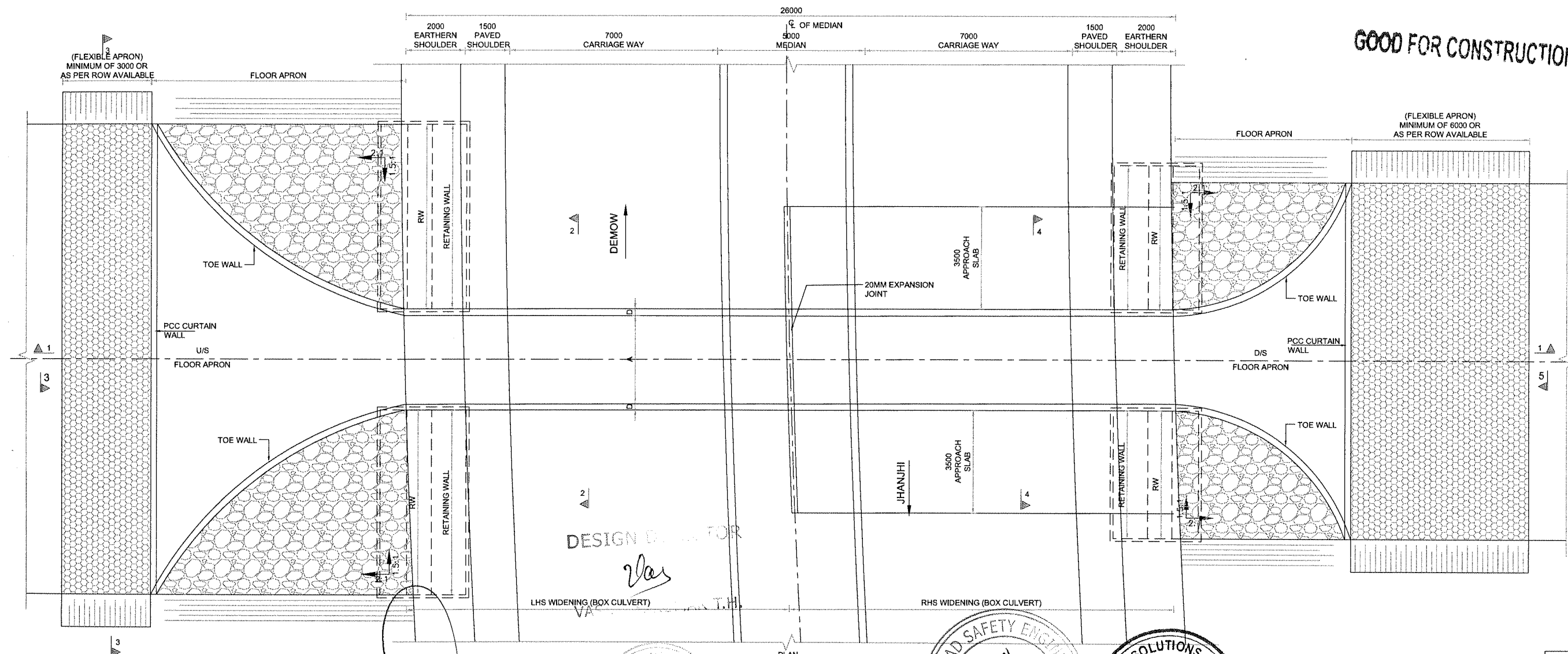
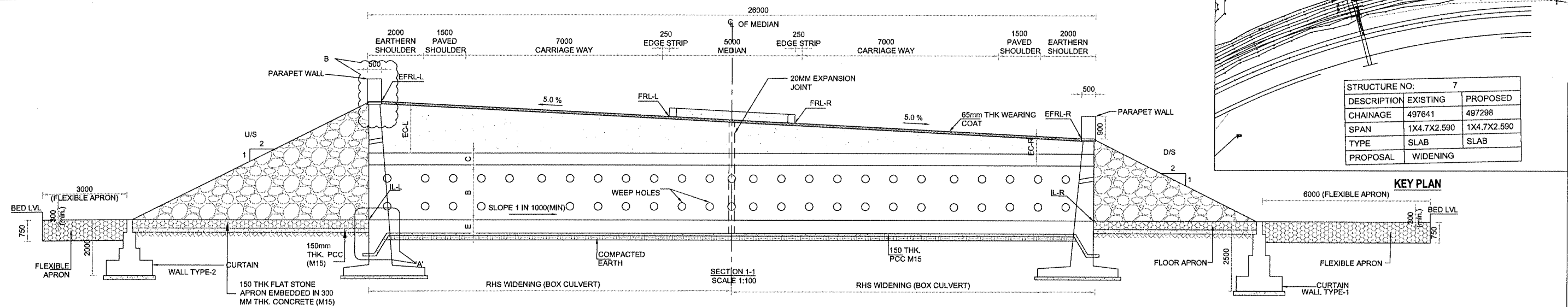


