

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
 2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED BEFORE EXECUTION.
 3. ALL DIMENSIONS AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 4. THIS GENERAL ARRANGEMENT DRAWING IS INDICATIVE AND IS MEANT ONLY FOR GUIDANCE FOR THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DEVELOPED & DESIGNED BY THE CONTRACTOR AS PER THE EMPLOYER'S REQUIREMENTS, SPECIFICATIONS AND SITE DIMENSIONS / CONDITIONS AND SHALL BE APPROVED BY ENGINEER / EMPLOYER.
 5. ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING IR BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
 6. FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
 7. LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
 8. GROUND PROFILE SHOULD BE VERIFIED BEFORE EXECUTION.
- SUPERSTRUCTURE & SUBSTRUCTURE**
- 1) THE BRIDGE SHALL BE DESIGNED AS PER DFCC I LOADING (32.5T AXLE LOAD) BRIDGE RULE, ISSUED BY RDSO, (WITH LATEST CORRECTION SLIP).
 - 2) THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
 - 3) BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - 4) WEEP HOLES SHALL BE PROVIDED IN RETURN WALL & ABUTMENT.
 - 5) JOINT FOUNDATION BOLTS SHALL BE PROVIDED IN CONSULTATION WITH THE CONTRACTOR OF EMP-4.
 - 6) RAILING EXPANSION JOINTS, BEARING, WEARING COAT, FOOTPATH, SERVICE DUCT, DRAINAGE SHALL BE PROVIDED AS PER SPECIFICATION.
 - 7) FOR INSPECTION OF BEARING / SUPERSTRUCTURE, SUITABLE ARRANGEMENT SHALL BE PROVIDED.
 - 8) FOR CHANGING OF BEARING SUITABLE ARRANGEMENT SHALL BE PROVIDED.
- GEO-TECHNICAL**
- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL INVESTIGATION REPORT.
 - 2) GEO-TECHNICAL BORE HOLE DATA REFERED IN GAD IS INDICATIVE ONLY.
 - 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

TABLE-1

DETAILS	PROPOSED DFC
PACKAGE	3
SECTOR	5
BRIDGE NO.	492
CHAINAGE	205334.063
SPAN CONFIGURATION (C/C) OF PIER	1X12.2m
OVERALL SPAN (mm)	13375
EFFECTIVE SPAN (mm)	12575
CLEAR SPAN (mm)	12200
TYPE OF STRUCTURE	PRESTRESSED CONTIGUOUS BOX
DEPTH OF SUPERSTRUCTURE (mm)	1780
TYPE OF CROSSING	RAILWAY (R/O)
BRIDGE (STRAIGHT/CURVE/SKEW)	SKEW 8°
FORMATION LEVEL R.L. (METER)	36.671
RAIL LEVEL (METER)	27.517
GROUND LEVEL R.L. (METER)	27.424
DESIGN DISCHARGE (Cumec)	-
VERTICAL CLEARANCE MIN. (mm)	5870
TYPE OF FOUNDATION	PILE FOUNDATION
BRIDGE BEARING (ELASTOMER WITH - SUITABLE RESTRAINTS)	FIX & FREE

REFERENCE DRAWINGS:

DRAWING NO	SUBJECT
CEG/SACHIN-NADIADI/PLAN/PROFILE/S-510	L-SECTION
	CONTINUOUS BOX

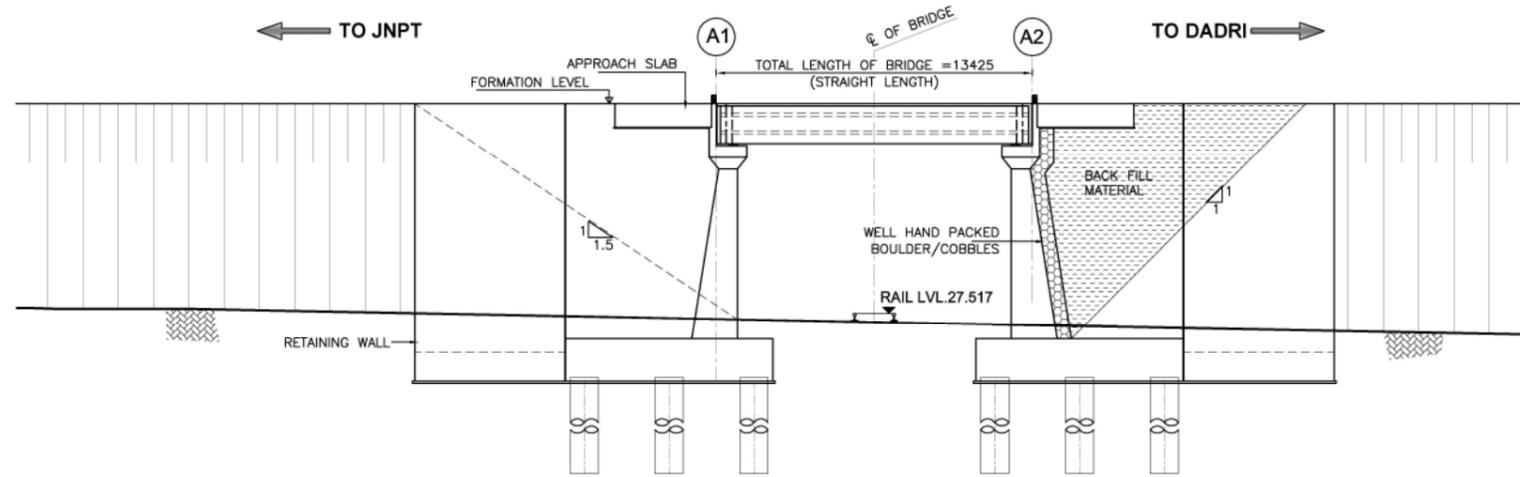
APPROVED

DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFCC	CPM/DFCC
MANAGER / DFCC	GGM/Engg-H

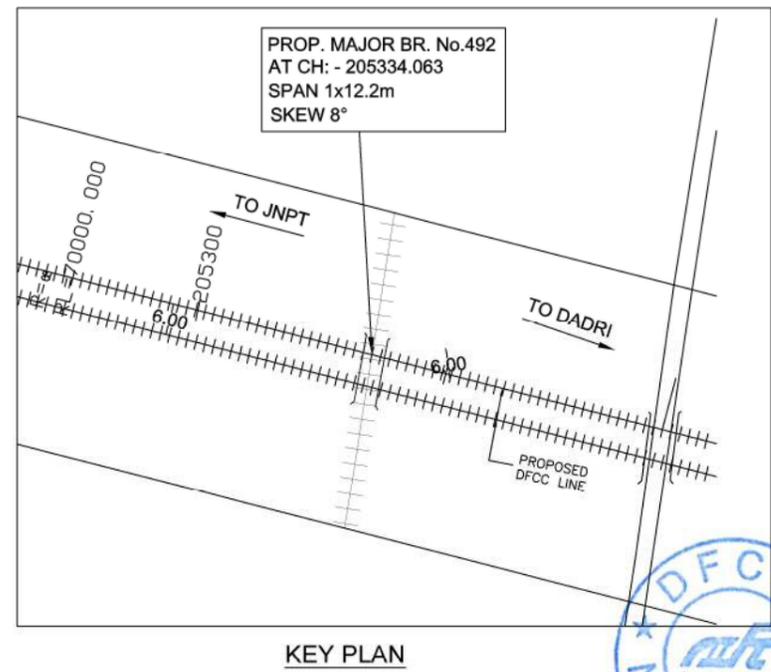
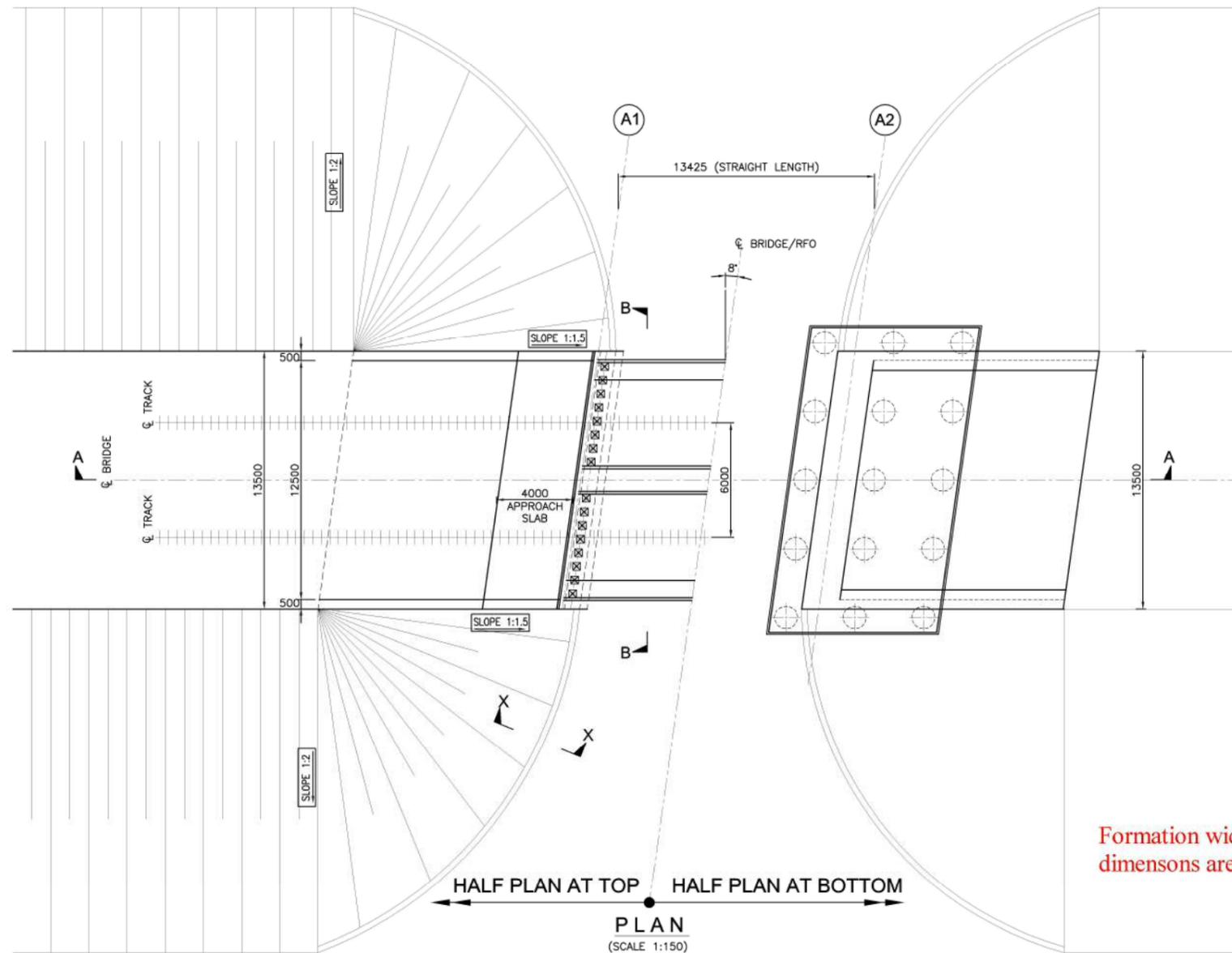
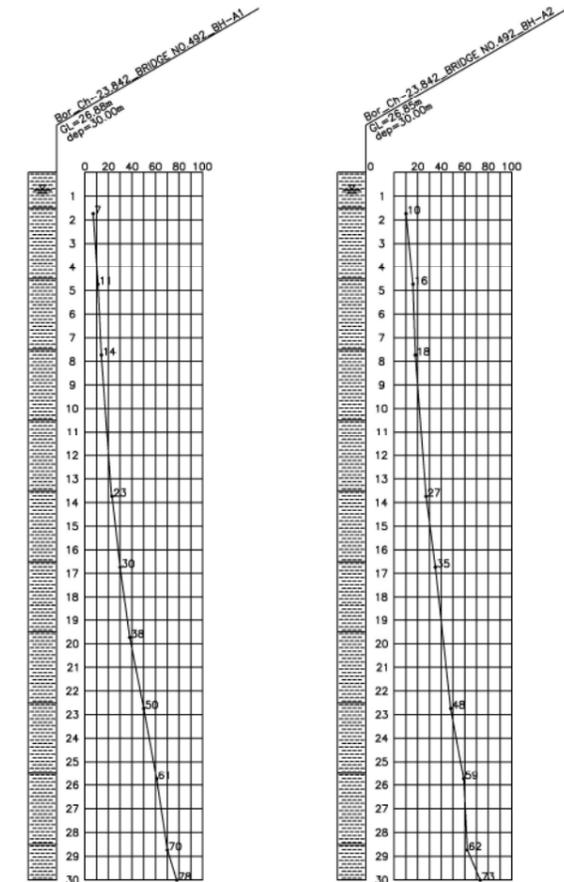
STANDARD OF LOADS: 32.50 TONNE AXLE LOAD, 12 T/M TRAILING LOAD.
 WESTERN DELEGATED RIGHT OF CORRIDOR BETWEEN JNPT (NADIADI) - DADRI (NEAR DELHI)

TITLE:- SECTION NO. 05 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. 492, (FOR RAILWAY), 1X12.20m. KM, (REV. CH.205334.063), GENERAL ARRANGEMENT DRAWING

DRAWN BY	CHECKED BY	APPROVED BY
R.K.Y.	V.K.S.	G.U.R.
SCALE: AS SHOWN	DATE: 01/08/2015 - 1:11pm	REV. No.
PROJECT NO. 12008	DRG. NO.:	CEG/SACHIN-NADIADI/GAD-BRIDGE/S-5492



GROUND LVL.(m)	27.554	27.424	27.294
CHAINAGE (m)	205328.34	205334.063	205348.34

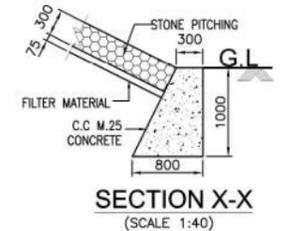
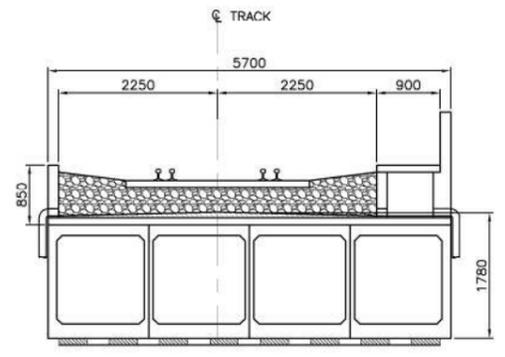
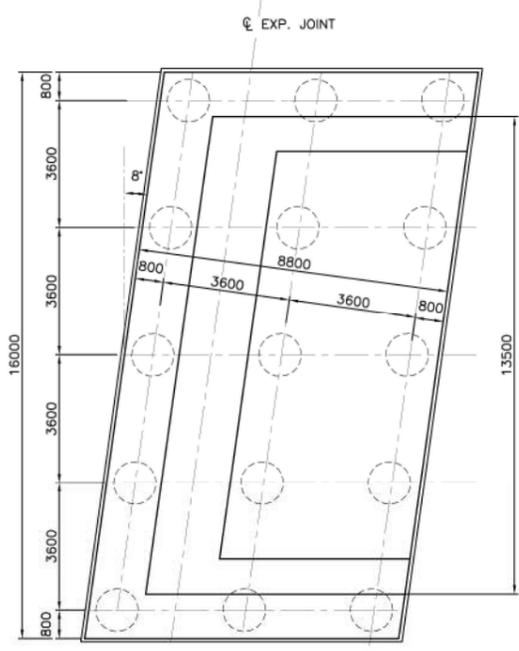
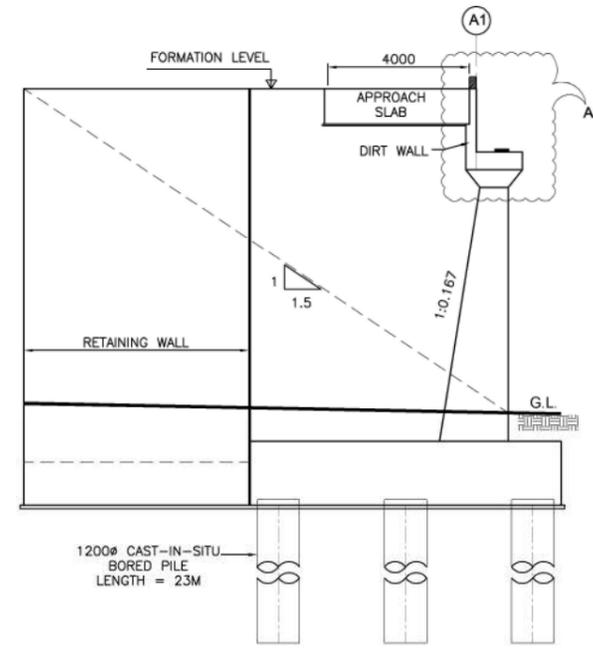
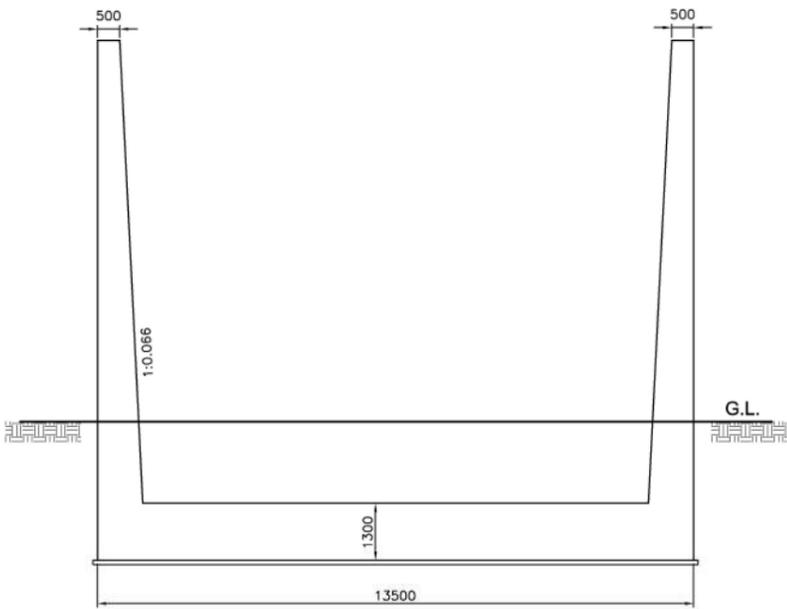
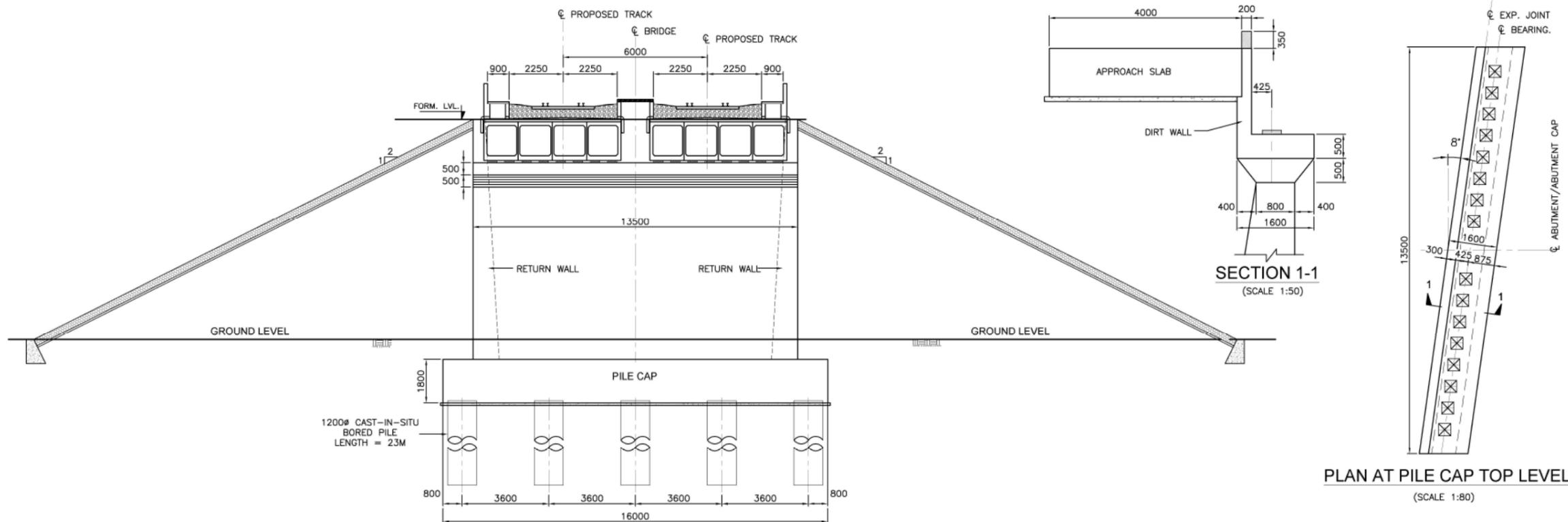


Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

THIS DRAWING WAS ORIGINALLY PREPARED BY CEG ENGINEERS GROUP LTD. (CONSULTING ENGINEERS GROUP LTD.) CONSULTANT AND REVIEWED / MODIFIED BY NIPPON KOEI CONSORTIUM.

