-23 SCALE 1:25



5 REINF. DETAILS OF BEAM B2
N-23 SCALE 1:25



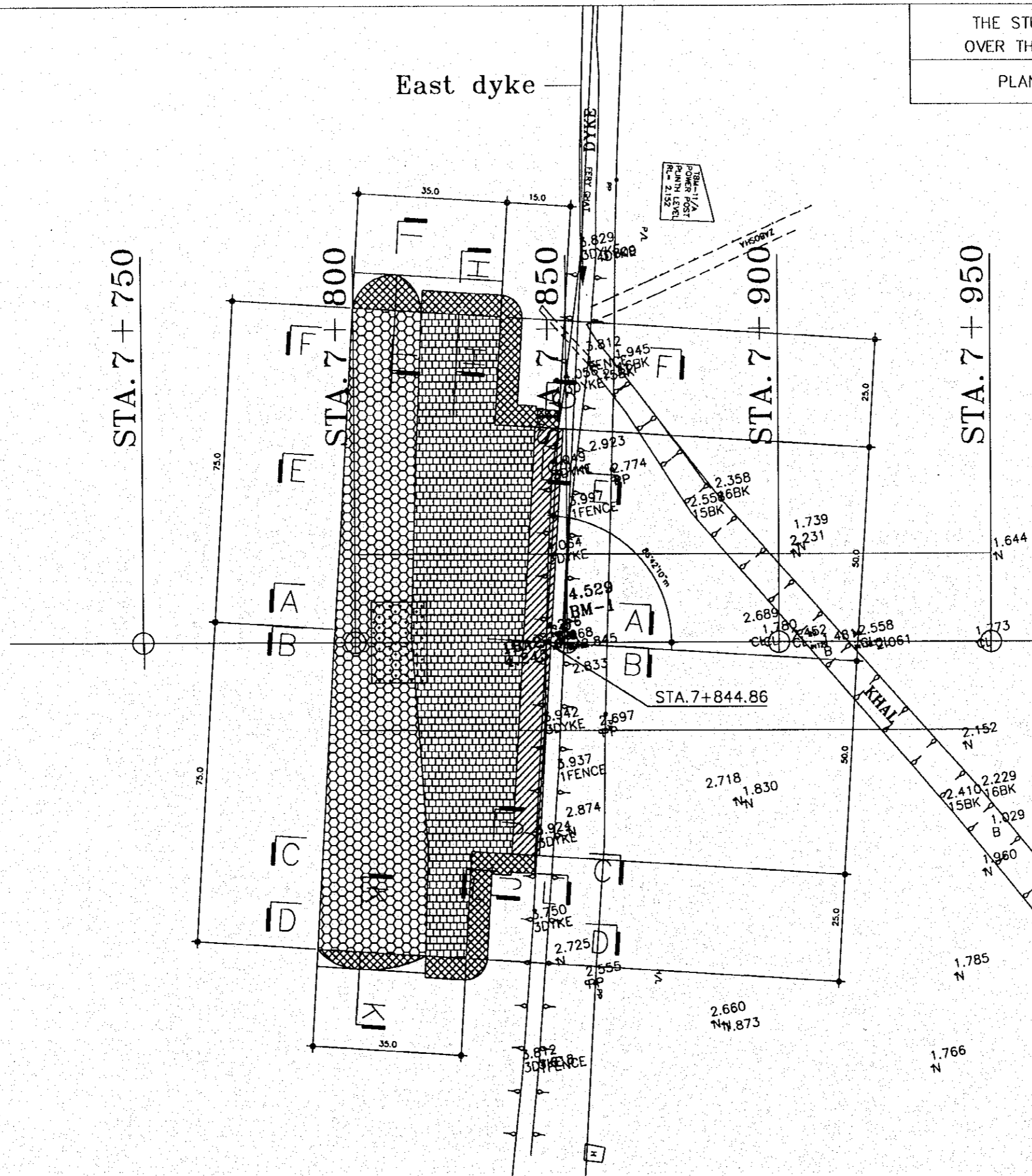
7 KEY PLAN
N-23 SCALE 1:100






O. REVETMENT AND RIVER BED PROTECTION

THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

PLAN OF REVETMENT

SCALE	SHEET NO.
AS SHOWN	O-01

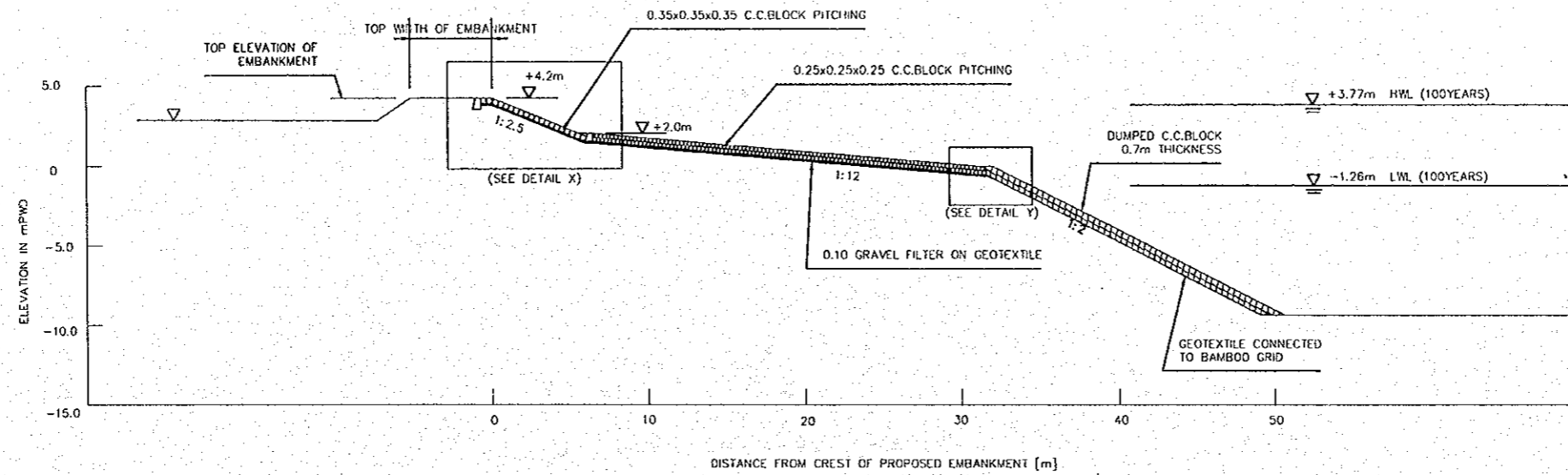


-  DUMPED C.C. BLOCK
0.7m THICKNESS
-  0.25x0.25x0.25 C.C. BLOCK
2 LAYER
-  0.35x0.35x0.35 C.C. BLOCK
1 LAYER
-  CONNECTED SECTION TO
EXISTING GROUND
-  PILE CAP

THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

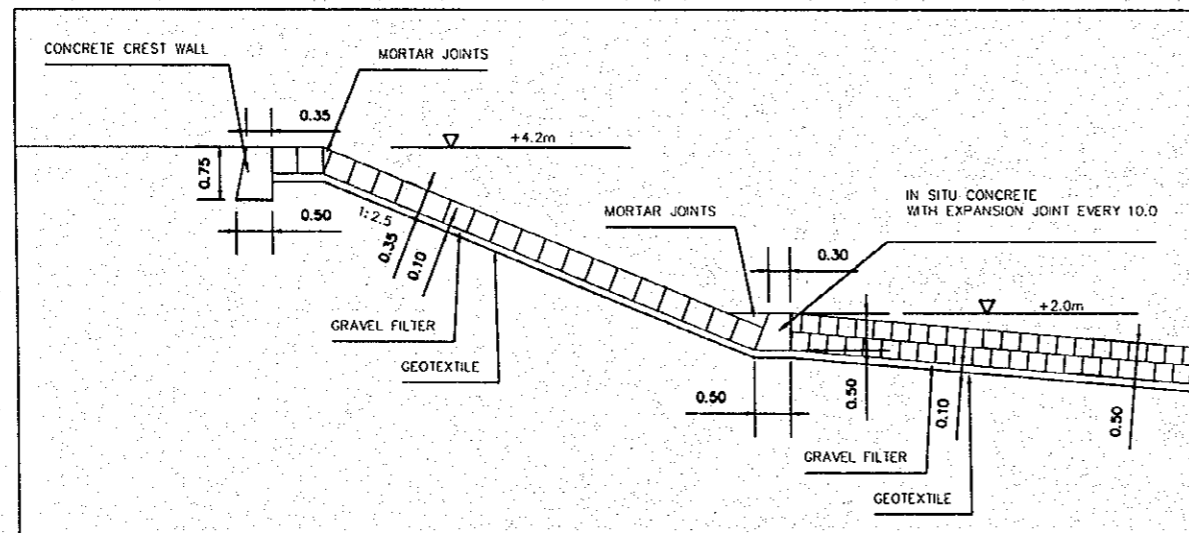
TYPICAL CROSS SECTION OF REVETMENT

SCALE	SHEET NO.
AS SHOWN	O-02

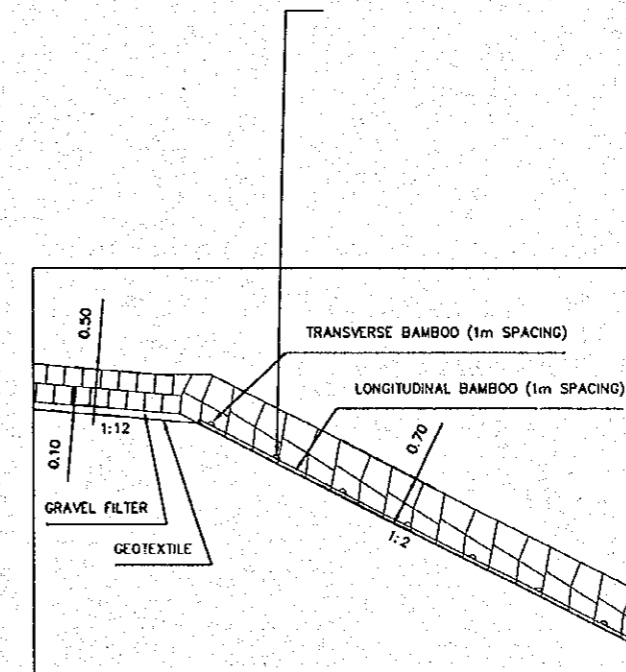


TYPICAL CROSS SECTION OF REVETMENT
SECTION A-A

SCALE 1:200



DETAIL X
SCALE 1:50

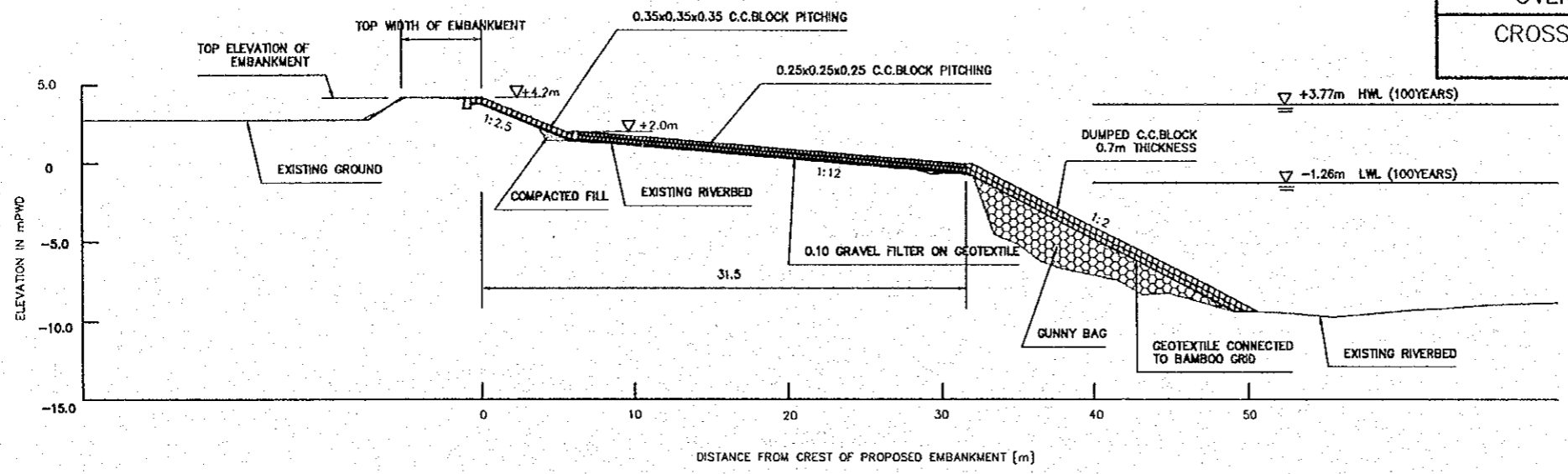


DETAIL Y
SCALE 1:50

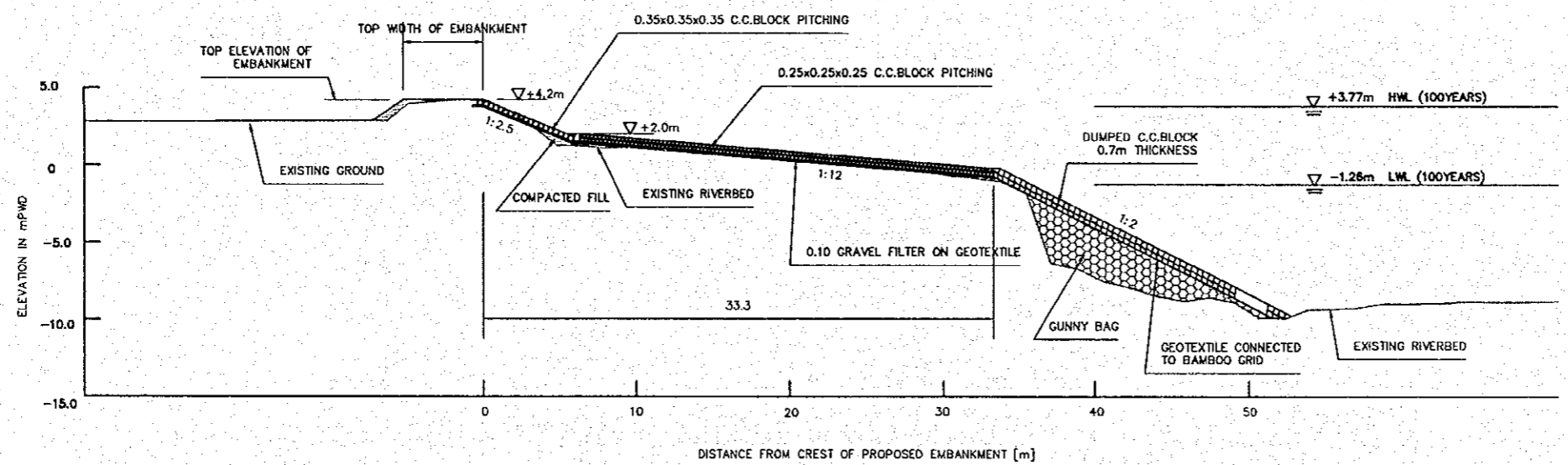
