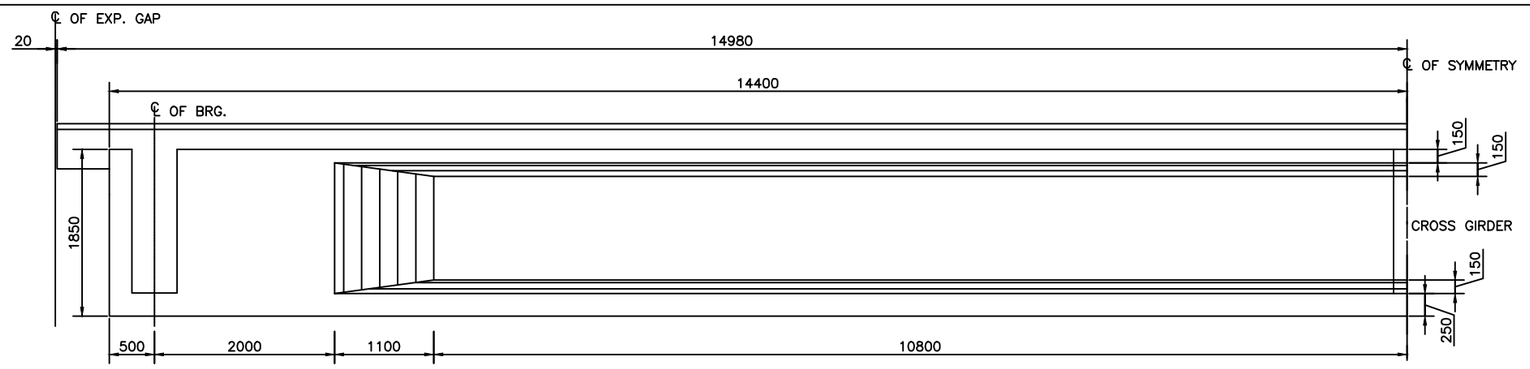
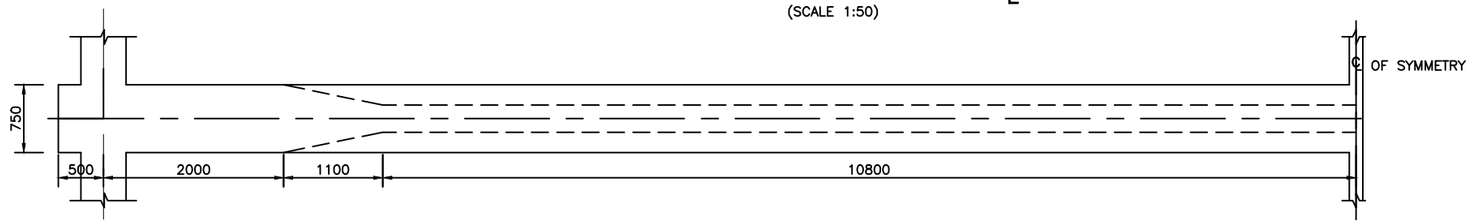


HALF LONGITUDINAL ELEVATION ALONG ℄ OF GIRDER

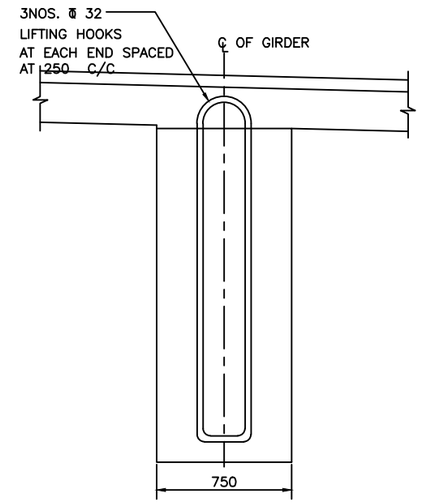
(SCALE 1:50)



HALF PLAN

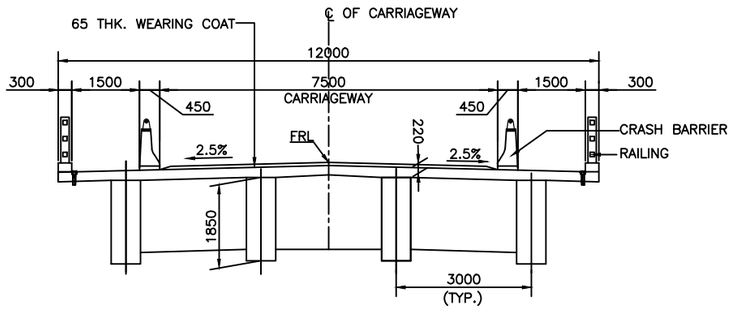
(SCALE 1:50)

CROSS GIF



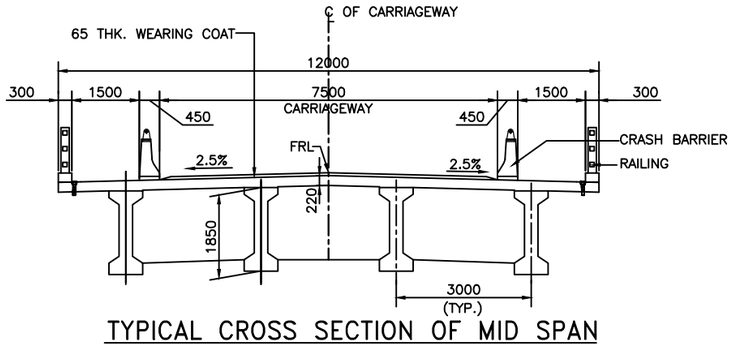
TYP. SECTION SHOWING LIFTING HOOK ARRANGEMENT AT 1.0M FROM BEAM END

(SCALE 1:25)



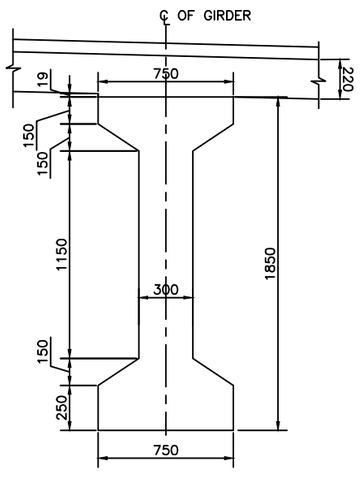
TYPICAL CROSS SECTION OF SUPPORT

(SCALE 1:100)



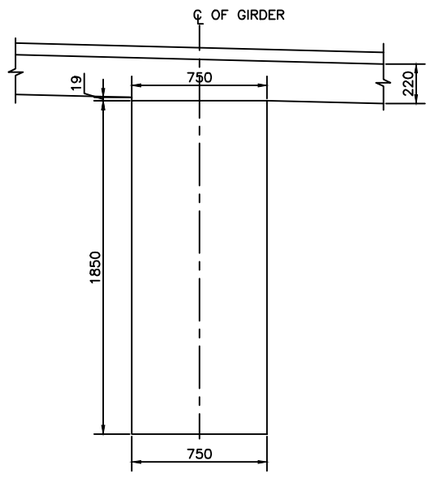
TYPICAL CROSS SECTION OF MID SPAN

(SCALE 1:100)



SECTION AT MID SPAN

(SCALE 1:25)



SECTION AT SUPPORT

(SCALE 1:25)