EXISTING CHAINAGE	DESIGN CHAINAGE	SPAN	FRL-L	FRL-R	EFRL-L	EFRL-R	EC-L	EC-R	IL-L	IL-R	CLEAR WIDTH (A)	CLEAR HEIGHT (B)	TOP SLAB THICKNESS (C)	WALL THICKNESS (D)	BOTTOM RAFT THICKNESS (E)	RW	FLOW DIRECTION
497+641	497+298	1X4.7X2.59	91.041	90.791	91.566	90.266	1.848	0.548	90.049	90.023	4.700	2.590	0.40	0.40	0.40	7.4	L-R



GOOD FOR CONSTRUCTION

PROJECT
FOUR LANING OF JHANJHI TO DEMOW
SECTION OF NH-37 FROM EXISTING CH. Km
491+050 TO Km 535+250 (DESIGN CH. Km
490+800 TO Km 534+800) IN THE STATE OF
ASSAM UNDER EPC MODE.


CLIENT


National Highways infrastructure
Development Corporation Ltd.

Ministry of Road Transport &
Highways, Government of India

Branch office : House No.1, Panipath,
Ambikagiri Nagar , Zoo road,
Guwahati-24

CONTRACTOR

 Gannett Construction Company
8600 Glenhurst Drive, Suite 100
Houston, Texas 77036
KOUZATA



DESIGN CONSULTANT
PROFESSIONAL CIVIL INFRA PVT. LTD.
1838, GROUND FLOOR,
SIR. M. VISVESWARAYA LAYOUT
NAGADEVANAHALLI,
BANGALORE - 560 056

SCALE 1:100

PROOF CONSULTANT

CHEM INFRA-TECH
CONSULTANTS (P) LTD.,

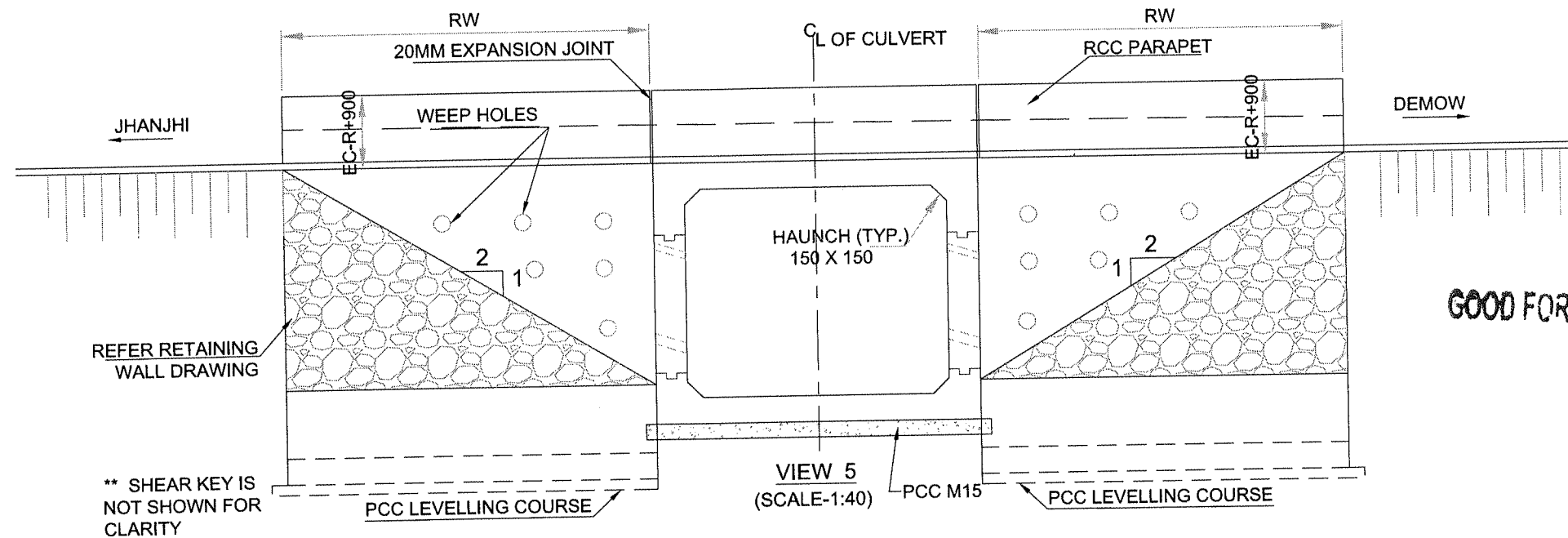
77/1, 1ST FLOOR,
13TH MAIN, SRINAGAR,
OPP. PES COLLEGE,
BENGALURU - 560050