CONSULTING ENGINEERS GROUP LTD. E-12, Moji Colony, Malviya Nagar, Jaipur-17. Tel: +91-141-2520899, 2521899, 2520556 Fax: 2521899, E-Mail: ceg@cegindia.com





Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder



REFERENCE DRAWINGS:	
DRAWING NO. CEG/SACHIN-NADIADI/PLAN-PROFILE/S-10	SUBJECT. L-SECTION CONTINUOUS BOX
APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DDC	CPM/DFCC
MANAGER / DEPT.	GGM(Engg.)
ASSET MANAGER	
STANDARD SPECIFICATIONS: 32.50 TONNE AXLE LOAD, 12 T/M TRAILING LOAD.	
PROJECT WESTERN DEVELOPED FREIGHT CORRIDOR BETWEEN MUMBAI AND DELHI (NEAR DELHI)	
CLIENT:- DFCC	

TYPICAL CROSS SECTION (FOR PRESTRESSED CONTIGUOUS BOX) (SCALE 1:50)

SECTION X-X (SCALE 1:40)

DETAIL OF ABUTMENT - A1 (SCALE 1:100)

PLAN AT ABUTMENT CAP LEVEL (SCALE 1:100)

SECTION 1-1 (SCALE 1:50)

SECTION B-B (SCALE 1:100)

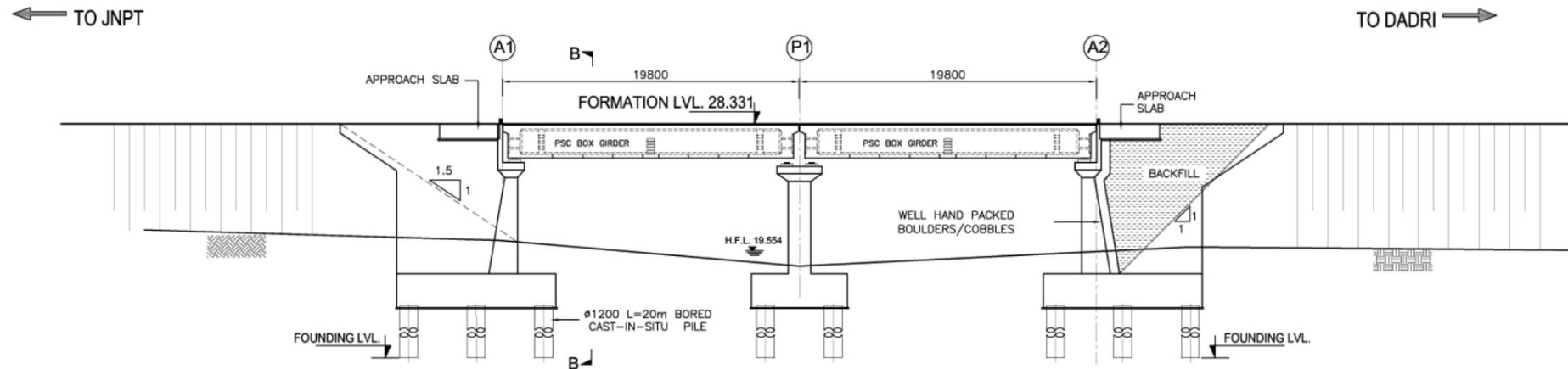
PLAN AT PILE CAP TOP LEVEL (SCALE 1:80)

THIS DRAWING WAS ORIGINALLY PREPARED BY C E G CONSULTING Engineers Group Ltd. (CONSULTING Engineers Group Ltd.) CONSULTANT AND REVIEWED / MODIFIED BY NIPPON KOEI CONSORTIUM.

CONSULTING Engineers Group Ltd. E-12, Moji Colony, Malviya Nagar Jaipur-17 Tel: +91-141-2520899, 2521899, 2520556 Fax: 2521899, E-Mail: ceg@ceginia.com

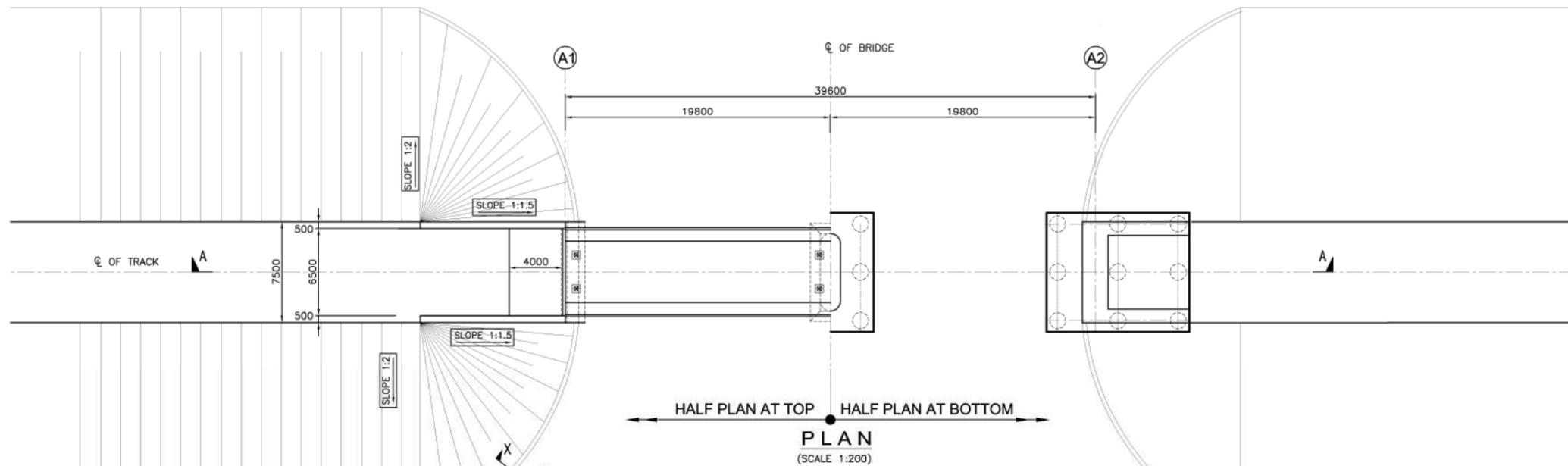
TITLE:- SECTION NO. 05 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. 492, (FOR RAILWAY), 1X12.20m. AT KM. (REV. CH.205334.083), GENERAL ARRANGEMENT DRAWING (SHEET -2 OF 2)

DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 1:11pm	REV. No.
PROJECT NO: 12008	DRG. NO: CEG/SACHIN-NADIADI/ GAD-BRIDGE /S-5492	



GROUND LVL.(m)	21.140	20.550	18.840	20.110	19.940
CHAINAGE(m)	840.0	860.0	880.0	900.0	920.0

SECTION ELEVATION A-A
(SCALE 1:200)



Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

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 7. LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
 8. GROUND PROFILE SHOULD BE VERIFIED BEFORE EXECUTION.

- SUPERSTRUCTURE & SUBSTRUCTURE**
- 1) THE BRIDGE SHALL BE DESIGNED AS PER DFCC/LOADING (32.5T AXLE LOAD) BRIDGE RULE, ISSUED BY RDSO, (WITH LATEST CORRECTION SLIP).
 - 2) THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
 - 3) BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - 4) WEEP HOLES SHALL BE OF PROVIDED IN RETURN WALL & ABUTMENT.
 - 5) O/E FOUNDATION BOLTS SHALL BE PROVIDED IN CONSULTATION WITH THE CONTRACTOR OF EMP-4.
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 - 7) FOR INSPECTION OF BEARING / SUPERSTRUCTURE, SUITABLE ARRANGEMENT SHALL BE PROVIDED.
 - 8) FOR CHANGING OF BEARING SUITABLE ARRANGEMENT SHALL BE PROVIDED.

- GEO-TECHNICAL**
- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT.
 - 2) GEO-TECHNICAL BORE HOLE DATA REFERRED IN GAD IS INDICATIVE ONLY.
 - 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

TABLE-1

DETAILS	PROPOSED DFC
PACKAGE	3
SECTOR	5Co.
BRIDGE NO.	MDN-2
CHAINAGE	860.000
SPAN CONFIGURATION	2X18.30m
OVERALL SPAN (mm)	19750
CLEAR SPAN (mm)	18300
TYPE OF STRUCTURE	POST TENSIONED BOX GIRDER
DEPTH OF SUPERSTRUCTURE (mm)	2280
TYPE OF CROSSING	NALLA
BRIDGE (STRAIGHT/CURVE/SKEW)	STRAIGHT
FORMATION LEVEL R.L. (METER)	28.331
H.F.L. R.L. (METER)	19.554
BED LEVEL R.L. (METER)	18.840
DESIGN DISCHARGE (Cumec)	-
VERTICAL CLEARANCE MIN. (mm)	-
TYPE OF FOUNDATION	PILE FOUNDATION
BRIDGE BEARING (ELASTOMER WITH-SUITABLE RESTRAINTS)	(FIXED & FREE)

REFERENCE DRAWINGS:

DRAWING NO	SUBJECT
CEG/SACHIN-NADIADI/PLAN-PROFILE/S-510	L-SECTION
	POST TENSIONED BOX GIRDER

APPROVED

DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFC	CPM/DFCC
MANAGER / DFC	GGM/Engg.H
ASSET MANAGER	

STANDARD OVERLOADING: 32.50 TONNE AXLE LOAD, 12 T/M TRAILING LOAD.
 SUBJECT: WESTERN DEVELOPER, RIGHT CORRIDOR BETWEEN JNPT (NEAR MUMBAI) - DADRI (NEAR DELHI)



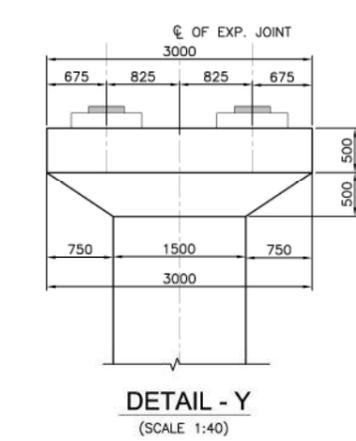
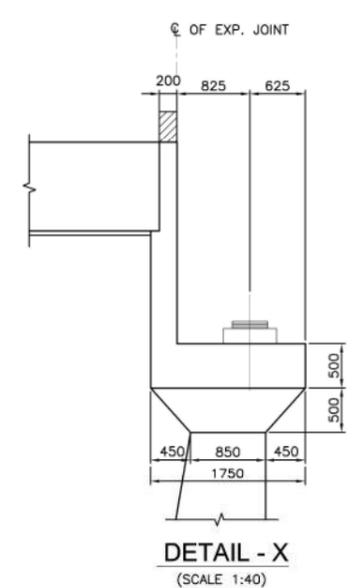
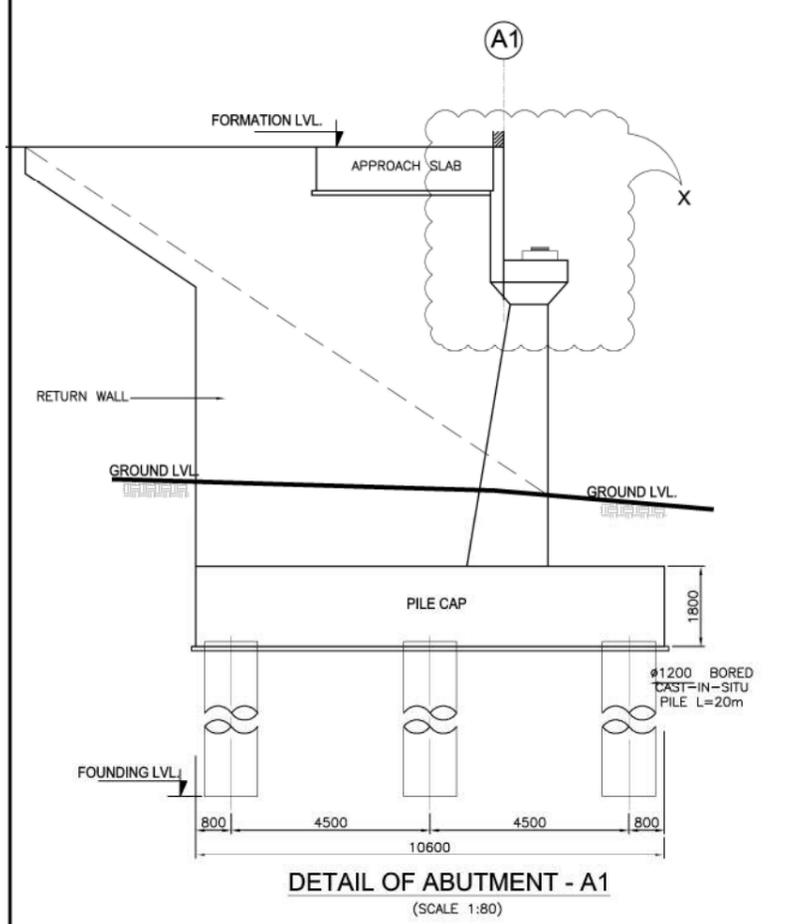
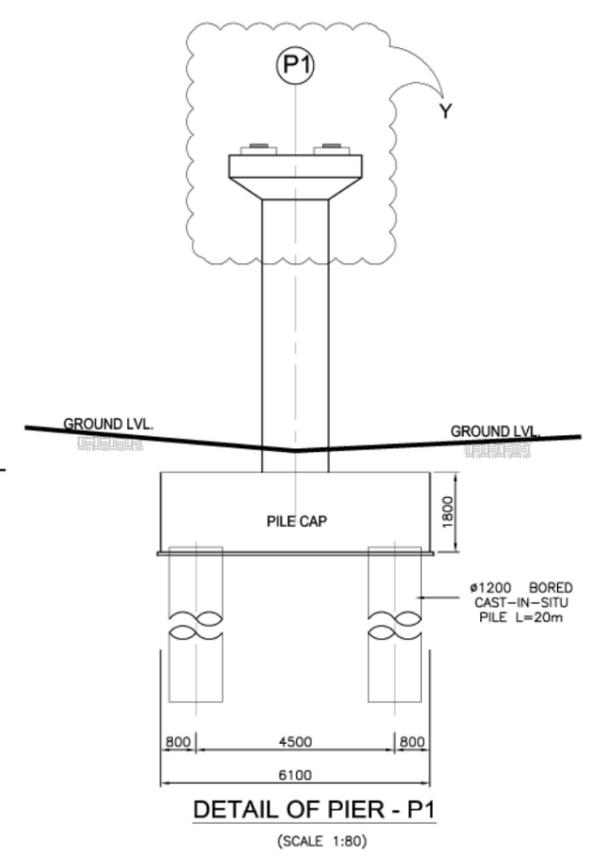
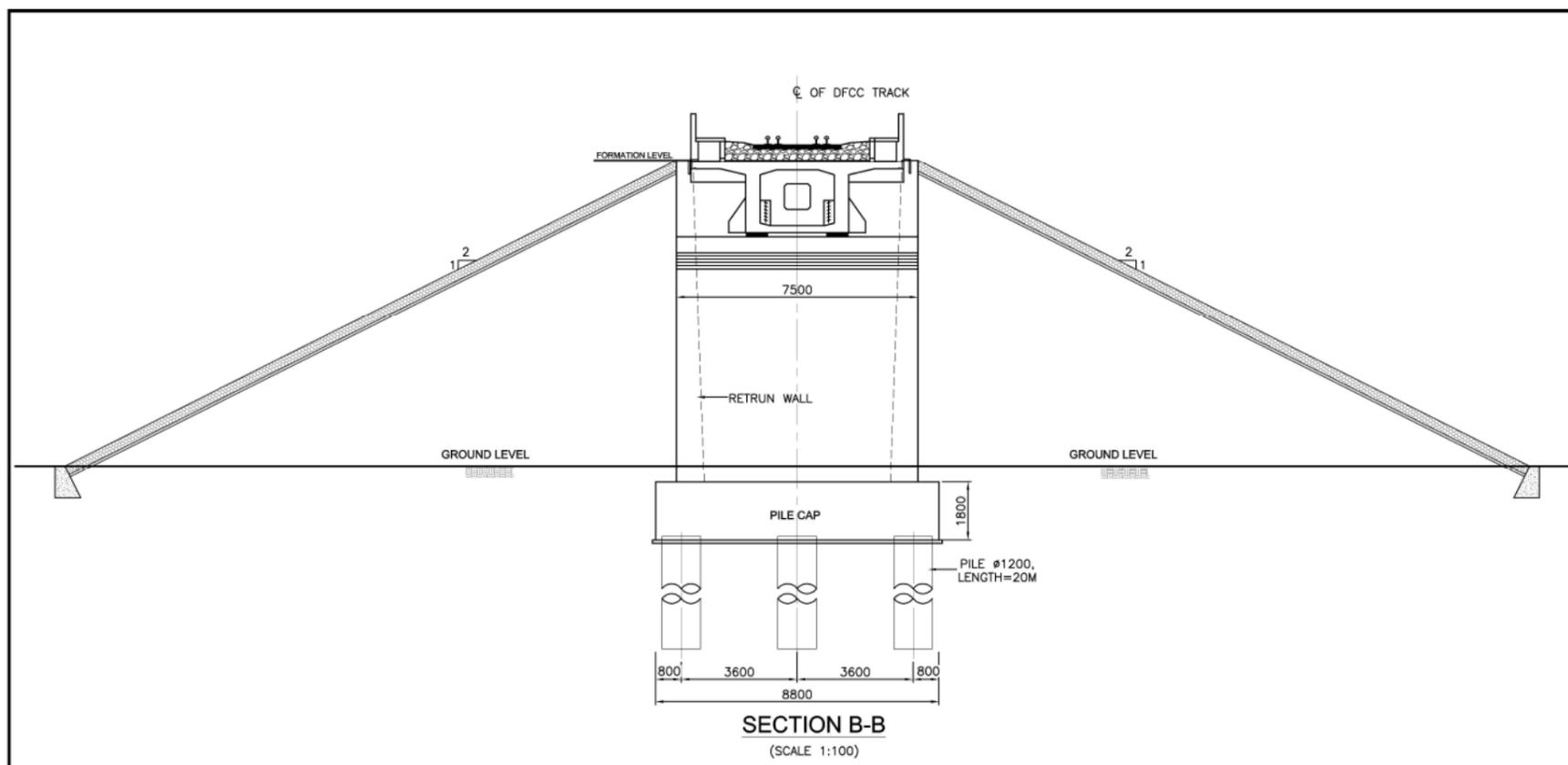
TITLE:- SECTION NO. 05 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MDN-2, (FOR NALLA), 2X18.30m, PSC BOX GIRDER AT KM. (REV. CH.880.000), GENERAL ARRANGEMENT DRAWING (SHEET 1 OF 3)

DRAWN BY	CHECKED BY	APPROVED BY
R.K.Y.	V.K.S.	G.U.R.
SCALE - AS SHOWN	DATE: 01/08/2015 - 1:12pm	REV. No.
PROJECT NO. 12008	DRG NO.:	CEG/SACHIN-NADIADI/GAD-BRIDGE/S-5Co/MDN-2

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CONSULTING ENGINEERS GROUP LTD.
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 Tel: +91-141-2520899, 2521899, 2520556
 Fax: 2521899, E-Mail:ceg@ceginia.com



Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

REFERENCE DRAWINGS:	
DRAWING NO.	SUBJECT
CEG/SACHIN NADIADI PLAN-PROFILE/S-510	L-SECTION
	POST TENSIONED BOX GIRDER
APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DCCG	CPM/DFCC
MANAGER / P.O.	GGM/Engrg-I
ASSISTANT MANAGER	
STANDARD LOADING: 32.50 T/MN AXLE LOAD, 12 T/M TRAILING LOAD.	
PROJECT: PROJ. CEG/MDN-2	
WESTERN RAILWAY FREIGHT CORRIDOR BETWEEN NFN (NEAR MUMBAI) & NADUR (NEAR DELHI)	
CLIENT: -	

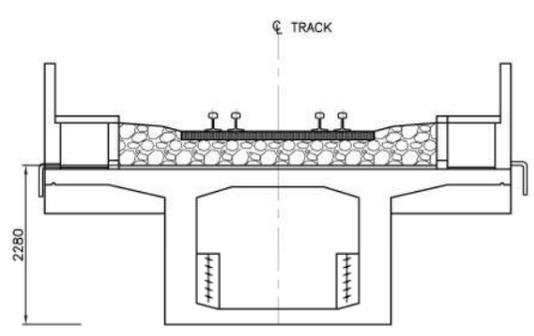
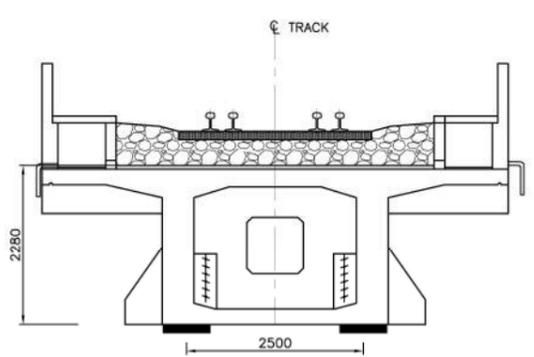
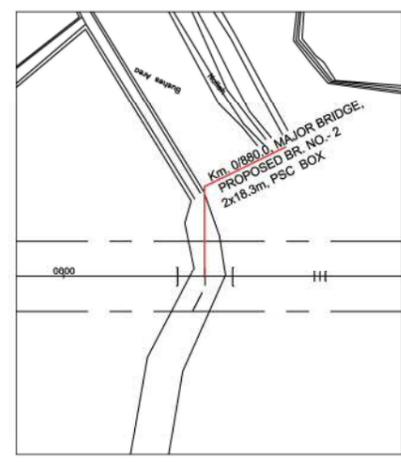
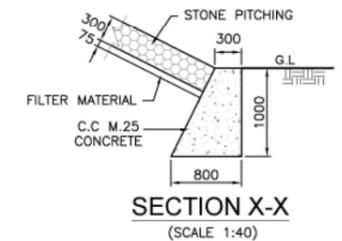
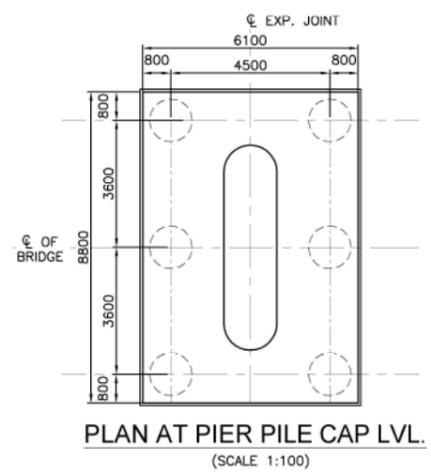
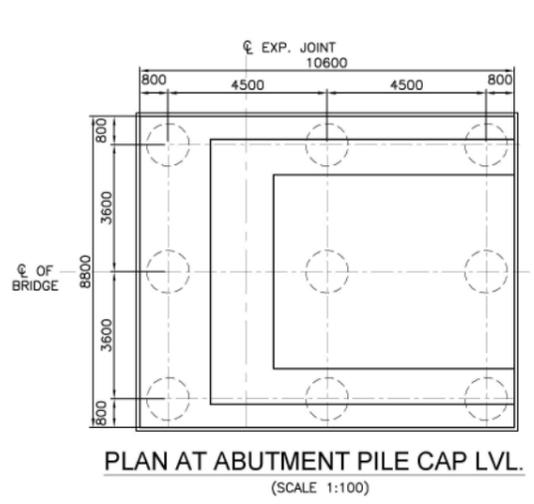


TITLE:- SECTION NO. 05 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MDN-2, (FOR NALLA), 2X18.30m. PSC BOX GIRDER AT KM. (REV. CH.880.000. GENERAL ARRANGEMENT DRAWING (SHEET : 2 OF 3)

THIS DRAWING WAS ORIGINALLY PREPARED BY C.E.G (CONSULTING Engineers Group Ltd.) CONSULTANT AND REVIEWED / MODIFIED BY NIPPON KOEI CONSORTIUM.

