

N.R.H.Q.E. PLAN NO. P-219-RB/2014 SH-NO-1

N.R.H.Q.E.(P) PLAN NO.

N.R.DY.C.E.(C) UMB PLAN NO. P-403/DY.CE/C/UMB/2013

NORTHERN RAILWAY

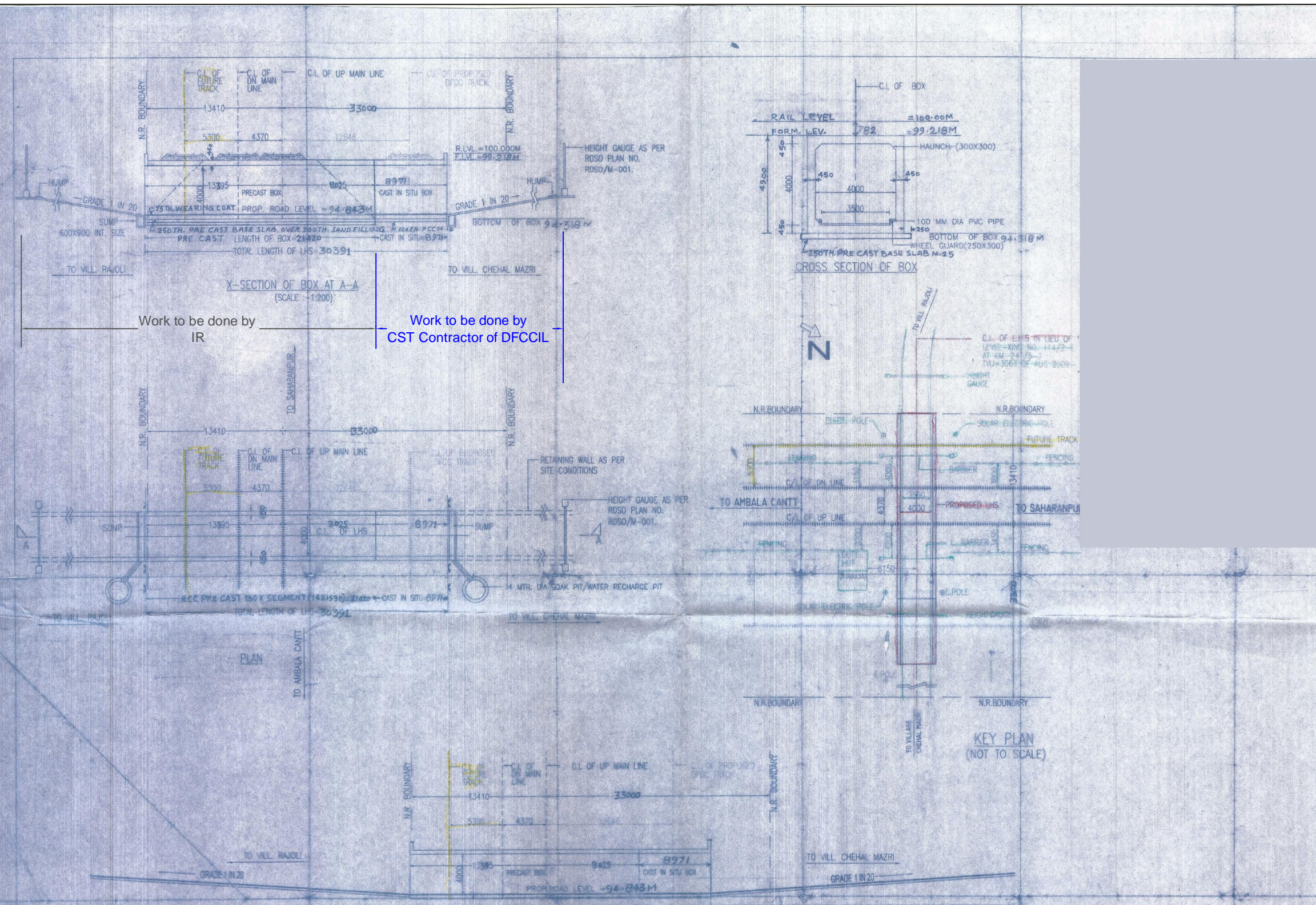
DRAWING OFFICE (CONST.) AMBALA
CONSTRUCTION OF SINGLE LANE ROAD
UNDER BRIDGE IN LIEU OF LEVEL
CROSSING NO. 114-C/2-E AT KM.241/5-7
IN BETWEEN BARARA & TANDWAL
RAILWAY STATION ON SRE-UMB SECTION.
(SIZE OF BOX = 1 X 4.00 X 4.00 M)

GENERAL-ARRANGEMENT DRAWING

SCALE :- 1:200, 1:400

PINK BOOK ITEM NO:- 413 OF YEAR 2013-14

- NOTES:-
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE. FOLLOW THE WRITTEN DIMENSIONS ONLY.
 - CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SUP) IN ORDER OF PREFERENCE:-
i. IRS BRIDGE RULES.
ii. IRS CONCRETE BRIDGE CODE.
iii. IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
iv. RELEVANT BIS CODES.
 - LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD).
 - HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY ENGINEER.
 - TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COALTAR OR BITUMEN CONFORMING TO IS: 3070-1985 BEFORE FILLING OF EARTH.
 - WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
 - TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE ENGINEER.
 - THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
 - PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
 - SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFC.
 - SAFE WORKING AT SITE, INCLUDING SAFETY OF TRAINS SHOULD BE ENSURED BY CONTRACTOR.
 - AT PRESENT OFC & SIGNAL CABLE MAY EXIST ADJACENT TO IR TRACK. THE SAME IS TO BE PROTECTED TO PREVENT DAMAGE OF CABLE. NO JOB WORKING WILL BE ALLOWED NEAR CABLES.
 - METHODOLOGY FOR CONSTRUCTION OF SUBWAY OF DFC PORTION SHALL BE GOT APPROVED FROM ENGINEER.
 - DIVERSION OF LC FOR EXECUTION OF WORK SHALL BE UNDER THE SCOPE OF DFC CONTRACTOR. METHODOLOGY FOR THE SAME SHALL BE GOT APPROVED FROM DFCIL & IR BOTH.
 - HEIGHT GAUGES ON DFC SIDE SHALL BE SHIFTED AS PER APPROVED PLAN.
 - EXISTING WORK SHOWN IN BLACK.
 - PROPOSED WORK SHOWN IN RED.
 - DFCIL WORK SHOWN IN BLUE.
 - TEMPORARY DIVERTED WORK SHOWN IN MAGENTA.
 - THE WORK OF RUB WILL BE EXECUTED IN SYNCHRONIZATION WITH IR WORK. A JOINT PROGRAMME SHALL BE MADE WITH IR FOR CONSTRUCTION.