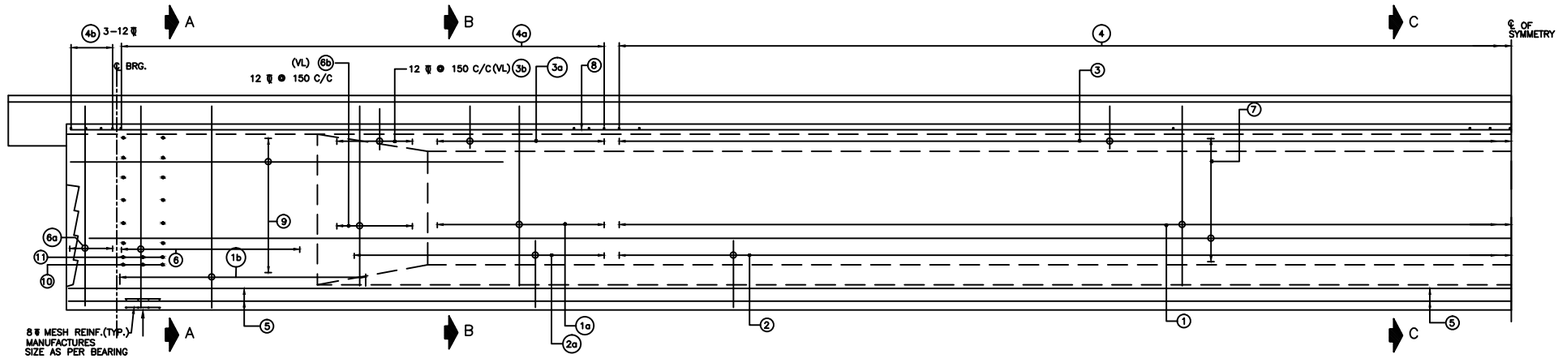
NOTE:-

1. ALL DIMENSIONS ARE IN MM. WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
2. THE DESIGN IS IN ACCORDANCE WITH IRC AND IS CODES. .
3. GRADE OF CONCRETE:
   PILE - M40
   PILE CAP, ABUTMENT, DIRTWALL - M35
   SEISMIC ARRESTOR , PEDESTAL, RETURN WALL , RETAINING WALL - M35
   DECK SLAB, CRASH BARRIER - M40
   APPROACH SLAB - M30
   GIRDER -M40
4. GRADE OF REINFORCEMENT STEEL SHALL BE Fe-500 D CONFORMING TO IS : 1786.
5. CLEAR COVER TO ANY REINFORCEMENT SHALL BE
   a) FOUNDATIONS AND IN CONTACT WITH SOIL -75MM
   b) AT ALL OTHER LOCATIONS -40MM
6. PEDESTAL THICKNESS VARIES WITH THICKNESS OF BEARING.
7. 600 TH. FILTER MEDIA BEHIND ABUTMENT SHALL BE PROVIDED AS PER PARA 2.1 OF APPENDIX - 6 OF IRC:78.
8. 100 DIA WEEP HOLES IN ABUTMENTS & RETURN WALLS NOT EXCEEDING ONE METRE SPACING IN BOTH DIRECTIONS SHALL BE PROVIDED ABOVE LWL.
9. BACK FILLING SHALL CONSIST OF SELECTED EARTH CONFORMING TO APPENDIX : 6 OF IRC : 78-2014 HAVING PROPERTIES C=0, Ø>30°, δ=20°, d=18 kN/m^3.
10. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH FINAL HIGHWAY PLAN AND PROFILE DRAWINGS, ALL LEVELS GIVEN IN DRAWING SHALL BE VERIFIED BEFORE EXECUTION AT SITE.
11. FOR SUPERSTRUCTURE, WEARING COAT, EXPANSION JOINT, & DRAINAGE SPOUT REFER STANDARD MOST DRG.
12. CONSIDERATIONS FOR DESIGN: SEISMIC ZONE - V, MAY BE CHECKED/CONFIRMED WITH LOCAL AUTHORITY BEFOR EXECUTION AND IMPORTANCE FACTOR - 1.0
13. PITCHING FOR SLOPE PROTECTION MAY BE PROVIDED AS PER SITE REQUIREMENT
14. PITCHING FOR SLOPE PROTECTION MAY BE PROVIDED AS PERPROVISIONS OF IRC 89:
    - NO STONE WEIGHT LESS THAN 40 kg SHALL BE USED. WHERE THE REQUIRED SIZE STONES ARE NOT ECONOMICALLY AVAILABLE, CEMENT CONCRETE BLOCKS OR STONES IN WIRE CRATES MAY BE USED IN PLACE OF ISOLATED STONES OF EQUIVALENT WEIGHT. CEMENT CONCRETE BLOCKS WILL BE PREFERRED WEHEREVER PRACTICABLE.
    - FILTER SHALL CONSIST OF SOUND GRAVEL , STONE, JHAMA(OVERBURNT) BRICK BALLAST AND COARSE SAND.
15. STRIP SEAL TYPE EXPANSION JOINTS OF PROVEN QUALITY SHALL BE PROVIDED AS PER IRC : SP:69-2005.
16. PILES SHALL BE BORED CAST-IN-SITU SHALL BE AS PER RECOMMENDATION OF SUB-SOIL INVESTIGATION REPORT. LOAD CARRYING CAPACITY OF PILES SHALL BE VERIFIED WITH INITIAL LOAD TEST.
17. POT/PTFE BEARING SHALL BE PROVIDED UNDER EACH LONGITUDINAL GIRDER OF SUPER STRUCTURE DESIGN AND MANUFACTURING OF BEARINGS SHALL BE DONE AS PER STIPULATIONS MADE IN IRC:83 (PART-III) 2002.
18. SIZE OF POT/PTFE BEARING SHALL BE AS PER MANUFACTURE DESIGNS.
19. THIS DRAWING IS INDICATIVE ONLY. THE DETAIL DESIGN/DRAWING SHALL BE PREPARED BY CONCESSIONAIRE FOR EXECUTION

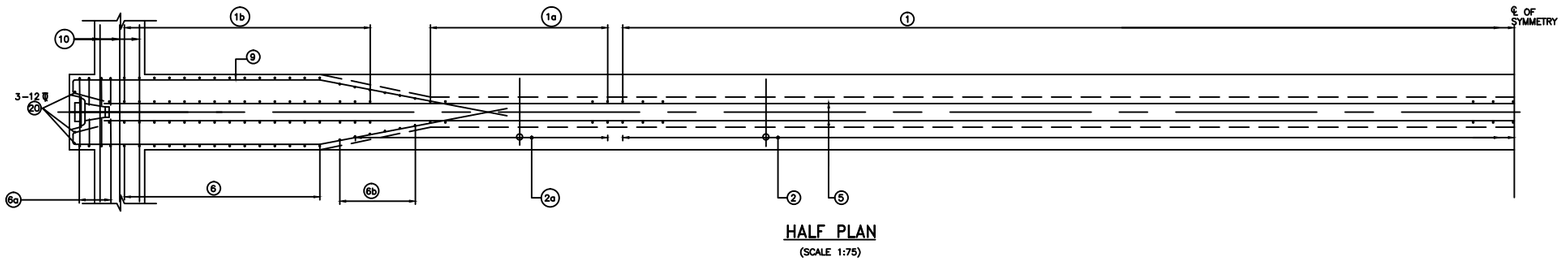
Client:	**DETAILED PROJECT REPORT**	**DIMENSION DETAILS OF PSC SUPERSTRUCTURE**	**Revision -** R 1	**Drawn by**	**Designed by**	**Checked by**	**Approved by**
			Date -March:- 2013	R.D. Mishra	Devella Satyanarayana	Vikas Gupta	C.K. Nayar
MINISTRY OF EXTERNAL AFFAIRS NEW DELHI	**Consultancy services for Topographical Survey, Design Review and Redesign of Highway Section as per NH Specification from Kaletwa to Zorinpui (India- Myanmar Border) in Chin State of Myanmar.**	**Drawing No:-MYANMAR/KALETWA-ZORINPUI/ MNB/14+075/201**	**A2**	**Scale :-** As Shown			

Consultant:

IRCON INFRASTRUCTURE & SERVICES LIMITED



HALF LONGITUDINAL SECTION
(SCALE 1:75)



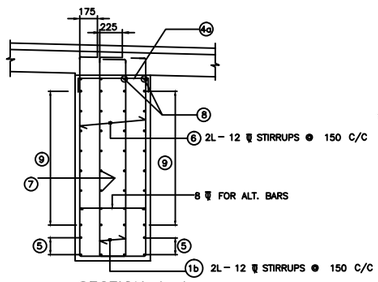
HALF PLAN
(SCALE 1:75)

NOTES

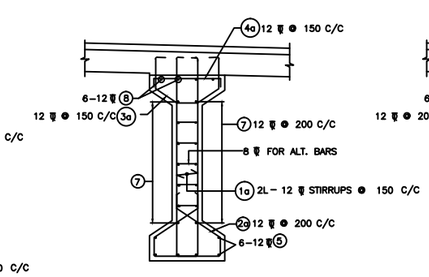
1. ALL DIMENSIONS ARE IN mm AND LEVELS IN METRES. UNLESS OTHERWISE SPECIFIED.
2. THE DRAWING SHALL NOT BE SCALED OFF, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. ALL REINFORCING STEEL SHALL BE OFF HYSD BARS (GRADE DESIGNATION S 500) CONFORMING TO I.S. 1786.
4. MINIMUM CLEAR COVER TO REINFORCEMENT INCLUDING STIRRUPS SHALL BE 40mm.
5. THE ANCHORAGE LENGTH & LAP LENGTH OF BARS SHALL BE AS PAR CLAUSE 304 OF IRC:21
6. 32Ø SPACER BARS SHALL BE PROVIDED @ 1.0m C/C BETWEEN TWO TIERS OF LONGITUDINAL BARS OF GIRDERS.
7. TWO LAYERS OF MESH REINFORCEMENT TYPE ``A" ONE AT 20mm AND OTHER AT 75mm SHALL BE PROVIDED FROM THE BOTTOM OF GIRDER.