SAFETY CONSULTANT
SMART SAFETY SERVICES
CRSA/2015/00048
#356 & 7, HARI HARA NIVAS
GUMMAKONDA COLONY,
HYDERGUDA,
HYDERABAD - 500048

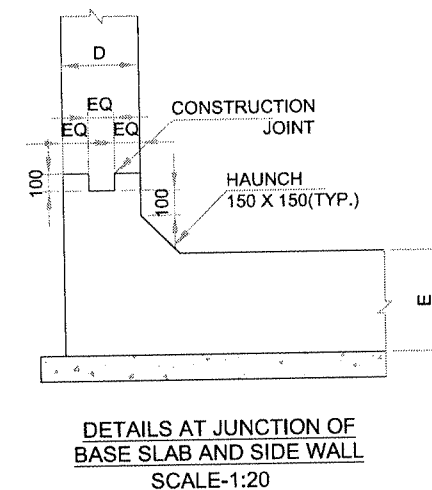
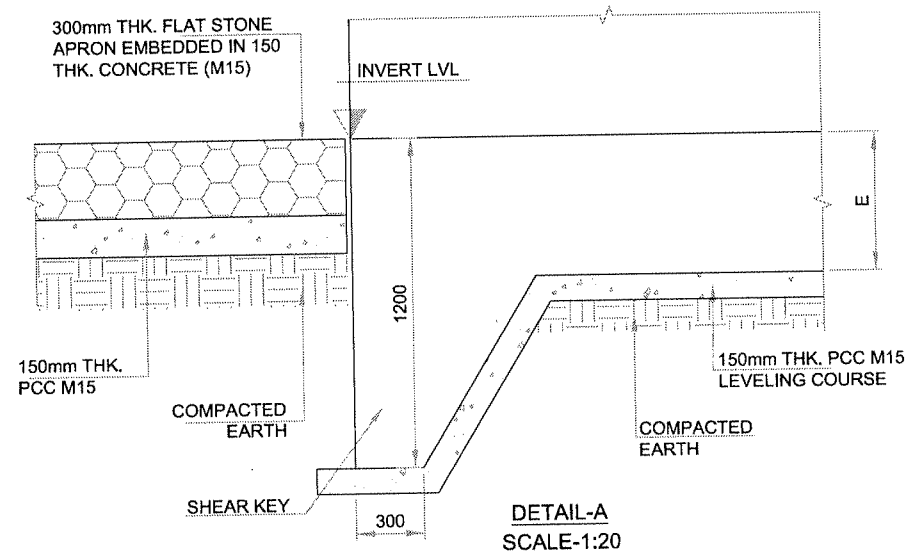
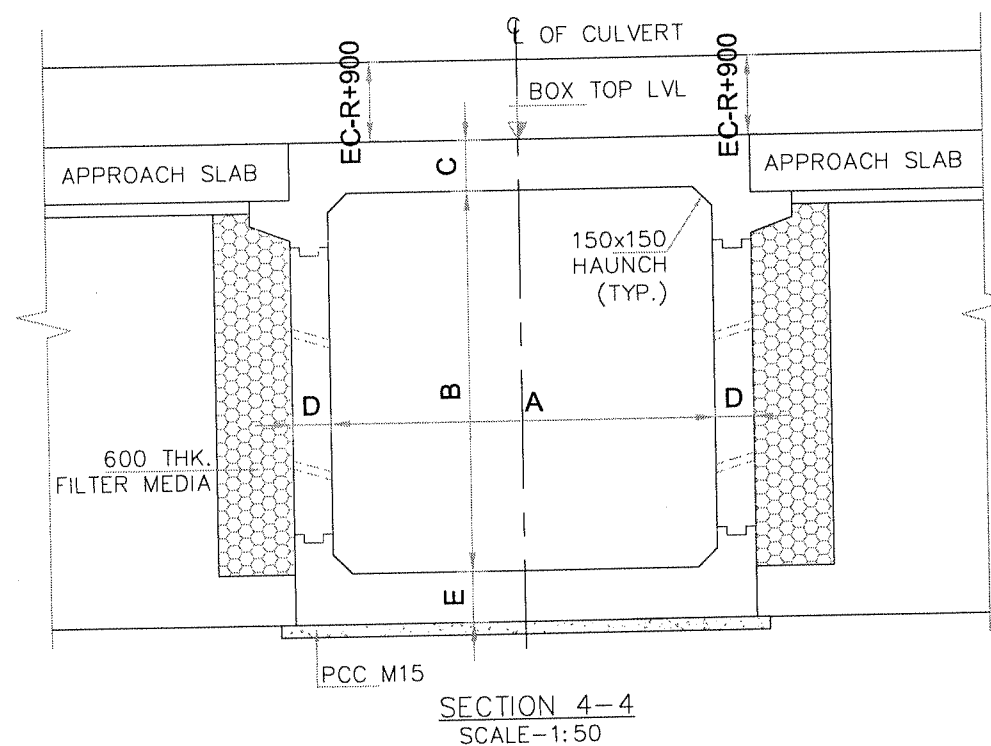
VOYANT SOLUTIONS PVT. LTD.
403, 4th Floor, 77 P Park
Centra, Block 77 P, Vayalil Vayalil
Vihar, Sector 30, Gurgaon,
Gurgaon, Haryana 122002

		NAME	SHEET SIZE
DESIGN DIRECTOR			A2
PROOF CONSULTANT			SCALE
SAFETY CONSULTANT			AS SHOWN
AUTHORITY CONSULTANT			SHEET No.
			01 OF 03

WIDENED WITH BOX.		FOR APPROVAL	
TITLE: GENERAL ARRANGEMENT DRAWING OF BOX CULVERT (RECONSTRUCTION) AT DESIGN CH 497+298 (EXISTING CH 497+641)			
DRAWING No.			REV.
PCIPL/NH-37/J-D/STR/BC/02			00



GOOD FOR CONSTRUCTION



DESIGN DIRECTOR
Vas
 VASANTH KUMAR T.H.

PROJECT
 FOUR LANING OF JHANJHI TO DEMOW
 SECTION OF NH-37 FROM EXISTING CH. Km
 491+050 TO Km 535+250 (DESIGN CH. Km
 490+800 TO Km 534+800) IN THE STATE OF
 ASSAM UNDER EPC MODE.