CONSULTING Engineers Group Ltd. E-12, Moji Colony, Malviya Agar Jaipur-17 Tel: +91-141-2520899, 2521899, 2520556 Fax: 2521899, E-Mail: ceg@cegindia.com

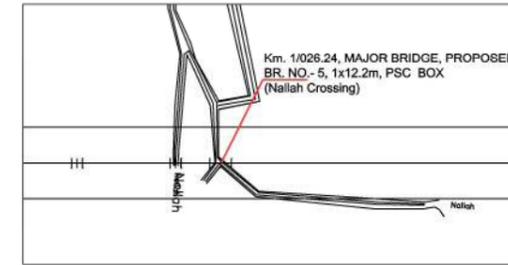
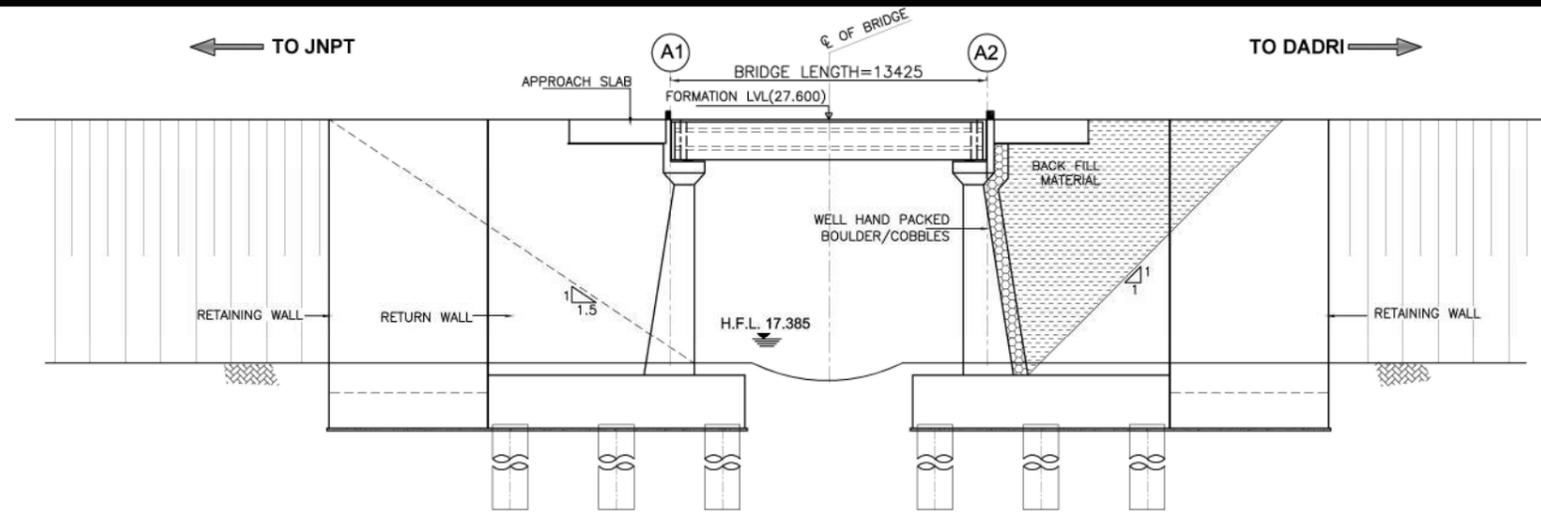
DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: AS SHOWN	DATE: 01/06/2015 - 1:12pm	REV. No.
PROJECT NO. 12008	DRG NO. CEG/SACHIN NADIADI/GAD BRIDGE/S-510/MDN-2	



SECTION AT SUPPORT
SECTION AT MID SPAN
18.3m SPAN (POST TENSIONED BOX GIRDER)
(SCALE 1:50)

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

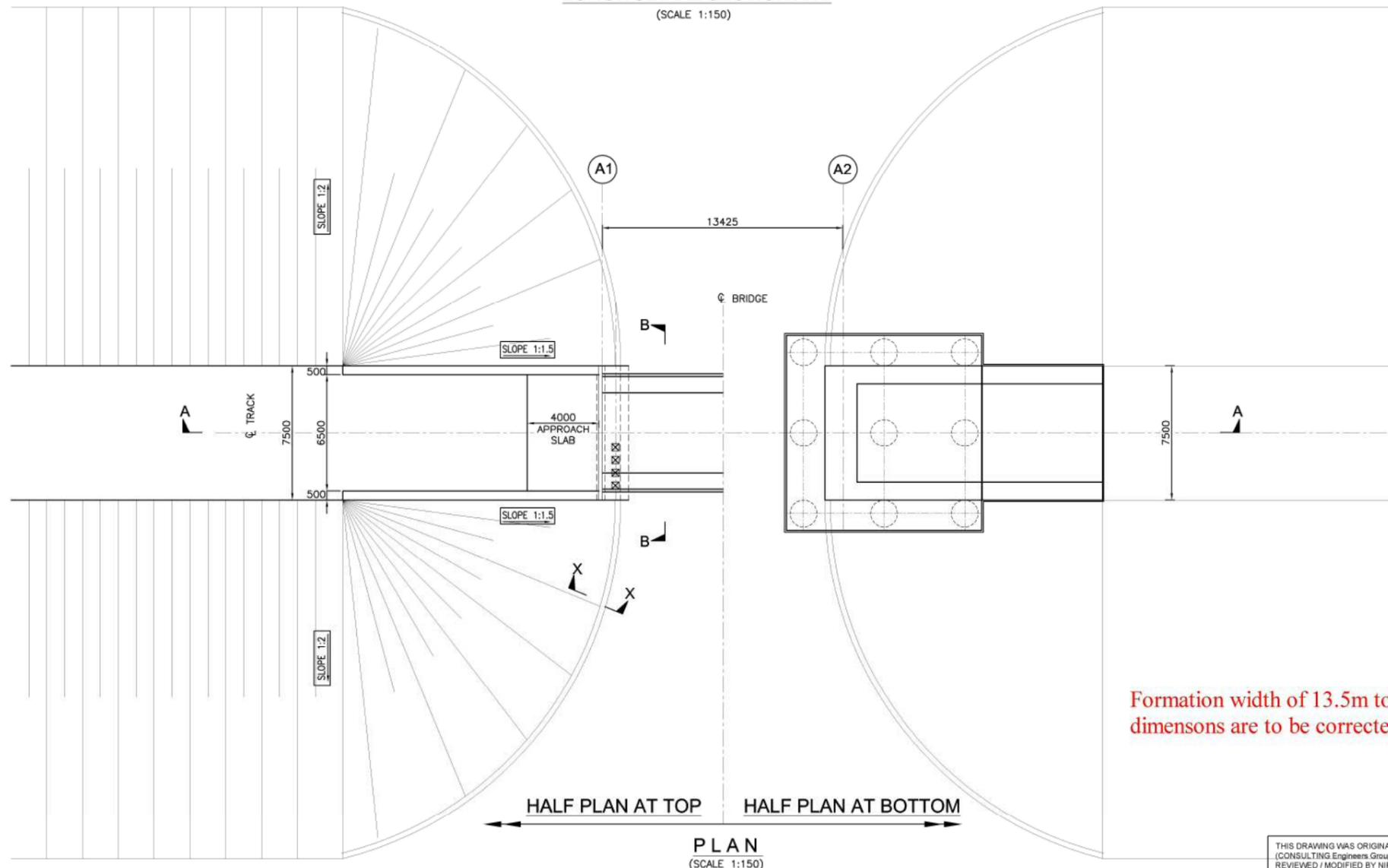
REFERENCE DRAWINGS:	
DRAWING NO.	SUBJECT.
CEG/SACHIN-NADIAD/PLAN-PROFILE-S-10	L-SECTION
	POST TENSIONED BOX GIRDER
APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / D.R.O.	CPM/DFCC
MANAGER / DEPT.	GGM(Engg.)H
ASSET MANAGER	
STANDARD SPECIFICATION: 32.50/1997/1998/1999/2000/2001/2002/2003/2004/2005/2006/2007/2008/2009/2010/2011/2012/2013/2014/2015/2016/2017/2018/2019/2020/2021/2022/2023/2024/2025/2026/2027/2028/2029/2030/2031/2032/2033/2034/2035/2036/2037/2038/2039/2040/2041/2042/2043/2044/2045/2046/2047/2048/2049/2050/2051/2052/2053/2054/2055/2056/2057/2058/2059/2060/2061/2062/2063/2064/2065/2066/2067/2068/2069/2070/2071/2072/2073/2074/2075/2076/2077/2078/2079/2080/2081/2082/2083/2084/2085/2086/2087/2088/2089/2090/2091/2092/2093/2094/2095/2096/2097/2098/2099/2100/2101/2102/2103/2104/2105/2106/2107/2108/2109/2110/2111/2112/2113/2114/2115/2116/2117/2118/2119/2120/2121/2122/2123/2124/2125/2126/2127/2128/2129/2130/2131/2132/2133/2134/2135/2136/2137/2138/2139/2140/2141/2142/2143/2144/2145/2146/2147/2148/2149/2150/2151/2152/2153/2154/2155/2156/2157/2158/2159/2160/2161/2162/2163/2164/2165/2166/2167/2168/2169/2170/2171/2172/2173/2174/2175/2176/2177/2178/2179/2180/2181/2182/2183/2184/2185/2186/2187/2188/2189/2190/2191/2192/2193/2194/2195/2196/2197/2198/2199/2200/2201/2202/2203/2204/2205/2206/2207/2208/2209/2210/2211/2212/2213/2214/2215/2216/2217/2218/2219/2220/2221/2222/2223/2224/2225/2226/2227/2228/2229/2230/2231/2232/2233/2234/2235/2236/2237/2238/2239/2240/2241/2242/2243/2244/2245/2246/2247/2248/2249/2250/2251/2252/2253/2254/2255/2256/2257/2258/2259/2260/2261/2262/2263/2264/2265/2266/2267/2268/2269/2270/2271/2272/2273/2274/2275/2276/2277/2278/2279/2280/2281/2282/2283/2284/2285/2286/2287/2288/2289/2290/2291/2292/2293/2294/2295/2296/2297/2298/2299/2300/2301/2302/2303/2304/2305/2306/2307/2308/2309/2310/2311/2312/2313/2314/2315/2316/2317/2318/2319/2320/2321/2322/2323/2324/2325/2326/2327/2328/2329/2330/2331/2332/2333/2334/2335/2336/2337/2338/2339/2340/2341/2342/2343/2344/2345/2346/2347/2348/2349/2350/2351/2352/2353/2354/2355/2356/2357/2358/2359/2360/2361/2362/2363/2364/2365/2366/2367/2368/2369/2370/2371/2372/2373/2374/2375/2376/2377/2378/2379/2380/2381/2382/2383/2384/2385/2386/2387/2388/2389/2390/2391/2392/2393/2394/2395/2396/2397/2398/2399/2400/2401/2402/2403/2404/2405/2406/2407/2408/2409/2410/2411/2412/2413/2414/2415/2416/2417/2418/2419/2420/2421/2422/2423/2424/2425/2426/2427/2428/2429/2430/2431/2432/2433/2434/2435/2436/2437/2438/2439/2440/2441/2442/2443/2444/2445/2446/2447/2448/2449/2450/2451/2452/2453/2454/2455/2456/2457/2458/2459/2460/2461/2462/2463/2464/2465/2466/2467/2468/2469/2470/2471/2472/2473/2474/2475/2476/2477/2478/2479/2480/2481/2482/2483/2484/2485/2486/2487/2488/2489/2490/2491/2492/2493/2494/2495/2496/2497/2498/2499/2500/2501/2502/2503/2504/2505/2506/2507/2508/2509/2510/2511/2512/2513/2514/2515/2516/2517/2518/2519/2520/2521/2522/2523/2524/2525/2526/2527/2528/2529/2530/2531/2532/2533/2534/2535/2536/2537/2538/2539/2540/2541/2542/2543/2544/2545/2546/2547/2548/2549/2550/2551/2552/2553/2554/2555/2556/2557/2558/2559/2560/2561/2562/2563/2564/2565/2566/2567/2568/2569/2570/2571/2572/2573/2574/2575/2576/2577/2578/2579/2580/2581/2582/2583/2584/2585/2586/2587/2588/2589/2590/2591/2592/2593/2594/2595/2596/2597/2598/2599/2600/2601/2602/2603/2604/2605/2606/2607/2608/2609/2610/2611/2612/2613/2614/2615/2616/2617/2618/2619/2620/2621/2622/2623/2624/2625/2626/2627/2628/2629/2630/2631/2632/2633/2634/2635/2636/2637/2638/2639/2640/2641/2642/2643/2644/2645/2646/2647/2648/2649/2650/2651/2652/2653/2654/2655/2656/2657/2658/2659/2660/2661/2662/2663/2664/2665/2666/2667/2668/2669/2670/2671/2672/2673/2674/2675/2676/2677/2678/2679/2680/2681/2682/2683/2684/2685/2686/2687/2688/2689/2690/2691/2692/2693/2694/2695/2696/2697/2698/2699/2700/2701/2702/2703/2704/2705/2706/2707/2708/2709/2710/2711/2712/2713/2714/2715/2716/2717/2718/2719/2720/2721/2722/2723/2724/2725/2726/2727/2728/2729/2730/2731/2732/2733/2734/2735/2736/2737/2738/2739/2740/2741/2742/2743/2744/2745/2746/2747/2748/2749/2750/2751/2752/2753/2754/2755/2756/2757/2758/2759/2760/2761/2762/2763/2764/2765/2766/2767/2768/2769/2770/2771/2772/2773/2774/2775/2776/2777/2778/2779/2780/2781/2782/2783/2784/2785/2786/2787/2788/2789/2790/2791/2792/2793/2794/2795/2796/2797/2798/2799/2800/2801/2802/2803/2804/2805/2806/2807/2808/2809/2810/2811/2812/2813/2814/2815/2816/2817/2818/2819/2820/2821/2822/2823/2824/2825/2826/2827/2828/2829/2830/2831/2832/2833/2834/2835/2836/2837/2838/2839/2840/2841/2842/2843/2844/2845/2846/2847/2848/2849/2850/2851/2852/2853/2854/2855/2856/2857/2858/2859/2860/2861/2862/2863/2864/2865/2866/2867/2868/2869/2870/2871/2872/2873/2874/2875/2876/2877/2878/2879/2880/2881/2882/2883/2884/2885/2886/2887/2888/2889/2890/2891/2892/2893/2894/2895/2896/2897/2898/2899/2900/2901/2902/2903/2904/2905/2906/2907/2908/2909/2910/2911/2912/2913/2914/2915/2916/2917/2918/2919/2920/2921/2922/2923/2924/2925/2926/2927/2928/2929/2930/2931/2932/2933/2934/2935/2936/2937/2938/2939/2940/2941/2942/2943/2944/2945/2946/2947/2948/2949/2950/2951/2952/2953/2954/2955/2956/2957/2958/2959/2960/2961/2962/2963/2964/2965/2966/2967/2968/2969/2970/2971/2972/2973/2974/2975/2976/2977/2978/2979/2980/2981/2982/2983/2984/2985/2986/2987/2988/2989/2990/2991/2992/2993/2994/2995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KEY PLAN

GROUND LVL.(m)	16.070	16.920	17.269	18.040	20.380
CHAINAGE (m)	1000	1020.0	1026.240	1040.0	1060.0

LONGITUDINAL SECTION A-A
(SCALE 1:150)



PLAN
(SCALE 1:150)

- GENERAL NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
 2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
 3. ALL DIMENSIONS AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 4. THIS GENERAL ARRANGEMENT DRAWING IS INDICATIVE AND IS MEANT ONLY FOR GUIDANCE FOR THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DEVELOPED & DESIGNED BY THE CONTRACTOR AS PER THE EMPLOYER'S REQUIREMENTS, SPECIFICATIONS AND SITE DIMENSIONS / CONDITIONS AND SHALL BE APPROVED BY ENGINEER / EMPLOYER.
 5. ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
 6. FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
 7. LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
 8. GROUND PROFILE SHOULD BE VERIFIED BEFORE EXECUTION.
- SUPERSTRUCTURE & SUBSTRUCTURE**
- 1) THE BRIDGE SHALL BE DESIGNED AS PER DFCCI LOADING (32.5T AXLE LOAD) BRIDGE RULE, ISSUED BY RDSO. (WITH LATEST CORRECTION SLIP).
 - 2) THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
 - 3) BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - 4) WEEP HOLES SHALL BE OF PROVIDED IN RETURN WALL & ABUTMENT.
 - 5) JOE FOUNDATION BOLTS SHALL BE PROVIDED IN CONSULTATION WITH THE CONTRACTOR OF EMP-4.
 - 6) RAILING EXPANSION JOINTS, BEARING, WEARING COAT, FOOTPATH, SERVICE DUCT, DRAINAGE SHALL BE PROVIDED AS PER SPECIFICATION.
 - 7) FOR INSPECTION OF BEARING / SUPERSTRUCTURE, SUITABLE ARRANGEMENT SHALL BE PROVIDED.
 - 8) FOR CHANGING OF BEARING SUITABLE ARRANGEMENT SHALL BE PROVIDED.
- GEO-TECHNICAL**
- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT.
 - 2) GEO-TECHNICAL BORE HOLE DATA REFERRED IN GAD IS INDICATIVE ONLY.
 - 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

TABLE-1

DETAILS	PROPOSED DFC
PACKAGE	3
SECTOR	SCo
BRIDGE NO.	MDN-5
CHAINAGE	1026.240
SPAN CONFIGURATION (C/C) OF PIER	1X12.2m
OVERALL SPAN (mm)	13375
EFFECTIVE SPAN (mm)	12575
CLEAR SPAN (mm)	12200
TYPE OF STRUCTURE	PRESTRESSED CONTIGUOUS BOX
DEPTH OF SUPERSTRUCTURE (mm)	1780
TYPE OF CROSSING	NALLA
BRIDGE (STRAIGHT/CURVE/SKEW)	STARIGHT
FORMATION LEVEL R.L. (METER)	27.600
H.F.L. R.L. (METER)	17.385
BED LEVEL R.L. (METER)	17.269
DESIGN DISCHARGE (Cumec)	-
VERTICAL CLEARANCE MIN. (mm)	-
TYPE OF FOUNDATION	PILE FOUNDATION
BRIDGE BEARING (ELASTOMER WITH-SUITABLE RESTRAINTS)	FIX & FREE

REFERENCE DRAWINGS:

DRAWING NO	SUBJECT
CEG/SACHIN NADIAD/ PLAN-PROFILE/S-510	L-SECTION
	CONTIGUOUS BOX

APPROVED

DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFCC	GPM/DFCC
MANAGER / DECC	GGM/Engg-I

ASSET MANAGER

STANDARD GAUGING: 32.50 TONNE AXLE LOAD, 12 T/M TRAILING LOAD

PROJECT: WESTERN DEVELOPMENT CORRIDOR BETWEEN JIPUNTA (MUMBAI) - DADRI (NEAR DELHI)

CLIENT: DFCC

TITLE:- SECTION NO. 05 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MDN-5, (FOR NALLA), 1X12.20m. PRESTRESSED CONTIGUOUS BOX AT CH.1026.240. GENERAL ARRANGEMENT DRAWING

(SHEET : 1 OF 2)

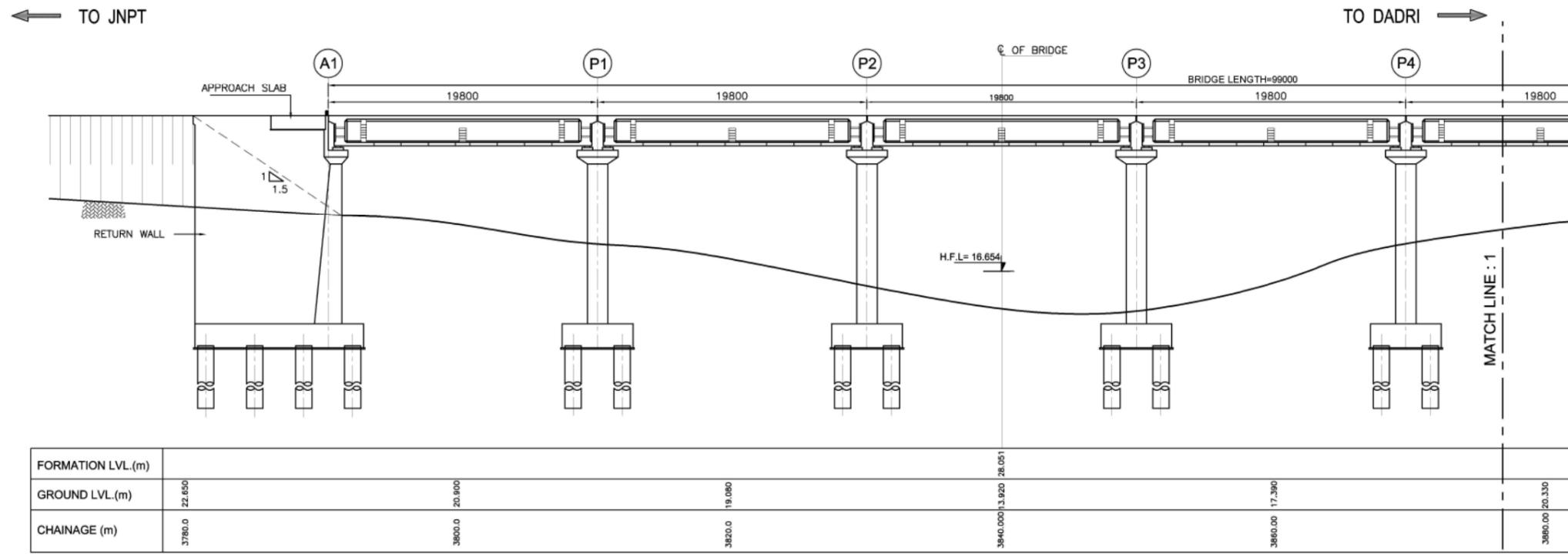
Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

THIS DRAWING WAS ORIGINALLY PREPARED BY C E G (CONSULTING Engineers Group Ltd.) CONSULTANT AND REVIEWED / MODIFIED BY NIPPON KOEI CONSORTIUM.