- NOTES:
1. ALL THICKNESS OF C.C.BLOCK ARE THE MINIMUM ACCEPTABLE VALUES TO BE ACHIEVED IN CONSTRUCTION.
 2. QUOTED SCALES ARE CORRECT WHEN DRAWING IS REPRODUCED AT A1 SIZE.
 3. ALL DIMENSIONS AND LEVELS ARE IN METERS.

THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

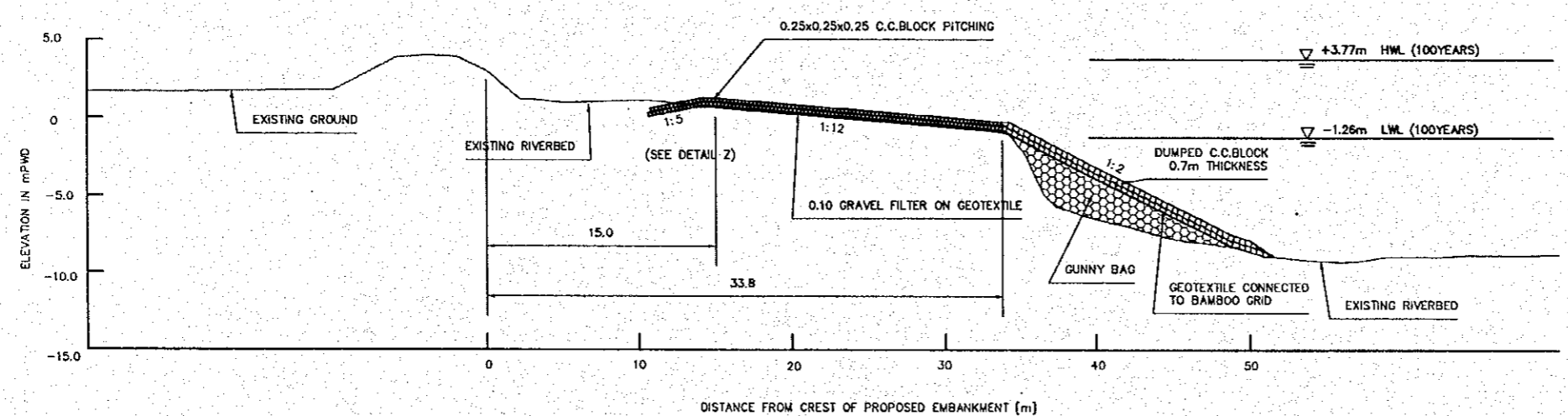
CROSS SECTIONS OF REVETMENT (1/2)	SCALE	SHEET NO.
	1:200	0-03