10000	8000	6000	4000	2000	1305	800	1650	2000	4000	6000	8000	10000
97.772	91.277	84.772	78.277	71.772	65.277	58.772	52.277	45.772	39.277	32.772	26.277	19.772
98.000	91.500	85.000	78.500	72.000	65.500	59.000	52.500	46.000	39.500	33.000	26.500	20.000

PRE CAST LENGTH OF BOX 21420
TOTAL LENGTH OF LHS 30391

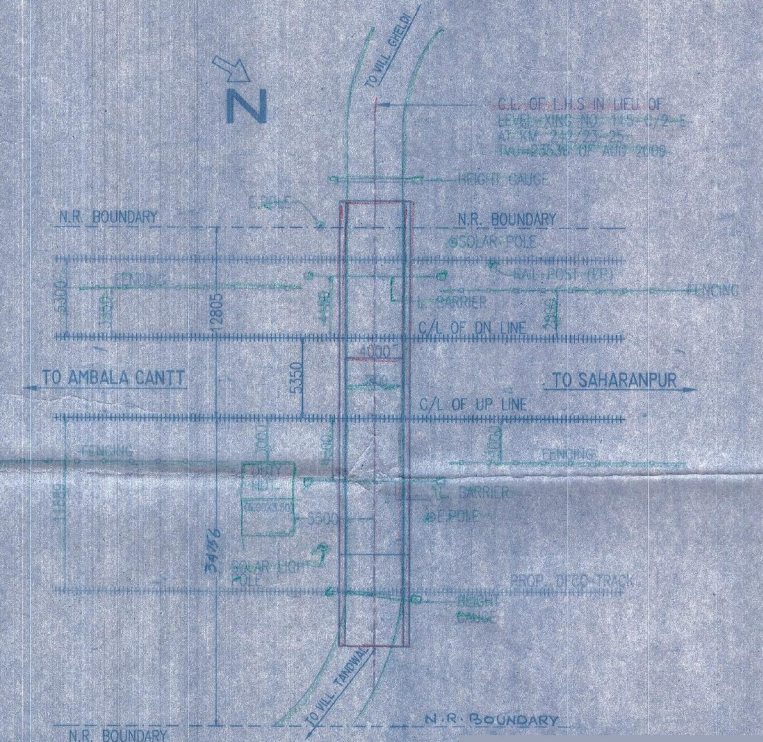
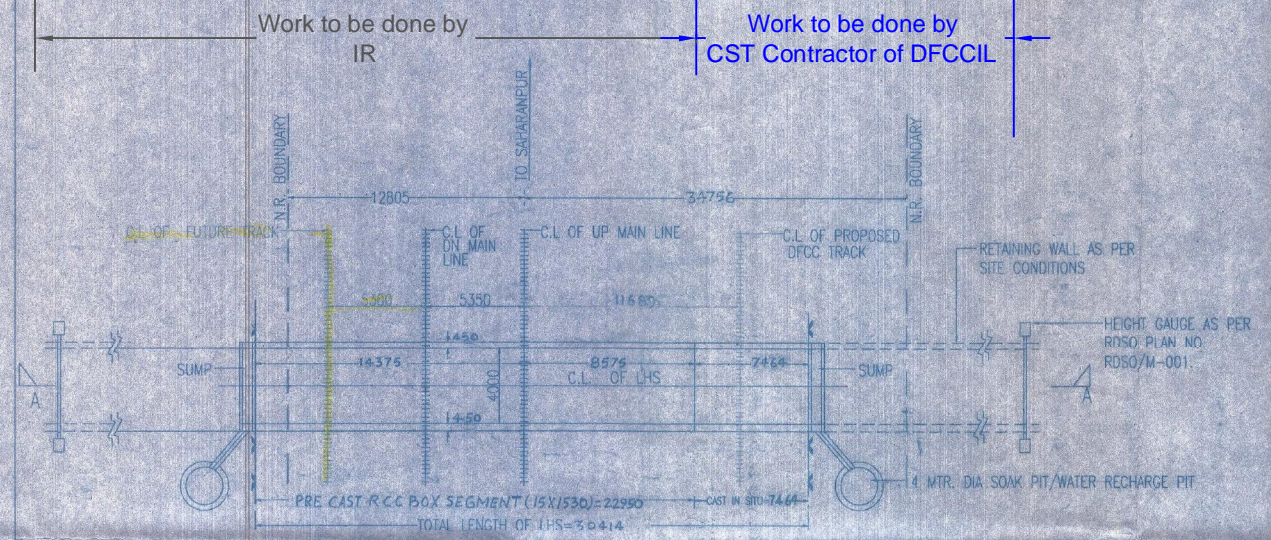
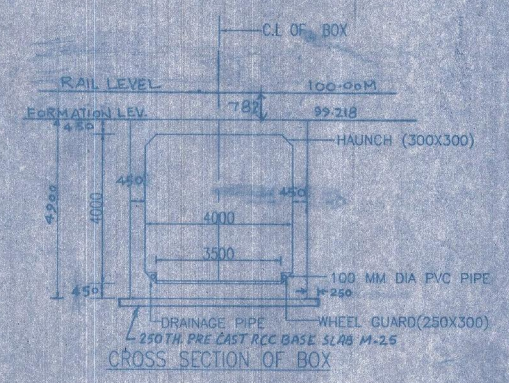
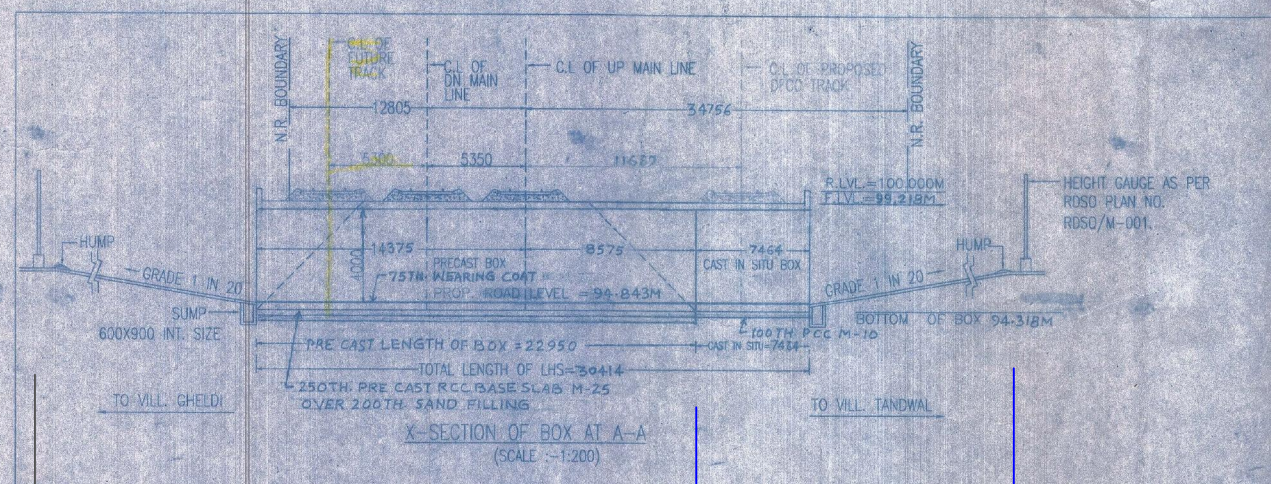
L-SECTION ROAD