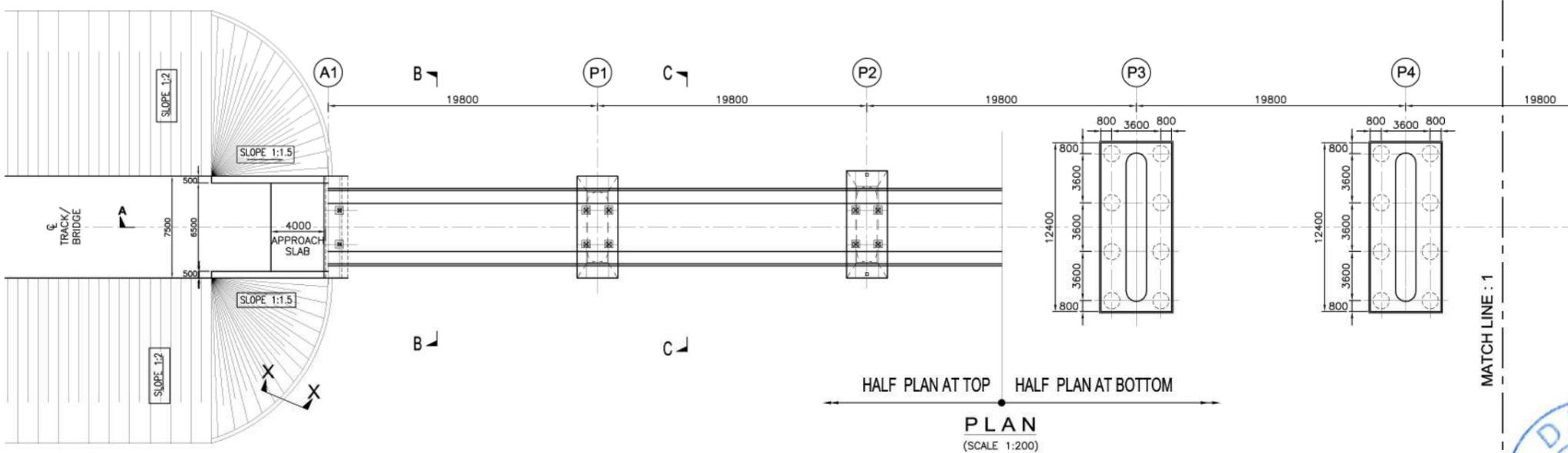
CONSULTING Engineers Group Ltd. E-12, Moji Colony, Malviya Agar Jaipur-17 Tel: +91-141-2520899, 2521899, 2520556 Fax: 2521899, E-Mail:ceg@ceginia.com



DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: AS SHOWN	DATE: 01/06/2015 - 1:12pm	REV. No.
PROJECT NO: 1/2008	DRG NO: CEG/SACHIN NADIAD/ GAD-BRIDGE /S-50/MDN-5	



LONGITUDINAL SECTION A-A
(SCALE 1:200)



PLAN
(SCALE 1:200)

- GENERAL NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
 - ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
 - ALL DIMENSIONS AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - THIS GENERAL ARRANGEMENT DRAWING IS INDICATIVE AND IS MEANT ONLY FOR GUIDANCE FOR THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DEVELOPED & DESIGNED BY THE CONTRACTOR AS PER THE EMPLOYER'S REQUIREMENTS, SPECIFICATIONS AND SITE DIMENSIONS / CONDITIONS AND SHALL BE APPROVED BY ENGINEER / EMPLOYER.
 - ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING IR BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
 - FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
 - LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
 - GROUND PROFILE SHOULD BE VERIFIED BEFORE EXECUTION.
- SUPERSTRUCTURE & SUBSTRUCTURE**
- THE BRIDGE SHALL BE DESIGNED AS PER DFCCI LOADING (22.8T AXLE LOAD) BRIDGE RULE, ISSUED BY RDSO, (WITH LATEST CORRECTION SLIP).
 - THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - WEEP HOLES SHALL BE OF PROVIDED IN RETURN WALL & ABUTMENT.
 - ONE FOUNDATION BOLTS SHALL BE PROVIDED IN CONSULTATION WITH EMP-4.
 - RAILING EXPANSION JOINTS, BEARING, WEARING COAT, FOOTPATH, SERVICE DUCT, DRAINAGE SHALL BE PROVIDED AS PER SPECIFICATION.
 - FOR INSPECTION OF BEARING / SUPERSTRUCTURE, SUITABLE ARRANGEMENT SHALL BE PROVIDED.
 - FOR CHANGING OF BEARING SUITABLE ARRANGEMENT SHALL BE PROVIDED.
- GEO-TECHNICAL**
- FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT.
 - GEO-TECHNICAL BORE HOLE DATA REFERED IN GAD IS INDICATIVE ONLY.
 - DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

TABLE-1

DETAILS	PROPOSED DFC
PACKAGE	3
SECTOR	5Co.M/Dn
BRIDGE NO.	MDN-11
CHAINAGE	3840.00
SPAN CONFIGURATION	5 x 18.3 m
OVERALL SPAN (mm)	19790
CLEAR SPAN (mm)	18300
TYPE OF STRUCTURE	POST TENSIONED BOX GIRDER
DEPTH OF SUPERSTRUCTURE (mm)	2280
TYPE OF CROSSING	DRAIN
BRIDGE (STRAIGHT/CURVE/SKEW)	STRAIGHT
FORMATION LEVEL R.L. (METER)	28.051
GROUND LEVEL R.L. (METER)	13.920
H.F.L. (METER)	16.654
DESIGN DISCHARGE (Cumec)	
VERTICAL CLEARANCE MIN. (mm)	-
TYPE OF FOUNDATION	PILE FOUNDATION
BRIDGE BEARING (ELASTOMER WITH SUITABLE RESTRAINTS)	FIX - FREE

GENERAL ARRANGEMENT DRAWING (SHEET 1 OF 3)

APPROVED

DESIGNATION INITIALS OF APPROVING OFFICIALS

CPM / DFCCIL / AHMEDABAD G.G.M. / DESIGN

DY. CPM / DFCCIL / AHMEDABAD G.G.M. / ENGG.

APM / DFCCIL / AHMEDABAD G.G.M. / DESIGN

CHECKED BY CONSULTANT

SECTION NO. 5Co.M/Dn

BRIDGE NO. MDN-11

CHAINAGE 3840.00

KM (Ify)

SPAN 5x18.3m

POST TENSIONED BOX GIRDER

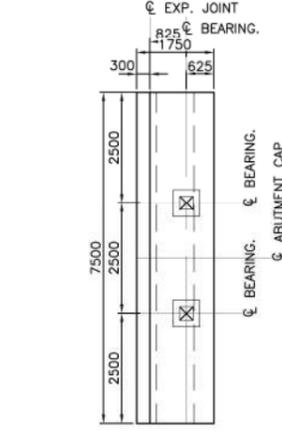
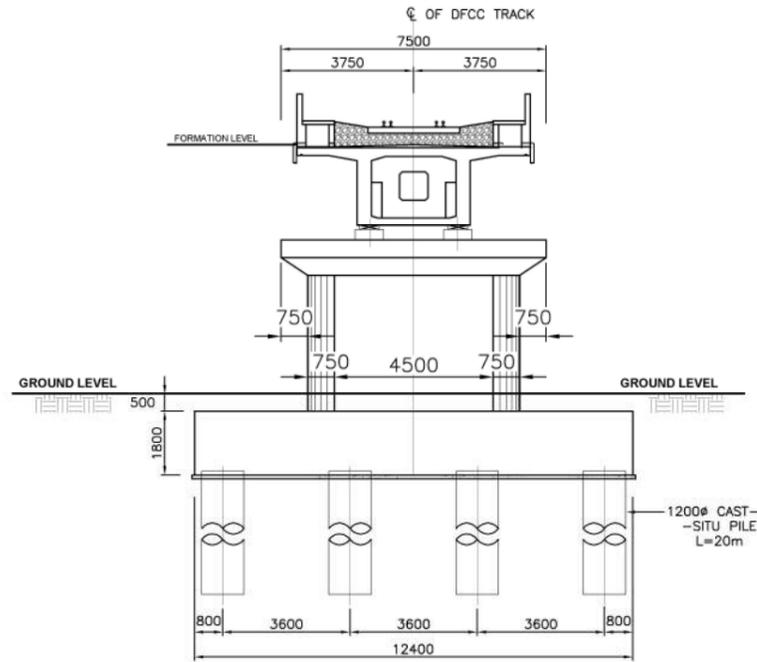
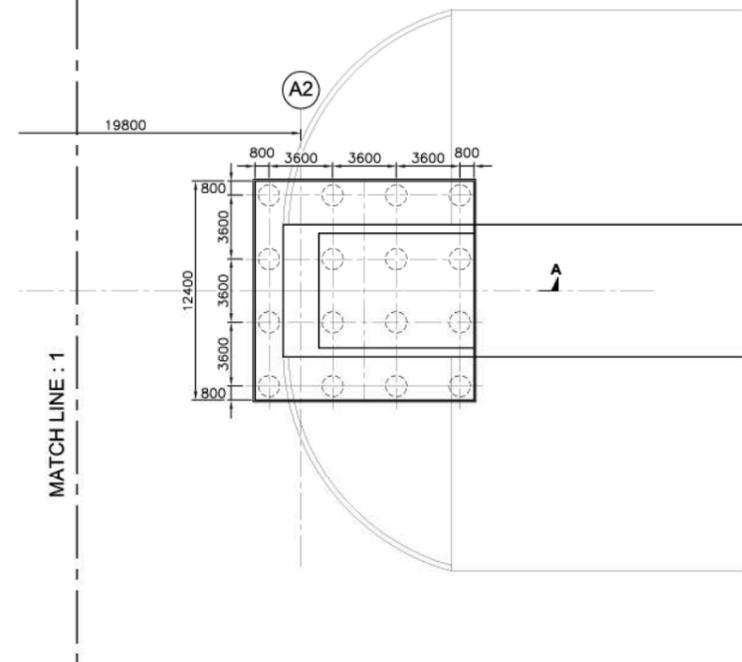
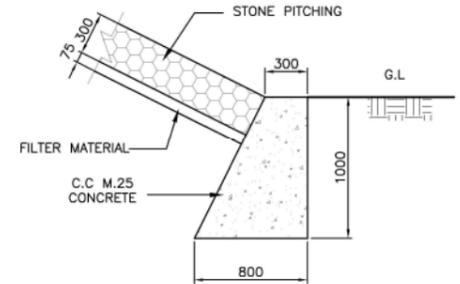
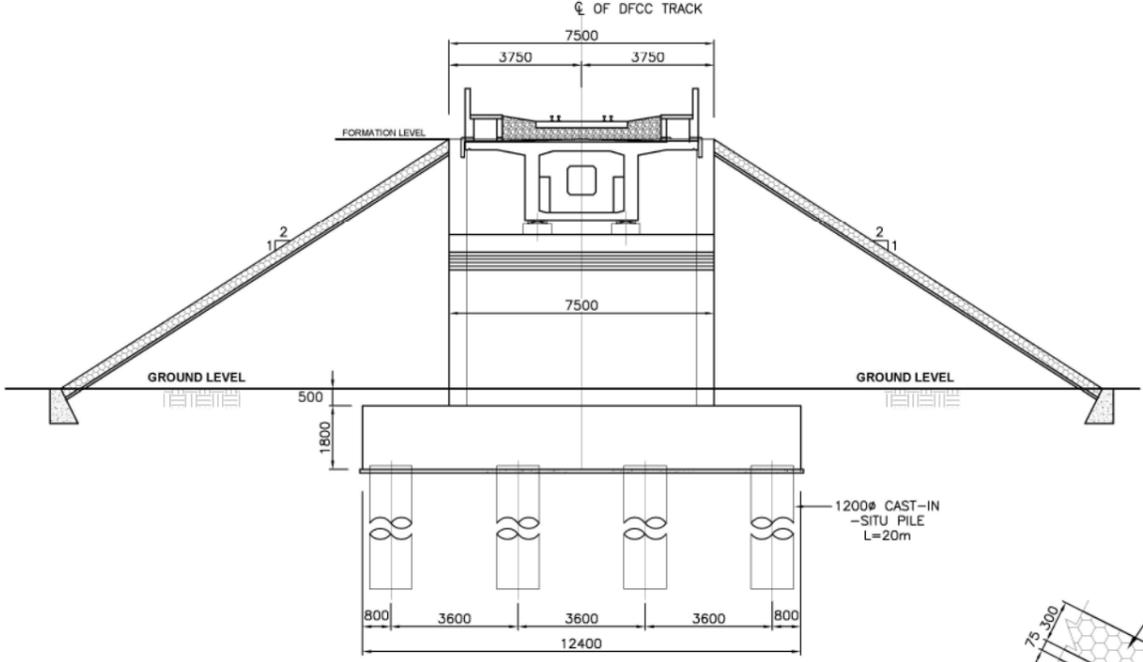
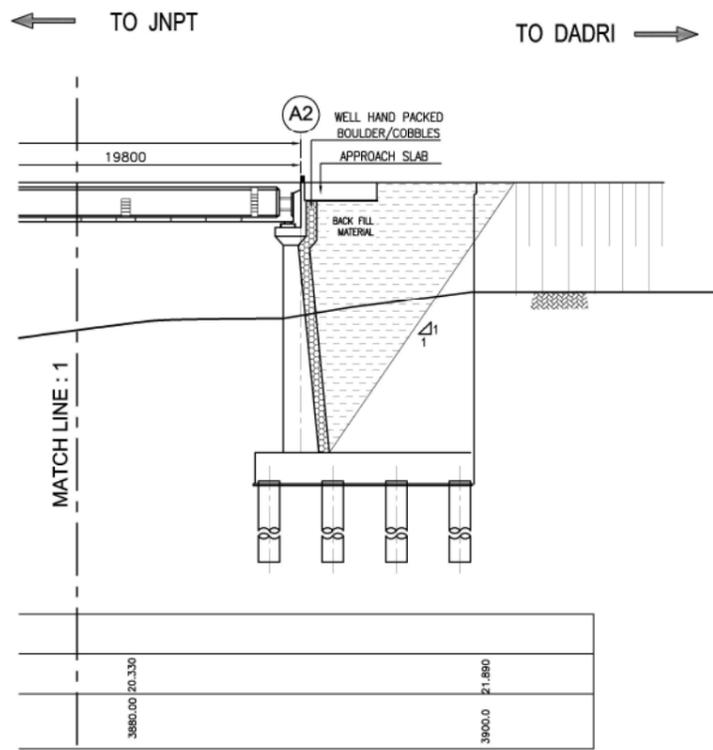
DRG. NO. DFCCIL/AHM/SEC-5Co.M/Dn/BR.NO-MDN-11

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CONSULTANT:
HYDROPENEUM SYSTEMS
RAGHUVANSH, CTS NO. 755/80,
PLOT NO -78, 2nd Floor, MAYUR COLONY,
KOTHRUD, PUNE-411038.

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

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PLAN AT ABUTMENT CAP LVL.
(SCALE 1:80)

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

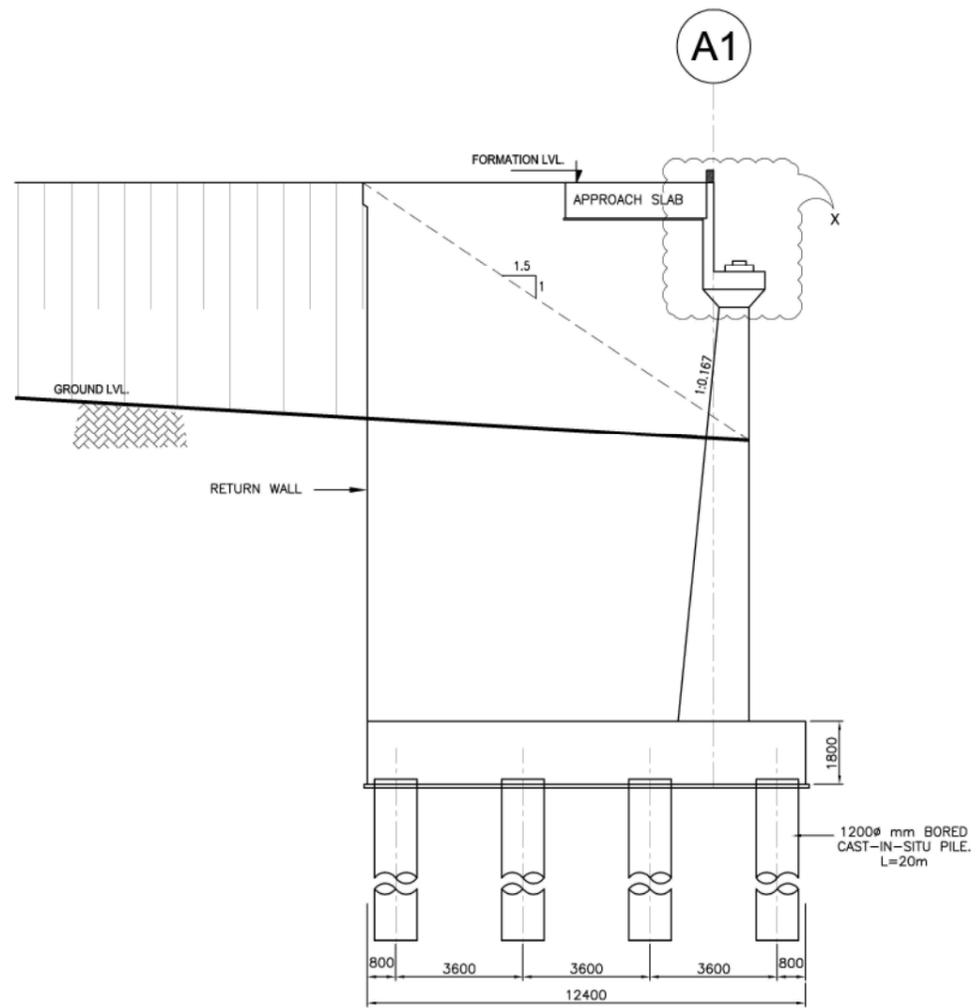
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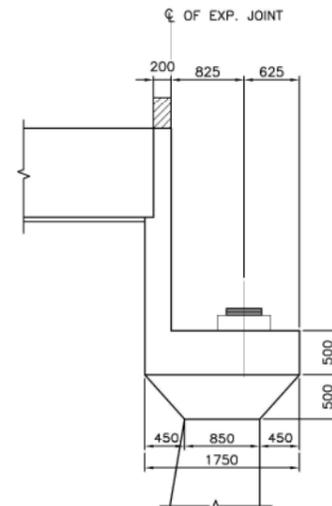
CONSULTANT:
HYDROPEUM SYSTEMS
RAGHUVANSH, CTS NO. 755/80,
PLOT NO -78, 2nd Floor, MAYUR COLONY,
KOTHRUD, PUNE-411038.