REFERENCE DRG NO.:

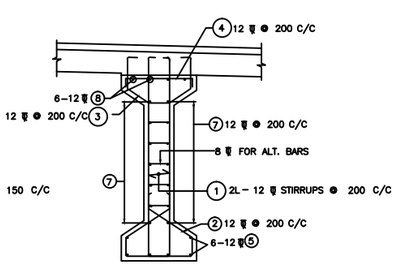
1. MYANMAR/KALETWA-ZORINPUI/GA/14+075/104
2. MYANMAR/KALETWA-ZORINPUI/MNB/14+075/201
3. MYANMAR/KALETWA-ZORINPUI/MNB/14+075/203
4. MYANMAR/KALETWA-ZORINPUI/MNB/14+075/204
5. MYANMAR/KALETWA-ZORINPUI/MNB/14+075/205
6. MYANMAR/KALETWA-ZORINPUI/MNB/14+075/206



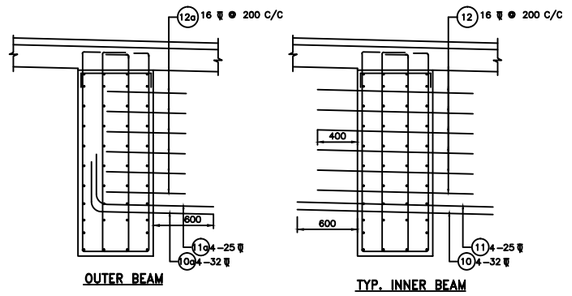
SECTION A–A
(SCALE 1:75)



SECTION B–B
(SCALE 1:75)



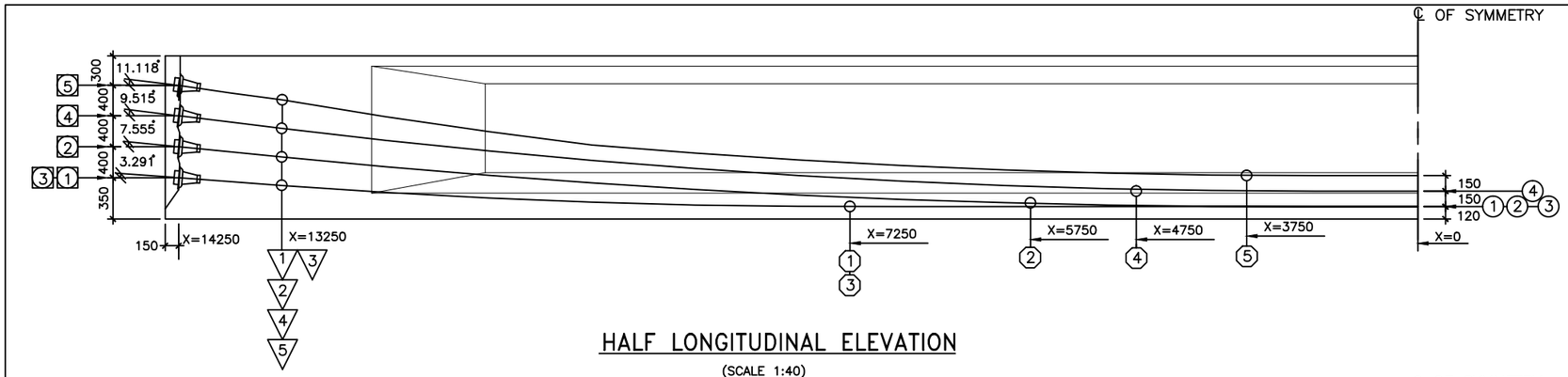
SECTION C–C
(SCALE 1:75)



TYP. DETAILS OF BARS FOR END DIAPHRAGM
(SCALE 1:75)

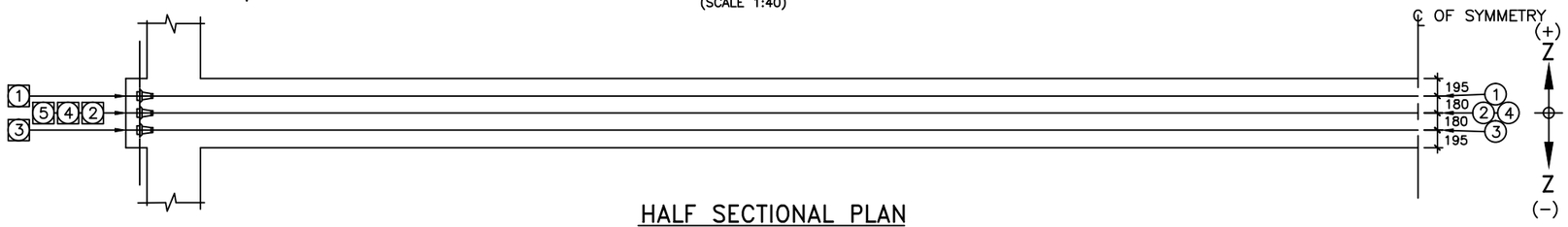
Client: MINISTRY OF EXTERNAL AFFAIRS NEW DELHI	**DETAILED PROJECT REPORT** Consultancy services for Topographical Survey, Design Review and Redesign of Highway Section as per NH Specification from Kaletwa to Zorinpui (India- Myanmar Border) in Chin State of Myanmar.	**REINFORCEMENT DETAILS OF PRECAST PSC BEAM**		Revision - R 1	Drawn by	Designed by	Checked by	Approved by
				Date -March:- 2013	R.D. Mishra	Devella Satyanarayana	Vikas Gupta	C.K. Nayar
		Drawing No:- MYANMAR/KALETWA-ZORINPUI/ MNB/14+075/202	A2	Scale :- As Shown				

Consultant: IRCON INFRASTRUCTURE & SERVICES LIMITED



HALF LONGITUDINAL ELEVATION

(SCALE 1:40)



HALF SECTIONAL PLAN

(SCALE 1:40)

CABLE NO	ORDINATES AT DISTANCE 'X' FROM CENTRE																
	14250	13250	13000	12000	11500	11000	10000	9000	8000	7000	6000	5000	4000	3000	2000	1000	0
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
1	350	293	278	228	206	187	156	135	123	120	120	120	120	120	120	120	120
2	350	293	278	228	206	187	156	135	123	120	120	120	120	120	120	120	120
3	750	617	585	465	412	364	280	203	165	134	121	120	120	120	120	120	120
4	1150	982	941	788	719	655	541	448	374	320	285	271	270	270	270	270	270
5	1550	1353	1305	1124	1041	964	824	705	607	529	472	436	421	420	420	420	420

LEGEND

- ◯ INDICATES CABLE NUNBER
- ◯ INDICATES START OF CURVE IN ELEVATION
- ▽ INDICATES END OF CURVE IN ELEVATION
- ⬡ INDICATES END OF CABLE

NOTES:

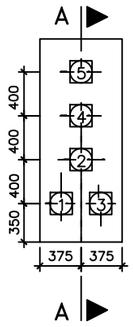
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METERS.
2. DIMENSIONS SHALL NOT BE SCALED OFF FROM THE DRAWING.

MATERIALS:

3. a) CONCRETE CONTROLLED MIX HAVING 28 DAYS CHARACTERISTIC STRENGTH OF 50N/mm2.(M50)
   (MAXIMUM SIZE OF AGGREGATE: 20MM)
   b) PRESTRESSING STEEL OF 12.7mm NOMINAL DIA SEVEN PLY CLASS 2 STRAND AS PER IS 14268: 1995 SHALL BE USED FOR PRESTRESSING
   c) ORDINARY STEEL REINFORCEMENT I) HIGH YIELD STRENGTH DEFORMED BARS (DENOTED AS ϕT) CONFORMING TO IS: 1786-1985
4. MINIMUM CLEAR COVER TO ORDINARY REINFORCEMENT SHALL BE 50mm.
5. LAP LENGTH OF DEFORMED BARS SHALL BE AS PER CLAUSE 304.6.6.3 OF IRC: 21:2000
6. THE FOLLOWING PROPERTIES HAVE BEEN CONSIDERED IN THE DESIGN.
   i) AREA OF 1 STRAND =98.7mm2. ii)WOBBLE COEFFICIENT K=0.0020/M
   iii)FRICTION COEFFICIENT =0.17. CORRAGATED HDPE SHEATHING SHALL BE USED.
   iv)MODULUS OF ELASTICITY OF STEEL IN STRAND=1.95X10Mpa
   v)AVERAGE SLIP=6MM.
7. THE PRESTRESSING IS DONE AS FOLLOWING
   TYPES OF CABLES.