CLIENT
 National Highways Infrastructure
 Development Corporation Ltd.
 Ministry of Road Transport &
 Highways, Government of India
 Branch office : House No.1, Panipath,
 Ambikagiri Nagar, Zoo road,
 Guwahati-24

CONTRACTOR
 GANESH ENTERPRISES & CO. LTD.
 403, 4th Floor, Park View
 2nd Main, Shivajinagar,
 Bangalore - 560048

DESIGN CONSULTANT
 PROFESSIONAL CIVIL ENGINEERS PVT. LTD.
 # 1838, GROUND FLOOR,
 SIR. M. VISVESWARAYA LAYOUT,
 NAGADEVANAHALLI,
 BANGALORE - 560 056

PROOF CONSULTANT
 CHETANA INFRA-TECH
 CONSULTANTS (P) LTD.,
 2nd 1ST FLOOR,
 17TH MAIN, SHIVAJINAGAR,
 OPP. PES COLLEGE,
 BANGALORE - 560048

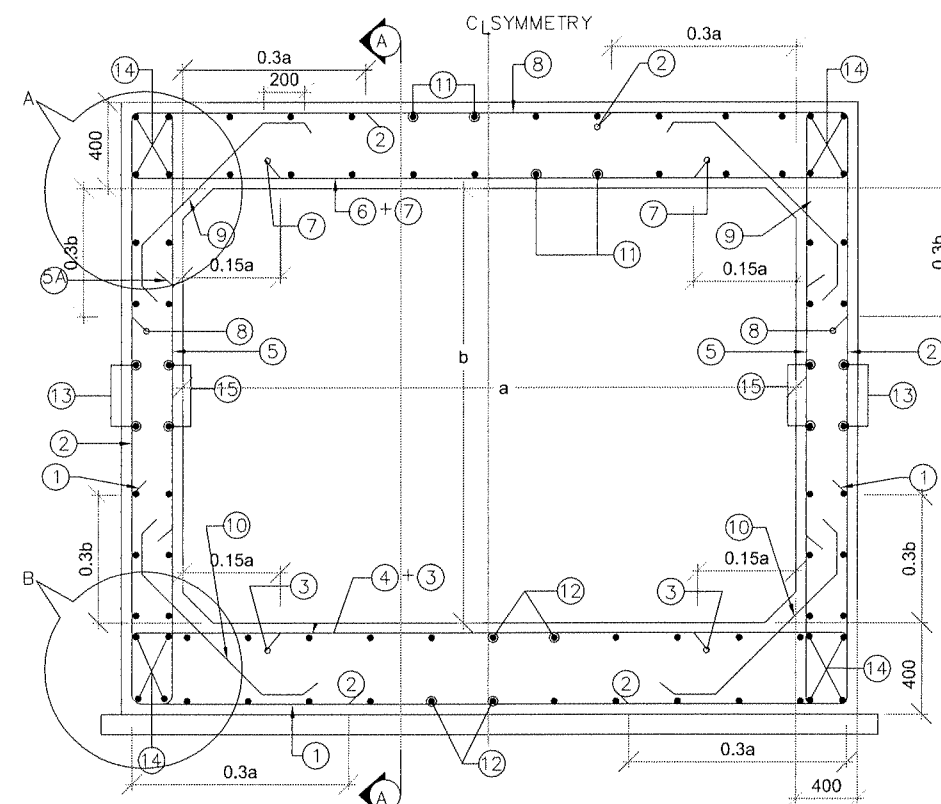
SAFETY CONSULTANT
 SMART SAFETY SERVICES
 3-5-6 & 7, HARI HARA NIVAS,
 GUMMAKONDA COLONY,
 HYDERABAD - 500048

AUTHORITY ENGINEER
 VOYANT'S SOLUTIONS PVT. LTD.
 403, 4th Floor, Park View
 2nd Main, Shivajinagar,
 Bangalore - 560048