GENERAL ARRANGEMENT DRAWING (SHEET 2 OF 3)	
APPROVED	INITIALS OF APPROVING OFFICIALS
DESIGNATION	INITIALS OF APPROVING OFFICIALS
CPM / DFCCIL / AHMEDABAD	G.G.M. / DESIGN
DY. CPM / DFCCIL / AHMEDABAD	G.G.M. / ENGG.
APM / DFCCIL / AHMEDABAD	G.G.M. / DESIGN
CHECKED BY CONSULTANT	5 Co. MDn
BIDDER NO.	MDN-11
CHAINAGE	3140.00
KM (IR)	
SPAN	5x18.3m
	POST TENSIONED BOX GIRDER
DRG. NO.	DFCCIL/AHM/SEC-5Co.M/Dn/BR.NO-MDN-11

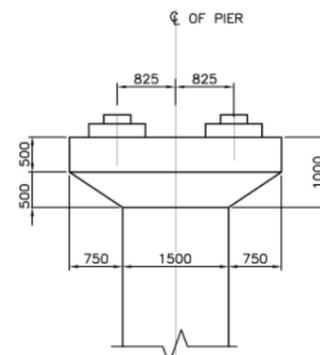
GENERAL ARRANGEMENT DRAWING
FOR CONSTRUCTION OF BRIDGE NO. MDN-11
(5x18.3m) POST TENSIONED BOX GIRDER ON DRAIN
DFCCIL - WESTERN CORRIDOR



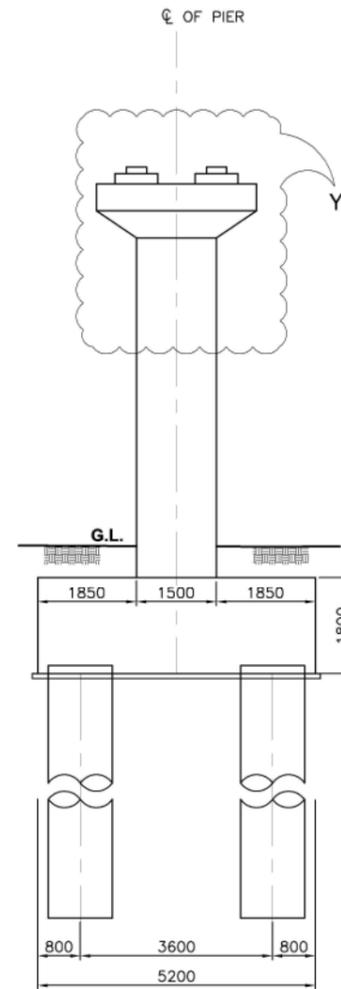
DETAIL OF ABUTMENT - A1
(SCALE 1:100)



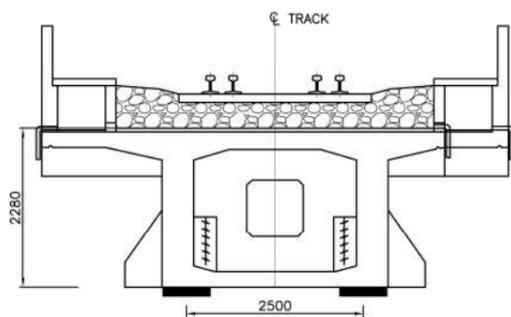
DETAIL - X
(SCALE 1:40)



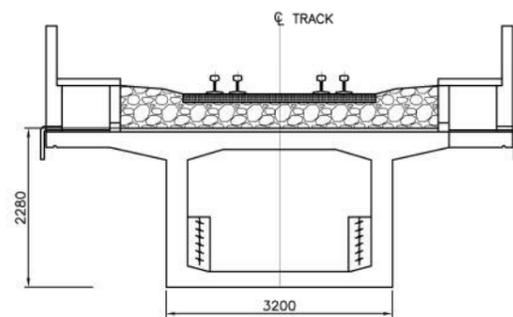
DETAIL - Y
(SCALE 1:50)



PIER DETAIL
SCALE 1:75

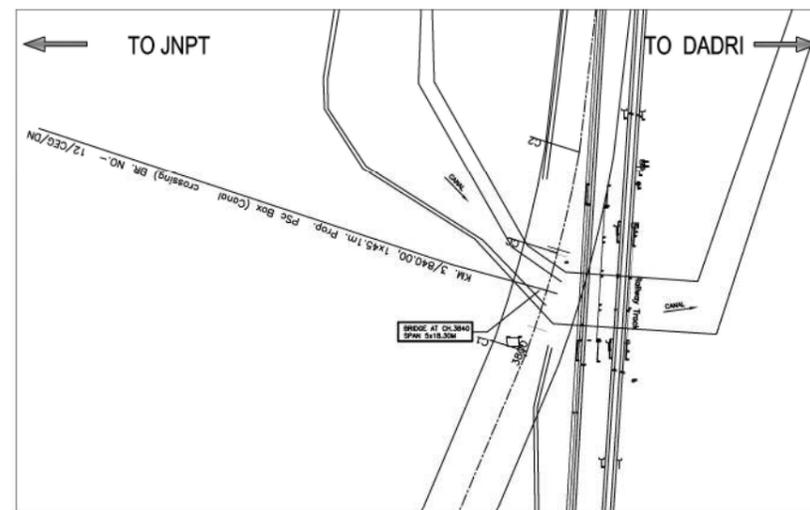


SECTION AT SUPPORT



SECTION AT MID SPAN

18.3m SPAN (POST TENSIONED BOX GIRDER)
(SCALE 1:50)



KEY PLAN

GENERAL ARRANGEMENT DRAWING (SHEET 3 OF 3)

APPROVED
DESIGNATION INITIALS OF APPROVING OFFICIALS

CPM / DFCCIL / AHMEDABAD G.G.M. / DESIGN

DY. CPM / DFCCIL / AHMEDABAD G.G.M. / ENGG.

APM / DFCCIL / AHMEDABAD G.G.M. / DESIGN

CHECKED / CONSULTANT

5 Co. MDn

BRIDGE NO. MDN-11

CHAINAGE 5118.30

KM (IR) 5x18.3m

SPAN POST TENSIONED BOX GIRDER

DRG. NO. DFCCIL/AHM/SEC-5Co.M/Dn/BR.NO-MDN-11

GENERAL ARRANGEMENT DRAWING

FOR CONSTRUCTION OF BRIDGE NO. MDN-11

(5x18.3m) POST TENSIONED BOX GIRDER ON DRAIN

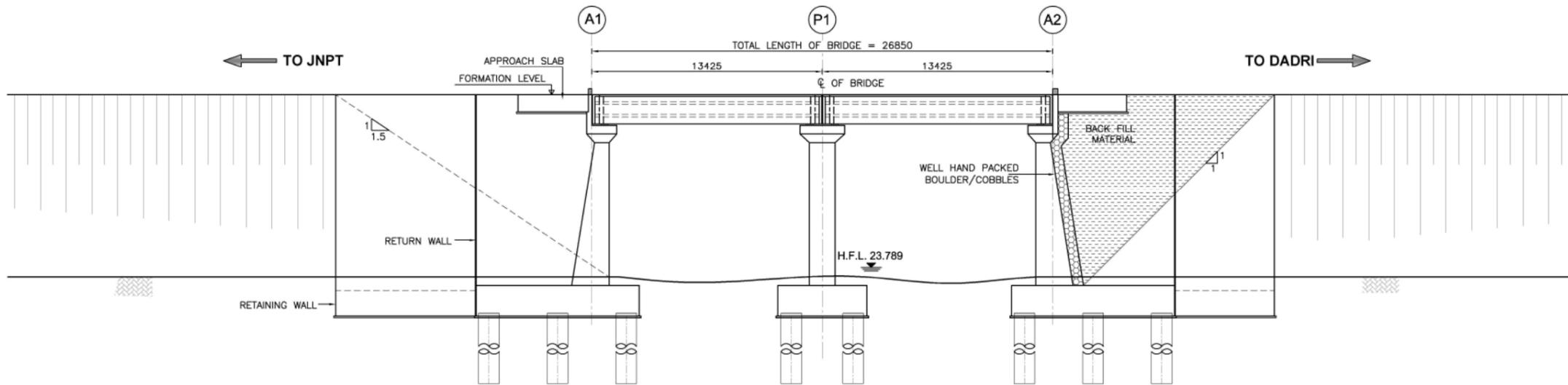
DFCCIL - WESTERN CORRIDOR

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CONSULTANT:
HYDROPNEUM SYSTEMS
RAGHUVANSH, CTS NO. 755/80,
PLOT NO-78, 2nd Floor, MAYUR COLONY,
KOTHRUD, PUNE-411038.

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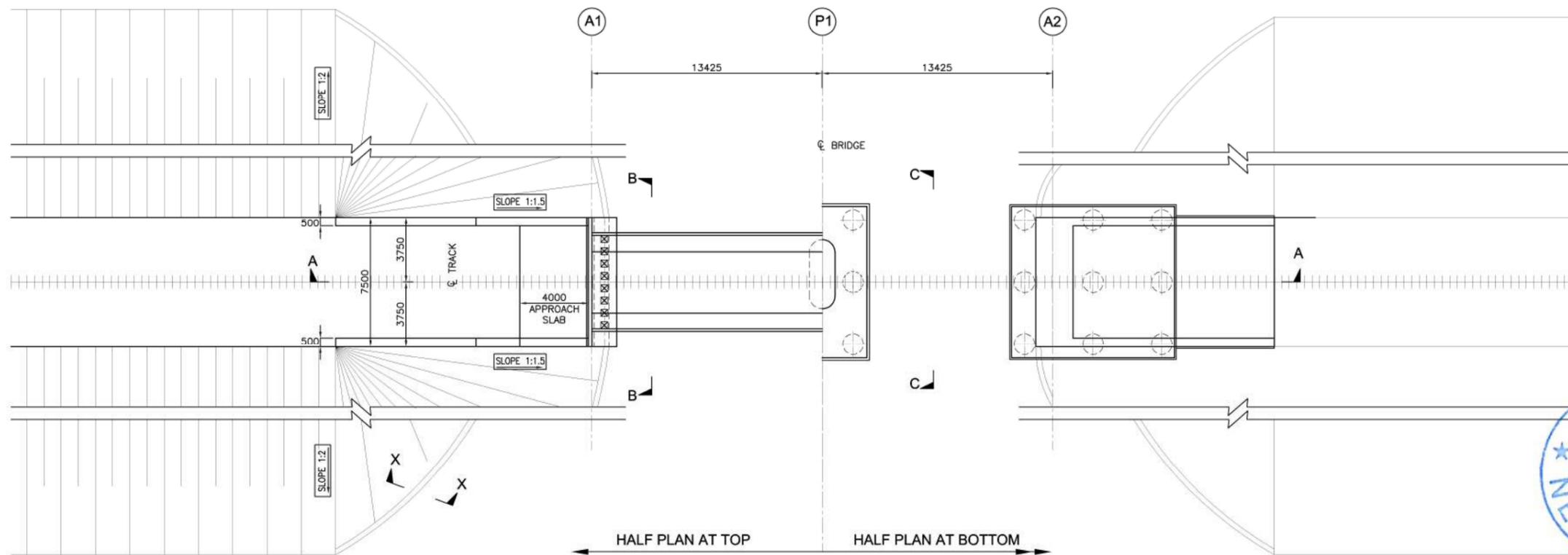
Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder



LONGITUDINAL SECTION A-A

(SCALE 1:150)

FORMATION LVL.(m)					
GROUND LVL.(m)	2040.000	2051.575	2060.000	2065.000	2078.425
CHAINAGE (m)	23.67	23.22	23.248	33.869	23.33



PLAN

(SCALE 1:150)

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
3. ALL DIMENSIONS AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
4. THIS GENERAL ARRANGEMENT DRAWING IS INDICATIVE AND IS MEANT ONLY FOR GUIDANCE FOR THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DEVELOPED & DESIGNED BY THE CONTRACTOR AS PER THE EMPLOYER'S REQUIREMENTS, SPECIFICATIONS AND SITE DIMENSIONS / CONDITIONS AND SHALL BE APPROVED BY ENGINEER / EMPLOYER.
5. ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
6. FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
7. LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
8. GROUND PROFILE SHOULD BE VERIFIED BEFORE EXECUTION.

SUPERSTRUCTURE & SUBSTRUCTURE

- 1) THE BRIDGE SHALL BE DESIGNED AS PER DFCCI LOADING (32.5T AXLE LOAD) BRIDGE RULE, ISSUED BY RDSO. (WITH LATEST CORRECTION SLIP).
- 2) THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
- 3) BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
- 4) WEEP HOLES SHALL BE OF PROVIDED IN RETURN WALL & ABUTMENT.
- 5) JOE FOUNDATION BOLTS SHALL BE PROVIDED IN CONSULTATION WITH THE CONTRACTOR OF EMP-4.
- 6) RAILING EXPANSION JOINTS, BEARING, WEARING COAT, FOOTPATH, SERVICE DUCT, DRAINAGE SHALL BE PROVIDED AS PER SPECIFICATION.
- 7) FOR INSPECTION OF BEARING / SUPERSTRUCTURE, SUITABLE ARRANGEMENT SHALL BE PROVIDED.
- 8) FOR CHANGING OF BEARING SUITABLE ARRANGEMENT SHALL BE PROVIDED.

GEO-TECHNICAL

- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT.
- 2) GEO-TECHNICAL BORE HOLE DATA REFERRED IN GAD IS INDICATIVE ONLY.
- 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

TABLE-1

DETAILS	PROPOSED DFC
PACKAGE	3
SECTOR	5Ca
BRIDGE NO.	MUP-7
CHAINAGE	2065.00
SPAN CONFIGURATION (C/C) OF PIER	2X12.2m
OVERALL SPAN (mm)	13375
EFFECTIVE SPAN (mm)	12575
CLEAR SPAN (mm)	12200
TYPE OF STRUCTURE	POST TENSIONED CONTIGUOUS BOX
DEPTH OF SUPERSTRUCTURE (mm)	1780
TYPE OF CROSSING	DRAIN
BRIDGE (STRAIGHT/CURVE/SKEW)	-
FORMATION LEVEL R.L. (METER)	33.869
H.F.L. R.L. (METER)	23.789
BED LEVEL R.L. (METER)	23.248
DESIGN DISCHARGE (Cumec)	-
VERTICAL CLEARANCE MIN. (mm)	-
TYPE OF FOUNDATION	PILE FOUNDATION
BRIDGE BEARING (ELASTOMER WITH - SUITABLE RESTRAINTS)	FIX - FREE

REFERENCE DRAWINGS:

DRAWING NO.	SUBJECT
CEGSACHIN-NADIADI PLAN-PROFILE/S-510	L-SECTION
DD - 01 (L&T RANBOLL)	CONTINUOUS BOX

APPROVED

DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFCC	CPM/DFCC
MANAGER / DFCC	GGM/Engg H

ASSET NUMBER: 102008
STANDARD: EL-AD-11-2010 (10000) - 12 T/M TRAILING LOAD

WESTERN DEDICATED RIGHT OF CORRIDOR BETWEEN JNPT (NEAR CAZMINHALL) - DADRI (NEAR DELHI)

CLIENT: DFCC NEW DELHI

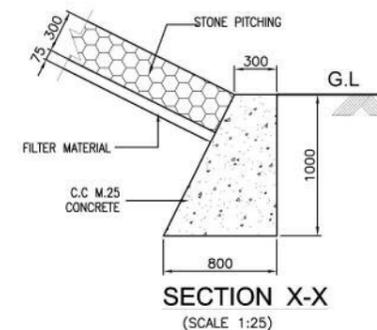
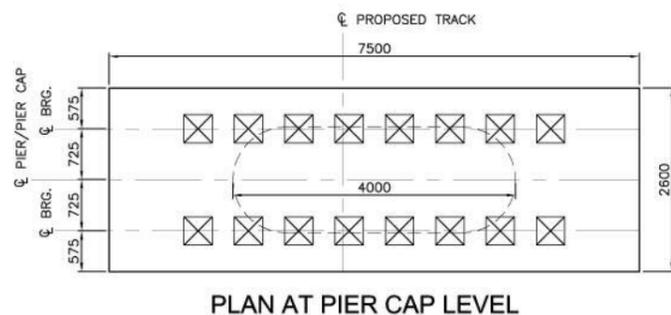
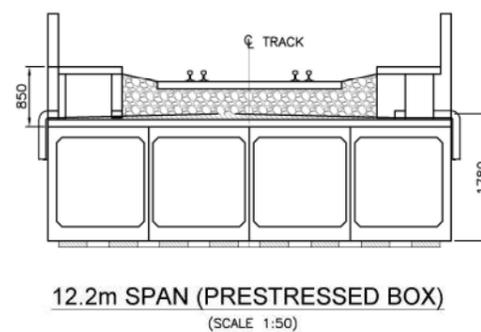
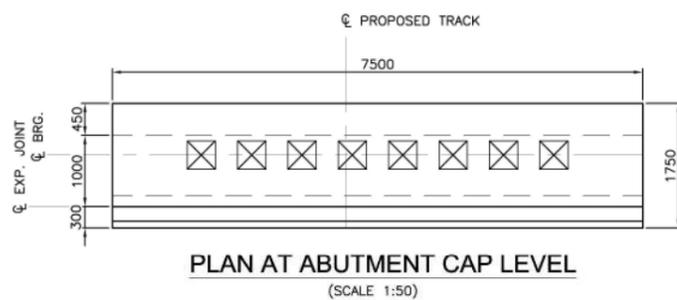
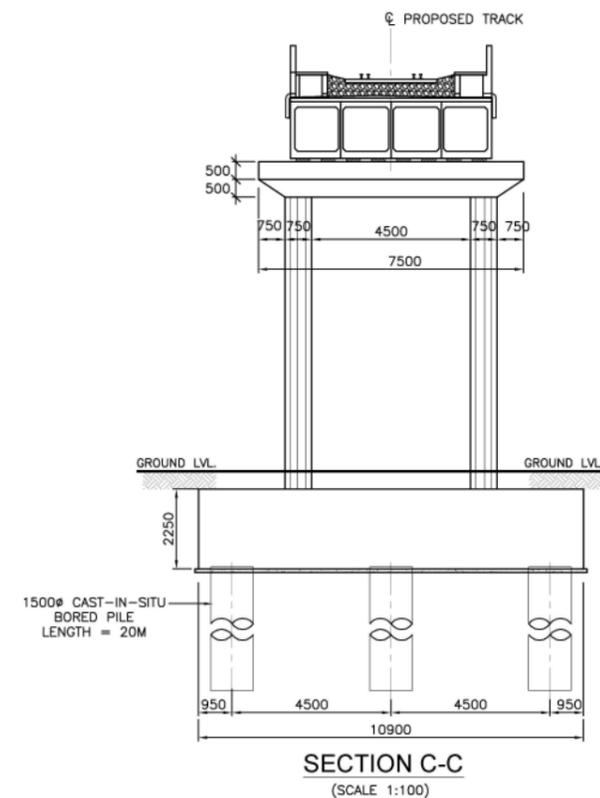
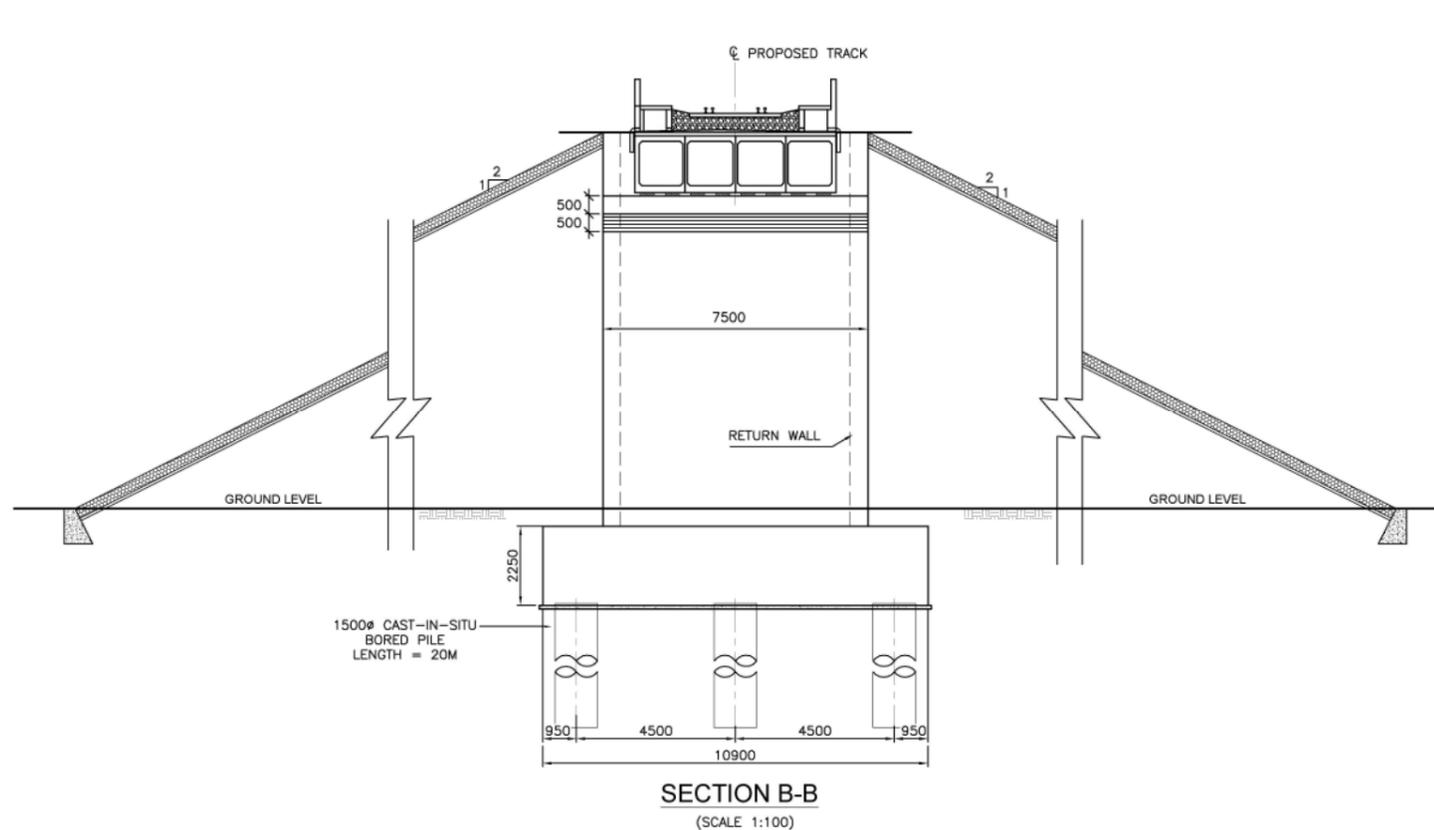
TITLE:- SECTION NO. 05 (VASAD - PALE) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-7, (FOR CANAL/CART TRACK), 2X12.2m, PRESTRESSED CONTIGUOUS BOX AT KM 1, (REV. CH.2065.00, GENERAL ARRANGEMENT DRAWING (SHEET: 1 OF 3)