FEASIBILITY CERTIFICATE		FEASIBILITY CERTIFICATE	
THE PROPOSAL CHECKED AT SITE & FOUND FEASIBLE.		THE PROPOSAL CHECKED AT SITE AND FOUND FEASIBLE.	
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
JE/D/C/UMB	SSE/D/C/UMB	JE/W/C/UMB	SSE/P-WAY/C/UMB
JE/W/C/UMB	SSE/P-WAY/C/UMB	SSE/WORKS/UMB	SSE/P-WAY/UMB
JE/W/C/UMB	SSE/P-WAY/C/UMB	SSE/WORKS/UMB	SSE/P-WAY/UMB
JE/W/C/UMB	SSE/P-WAY/C/UMB	SSE/WORKS/UMB	SSE/P-WAY/UMB

SIGNATURES OF DFCCIL AUTHORITIES					
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
APU/ENGG.	DY.CE/ENGG/UMB	CPH/ENGG.			
SIGNATURES OF STATE PWD (RRR) AUTHORITIES					
<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
SUB DIV ENGG/HSHRA	EXECUTIVE ENGINEER				
AMBALA	AMBALA				

<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
CE/CI/SP/BLI	Sr. DEE/G/UMB	Sr. DEE/TRD/UMB	Sr. DSTE/UMB	Sr. D.O.M/UMB	Sr. DEN/C/UMB
VEN/C/UMB	ARE/C/UMB	DY.CE/C/UMB	DY.CE/C/UMB		DEV/NO/UMB

N.R.H.Q.E. PLAN NO.
 N.R.H.Q.E.(P) PLAN NO.
 N.R.DY.C.E.(C) UMB PLAN NO. P-404/DY.CE/C/UMB/2013
NORTHERN RAILWAY
 DRAWING OFFICE (CONST.) AMBALA
CONSTRUCTION OF SINGLE LANE ROAD UNDER BRIDGE IN LIEU OF LEVEL CROSSING NO. 115-C/2-E AT KM.242/23-25 IN BETWEEN BARARA & TANDWAL RAILWAY STATION ON SRE-UMB SECTION. (SIZE OF BOX = 1 X 4.00 X 4.00 M)
 GENERAL-ARRANGEMENT DRAWING
 SCALE :- 1:200, 1:400
 PINK BOOK ITEM NO:- 413 OF YEAR 2013-14



CHANG	100.000	80.000	60.000	40.000	20.000	11.325	0.000	15.039	22.039	40.000	60.000	80.000	100.000
PROP. ROAD LEVEL	93.728	96.224	97.124	98.124	95.124	94.843	94.843	94.843	94.843	94.741	94.741	97.741	97.741
HEI.	97.229	98.229	98.229	98.229	98.229	98.229	98.229	98.229	98.229	98.229	98.229	98.229	98.229



FEASIBILITY CERTIFICATE							
THE PROPOSAL CHECKED AT SITE & FOUND FEASIBLE							
JE/W/C/UMB	SSE/P-WAY/C/UMB	SSE/WORKS/UMB	SSE/P-WAY/UMB	XEN/C/UMB	ADEN/UMB		

KEY PLAN (NOT TO SCALE)