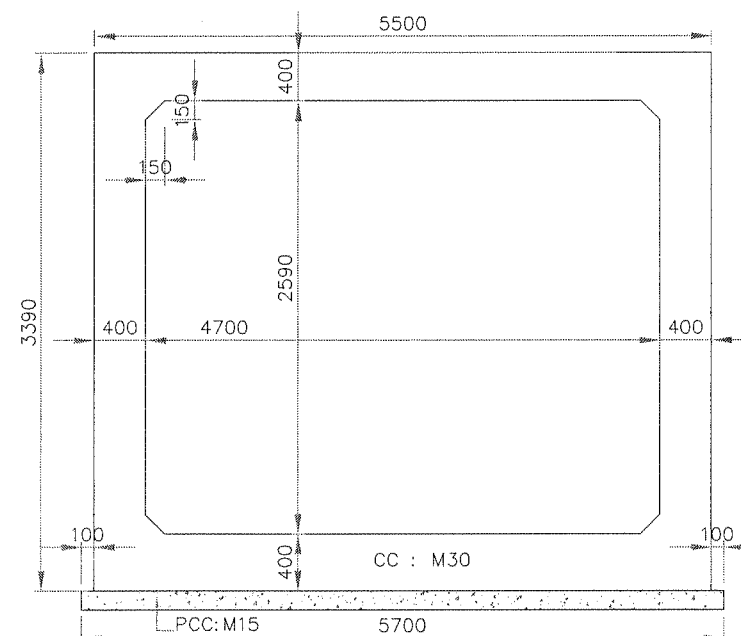
NAME	SHEET SIZE
DESIGN DIRECTOR	A2
PROOF CONSULTANT	SCALE
SAFETY CONSULTANT	AS SHOWN
AUTHORITY ENGINEER	SHEET No.
	03 OF 03

FOR APPROVAL	
TITLE: GENERAL ARRANGEMENT DRAWING OF BOX CULVERT (RECONSTRUCTION) AT DESIGN CH 497+298 (EXISTING CH 497+641)	REV.
DRAWING No. PCIPL/NH-37/J-D/STR/BC/02	00

GOOD FOR CONSTRUCTION



REINFORCEMENT DETAILS OF RCC BOX (LHS)
(SCALE 1:25)



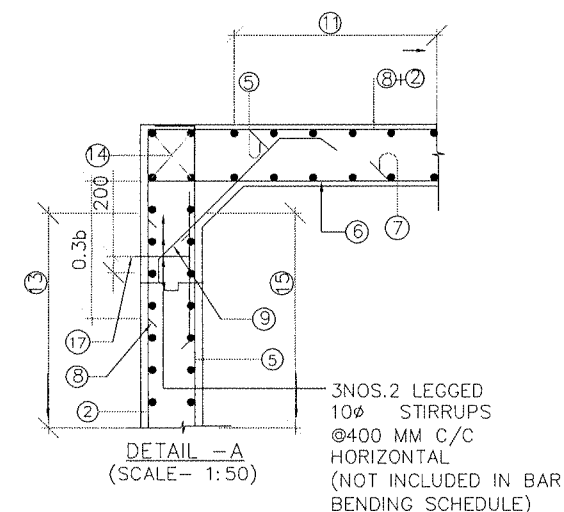
DETAILS OF RCC BOX (LHS)
(SCALE 1:40)

DESIGN CH: 497+298
SCHEDULE OF REINFORCEMENT

BAR MARK	SHAPE OF BARS (NOT TO SCALE)	BAR DIA IN mm	SPACING OR NO. OF BAR
1		12	100 C/C
2		12	100 C/C
3		12	100 C/C
4		12	100 C/C
5		12	100 C/C
5A		12	200 C/C
6		12	125 C/C
7		12	125 C/C
8		16	100 C/C
9		12	200 C/C
10		12	200 C/C
11		12	200 C/C
12		12	200 C/C
13		12	200 C/C
14		12	16 NOS.
15		12	200
16		12	10 NOS.
17		12	250
18		NOT USED	
19		NOT USED	
20		12	150
21		12	20 NOS.