DRAWN BY	CHECKED BY	APPROVED BY
R.K.Y.	V.K.S.	G.U.R.
SCALE - AS SHOWN	DATE: 01/06/2015 - 11:5pm	REV. No.
PROJECT NO. 102008	DRG NO.:	CEGSACHIN-NADIADI GAD-BRIDGE/S-5Ca/MUP-7

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CONSULTING ENGINEERS GROUP LTD.
E-12, Muzi Colony, Malviya Nagar Jaipur-17
Tel: +91-141-2520899, 2521899, 2520556
Fax: 2521899, E-Mail: ceeg@cegindia.com

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Formation width of 13.75m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

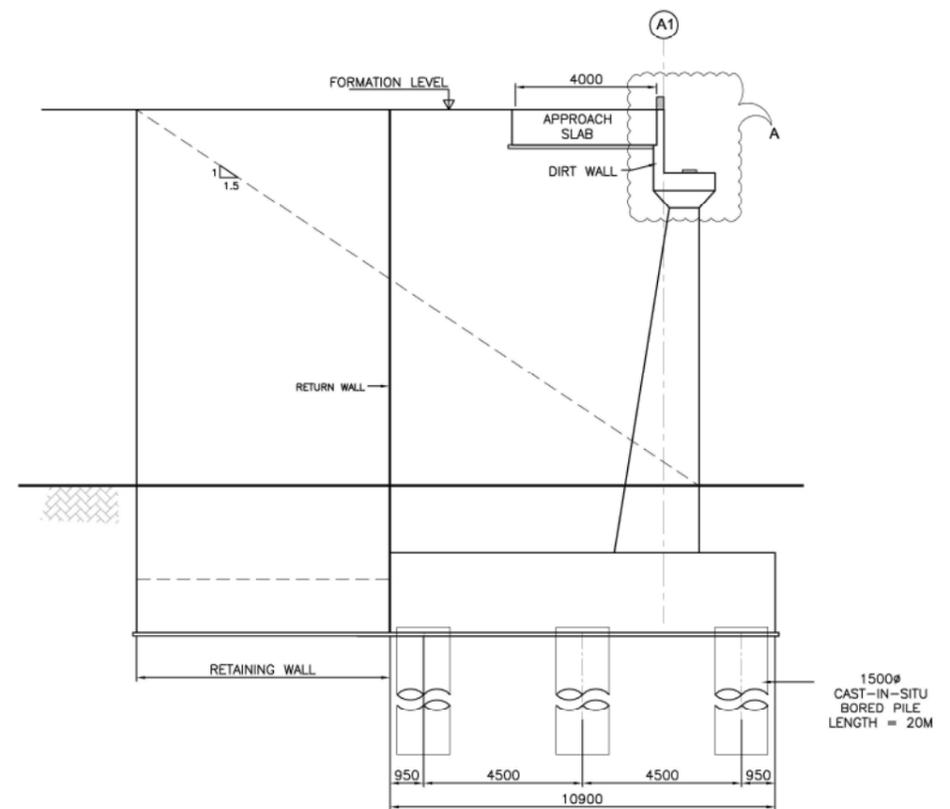
REFERENCE DRAWINGS:	
DRAWING NO.	SUBJECT.
CEG/SACHIN-NADIAD/PLAN-PROFILES-510	L-SECTION
DD-101 (L&T RAMBOLL)	CONTINUOUS BOX
APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DECC	CPM/DFCC
MANAGER / DECC	GGM(Engg.)
ASSET MANAGER / DECC	
STANDARD SPECIFICATION: 3250 (LONG) & 3250 (SHORT), 12 T/M TRAILING LOAD	
PROJECT: WESTERN DEDICATED FREIGHT CORRIDOR BETWEEN JAFAN (NEAR MUMBAI) & JAFAN (NEAR DELHI)	
CLIENT: DFCC	

TITLE:- SECTION NO. 05 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-7, (FOR CANAL/CART TRACK), 2X12.2m. PRESTRESSED CONTIGUOUS BOX AT KM. (REV. CH.2065.00, GENERAL ARRANGEMENT DRAWING (SHEET: 2 OF 3))

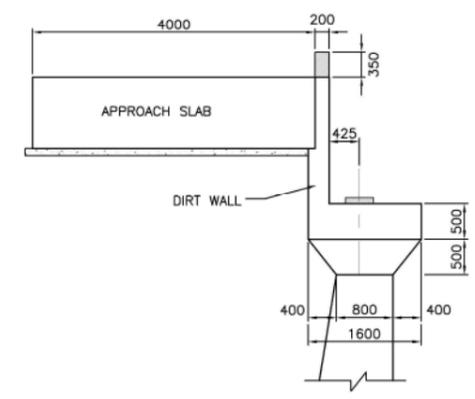
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CONSULTING Engineers Group Ltd.
E-12, Moji Colony, Malviya Nagar, Jaipur-17
Tel: +91-141-2520899, 2521899, 2520556
Fax: 2521899, E-Mail: ceg@cegindia.com

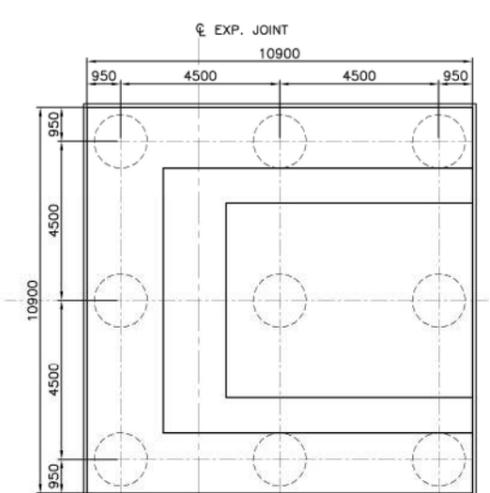
DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 1:15pm	REV. No.
PROJECT NO: 12008	DWG. NO: CEG/SACHIN-NADIAD/ GAD-BRIDGE /S-502/MUP-7	



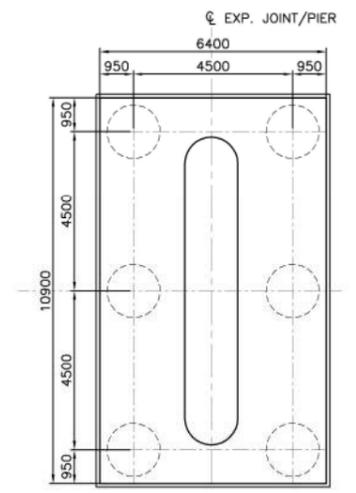
DETAIL OF ABUTMENT - A1
(SCALE 1:100)



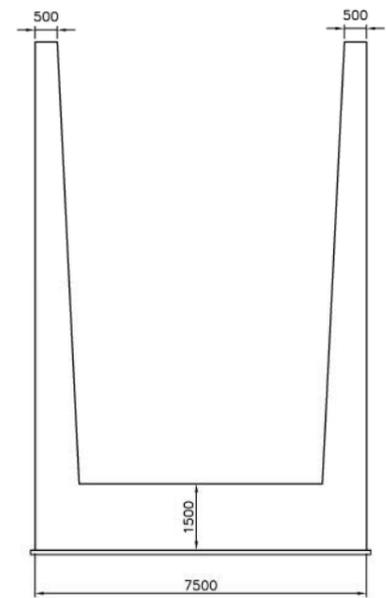
DETAIL - A
(SCALE 1:50)



PLAN AT ABUTMENT PILE CAP LVL.
(SCALE 1:100)



PLAN AT PIER PILE CAP LVL.
(SCALE 1:100)



DETAIL OF RETAINING WALL
(SCALE 1:80)

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

REFERENCE DRAWINGS:	
DRAWING NO.	SUBJECT.
CEG/SACHIN-NADIAD/PLAN-PROFILES-510	L-SECTION
DD - 001 (L&T RAMBOLL)	CONTINUOUS BOX
APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DRCO	CPM/DFCC
MANAGER / DEPT.	GGM(Engg.)/I
ASSET MANAGER / DEPT.	
STANDARD SPECIFICATION: 3250 (M&C) R&L ROAD, 12 T/M TRAILING LOAD	
PROJECT: WESTERN DISTRICT FREIGHT CORRIDOR BETWEEN JAFI (NEAR MUMBAI) & BAR (NEAR DELHI)	
CL. BY: [Signature]	

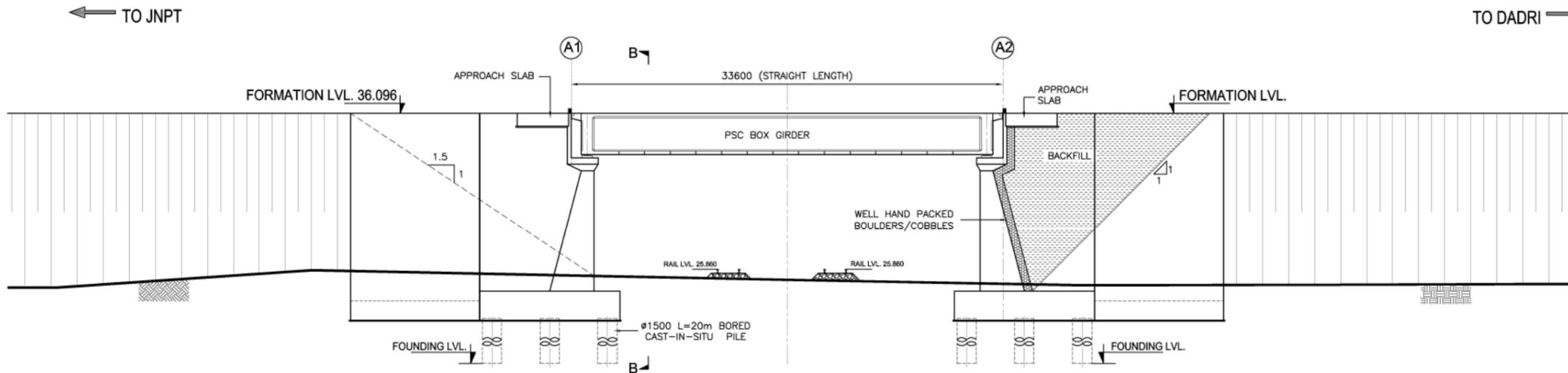


TITLE:- SECTION NO. 05 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-7, (FOR CANAL/CART TRACK), 2X12.2m. PRESTRESSED CONTIGUOUS BOX AT KM. (REV. CH.2065.00, GENERAL ARRANGEMENT DRAWING) (SHEET : 3 OF 3)

THIS DRAWING WAS ORIGINALLY PREPARED BY C E G (CONSULTING Engineers Group Ltd.) CONSULTANT AND REVIEWED / MODIFIED BY NIPPON KOEI CONSORTIUM.

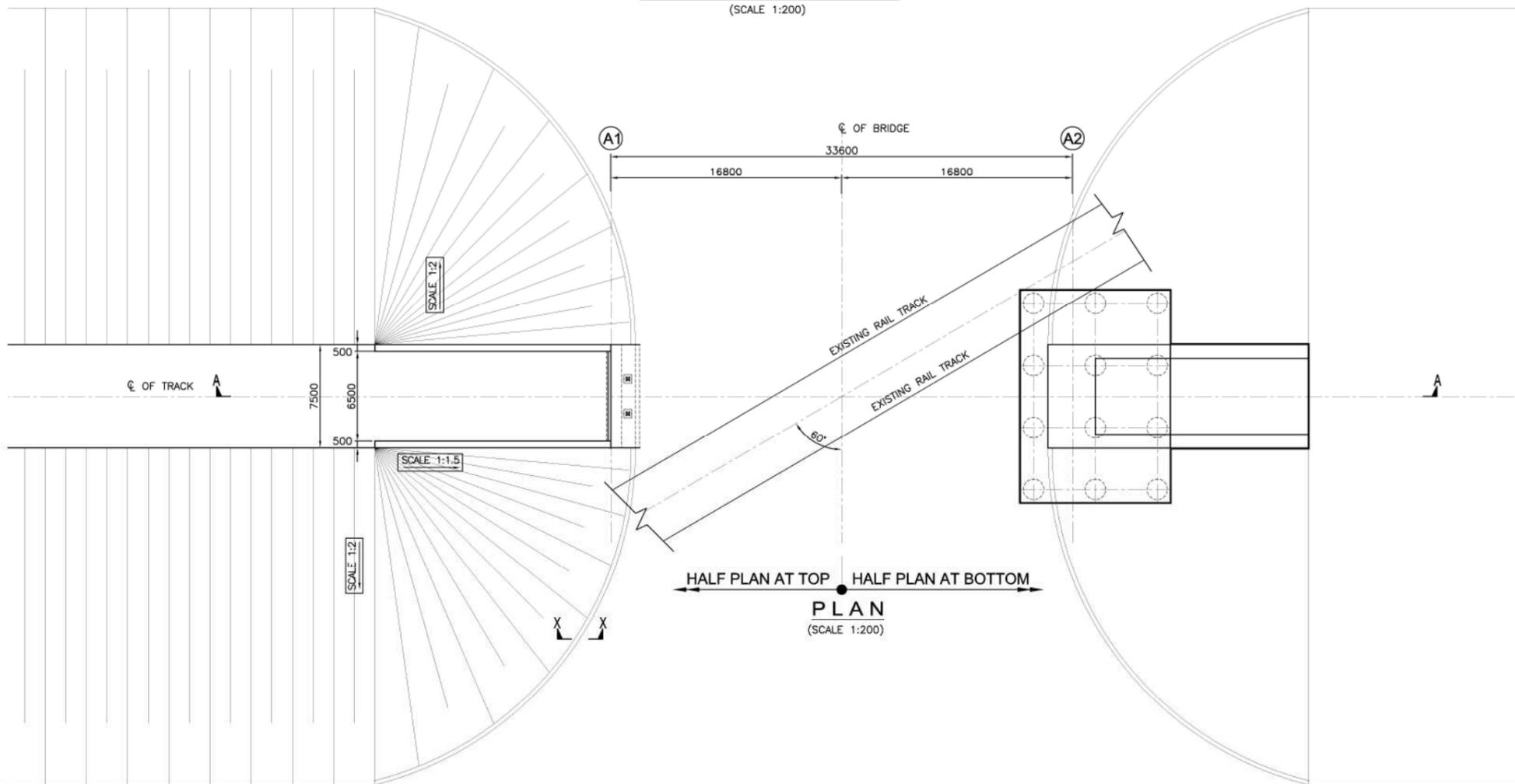
CONSULTING Engineers Group Ltd.
E-12, Meji Colony, Malviya Nagar Jaipur-17
Tel: +91-141-2520899, 2521899, 2520556
Fax: 2521899, E-Mail: ceg@cegindia.com

DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 1:15pm	REV. No.
PROJECT NO. 12008	DRG. NO.:	CEG/SACHIN-NADIAD/ GAD-BRIDGE /S-502/MUP-7



GROUND LVL.(m)	25.81	25.400	25.080	24.64
CHAINAGE(m)	2620.000	2640.200	2657.000	2680.000

SECTION ELEVATION A-A
(SCALE 1:200)



Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

- GENERAL NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
 2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
 3. ALL DIMENSIONS AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 4. THIS GENERAL ARRANGEMENT DRAWING IS INDICATIVE AND IS MEANT ONLY FOR GUIDANCE FOR THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DEVELOPED & DESIGNED BY THE CONTRACTOR AS PER THE EMPLOYER'S REQUIREMENTS, SPECIFICATIONS AND SITE DIMENSIONS / CONDITIONS AND SHALL BE APPROVED BY ENGINEER / EMPLOYER.
 5. ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING IR BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
 6. FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
 7. LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
 8. GROUND PROFILE SHOULD BE VERIFIED BEFORE EXECUTION.

- SUPERSTRUCTURE & SUBSTRUCTURE**
- 1) THE BRIDGE SHALL BE DESIGNED AS PER DFCC LOADING (32.5T AXLE LOAD) BRIDGE RULE, ISSUED BY RDSO, (WITH LATEST CORRECTION SLIP).
 - 2) THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
 - 3) BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - 4) WEAP HOLES SHALL BE PROVIDED IN RETURN WALL & ABUTMENT.
 - 5) THE FOUNDATION BOLTS SHALL BE PROVIDED IN CONSULTATION WITH THE CONTRACTOR OF EMP-4.
 - 6) RAILING EXPANSION JOINTS, BEARING, WEARING COAT, FOOTPATH, SERVICE DUCT, DRAINAGE SHALL BE PROVIDED AS PER SPECIFICATION.
 - 7) FOR INSPECTION OF BEARING / SUPERSTRUCTURE, SUITABLE ARRANGEMENT SHALL BE PROVIDED.
 - 8) FOR CHANGING OF BEARING SUITABLE ARRANGEMENT SHALL BE PROVIDED.

- GEO-TECHNICAL**
- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT.
 - 2) GEO-TECHNICAL BORE HOLE DATA REFERED IN GAD IS INDICATIVE ONLY.
 - 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

TABLE-1

DETAILS	PROPOSED DFC
PACKAGE	3
SECTOR	5Co
BRIDGE NO.	MUP-10
CHAINAGE	2657.000
SPAN CONFIGURATION	1 X 30.50m
OVERALL SPAN (mm)	33550
EFFECTIVE SPAN (mm)	31110
CLEAR SPAN (mm)	30500
TYPE OF STRUCTURE	PSC BOX GIRDER
DEPTH OF SUPERSTRUCTURE (mm)	3280
TYPE OF CROSSING	DFC MAIN LINE TRACK
BRIDGE (STRAIGHT/CURVESKEW)	STRAIGHT
FORMATION LEVEL R.L. (METER)	36.096
DFC MAIN LINE FORMATION LEVEL (METER)	25.080
DFC MAIN LINE RAIL LEVEL (METER)	25.860
VERTICAL CLEARANCE MIN. (mm)	8325
TYPE OF FOUNDATION	PILE FOUNDATION
BRIDGE BEARING (ELASTOMER WITH - SUITABLE RESTRAINTS)	FIX & FREE

REFERENCE DRAWINGS:

DRAWING NO.	SUBJECT
CEG/SACHIN-NADIADI/PLAN-PROFILE-SID	L-SECTION
	PSC BOX GIRDER

APPROVED

DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFC	CPM/DFCC
MANAGER / DFC	GGM(Engg.)
ASSET MANAGER	

STANDARD SPECIFICATION: 32.5T AXLE LOAD, 12 T/M TRAILING LOAD.