- NOTES:-
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
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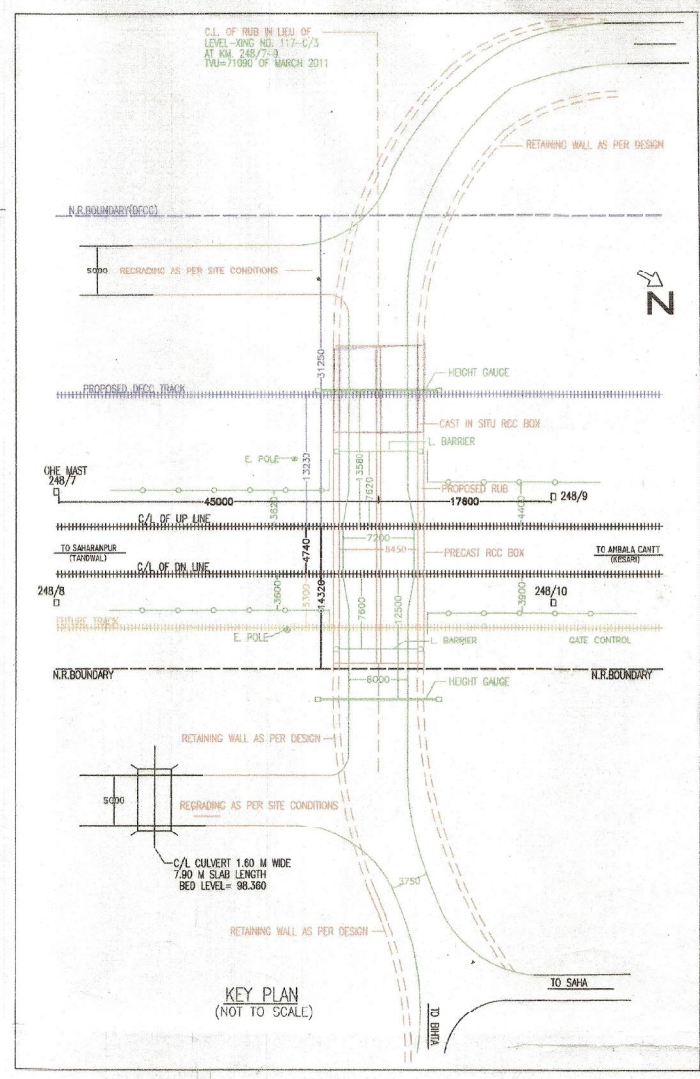
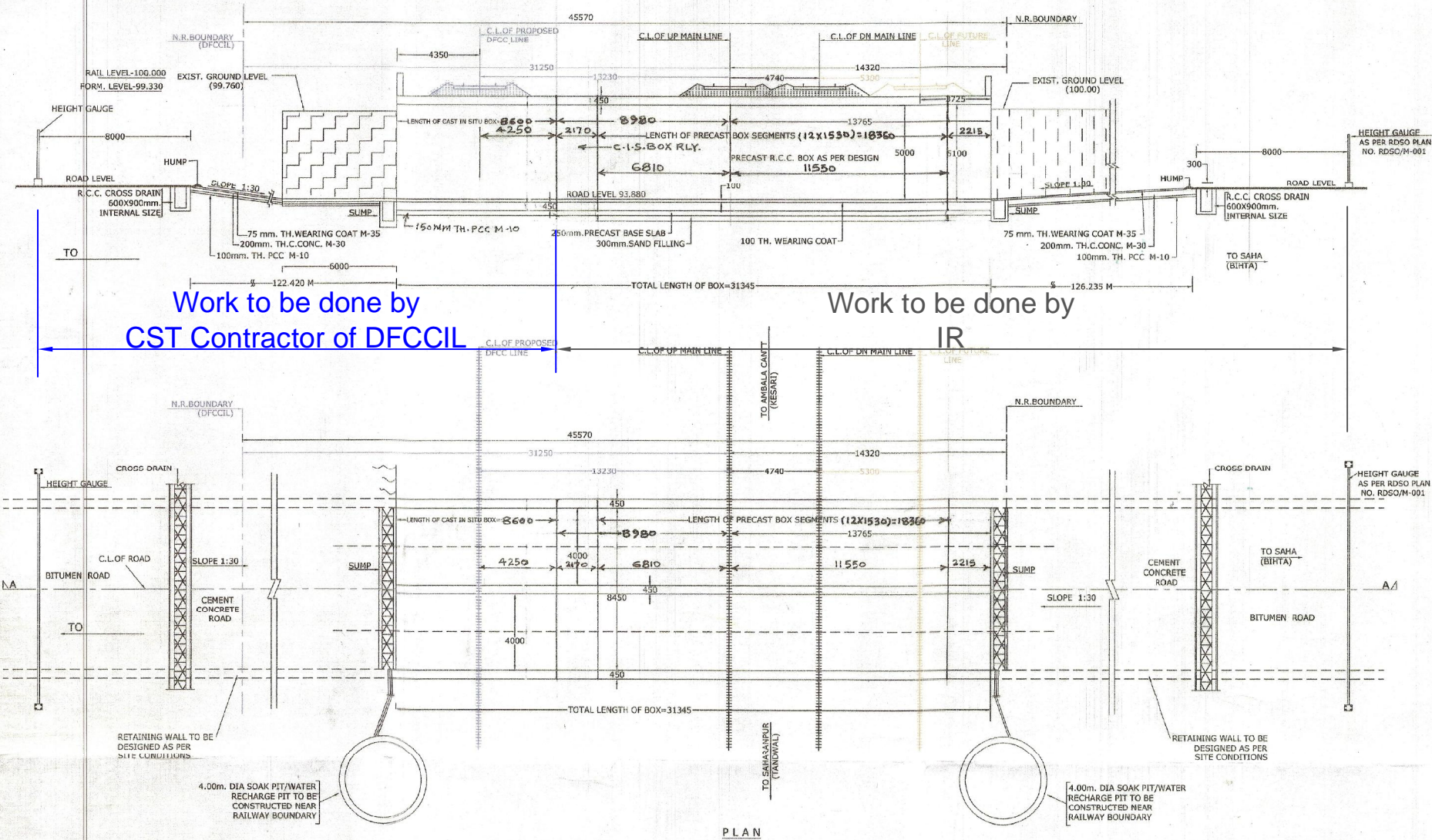
SIGNATURES OF DFCCIL AUTHORITIES		
APN/ENGR	DY.CPM/UMB	CPM/UMB
SIGNATURES OF STATE PWD (B&R) AUTHORITIES		
JE PWD (B&R) AMBALA	S.D.E./Const. SUB DIVISION PWD (B & R), AMBALA	XEN/PROV. DIVISION PWD (B&R), AMBALA