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS & LEVELS ARE IN METERS.
2. DIMENSIONS ARE NOT TO BE SCALED, ONLY WRITTEN DIMENSIONS TO BE FOLLOWED.
3. GRADE OF CONCRETE : M30 FOR BOX.
4. GRADE OF STEEL : Fe500.
5. CLEAR COVER TO REINFORCEMENT SHALL BE AS FOLLOWS.
TOP SLAB = 75mm (TOP FACE); 50mm (BOTTOM FACE)
BOTTOM SLAB = 50mm (TOP FACE); 75mm (BOTTOM FACE)
OUTER WALL = 75mm (EARTH FACE); 50mm (WATER FACE).
6. ANCHORAGE LENGTH SHALL BE 40x BAR DIA (ϕ)
7. LAP LENGTH OF THE STEEL SHALL BE PROVIDED AS BELOW.
LAP LENGTH = $K \times l$
 $K = 1.00$ (<25% LAPPED BAR RELATIVE TO TOTAL CROSS SECTIONAL AREA.)
 $K = 1.15$ (33% LAPPED BAR RELATIVE TO TOTAL CROSS SECTIONAL AREA.)
 $K = 1.40$ (50% LAPPED BAR RELATIVE TO TOTAL CROSS SECTIONAL AREA.)
ALTERNATIVELY BAR SPLICE COUPLER CAN BE USED FOR REBAR LAPPING AND SPLICING.
8. NOT MORE THAN 50% OF BARS CAN BE LAPPED AT A SECTION AND LAPS SHALL BE STAGGERED.
9. FOR DETAILS OF APPROACH SLAB, HAND RAILING RETAINING WALL, REFER SEPARATE MISCELLANEOUS DRAWINGS.
10. SBC OF SOIL BELOW THE BOX STRUCTURE SHALL NOT BE LESS THAN 12.0 T/Sq.m



DESIGN DIRECTOR

VASANTH KUMAR T.H.

<p>PROJECT</p> <p>FOUR LANING OF JHANJHI TO DEMOW SECTION OF NH-37 FROM EXISTING CH. Km 491+050 TO Km 535+250 (DESIGN CH. Km 490+800 TO Km 534+800) IN THE STATE OF ASSAM UNDER EPC MODE.</p>	<p>CLIENT</p> <p>National Highways Infrastructure Development Corporation Ltd.</p> <p>Ministry of Road Transport & Highways, Government of India</p> <p>Branch office : House No.1, Panipath, Ambikagiri Nagar , Zoo road, Guwahati-24</p>	<p>CONTRACTOR</p> <p>CHANDRASEKHAR ENGINEERING & CONSTRUCTION PVT. LTD.</p> <p>11838, GROUND FLOOR, SIR. M VESWESWARAYALAYOUT, MAGADEVANAHALLI, BANGALORE - 560056</p>	<p>DESIGN CONSULTANT</p> <p>PROFESSIONAL CIVIL INFRA PVT. LTD.</p> <p>11, 1ST FLOOR, 13TH MAIN, SENAGAR, OPP. PES. COLLEGE, BENGALURU-560008</p>	<p>PROJECT CONSULTANT</p> <p>CHANDRASEKHAR INFRA TECH CONSULTANTS PVT. LTD.</p> <p>11, 1ST FLOOR, 13TH MAIN, SENAGAR, OPP. PES. COLLEGE, BENGALURU-560008</p>	<p>SAFETY CONSULTANT</p> <p>SMART SAFETY SERVICES</p> <p>PRABHAKHARI HASANAVAS, 11, 1ST FLOOR, 13TH MAIN, SENAGAR, OPP. PES. COLLEGE, BENGALURU-560008</p>	<p>AUTHORITY ENGINEER</p> <p>DATE: 11/05/2020</p> <p>403, 4th Floor, 8th Park Centra, Block 1, Vihar, Sector 10, Gurugram, Haryana-122001</p>	<table border="1"> <thead> <tr> <th>DESIGN DIRECTOR</th> <th>NAME</th> <th>SHEET SIZE</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>A2</td> </tr> <tr> <td>PROOF CONSULTANT</td> <td></td> <td>SCALE</td> </tr> <tr> <td>SAFETY CONSULTANT</td> <td></td> <td>AS SHOWN</td> </tr> <tr> <td>AUTHORITY CONSULTANT</td> <td></td> <td>SHEET No. 02 OF 02</td> </tr> </tbody> </table>	DESIGN DIRECTOR	NAME	SHEET SIZE			A2	PROOF CONSULTANT		SCALE	SAFETY CONSULTANT		AS SHOWN	AUTHORITY CONSULTANT		SHEET No. 02 OF 02	<p>TITLE: REINFORCEMENT DETAILS OF BOX CULVERT (1X4.7X2.59) AT DESIGN CHAINAGE 497+298 (EXISTING CHAINAGE 497+641)</p> <p>DRAWING No. PC/PL/NH-37/JD/BC/STR/REIN/02</p> <p>REV. 00</p>
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