WESTERN DEDICATED FREIGHT CORRIDOR BETWEEN NCT (NEAR MUMBAI) - DADRI (NEAR DELHI)

CLAYE

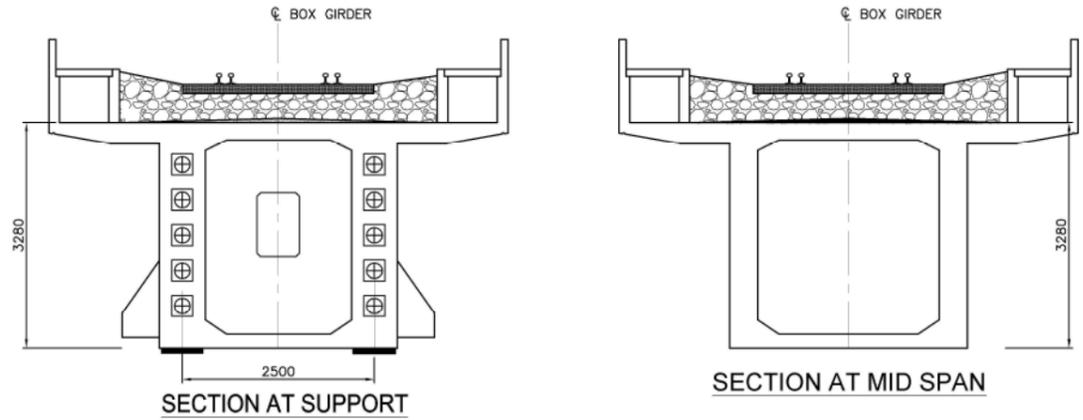
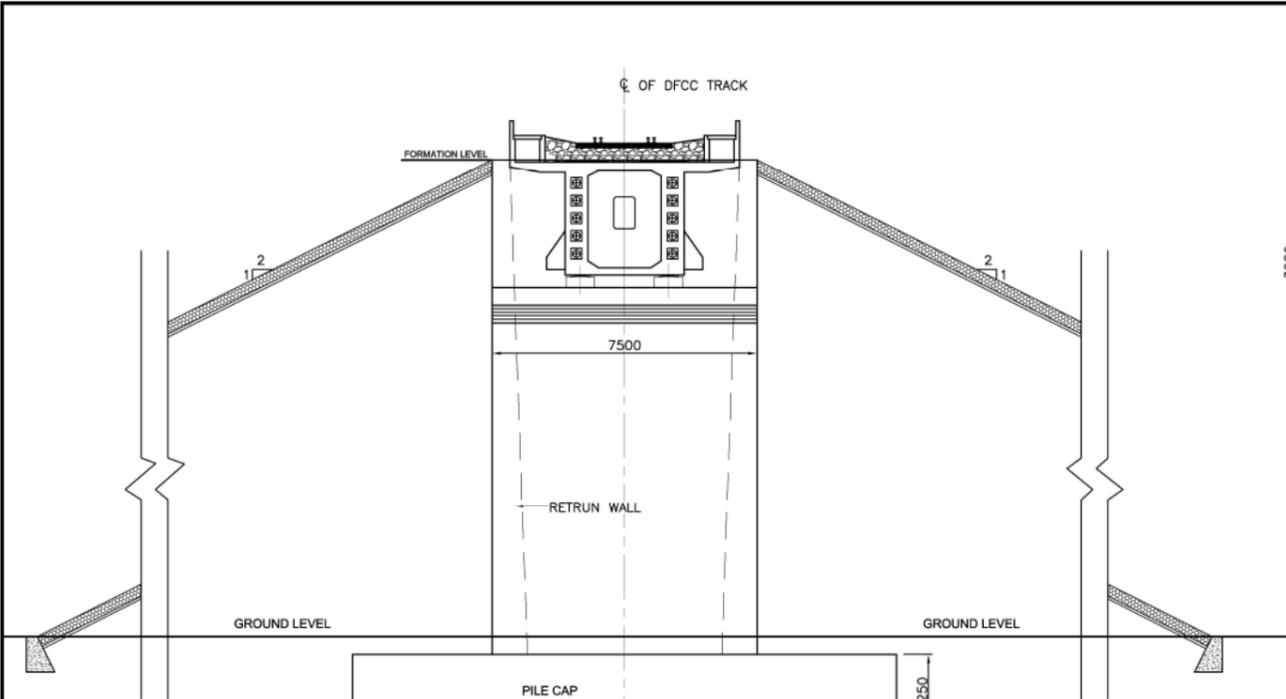


TITLE:- SECTION NO. 5Co. (SRAMIRGARH - PALANPUR) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-10, (FOR DFC MAIN LINE TRACK), 1X30.50m. PSC BOX GIRDER AT KM 636/2-3, (REV. CH.2657.000) GENERAL ARRANGEMENT DRAWING (SHEET: 1 OF 3)

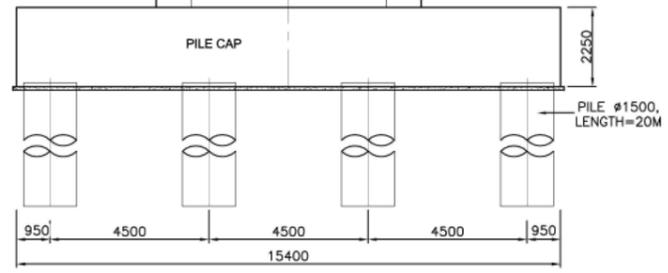
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E-12, Meji Colony, Malviya Nagar Jaipur-17
Tel: +91-141- 2520898, 2521899, 2520556
Fax: 2521899, E-Mail: ceg@cegindia.com

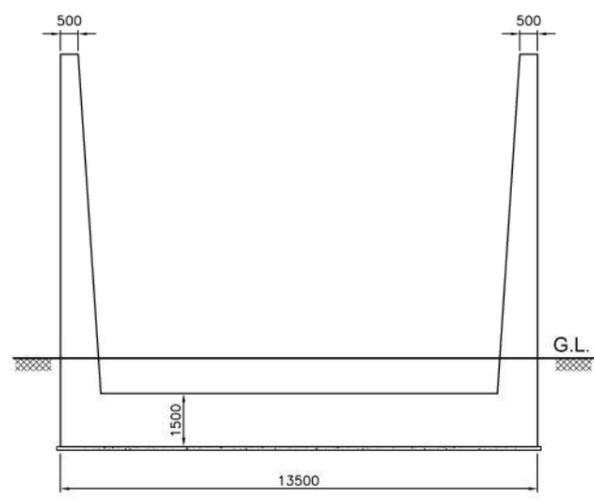
DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: AS SHOWN	DATE: 01/06/2015 - 2:26pm	REV. No.
PROJECT NO. 12008	ORG. NO. CEG/SACHIN-NADIADI/ GAD-BRIDGE /S-5Co/MUP-10	



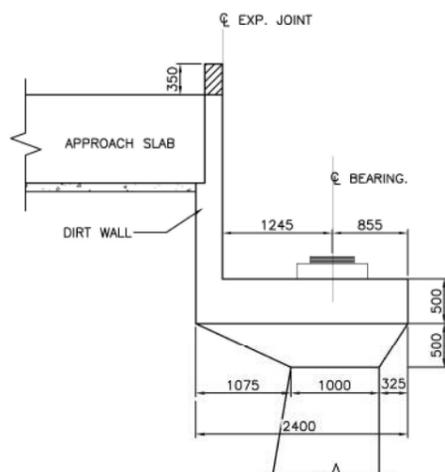
30.50m (SPAN POST TENSION BOX GIRDER)
(SCALE 1:50)



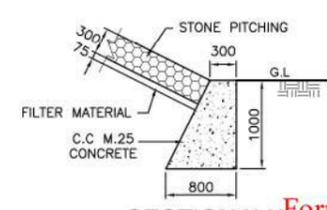
SECTION B-B
(SCALE 1:100)



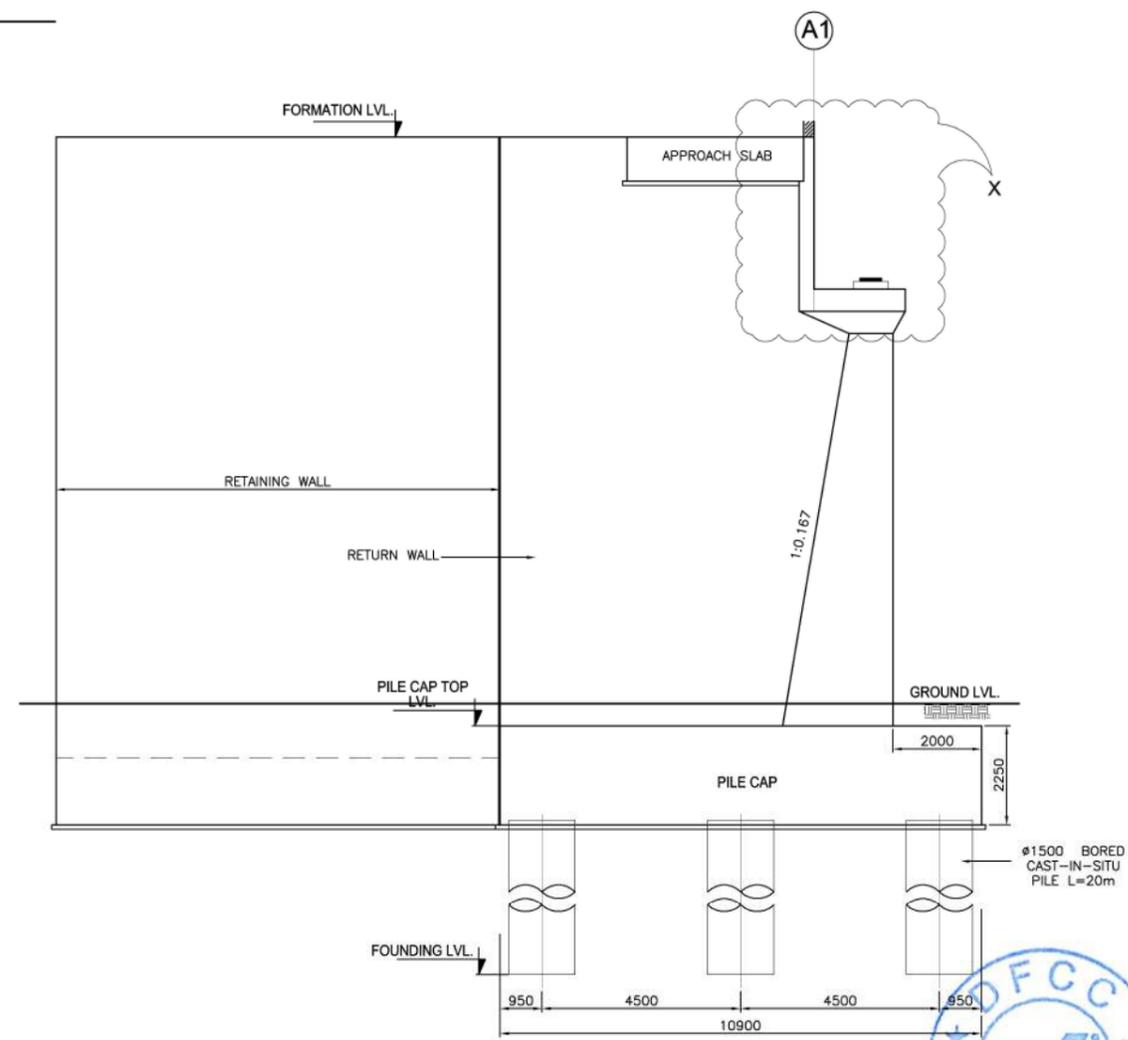
SECTION OF RETURN WALL
(SCALE 1:100)



DETAIL - X
(SCALE 1:40)



SECTION X-X Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder
(SCALE 1:40)



DETAIL OF ABUTMENT - A1
(SCALE 1:80)

REFERENCE DRAWINGS:	
DRAWING NO.	SUBJECT.
CEG/SACHIN-NADIAD/PLAN-PROFILES-S10	L-SECTION
	PSC BOX GIRDER
APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DRCO	CPM/DFCC
MANAGER / DEPT.	GGM(Engg.)/I
ASSET MANAGER	
STANDARD SPECIFICATION: 32.50 MPa STRENGTH GRADE, 12 T/M TRAILING LOAD.	
WESTERN DEDICATED FREIGHT CORRIDOR BETWEEN NCT (NEAR WAZIRPUR) - TAUR (NEAR DELHI)	
KM 636/2-3, (REV. CH. 2657.000)	

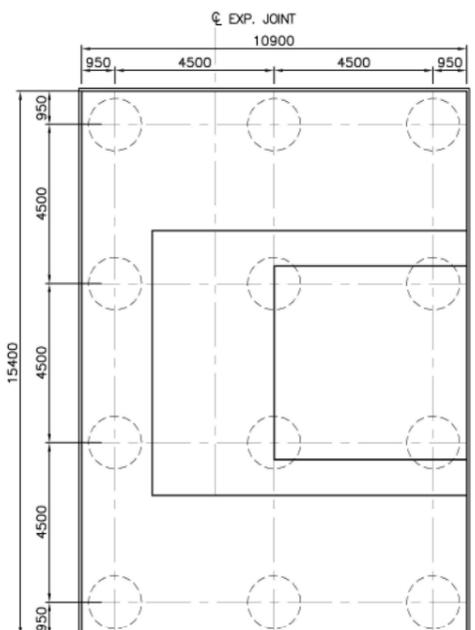


TITLE:- SECTION NO. 50s. (SRIRAMGARH - PALANPUR) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-10, (FOR DFCC MAIN LINE TRACK), 1X30.50m. PSC BOX GIRDER AT KM 636/2-3, (REV. CH. 2657.000)
GENERAL ARRANGEMENT DRAWING (SHEET : 2 OF 3)

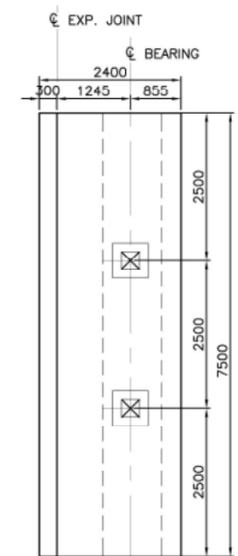
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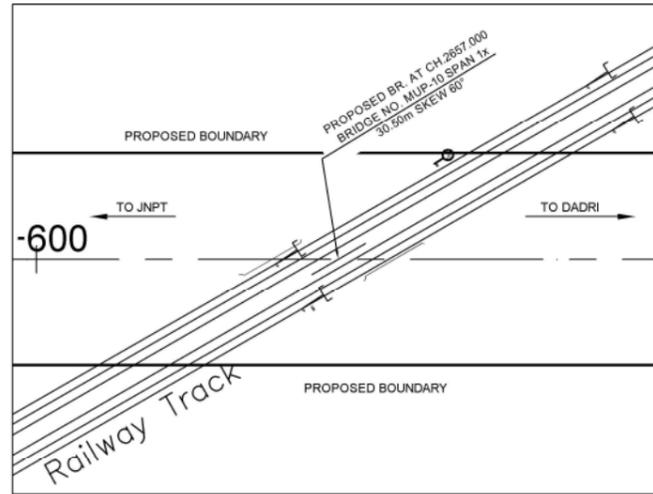
DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 2:26pm	REV. No.
PROJECT NO. 12008	DRG. NO. CEG/SACHIN-NADIAD/GAD-BRIDGE/S-50sMUP-10	



PLAN AT ABUTMENT PILE CAP TOP LVL.
(SCALE 1:100)



PLAN AT ABUTMENT CAP LVL.
(SCALE 1:60)



KEY PLAN

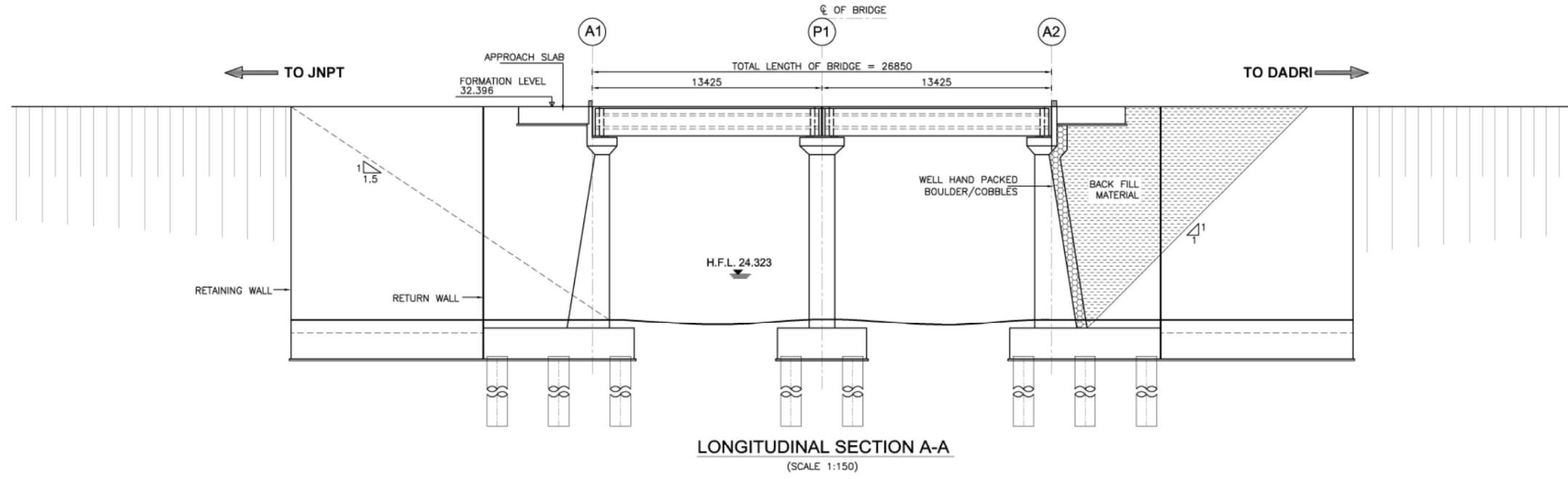
Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

REFERENCE DRAWINGS:	
DRAWING NO.	SUBJECT.
CEG/SACHIN-NADIAD/PLAN-PROFILE/S-510	L-SECTION
	PSC BOX GIRDER
APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFCO	CPM/DFCC
MANAGER / DEPT.	GGM(Engg./H)
ASSET MANAGER	
STANDARD SPECIFICATION: 3250 (PSC BOX GIRDER), 12 T/M TRAILING LOAD.	
WESTERN DEDICATED FREIGHT CORRIDOR BETWEEN JNPT (NEAR MUMBAI) - DADRI (NEAR DELHI)	
CL. ENCL. -	
 	
TITLE:- SECTION NO. 50a. (SRIRAMGARH - PALANPUR) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-10, (FOR DFC MAIN LINE TRACK), 1X30.50m. PSC BOX GIRDER AT KM 636/2-3, (REV. CH. 2857.000) GENERAL ARRANGEMENT DRAWING (SHEET : 3 OF 3)	
DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 2:27pm
PROJECT NO. 12008	APPROVED BY: G.U.R.
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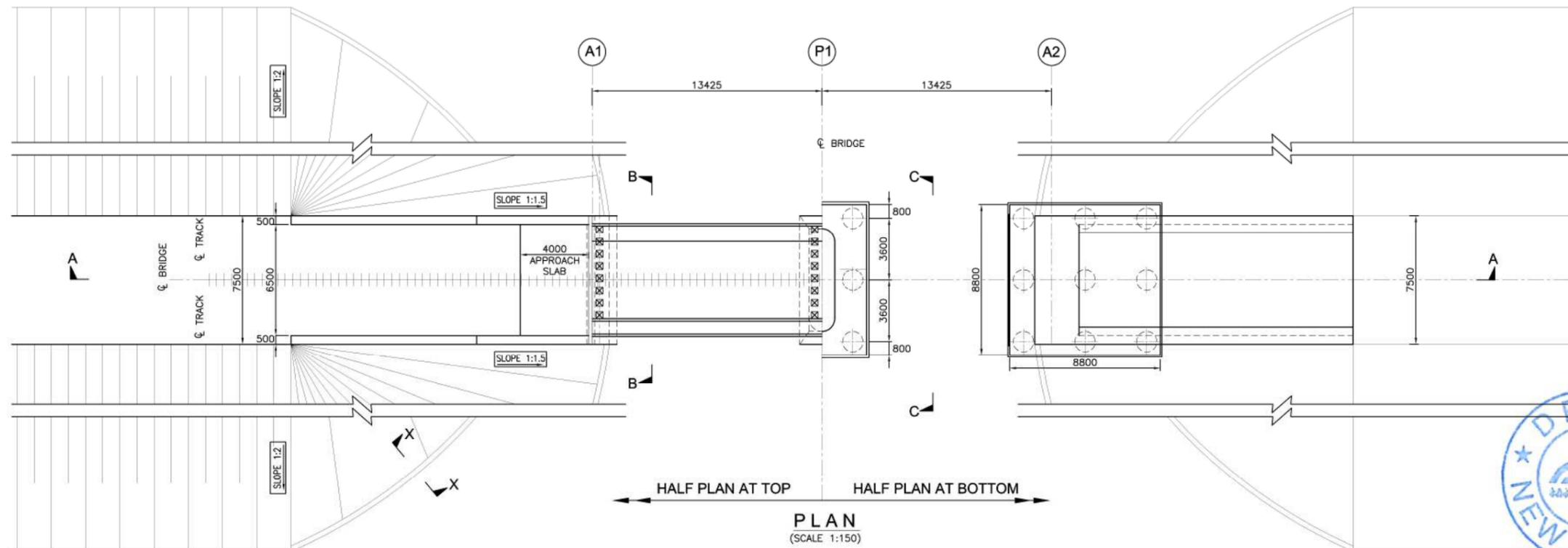
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SCALE: - AS SHOWN DATE: 01/06/2015 - 2:27pm REV. No.
PROJECT NO. 12008 DRG. NO. CEG/SACHIN-NADIAD/GAD-BRIDGE /S-50a/MUP-10



GROUND LVL. (m)	22.27	22.2	23.82	24.5	24.63
CHAINAGE (m)	3480.0	3500.0	3520.0	3540.0	3560.0



Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

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 3. ALL DIMENSIONS AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
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 5. ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
 6. FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
 7. LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
 8. GROUND PROFILE SHOULD BE VERIFIED BEFORE EXECUTION.