XEN/C/D/UM	DY.CE/C/D/UM	CE/C/SPL/UM			
SR.OSTE/UMB	SR.DOM/UMB	SR.DEN/C/UMB	DRM/UMB		
XEN/C/UMB	AEE/C/UMB	DY.CE/C/UMB	DY.CEE/C/JUC	DEN/HQ/UMB	

NORTHERN RAILWAY
DRAWING OFFICE (CONST.) AMBALA
AMBALA DIVISION

CONSTRUCTION OF TWO LANE ROAD UNDER BRIDGE IN LIEU OF LEVEL XING NO. 117-C/3 AT KM.248/7-9 IN BETWEEN TANDWAL AND KESARI RAILWAY STATION ON SRE-UMB SECTION ON DFCC ROUTE. (SIZE OF BOX = 2 X 4.00 X 5.10 M)

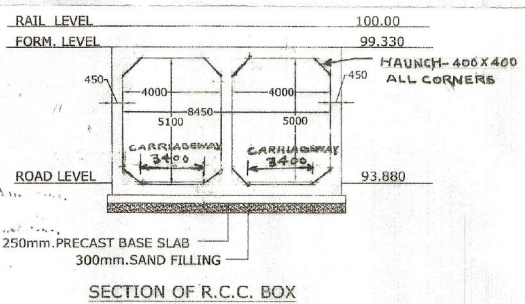
GENERAL-ARRANGEMENT DRAWING
SCALE :- 1:100
PINK BOOK ITEM NO:-395 OF YEAR 2013-14



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 - HEIGHT GAUGES ON DFC SIDE SHALL BE SHIFTED AS PER APPROVED PLAN.
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CROSS SECTION

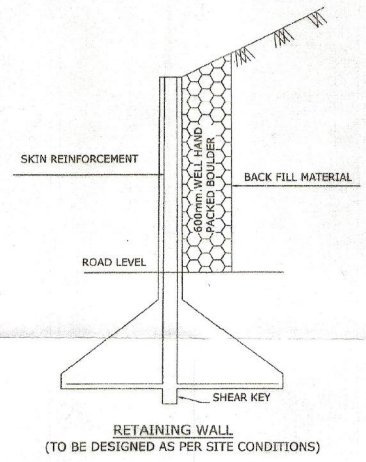
CUTTING / FILLING (+/-)	ROAD LEVEL	GROUND LEVEL	DISTANCE IN METRES
0.00	93.880	100.00	0.00
13.75	93.880	100.00	13.75
20.00	93.880	100.00	20.00
40.00	93.880	100.00	40.00
60.00	93.880	100.00	60.00
80.00	93.880	100.00	80.00
100.00	93.880	100.00	100.00
120.00	93.880	100.00	120.00
140.00	93.880	100.00	140.00



FEASIBILITY CERTIFICATE

THE PROPOSAL CHECKED AT SITE & FOUND FEASIBLE

SSR/TP/UMB	AD/TP/UMB	SSR/W/C/SRE	SSR/P-W/C/UMB	SSR/WORKS/UMB	SSR/P-W/UMB	XEN/C/SRE	ADEN/UMB
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SIGNATURES OF DFCC AUTHORITIES

APR/ENG/UMB	DY/CH/ENG/UMB	CE/UMB
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SIGNATURES OF HARYANA STATE PWD (B&R) AUTHORITIES

SDE/PWD/AMBALA	XEN/P-2/PWD/AMBALA
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Sr.DS/TP/UMB	Sr.DEE/TP/UMB	Sr.DEN/TP/UMB	DRM/UMB
AEE/TRD/C/CG	AEE/C/UMB	XEN/C/SRE	DY.CE/C/UMB
	DY.CEE/C/JUC	DEN/HQ/UMB	

SSR/TP/UMB	AD/TP/UMB	SSR/W/C/SRE	SSR/P-W/C/UMB	SSR/WORKS/UMB	SSR/P-W/UMB	XEN/C/SRE	ADEN/UMB
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N.R.H.Q.E. PLAN NO.
 N.R.H.Q.E.(P) PLAN NO.
 N.R.DY.C.E.(C) UMB PLAN NO. P-401/DY.CE/C/UMB/2013