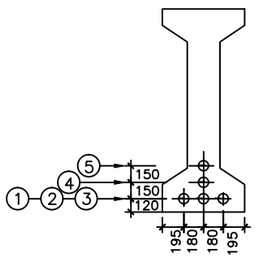
CABLE ID	TYPE OF CABLE	NO. OF WORKING STRAND	DUMMY STRAND	TOTAL STRAND
1	12 T 13	9	3	12
2	12 T 13	9	3	12
3	12 T 13	12	-	12
4	12 T 13	12	-	12
5	12 T 13	12	-	12

8. STAGES OF PRESTRESSING:
   PRESTRESSING IS DONE IN TWO STAGES
   FIRST STAGE CABLE ① ③② ARE STRESSED FULLY ON 7th DAY OR WHEN CONCRETE ATTAINS A STRENGTH OF M40 WHICHEVER IS LATER.
   SECOND STAGE CABLE ④ ⑤ ARE STRESSED FULLY ON 28th DAY OR WHEN CONCRETE ATTAINS A STRENGTH OF M45 WHICHEVER IS LATER.
9. ANY APPROVED SYSTEM OF PRESTRESSING SHALL BE ADOPTED.
10. THE LENGTH OF CABLE INDICATED ARE MEASURED ALONG PROFILE BETWEEN THE END FACES OF STRUCTURE ONLY. ADDITIONAL LENGTH REQUIRED FOR ATTACHING JACK IS TO BE ADDED IN CONSULTATION WITH SYSTEM MANUFACTURER THE EXTENSIONS INDICATED ARE FOR PORTION OF CABLE LAYING BETWEEN END FACES OF STRUCTURE ONLY ADDITIONAL EXTENSION FOR PORTION LAYING BETWEEN END FACE AND GRIPPING POINT OF JACK IS TO BE ADDED (APPROXIMATE 7MM/M)
11. THE CABLES SHOULD FOLLOW A SECOND DEGREE PARABOLIC CURVE BETWEEN THE TANGENT POINTS IN ELEVATION.
12. WHERE REINFORCEMENT IS INTERFEARING WITH SHEATHING OF CABLES, REINFORCEMENT ONLY SHALL BE ADJUSTED LOCALLY.
13. JACK GAUGE PRESSURE ARE CALCULATED WITH A JACK PISTON AREA OF 490CM^2 AND JACK FRICTION LOSS OF 4%.
    JACK GUAGE PRESSURE = $\frac{\text{FORCE AT JACK END}\times 1000\times 1.04}{490}$
    IF THE PISTION AREA OF THE JACK IS DIFFERENT THEN CALCULATE THE JACK GUAGE PRESSURE ACCORDINGLY.
14. VARIATIONS IN ELONGATION SHOULD NOT EXCEED 5% OVER THEORITICALLY CALCULATED ELONGATIONS.
15. GROUTING OF CABLES SHALL BE DONE AS PER APPENDIX OF IRC 18
16. STRENGTH OF CONCRETE AT ANCHORAGE LOCATIONS SHOULD BE ACHIEVED AS SPECIFIED IN SYSTEM LITERATURE AT THE TIME OF STRESSING.
17. SPIRAL REINFORCEMENT AROUND ANCHORAGE SHOULD CONFORM TO SYSTEM LITERATURE.
18. ALL THE CABLES ARE STRESSED FROM BOTH ENDS.
19. SHEATHING DIA OF CABLE SHALL BE 75mm ID FOR 12 T 13
20. SUPERIMPOSED LOADS SHALL BE LAID AFTER 28 DAYS BUT BEFORE 90 DAYS



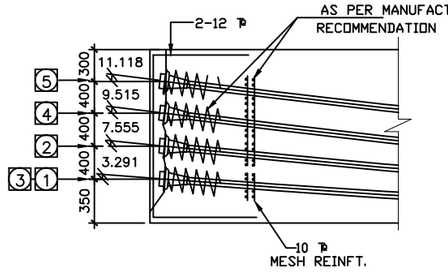
CROSS SECTION AT ANCHORAGE LOCATION

(SCALE 1:40)



CROSS SECTION AT MIDSPAN

(SCALE 1:40)



END BLOCK DETAILS SECTION A–A

(SCALE 1:40)

CABLE NO	NUMBER OF STRANDS	JACK GAUGE PRESSURE (kg/cm^2)	LENGTH OF CABLE mm	AVERAGE FORCE IN CABLE DURING STRESSING (KN)	GROSS CABLE ELONGATION AT EACH STRESSING END (mm)
1	12 T 13	358.0	28500	1213.2	99.9
2	12 T 13	358.0	28561	1604.9	99.3
3	12 T 13	358.0	28500	1213.2	99.9
4	12 T 13	358.0	28607	1600.4	99.2
5	12 T 13	358.0	28660	1597.6	99.2

REFERENCE DRG NO.:

1. MYANMAR/KALETWA–ZORINPUI/GA/14+075/104
2. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/201
3. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/202
4. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/204
5. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/205
6. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/206

Client:

सत्यमेव जयते

MINISTRY OF EXTERNAL AFFAIRS NEW DELHI

DETAILED PROJECT REPORT

Consultancy services for Topographical Survey, Design Review and Redesign of Highway Section as per NH Specification from Kaletwa to Zorinpui (India- Myanmar Border) in Chin State of Myanmar.

CABLE LAYOUT & PRESTRESSING DETAILS

Drawing No:- MYANMAR/KALETWA-ZORINPUI/ MNB/14+075/203

A2

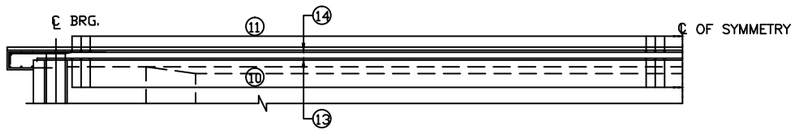
Revision - R 1	Drawn by	Designed by	Checked by	Approved by
Date -March:- 2013	R.D. Mishra	Devella Satyanarayana	Vikas Gupta	C.K. Nayar

Scale :- As Shown

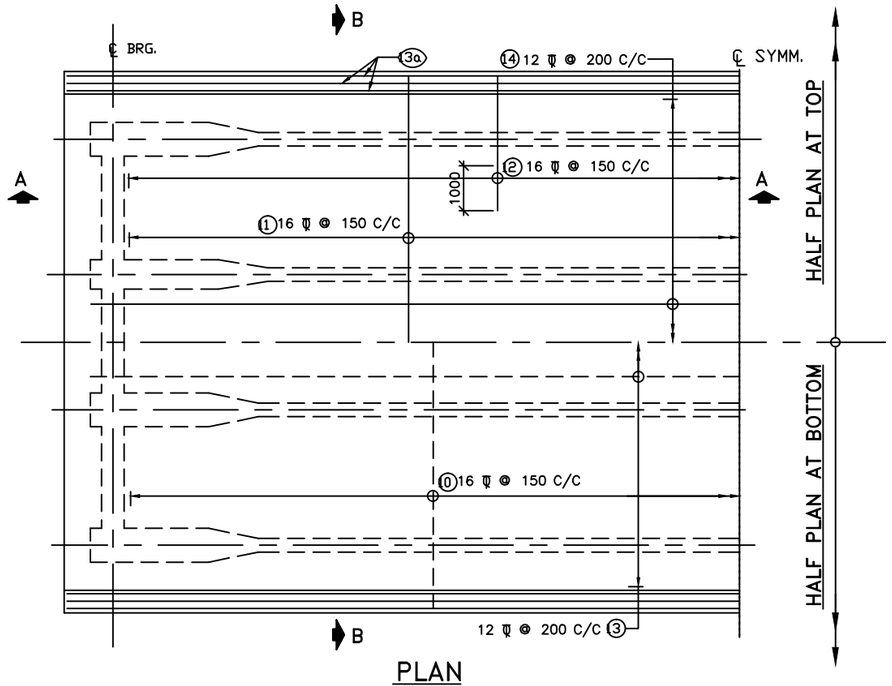
Consultant:

INFRA & SERVICES

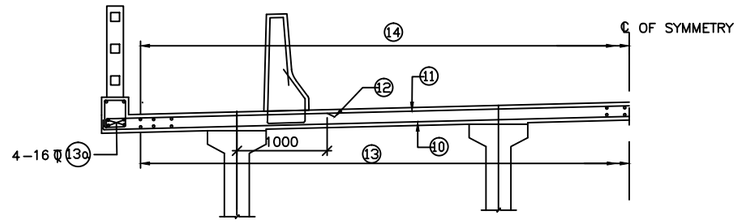
IRCON INFRASTRUCTURE & SERVICES LIMITED



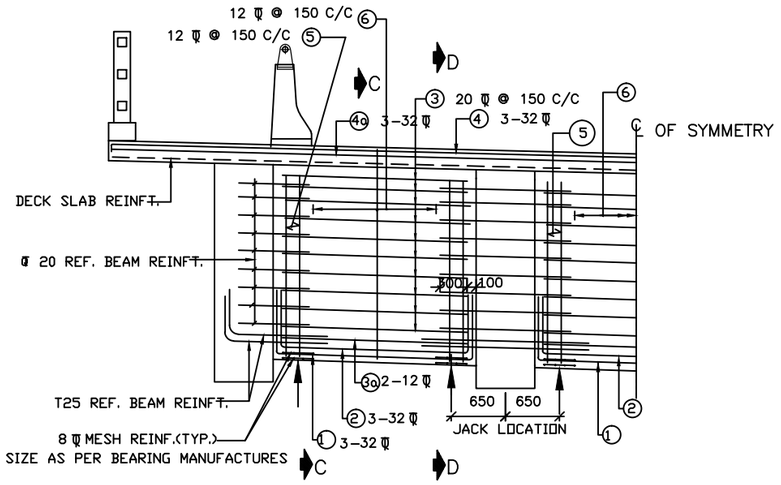
SECTION A–A
(SCALE 1:100)