SECTION A-A
SCALE 1:200



SECTION E-E
SCALE 1:200

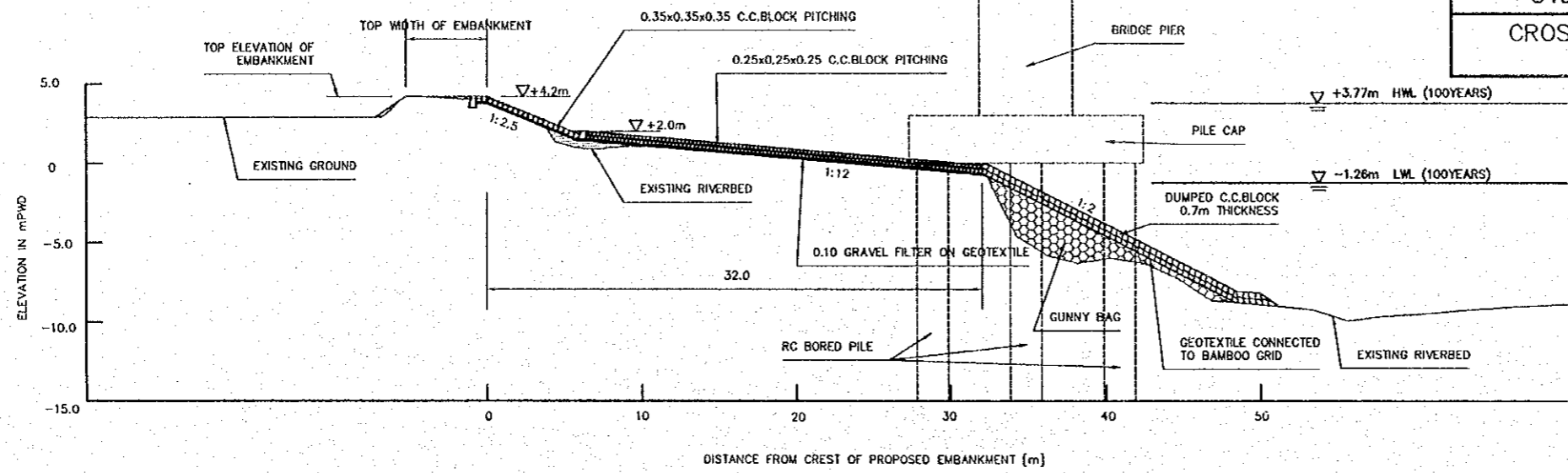


SECTION F-F
SCALE 1:200

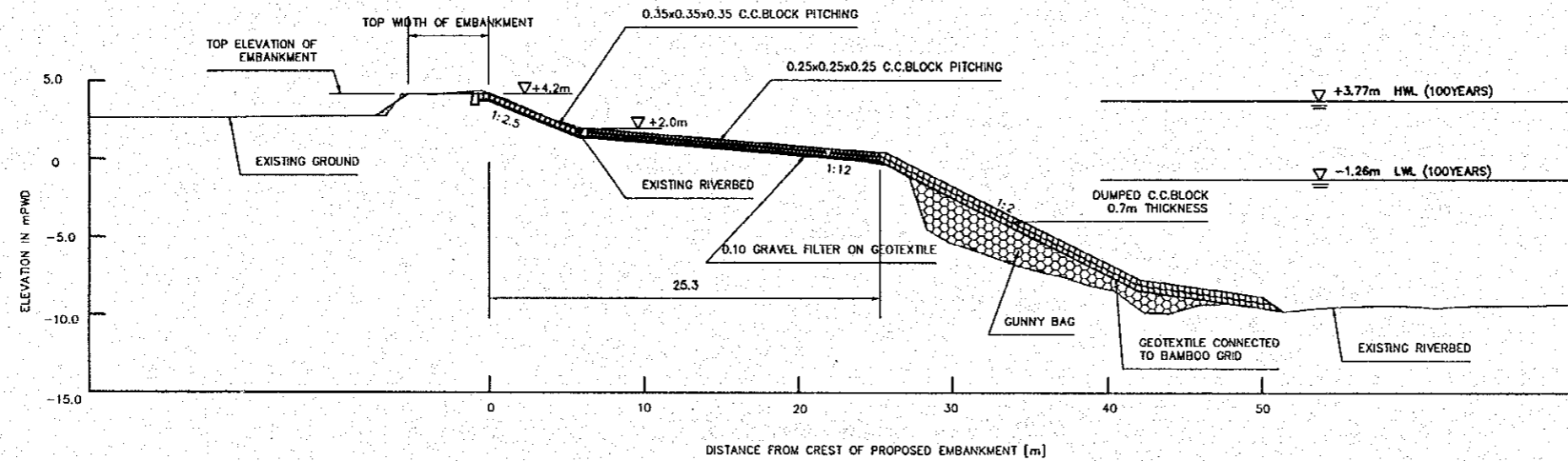
- NOTES:
1. ALL THICKNESS OF C.C.BLOCK ARE THE MINIMUM ACCEPTABLE VALUES TO BE ACHIEVED IN CONSTRUCTION.
 2. THESE SECTIONS ILLUSTRATE THE FORMATION OF THE PROPOSED WORKS BASED ON 1999 SURVEYS.
 3. QUOTED SCALES ARE CORRECT WHEN DRAWING IS REPRODUCED AT A1 SIZE.
 4. ALL DIMENSIONS AND LEVELS ARE IN METERS.

THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)
CROSS SECTIONS OF REVETMENT
(2/2)

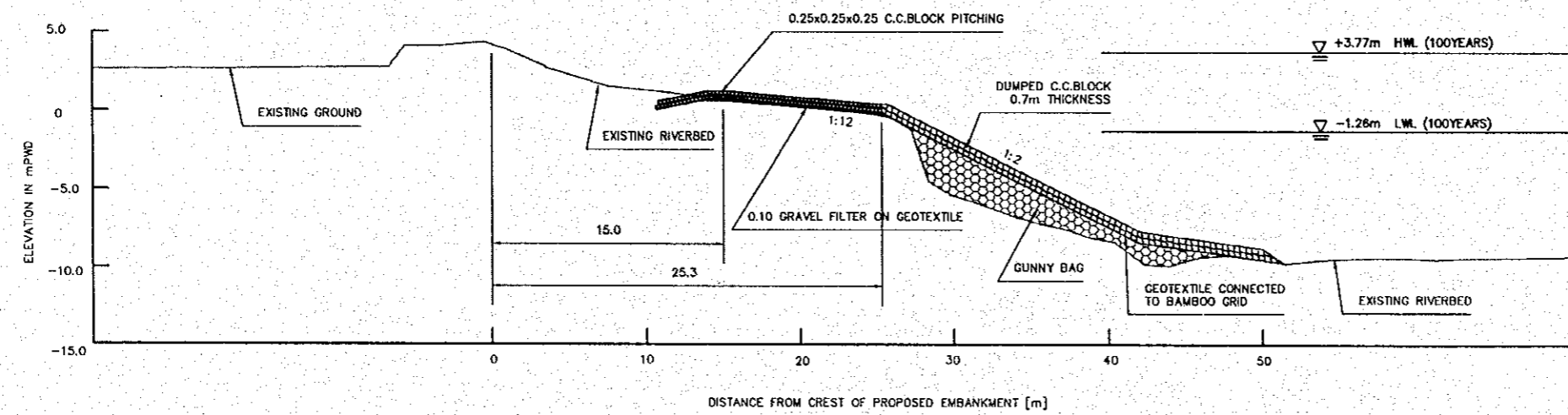
SCALE	SHEET NO.
1:200	0-04



SECTION B-B
SCALE 1:200



SECTION C-C
SCALE 1:200



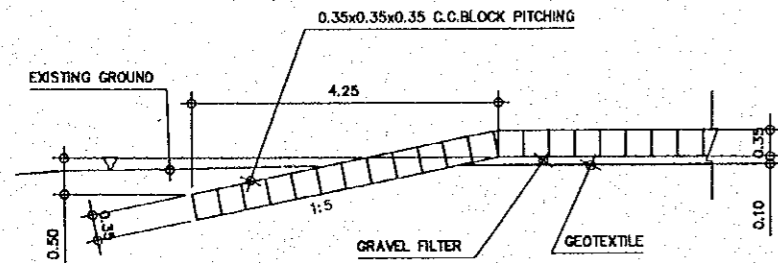
SECTION D-D
SCALE 1:200

- NOTES:
1. ALL THICKNESS OF C.C.BLOCK ARE THE MINIMUM ACCEPTABLE VALUES TO BE ACHIEVED IN CONSTRUCTION.
 2. THESE SECTIONS ILLUSTRATE THE FORMATION OF THE PROPOSED WORKS BASED ON 1999 SURVEYS. CONSTRUCTION DETAILS WILL DEPEND ON ACTUAL LEVELS EXISTING AT THE TIME.
 3. QUOTED SCALES ARE CORRECT WHEN DRAWING IS REPRODUCED AT A1 SIZE.
 4. ALL DIMENSIONS AND LEVELS ARE IN METERS.

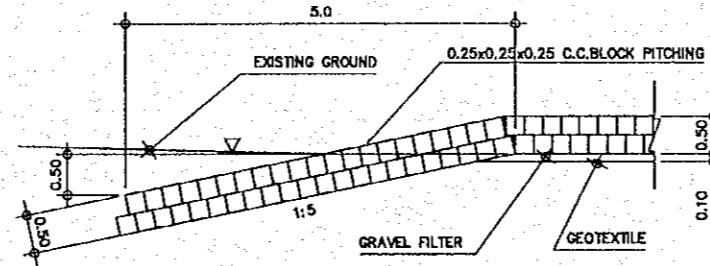
THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

DETAILS OF CONNECTED
SECTION OF REVETMENT

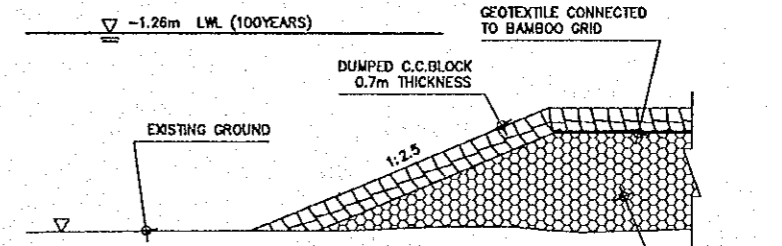
SCALE	SHEET NO.
AS SHOWN	0-05



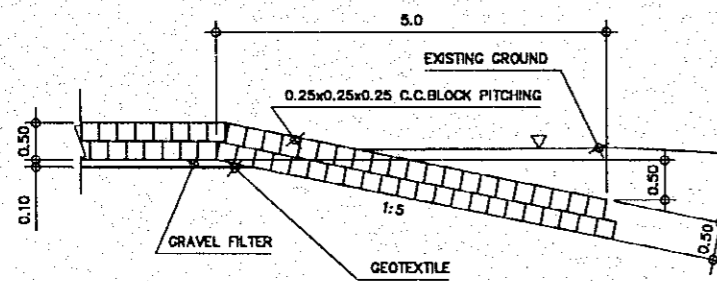
DETAIL AT UPSTREAM EGDE
(SECTION G-G)
SCALE 1:50