NORTHERN RAILWAY

DRAWING OFFICE (CONST.) AMBALA

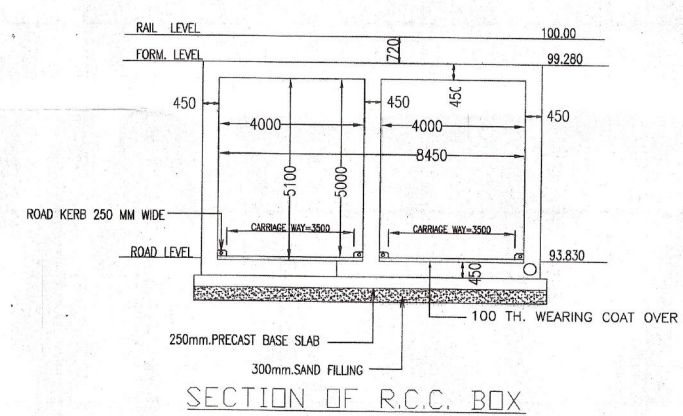
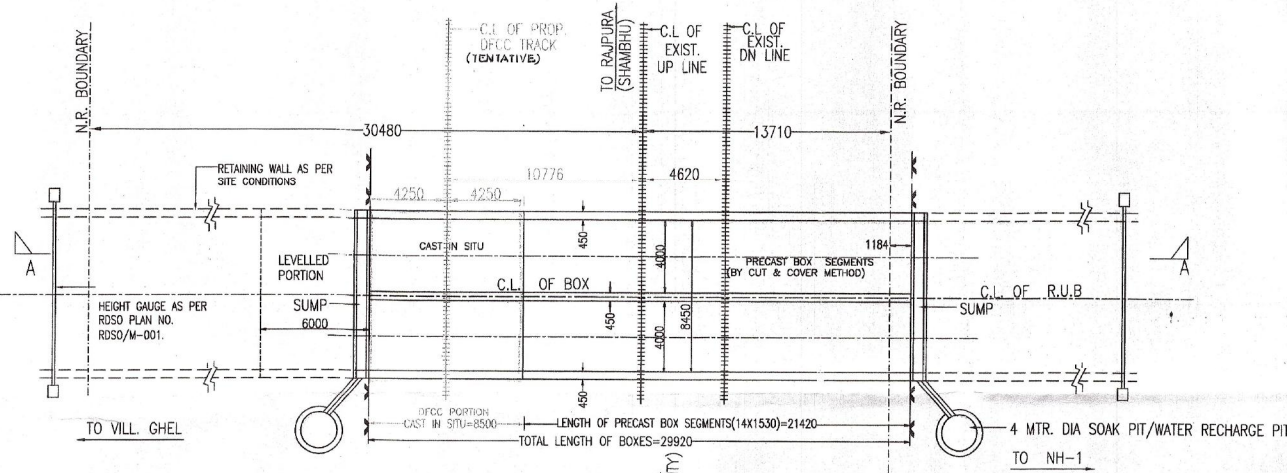
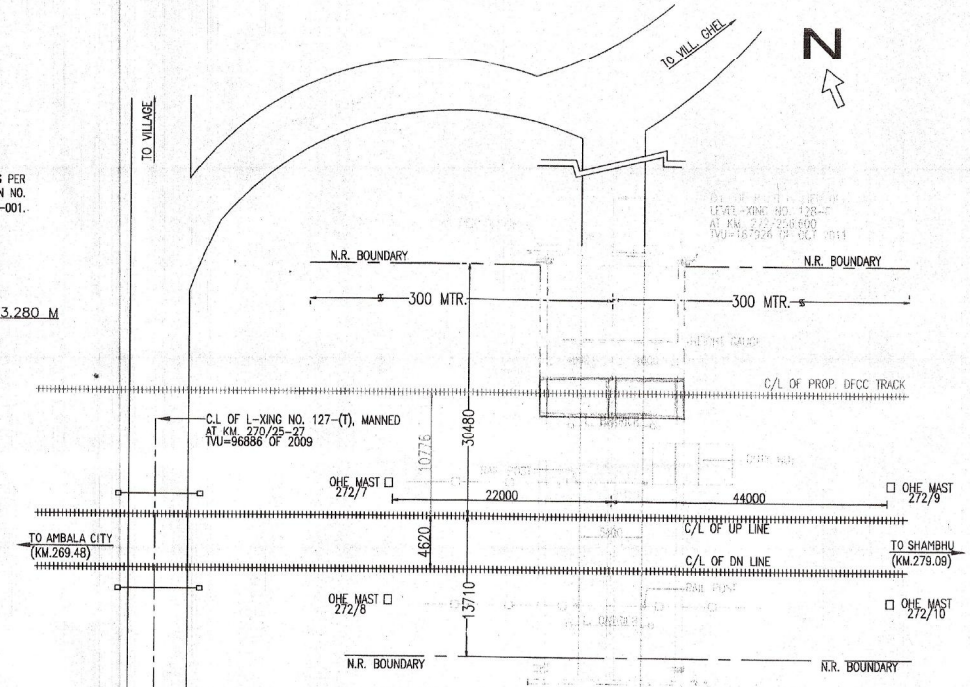
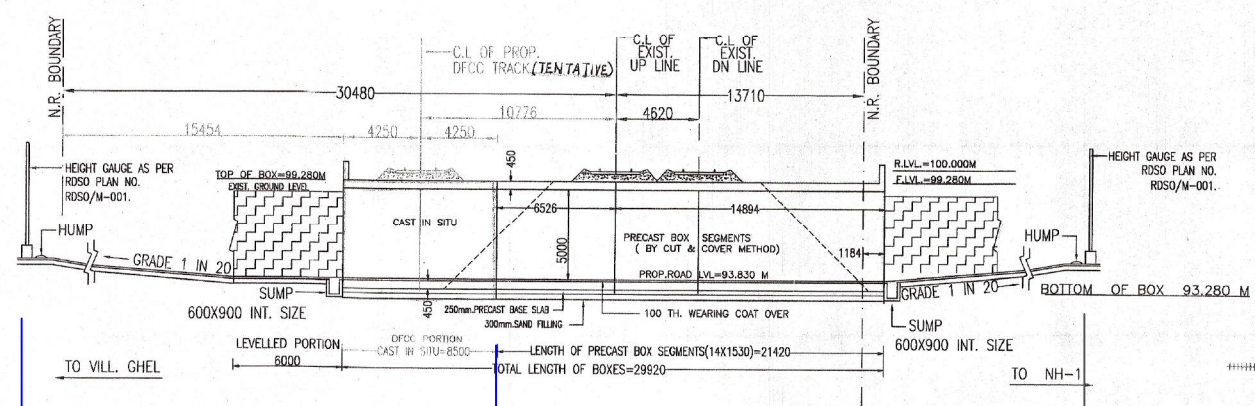
CONSTRUCTION OF ROAD UNDER BRIDGE IN LIEU OF LEVEL CROSSING NO. 128-C AT KM.272/256.600 ON AMBALA-LUDHIANA SECTION BETWEEN AMBALA CITY AND SHAMBHU RAILWAY STATION. (RCC TWIN BOX SIZE = 2X4.00 X 5.10 M)