PLAN
(SCALE 1:100)



SECTION B–B
(SCALE1:50)



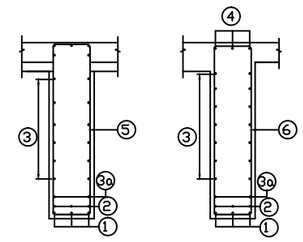
CROSS GIRDER REINFT. DETAILS
(SCALE1:50)

NOTES:

1. ALL DIMENSIONS ARE IN mm AND LEVELS IN METRES UNLESS OTHERWISE MENTIONED.
2. ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
3. GRADE OF CONCRETE FOR CAST–IN–SITU DECK SLAB SHALL BE M50.
4. ALL REINFORCEMENT BARS SHALL BE H.Y.S.D. BARS (GRADE DESIGNATION Fe 500) CONFORMING TO IS:1786. WITH LATEST AMMENDMENT.
5. THE ANCHORAGE LENGTH & LAP LENGTH OF BARS SHALL BE AS PAR CLAUSE 304 OF IRC:21
6. MINIMUM CLEAR COVER FOR DECK SLAB SHALL BE 40mm
7. R.C.C. CROSS GIRDER AND 220mm THICK DECK SLAB SHALL BE CAST–IN–SITU.

REFERENCE DRG NO.:

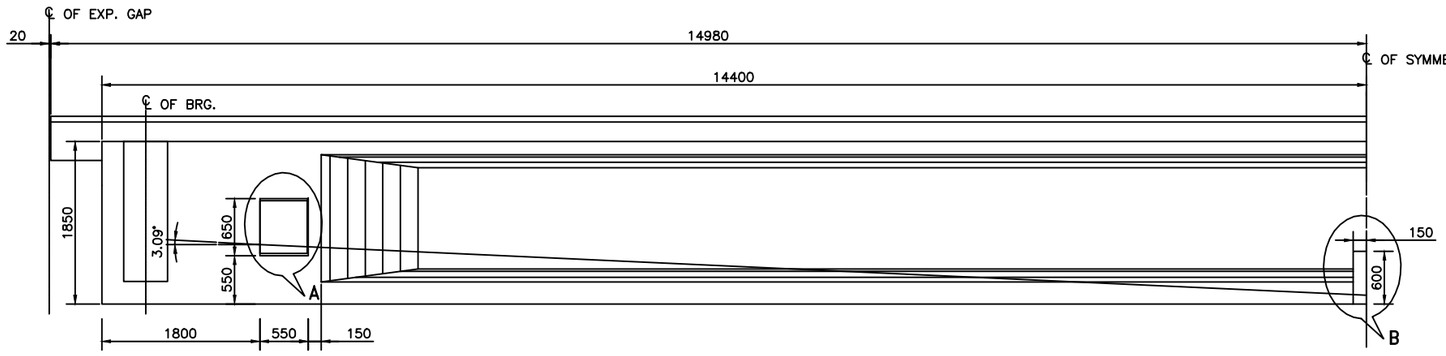
1. MYANMAR/KALETWA–ZORINPUI/GA/14+075/104
2. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/201
3. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/202
4. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/203
5. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/205
6. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/206



SECTION C–C SECTION D–D

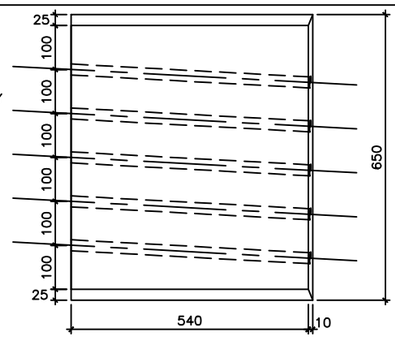
AT ABUTMENT LOCATION
(SCALE 1:50)

Client: MINISTRY OF EXTERNAL AFFAIRS NEW DELHI	**DETAILED PROJECT REPORT** Consultancy services for Topographical Survey, Design Review and Redesign of Highway Section as per NH Specification from Kaletwa to Zorinpui (India- Myanmar Border) in Chin State of Myanmar.	REINFORCEMENT DETAILS OF DECK SLAB & DIAPHRAGM		Revision - R 1	Drawn by	Designed by	Checked by	Approved by	**Consultant:** IRCON INFRASTRUCTURE & SERVICES LIMITED
				Date -March:- 2013	R.D. Mishra	Devella Satyanarayana	Vikas Gupta	C.K. Nayar	
		Drawing No:- MYANMAR/KALETWA-ZORINPUI/ MNB/14+075/204	A2	Scale :- As Shown					



HALF LONGITUDINAL ELEVATION

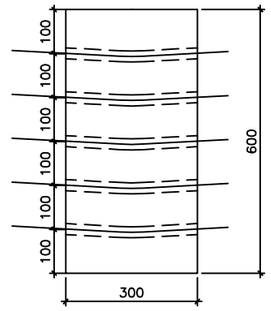
(SCALE 1:50)



DETAIL 'A'

(SHOWING DIMENSIONS OF END ANCHORAGE BLOCK FOR FUTURE PRESTRESSING)

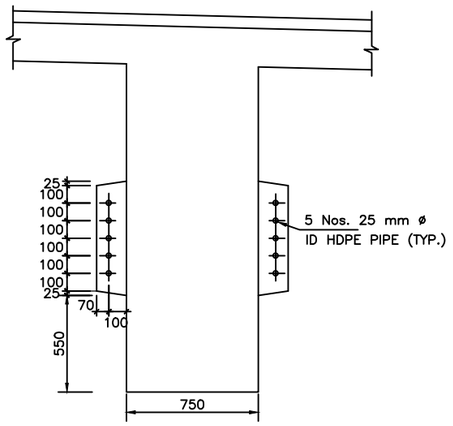
(SCALE 1:10)



DETAIL 'B'

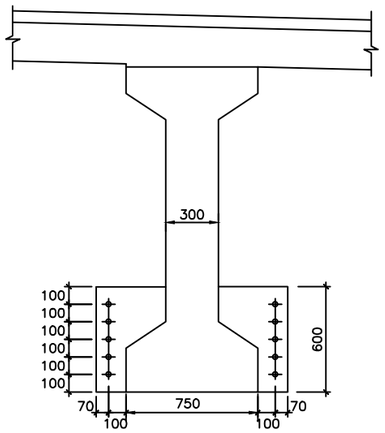
(SHOWING DIMENSIONS OF CENTRAL DEVIATOR BLOCK FOR FUTURE PRESTRESSING)

(SCALE 1:10)



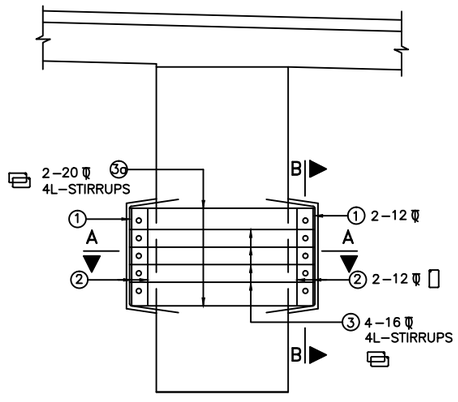
CROSS SECTION OF GIRDER AT SUPPORT

(SCALE 1:25)



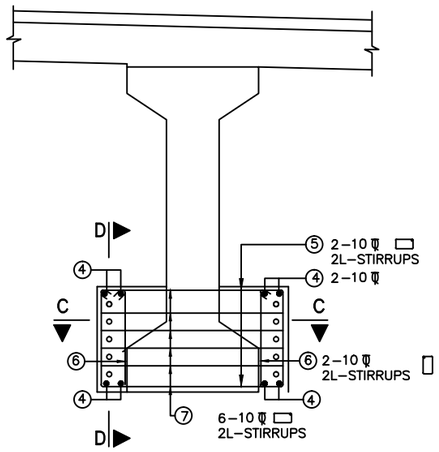
CROSS SECTION OF GIRDER AT MID SPAN

(SCALE 1:25)



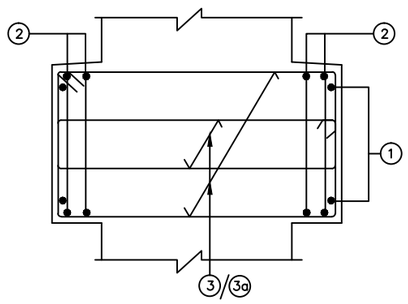
REINF. DETAILS OF END BLOCK

(SCALE 1:25)