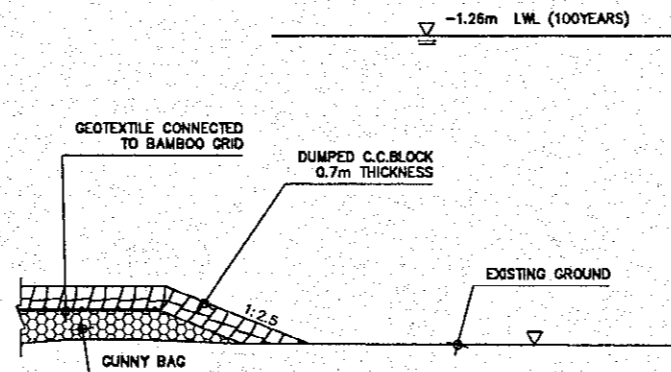
DETAIL AT UPSTREAM EGDE
(SECTION H-H)
SCALE 1:50



DETAIL AT UPSTREAM EGDE
(SECTION I-I)
SCALE 1:100

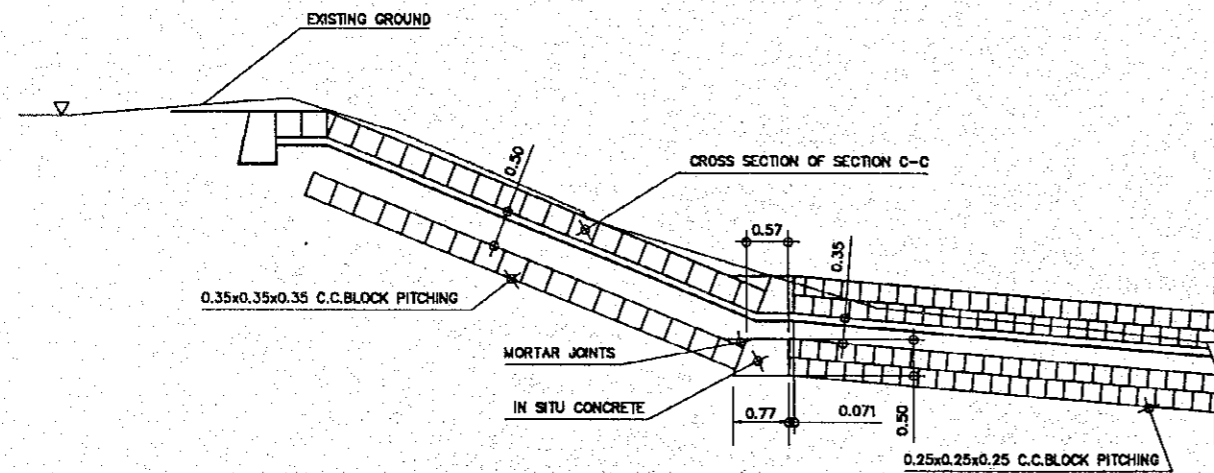


DETAIL AT DOWNSTREAM EGDE
(SECTION J-J)
SCALE 1:50

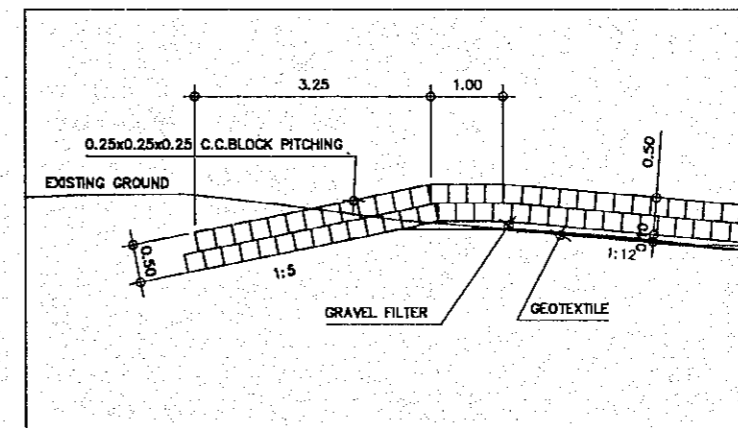


DETAIL AT DOWNSTREAM EGDE
(SECTION K-K)
SCALE 1:100

- NOTES:
1. ALL THICKNESS OF C.C.BLOCK ARE THE MINIMUM ACCEPTABLE VALUES TO BE ACHIVED IN CONSTRUCTION.
 2. THESE SECTIONS ILLUSTRATE THE FORMATION OF THE PROPOSED WORKS BASED ON 1888 SURVEYS.
 3. CONSTRUCTION DETAILS WILL DEPEND ON ACTUAL LEVELS EXISTING AT THE TIME.
 4. QUOTED SCALES ARE CORRECT WHEN DRAWING IS REPRODUCED AT A1 SIZE.
 5. ALL DIMENSIONS AND LEVELS ARE IN METERS.