GENERAL-ARRANGEMENT DRAWING

SCALE :- 1:200, 1:400

PINK BOOK ITEM NO:-397 OF YEAR 2013-14

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 - DFCCIL WORK SHOWN IN BLUE.
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L - SECTION

	100.00	80.000	60.000	40.000	21.026	15.026	0.000	14.884	20.000	40.000	60.000	80.000	100.00	105.00
CHANNAGE														

6000 ——— DFC PORTION CAST IN SITU=8500 ——— LENGTH OF PRECAST BOX SEGMENTS(14X1530)=21420 ——— TOTAL LENGTH OF BOXES=29920

FEASIBILITY CERTIFICATE
 THE PROPOSAL CHECKED AT SITE & FOUND FEASIBLE

(SOHAN LAL) JE/D/C/UMB	(B.B.JULKA) SSE/D/C/UMB	(MAM CHAND) JE/W/C/UMB	(MAM CHAND) JE/W/C/UMB	(HARPAL SINGH) SSE/P-WAY/UMB	(DINESH KUMAR) SSE/WORKS/RPU	(UPPAL HANU) ADE/RPJ	(RAM SINGH) AKN/C/UMB	(BALBIR SINGH) DY.CE/C/UMB
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SIGNATURES OF DFCCIL AUTHORITIES

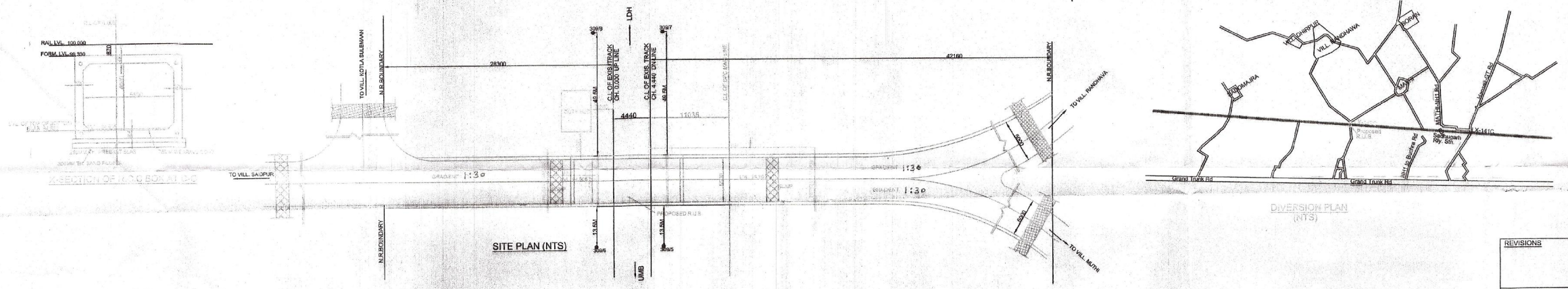
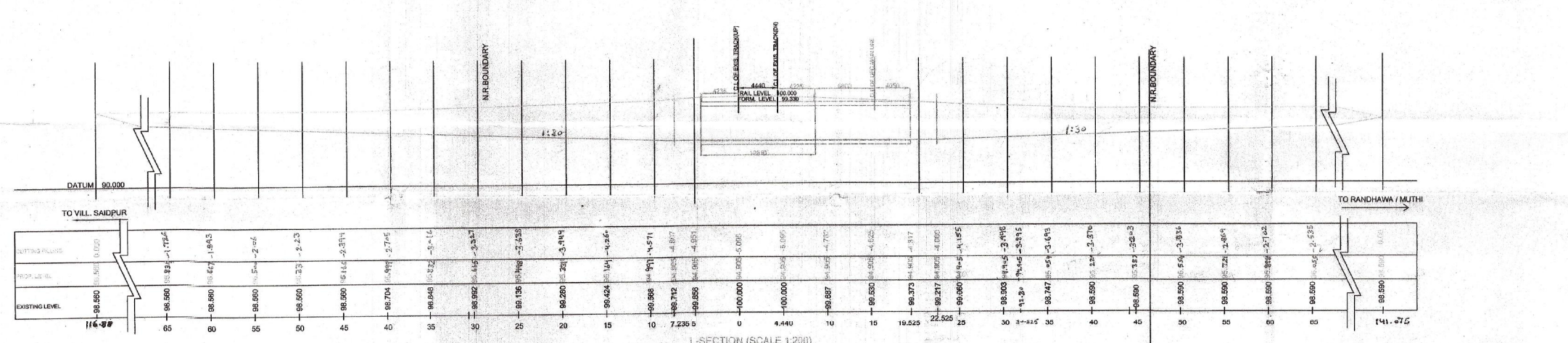
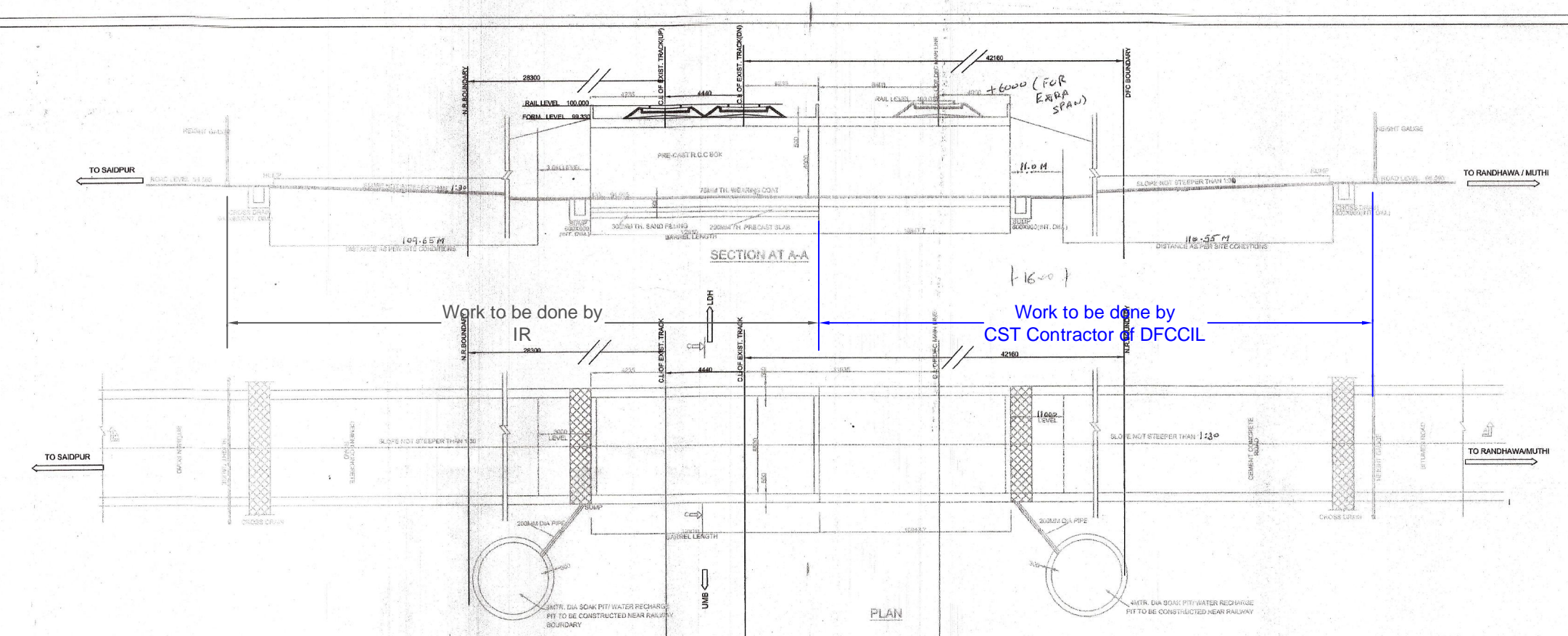
(SUNDER SINGH) APM/ENGG/UMB	(NATRAJ SINGH) DY.CPM/LIMB/DFCC	(SUNDER SINGH) CPM/UMB/DFCC	(JAI BHAGWAN) JE/PWD/B&R	(SUMIT DALAL) AE/PWD/B&R	(ARUN JAGGA) XEN,PWD(B&R),AMBALA	(SE.PWD(B&R),AMBALA)
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SIGNATURES OF STATE PWD AUTHORITIES(B&R)