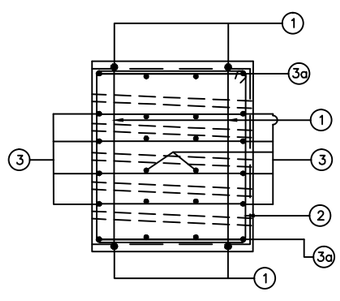
REINF. DETAILS CENTRAL DEVIATOR BLOCK

(SCALE 1:25)



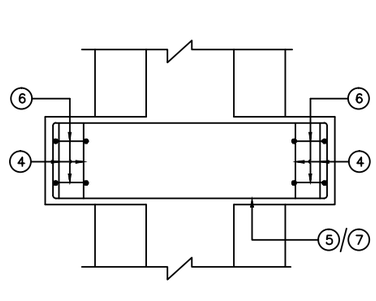
SECTION A–A

(SCALE 1:15)



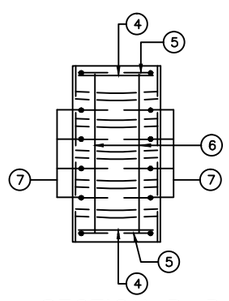
SECTION B–B

(SCALE 1:15)



SECTION C–C

(SCALE 1:15)



SECTION D–D

(SCALE 1:15)

NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS OTHERWISE SPECIFIED.
2. FOR GENERAL NOTES AND STANDARD DRAWINGS REFER GAD

REFERENCE DRG NO.:

1. MYANMAR/KALETWA–ZORINPUI/GA/14+075/104
2. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/201
3. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/202
4. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/203
5. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/204
6. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/206

Client: सत्यमेव जयते **MINISTRY OF EXTERNAL AFFAIRS NEW DELHI**	**DETAILED PROJECT REPORT** **Consultancy services for Topographical Survey, Design Review and Redesign of Highway Section as per NH Specification from Kaletwa to Zorinpui (India- Myanmar Border) in Chin State of Myanmar.**	**DETAILS OF FUTURE PRESTRESSING BLOCK AND DEVIATOR BLOCK**		Revision - R 1	Drawn by	Designed by	Checked by / Approved by	**Consultant:** **IRCON INFRASTRUCTURE & SERVICES LIMITED**
				Date -March:- 2013	R.D. Mishra	Devella Satyanarayana	Vikas Gupta / C.K. Nayar	
		Drawing No:- MYANMAR/KALETWA-ZORINPUI/ MNB/14+075/205	**A2**	**Scale :-** As Shown				

LEGEND:–

- FREE BEARING
- FIXED BEARING
- GUIDED BEARING ALONG TRANV. AXIS
- GUIDED BEARING ALONG LONG. AXIS

LAYOUT PLAN OF BEARINGS

(SCALE 1 : 100)

DATA (NOMINAL) FOR DESIGN OF BEARING

BEARING TYPE	SHOWN THUS	TYPE OF BEARING	MAXIMUM VERTICAL REACTION (KN)	MINIMUM VERTICAL REACTION (KN)	HORIZONTAL LOAD/BRG. (KN)			LONGITUDINAL MOVEMENT (mm)		TRANSVERSE MOVEMENT (mm)		ROTATION ø	REMARKS	TENTATIVE PEDESTAL SIZE (mm x mm)
					NORMAL CASE	SEISMIC LONGITUDINAL CASE	SEISMIC TRANSVERSE CASE							
					HL	HL	HT	+	–	+	–			
TYPE 1	⊡	FIXED POT BEARING	1360	854	200	407	490	0	0	0	0	0.01	FIXED IN BOTH DIRECTION	800 x 800
TYPE 2	⊡ ↕	GUIDED POT BEARING	1360	854	0	407	0	0	0	5	5	0.01	ALLOWING MOVEMENT IN T–T AXIS ONLY	800 x 800
TYPE 3	◄⊡►	GUIDED POT BEARING	1360	854	200	0	490	10	20	0	0	0.01	ALLOWING MOVEMENT IN L–L AXIS ONLY	800 x 800
TYPE 4	↕ ◄⊡►	FREE POT/PTFE BEARING	1360	854	0	0	0	10	20	5	5	0.01	ALLOWING MOVEMENT IN ALL DIRECTIONS	800 x 800

+ EXPANSION / – CONTRACTION

NOTES

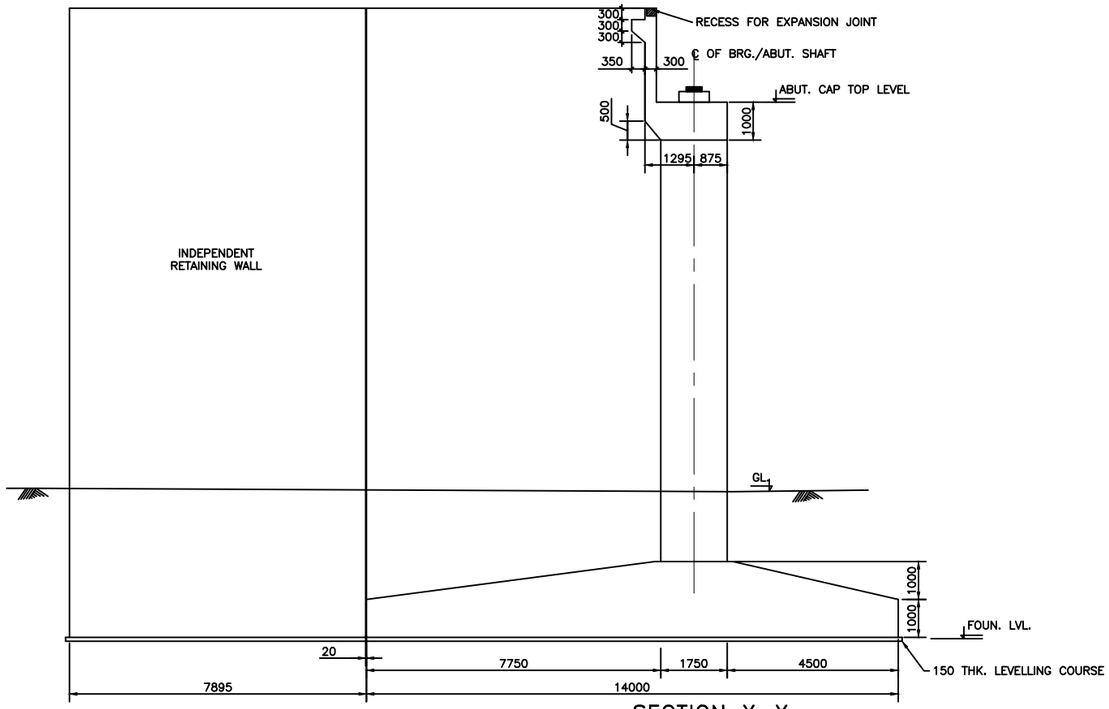
1. ALL DIMENSIONS ARE IN MILLIMETRES, UNLESS OTHERWISE SPECIFIED.
2. FOR GENERAL NOTES AND STANDARD DRAWINGS REFER DRG NO.
3. SUITABLE MESH REINFORCEMENTS ARE TO BE PROVIDED AT GIRDER SOFFIT & BELOW BEARING AS PER BEARING MANUFACTURES.

REFERENCE DRG NO.:

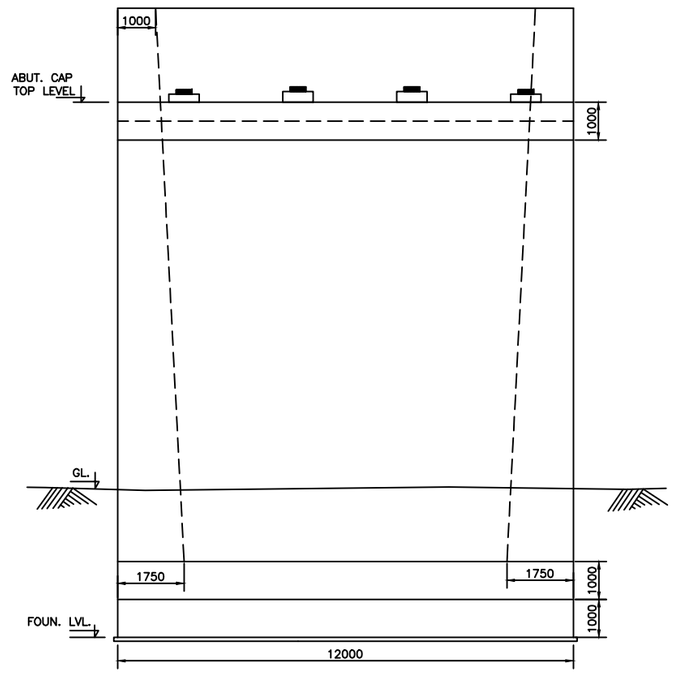
1. MYANMAR/KALETWA–ZORINPUI/GA/14+075/104
2. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/201
3. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/202
4. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/203
5. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/204
6. MYANMAR/KALETWA–ZORINPUI/MNB/14+075/205