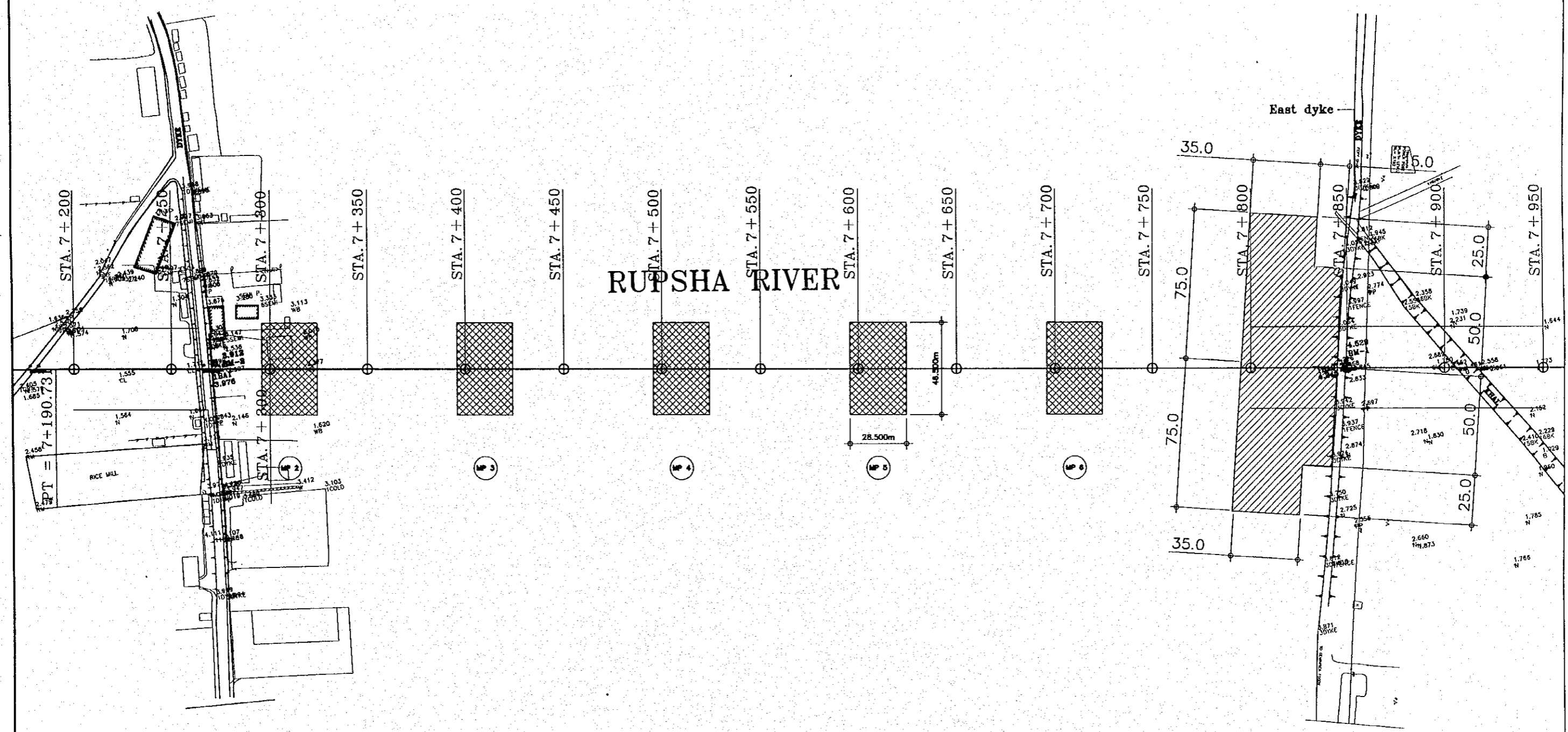
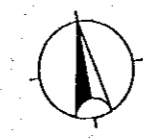
DETAIL AT DOWNSTREAM EGDE
(SECTION L-L)
SCALE 1:50





DETAIL Z
(SECTION F-F)
SCALE 1:50

THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSHA IN KHULNA (PHASE 2)