(SHOBHIT GUPTA) Sr. DEE/G/UMB	(NIRALA KATIYAR) Sr. DSTE/UMB	(KARAN SINGH) Sr. D.O.M/UMB	(B.K.GUPTA) Sr. DEN/C/UMB	(A.K.KATHPAL) DFM/UMB
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(RAKESH KUMAR) AXEN/C/D-I/DU	(R.P.KHURANA) DY.CE/C/D-II/DU	(S.C. JAIN) CE/C/SPL/DU			
(SHOBHIT GUPTA) Sr. DEE/G/UMB	(NIRALA KATIYAR) Sr. DSTE/UMB	(KARAN SINGH) Sr. D.O.M/UMB	(B.K.GUPTA) Sr. DEN/C/UMB	(A.K.KATHPAL) DFM/UMB	
(RAM SINGH) AXEN/C/UMB	(SANTOSH KUMAR) AEE/C/UMB	(BALBIR SINGH) DY.CE/C/UMB	(M.K. PANDEY) DY.CEE/C/UMB	(RAJESH GUPTA) DY.CSTE/C/ON/NDLS	(NEERAJ BHANDARI) SR. DEN/I/UMB

- NOTES: -
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE, FOLLOW THE WRITTEN DIMENSIONS ONLY.
 - CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 i. IRS BRIDGE RULES.
 ii. IRS CONCRETE BRIDGE CODE.
 iii. IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 iv. RELEVANT BIS CODES.
 b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD).
 - HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY ENGINEER.
 - TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COALTAR OR BITUMEN CONFORMING TO IS: 3070-1985 BEFORE FILLING OF EARTH.
 - WEEP HOLES OF 75mm DIA. PVC PIPES ϕ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
 - TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INEVITABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE ENGINEER.
 - THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
 - PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
 - SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
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FEASIBILITY HAS BEEN CHECKED AT SITE & FOUND FEASIBLE

SSE/WRPJ	SSE/PWRPJ	ADEN/RPJ	CPM/DFCCIL	SSE/TRD/SIR	ADEE/TRD/SIR
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17.02.15	17.2.15	17.2.15	17.2.15	17.2.15	17.2.15
DY. P.M. DFCCL	DY. CPM/DFCCIL	CPM/DFCCIL	CPM/DFCCIL	CPM/DFCCIL	CPM/DFCCIL
SDE/PWD	XEN/PWD	SEP/PWD	CHIEF ENGINEER/DFCCIL	AXENC/ICDDG	DY. CEC/ICDDG

REVISIONS	
DRAWING OFFICE DY. CHIEF ENGINEER/CONST-II CHANDIGARH	
AMBALA CANTT-LUDHIANA SECTION CONSTRUCTION OF PROPOSED RUB. OF SPAN 1 X 5.5M X 4.0M IN LIEU OF L-XING NO C-142 AT KM 309/6-8 ON UMB-LDH SECTION	
GENERAL ARRANGEMENT PLAN	
SCALE: 1:100, 1:200	

17/11/15
17/11/15