Client: सत्यमेव जयते **MINISTRY OF EXTERNAL AFFAIRS NEW DELHI**	**DETAILED PROJECT REPORT** **Consultancy services for Topographical Survey, Design Review and Redesign of Highway Section as per NH Specification from Kaletwa to Zorinpui (India- Myanmar Border) in Chin State of Myanmar.**	**DETAILS OF BEARINGS**	Revision - R 1	Drawn by	Designed by	Checked by	Approved by
			Date -March:- 2013	R.D. Mishra	Devella Satyanarayana	Vikas Gupta	C.K. Nayar
		Drawing No:- MYANMAR/KALETWA-ZORINPUI/MNB/14+075/206	A2	Scale :- As Shown			

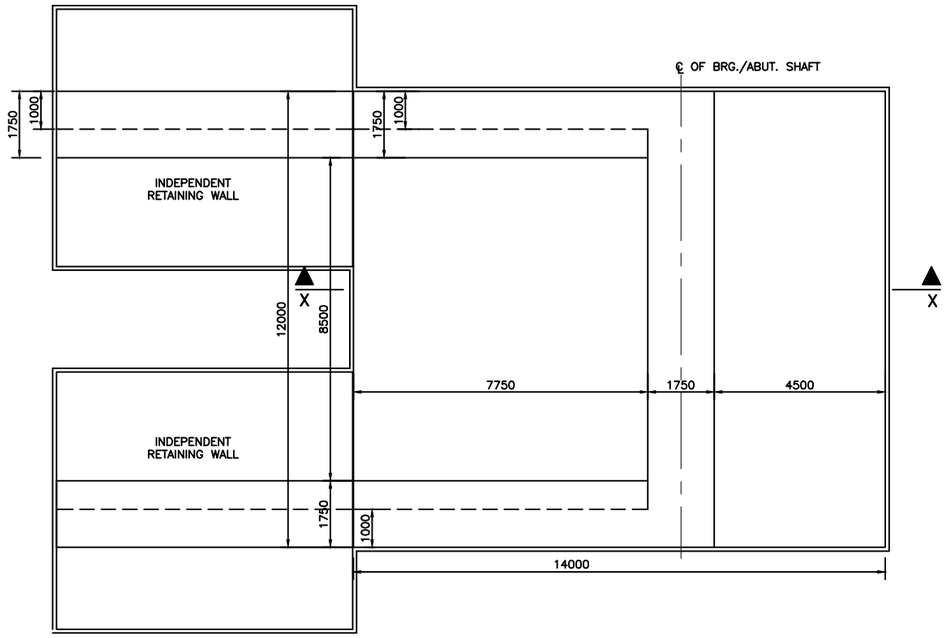
Consultant:
IRCON INFRASTRUCTURE & SERVICES LIMITED



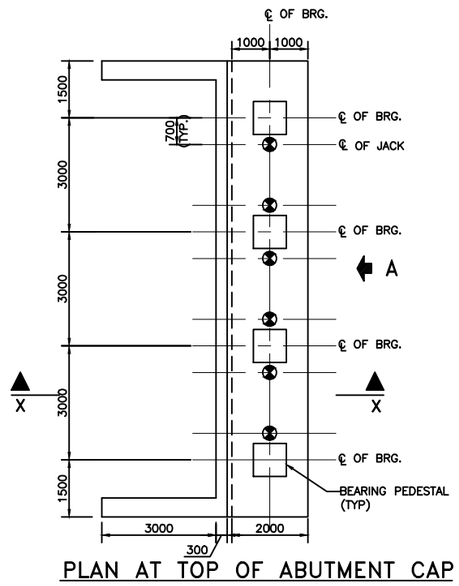
SECTION X–X



VIEW AT 'A'



FOUNDATION PLAN



PLAN AT TOP OF ABUTMENT CAP

NOTES:

1. ALL DIMENSIONS ARE IN mm AND LEVELS IN METRES. UNLESS OTHERWISE SPECIFIED.
2. THE DRAWING SHALL NOT BE SCALED OFF, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. ALL REINFORCING STEEL SHALL BE OFF HYSD BARS (GRADE DESIGNATION S 500) CONFORMING TO I.S. 1786.
4. MINIMUM CLEAR COVER TO REINFORCEMENT INCLUDING STIRRUPS SHALL BE 40mm.
5. THE ANCHORAGE LENGTH & LAP LENGTH OF BARS SHALL BE AS PAR CLAUSE 304 OF IRC:21
6. 32ø SPACER BARS SHALL BE PROVIDED @ 1.0m C/C BETWEEN TWO TIERS OF LONGITUDINAL BARS OF GIRDERS.
7. THE SAFE BEARING CAPACITY AND FOUNDING LEVEL PROPOSED ARE BESED ON AVAILABILITY OF SOFT DESIOGNATED ROCK WITHIN WHICH THE FOUNDATIONS ARE PROPOSED TO BE SOCKTED BY 1000mm (MIN.). ANY CHANGE IN ROCK QUALITY & LEVEL DURING ACTUAL CONSTRUCTION IS TO BE BROUGHT TO THE NOTICE OF ENGINEER–IN–CHARGE.
8. REFER SEPARATE DRAWING FOR INDIPENDENT RETAINING WALL

REFERENCE DRG NO.:

1. MYANMAR/KALETWA–ZORINPUI/GA/14+075/104
2. MYANMAR/KALETWA–ZORINPUI/MNB/SUBSTR/14+075/208
3. MYANMAR/KALETWA–ZORINPUI/MISS/301 FOR INDIPENDENT RETAINING WALL

LEVELS:

TOP OF ABUTMENT CAP LEVEL	316+496
HIGH FLOOD LEVEL (HFL)	310+673
LOWEST GROUND LEVEL (LGL)	307+403
FOUNDING LEVEL	302+903

Client:

सत्यमेव जयते

MINISTRY OF EXTERNAL AFFAIRS NEW DELHI

DETAILED PROJECT REPORT

Consultancy services for Topographical Survey, Design Review and Redesign of Highway Section as per NH Specification from Kaletwa to Zorinpui (India- Myanmar Border) in Chin State of Myanmar.

DIMENSION DETAILS OF ABUTMENT AT BRIDGE CH: 14+075

Drawing No:- MYANMAR/KALETWA-ZORINPUI/ MNB/SUBSTR/14+075/207

A2

Revision - R 1	Drawn by	Designed by	Checked by	Approved by
Date -March:- 2013	R.D. Mishra	Devella Satyanarayana	Vikas Gupta	C.K. Nayar

Scale :- As Shown

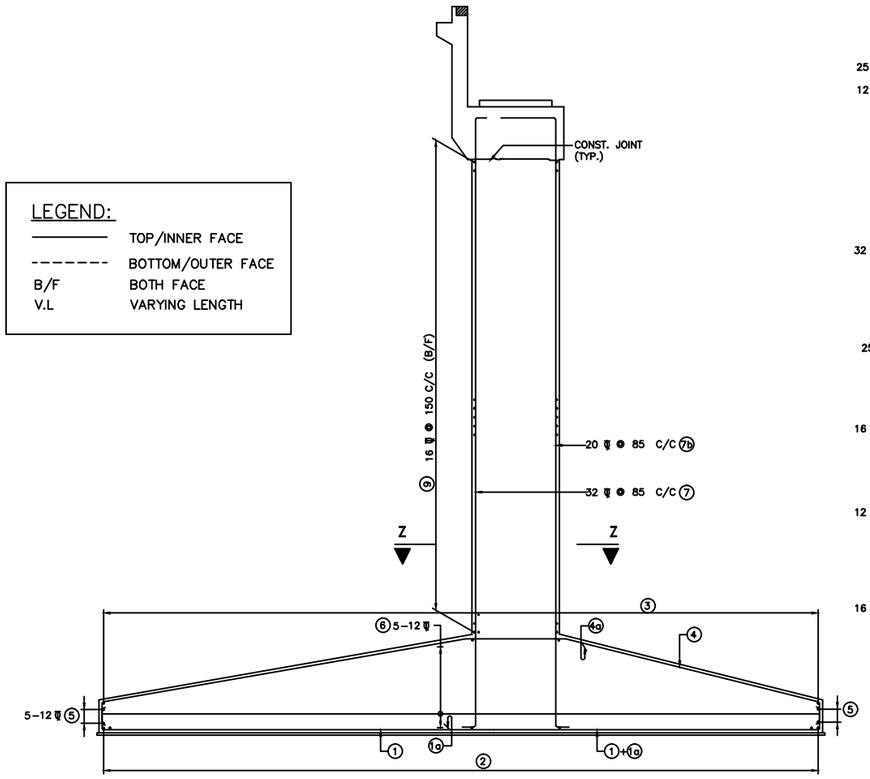
Consultant:

INFRA & SERVICES

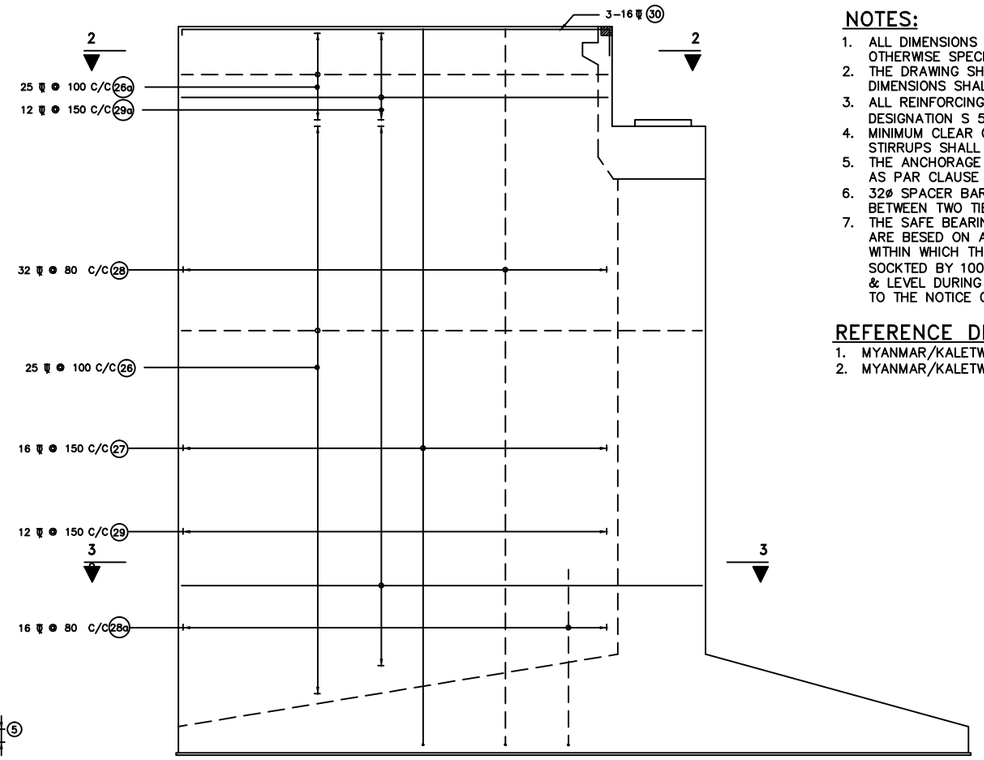
IRCON INFRASTRUCTURE & SERVICES LIMITED

LEGEND:

———	TOP/INNER FACE
- - - - - - -	BOTTOM/OUTER FACE
B/F	BOTH FACE
V.L	VARYING LENGTH



SECTION Y–Y



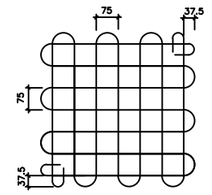
REINF. DETAILS OF RETRUN WALL

NOTES:

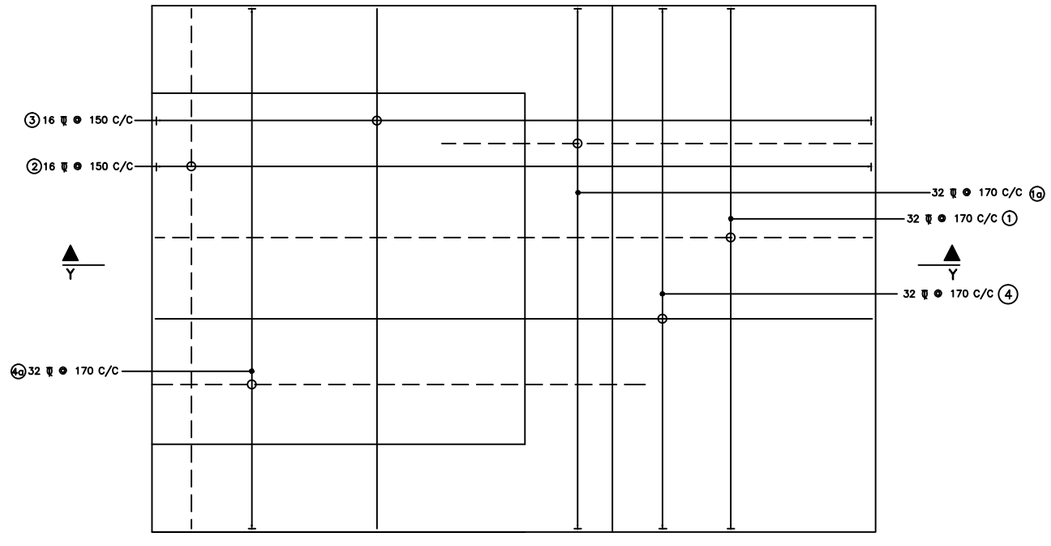
1. ALL DIMENSIONS ARE IN mm AND LEVELS IN METRES. UNLESS OTHERWISE SPECIFIED.
2. THE DRAWING SHALL NOT BE SCALED OFF, ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. ALL REINFORCING STEEL SHALL BE OFF HYSD BARS (GRADE DESIGNATION S 500) CONFORMING TO I.S. 1786.
4. MINIMUM CLEAR COVER TO REINFORCEMENT INCLUDING STIRRUPS SHALL BE 40mm.
5. THE ANCHORAGE LENGTH & LAP LENGTH OF BARS SHALL BE AS PAR CLAUSE 304 OF IRC: 21
6. 32ø SPACER BARS SHALL BE PROVIDED @ 1.0m C/C BETWEEN TWO TIERS OF LONGITUDINAL BARS OF GIRDERS.
7. THE SAFE BEARING CAPACITY AND FOUNDING LEVEL PROPOSED ARE BESED ON AVAILABILITY OF SOFT DESIOGNATED ROCK WITHIN WHICH THE FOUNDATIONS ARE PROPOSED TO BE SOCKTED BY 1000mm (MIN.). ANY CHANGE IN ROCK QUALITY & LEVEL DURING ACTUAL CONSTRUCTION IS TO BE BROUGHT TO THE NOTICE OF ENGINEER–IN–CHARGE.

REFERENCE DRG NO.:

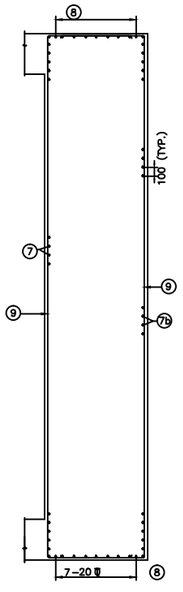
1. MYANMAR/KALETWA–ZORINPUI/GA/14+075/104
2. MYANMAR/KALETWA–ZORINPUI/MNB/SUBSTR/14+075/207



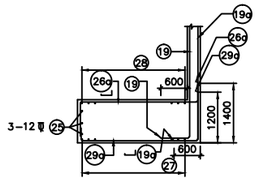
TYPICAL MESH DETAILS
AT BEARING & JACK LOCATION



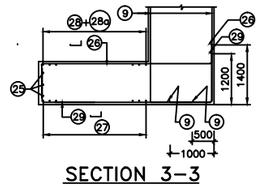
REINF. DETAILS OF FOOTING



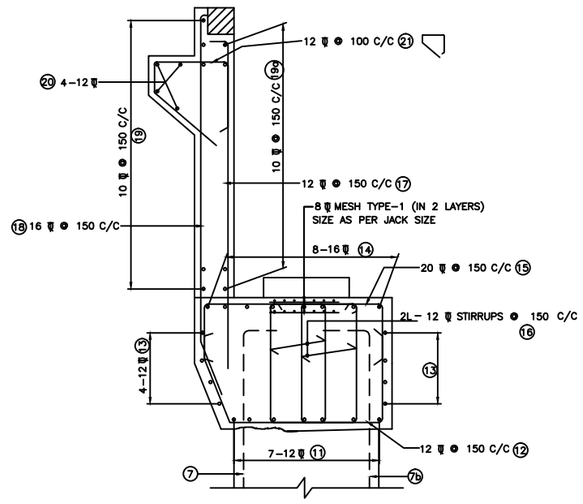
SECTION Z–Z



SECTION 2–2



SECTION 3–3



REINF. DETAILS OF PIER CAP

Client: MINISTRY OF EXTERNAL AFFAIRS NEW DELHI	**DETAILED PROJECT REPORT** Consultancy services for Topographical Survey, Design Review and Redesign of Highway Section as per NH Specification from Kaletwa to Zorinpui (India- Myanmar Border) in Chin State of Myanmar.	**REINFORCEMENT DETAILS OF ABUTMENT AT BRIDGE CH: 14+075**		Revision - R 1	Drawn by	Designed by	Checked by / Approved by	**Consultant:** IRCON INFRASTRUCTURE & SERVICES LIMITED
				Date -March:- 2013	R.D. Mishra	Devella Satyanarayana	Vikas Gupta / C.K. Nayar	
		Drawing No:- MYANMAR/KALETWA-ZORINPUI/ MNB/SUBSTR/14+075/208	A2	Scale :- As Shown				