PLAN OF PROTECTION OF PIER	SCALE	SHEET NO.
	AS SHOWN	0-06

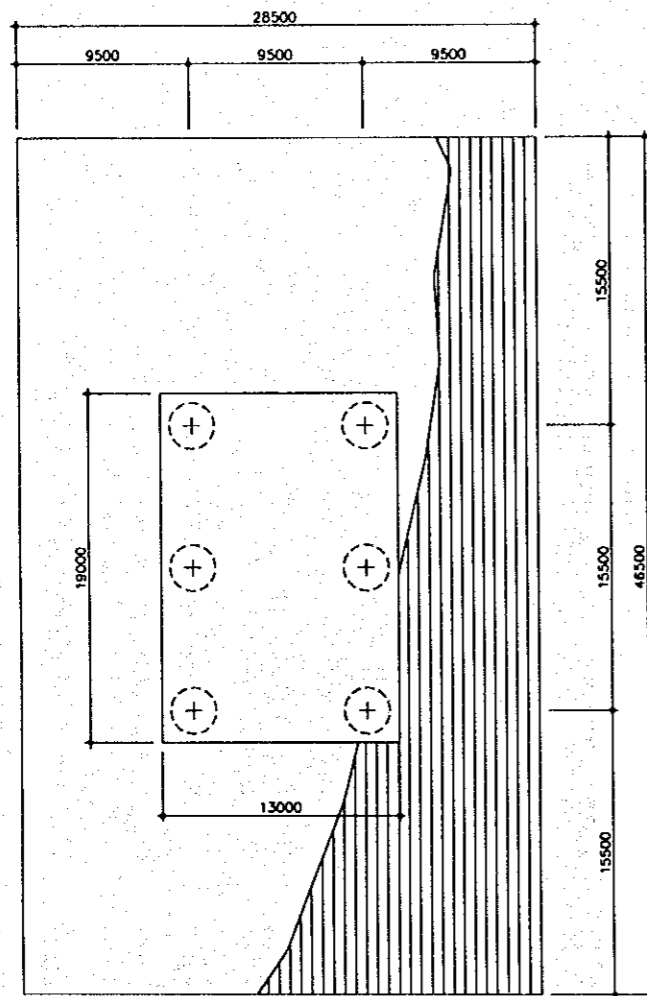


-  PROTECTION OF PIERS AGAINST SCOURING
-  REVETMENT

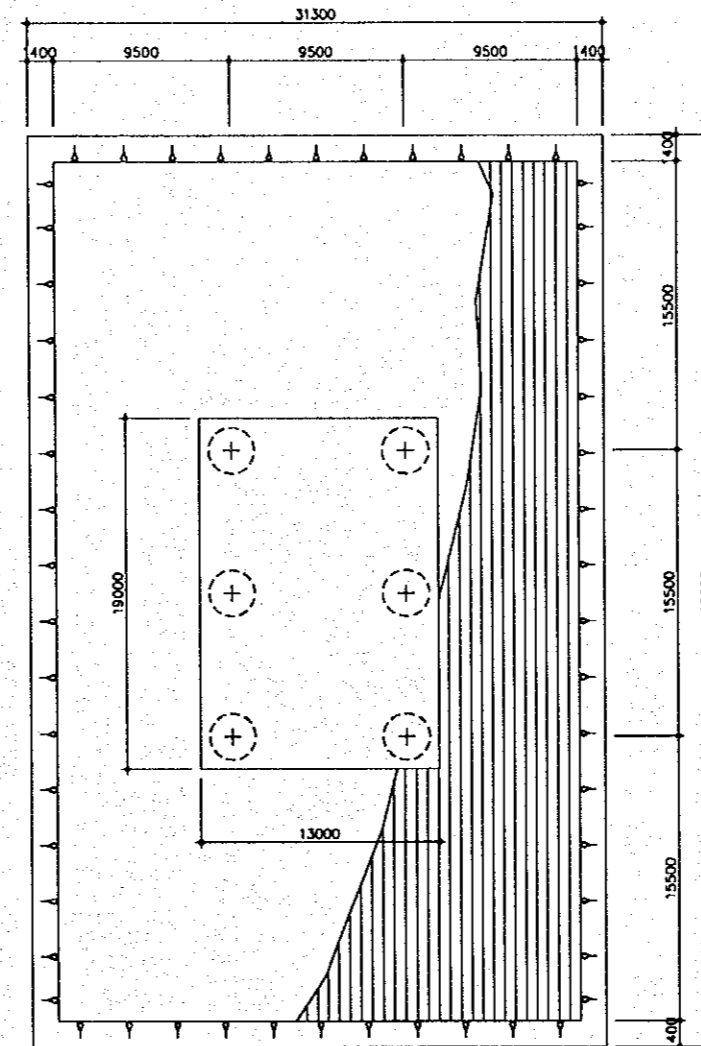
THE STUDY ON CONSTRUCTION OF THE BRIDGE
OVER THE RIVER RUPSA IN KHULNA (PHASE 2)

DETAIL OF PROTECTION OF PIER

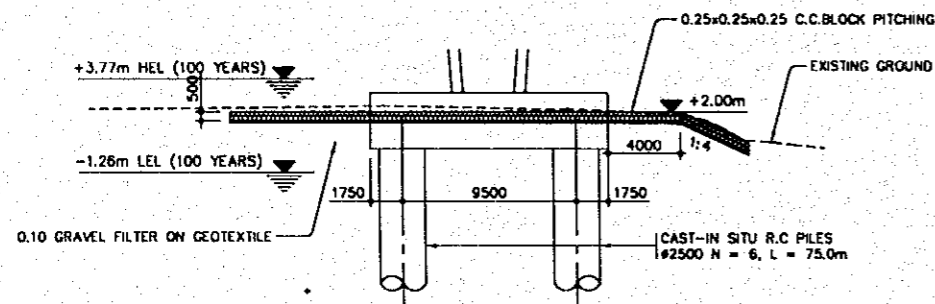
SCALE	SHEET NO.
1:200	0-07



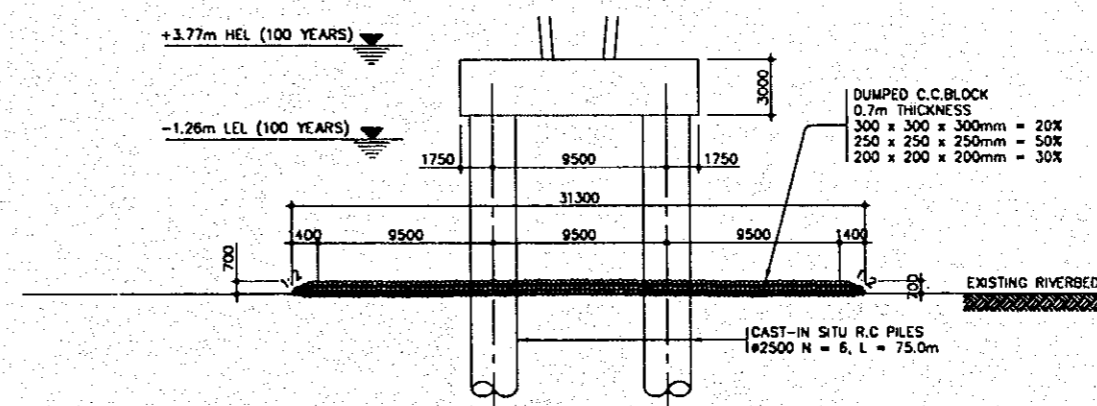
1 PLAN (MP2)
0-07 SCALE 1:200



2 PLAN (MP3-MP6)
0-07 SCALE 1:200



3 ELEVATION (MP2)
0-07 SCALE 1:200



4 ELEVATION (MP3-MP6)
0-07 SCALE 1:200

- NOTES:
1. THICKNESS OF C.C.BLOCK IS THE MINIMUM ACCEPTABLE VALUES TO BE ACHIEVED IN CONSTRUCTION.
 2. QUOTED SCALES ARE CORRECT WHEN DRAWING IS REPRODUCED AT A1 SIZE.
 3. ALL DIMENSIONS AND LEVELS ARE IN METERS.
 4. THIS DRAWING TO BE READ IN CONSTRUCTION WITH DRAWING NO. J-04.