- SUPERSTRUCTURE & SUBSTRUCTURE**
- 1) THE BRIDGE SHALL BE DESIGNED AS PER DFCCI LOADING (32.5T AXLE LOAD) BRIDGE RULE, ISSUED BY RDSO. (WITH LATEST CORRECTION SLIP).
 - 2) THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
 - 3) BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - 4) WEAP HOLES SHALL BE PROVIDED IN RETURN WALL & ABUTMENT.
 - 5) JOINT FOUNDATION BOLTS SHALL BE PROVIDED IN CONSULTATION WITH THE CONTRACTOR OF EMP-4.
 - 6) RAILING EXPANSION JOINTS, BEARING, WEARING COAT, FOOTPATH, SERVICE DUCT, DRAINAGE SHALL BE PROVIDED AS PER SPECIFICATION.
 - 7) FOR INSPECTION OF BEARING / SUPERSTRUCTURE, SUITABLE ARRANGEMENT SHALL BE PROVIDED.
 - 8) FOR CHANGING OF BEARING SUITABLE ARRANGEMENT SHALL BE PROVIDED.

- GEO-TECHNICAL**
- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT.
 - 2) GEO-TECHNICAL BORE HOLE DATA REFERED IN GAD IS INDICATIVE ONLY.
 - 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

TABLE-1

DETAILS	PROPOSED DFC
PACKAGE	3
SECTOR	50a
BRIDGE NO.	MUP-13
CHAINAGE	3520.000
SPAN CONFIGURATION (C-C) OF PIER	2X12.2m
OVERALL SPAN (mm)	13375
EFFECTIVE SPAN (mm)	12525
CLEAR SPAN (mm)	12200
TYPE OF STRUCTURE	PRESTRESSED CONTIGUOUS BOX
DEPTH OF SUPERSTRUCTURE (mm)	1780
TYPE OF CROSSING	NALLA
BRIDGE (STRAIGHT/CURVE/SKEW)	STRAIGHT
FORMATION LEVEL R.L. (METER)	32.396
H.F.L. R.L. (METER)	24.323
BED LEVEL R.L. (METER)	23.820
DESIGN DISCHARGE (Cumec)	-
VERTICAL CLEARANCE MIN. (mm)	-
TYPE OF FOUNDATION	PILE FOUNDATION
BRIDGE BEARING (ELASTOMER WITH - SUITABLE RESTRAINTS)	FIX - FREE

REFERENCE DRAWINGS:

DRAWING NO.	SUBJECT.
CEG/SACHIN-NADIADI PLAN-PROFILE/S-5/10	L-SECTION
	CONTIGUOUS BOX

APPROVED

DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M./D.F.C.C.	CPM/DFCC
MANAGER	GSM/Engg.H

WESTERN RAILWAY PROJECT
WESTERN RAILWAY RIGHT CORRIDOR BETWEEN JNPT (NEAR JUMBA) - DADRI (NEAR DELHI)



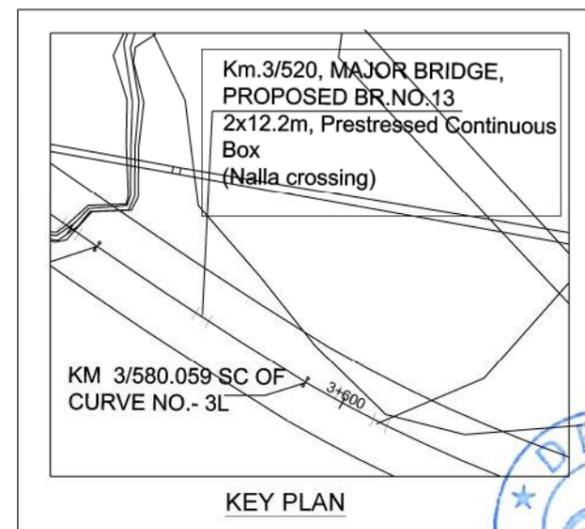
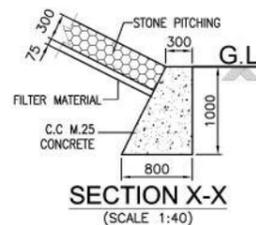
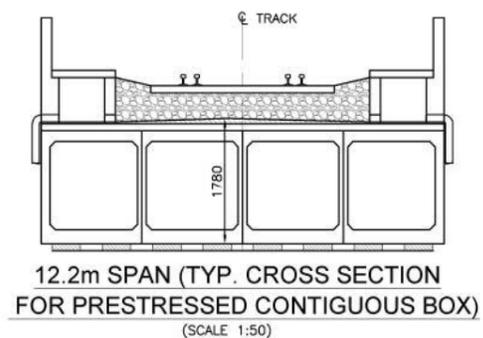
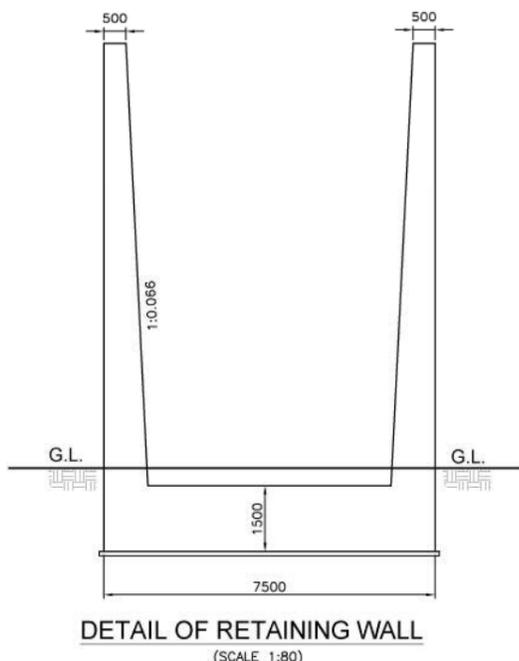
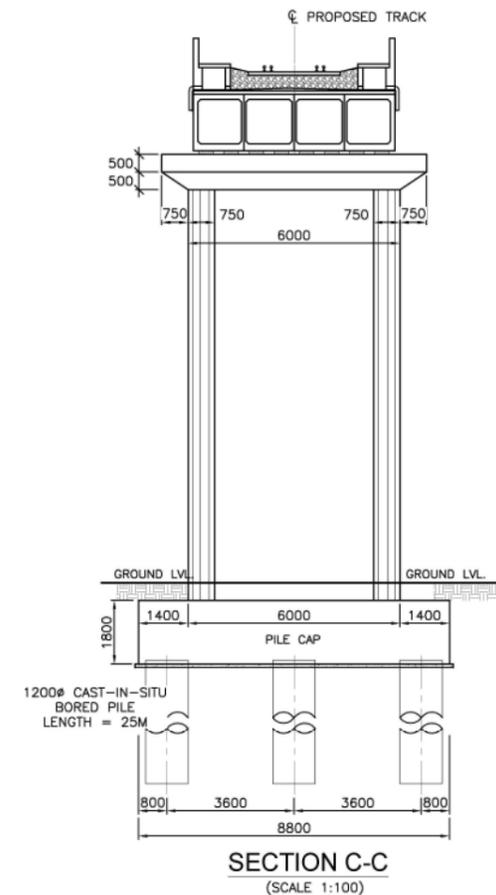
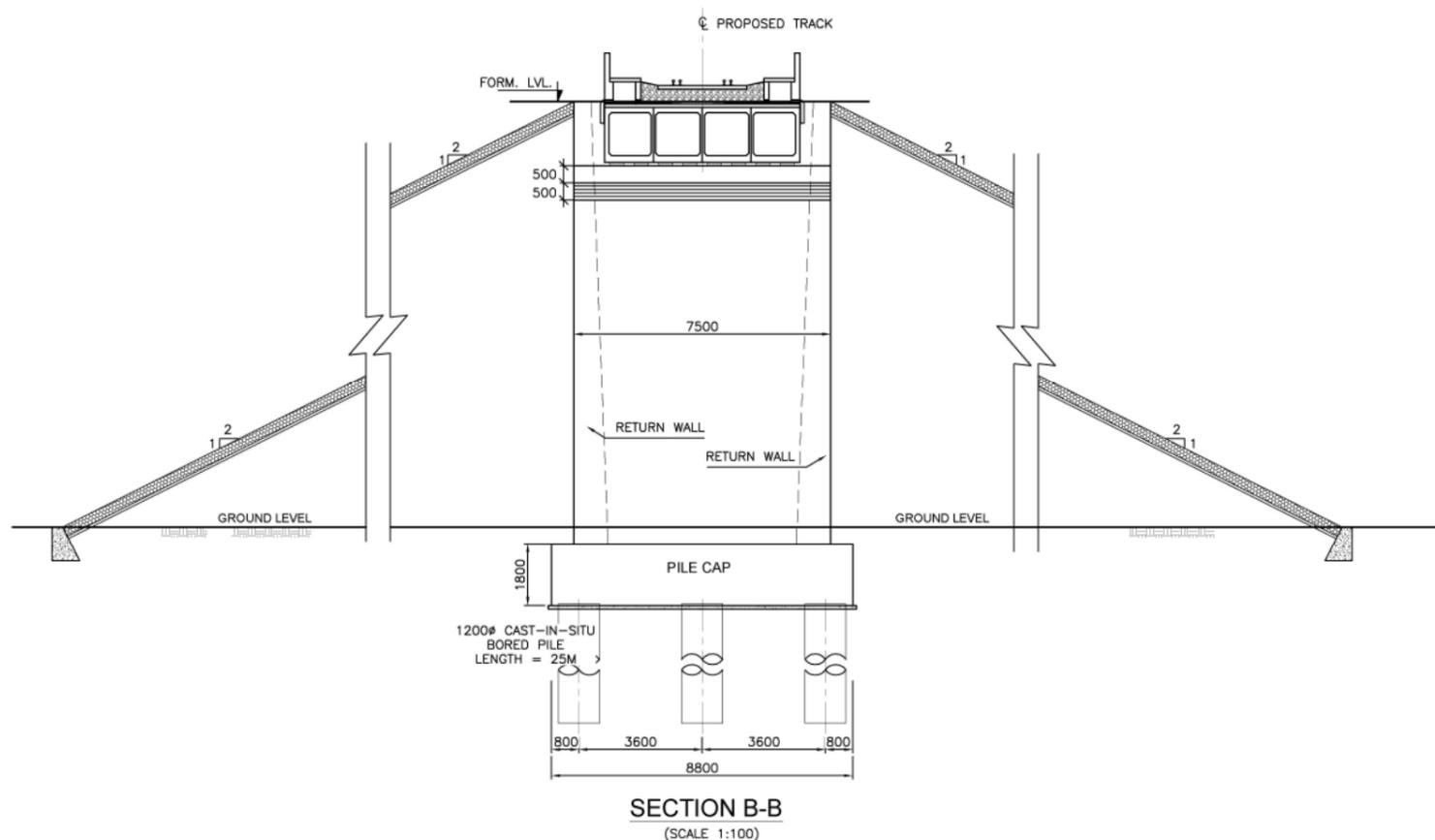
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DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 2:27pm	REV. No.
PROJECT NO. 12008	DRG NO. CEG/SACHIN-NADIADI GAD-BRIDGE/S-50A/MUP-13	



REFERENCE DRAWINGS:	
DRAWING NO.	SUBJECT.
CE/SACHIN-NADIADI PLAN-PROFILE-S-110	L-SECTION
	CONTIGUOUS BOX
APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M./CPM	CPM/DFCC
MANAGER	GGM(Engg-I)
PROJECT: WESTERN RAILWAY DEVELOPMENT CORRIDOR BETWEEN MUMBAI (NEAR MUMBAI) & JADRI (NEAR DELHI)	



Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

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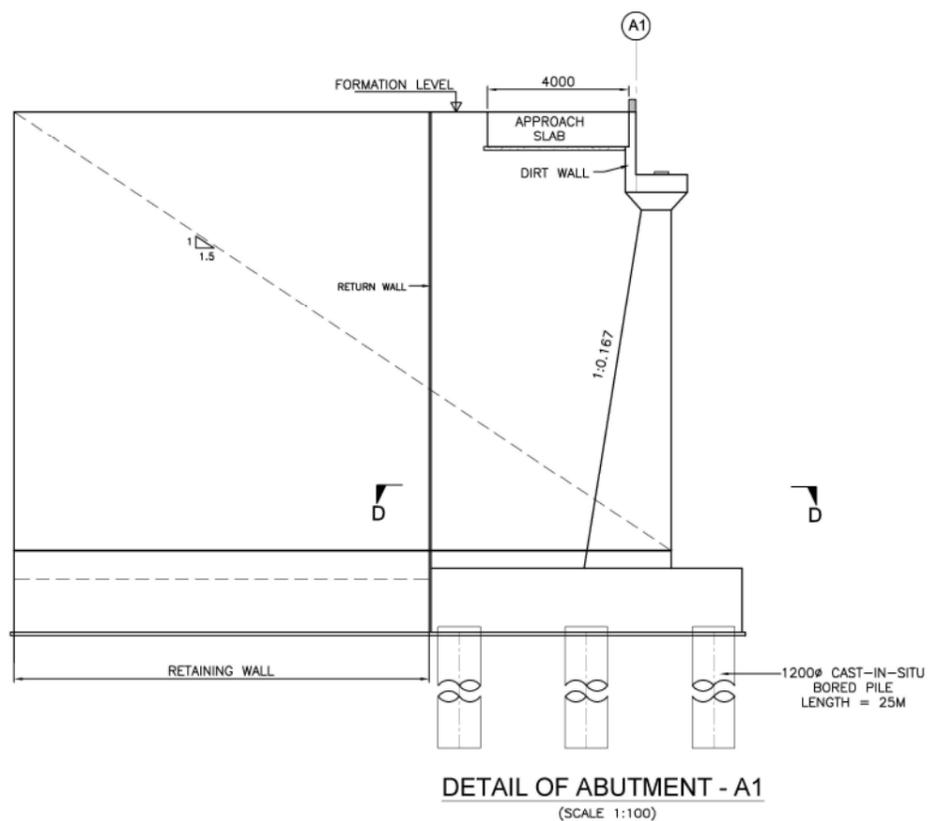
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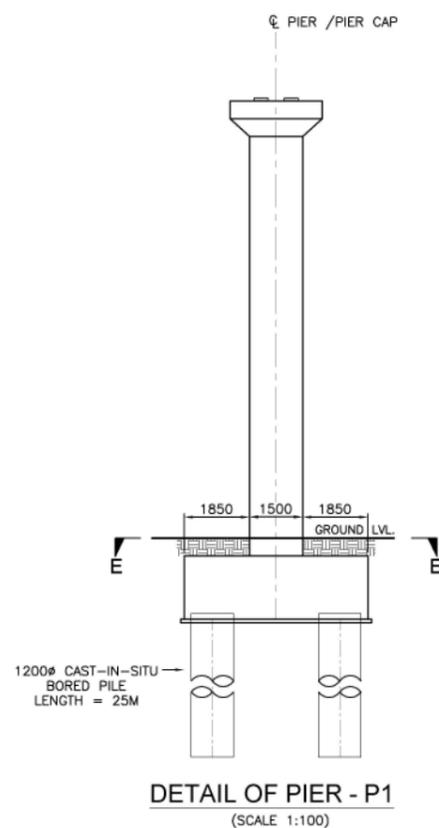
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GENERAL ARRANGEMENT DRAWING (SHEET 2 OF 3)

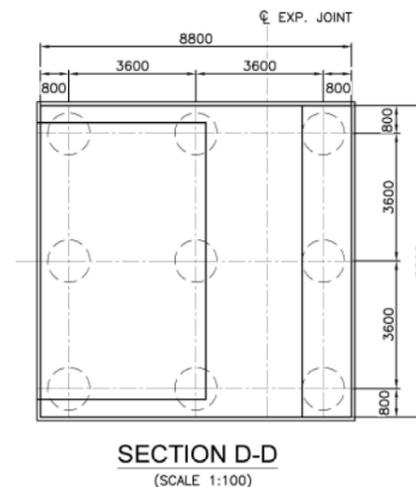
DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 2:28pm	REV. No.
PROJECT NO. 12008	DRG NO.	CEG/SACHIN-NADIADI GAD-BRIDGE/S-50A/MUP-13



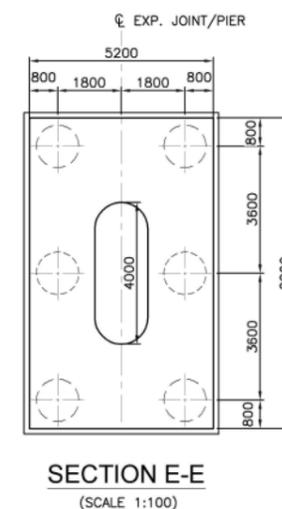
DETAIL OF ABUTMENT - A1
(SCALE 1:100)



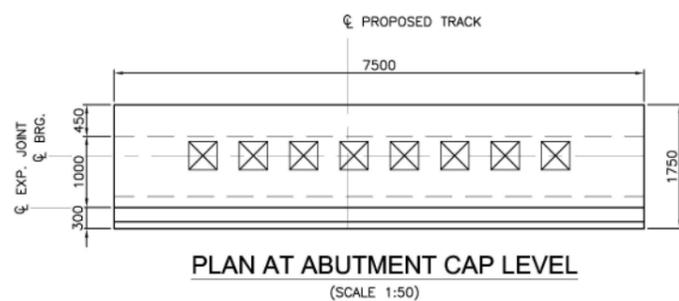
DETAIL OF PIER - P1
(SCALE 1:100)



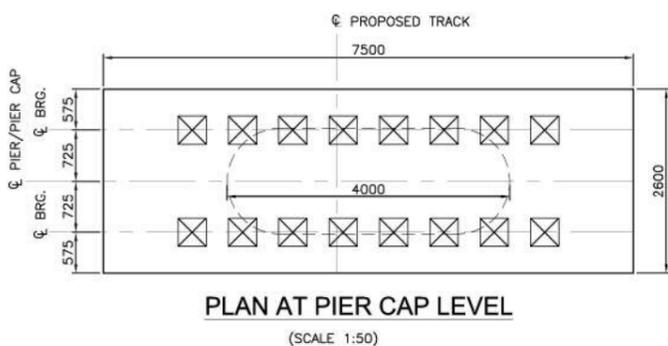
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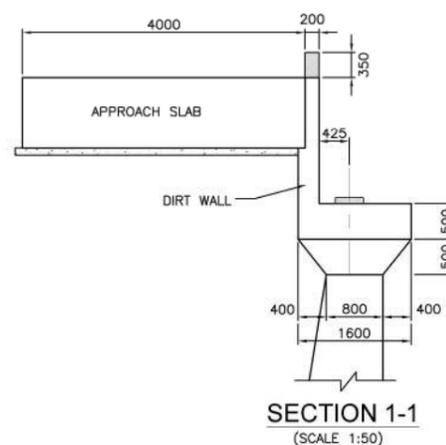
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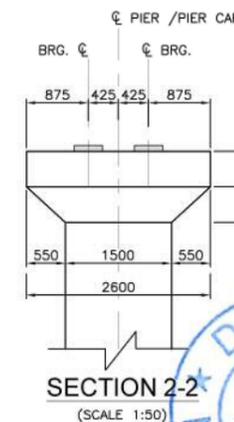
PLAN AT ABUTMENT CAP LEVEL
(SCALE 1:50)



PLAN AT PIER CAP LEVEL
(SCALE 1:50)



SECTION 1-1
(SCALE 1:50)



SECTION 2-2
(SCALE 1:50)

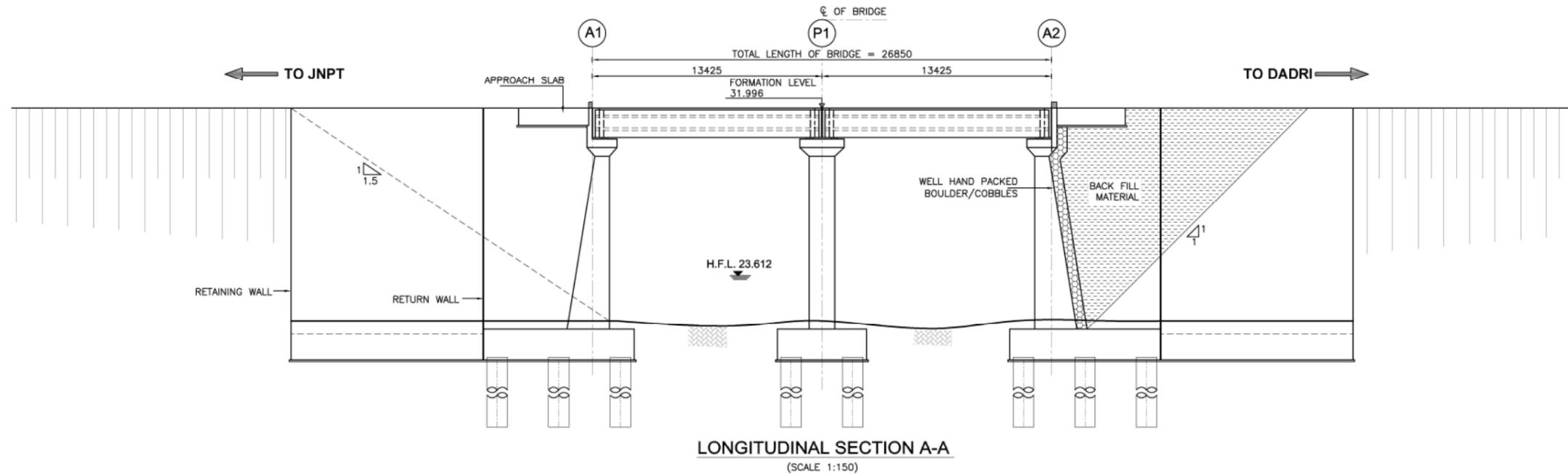
Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

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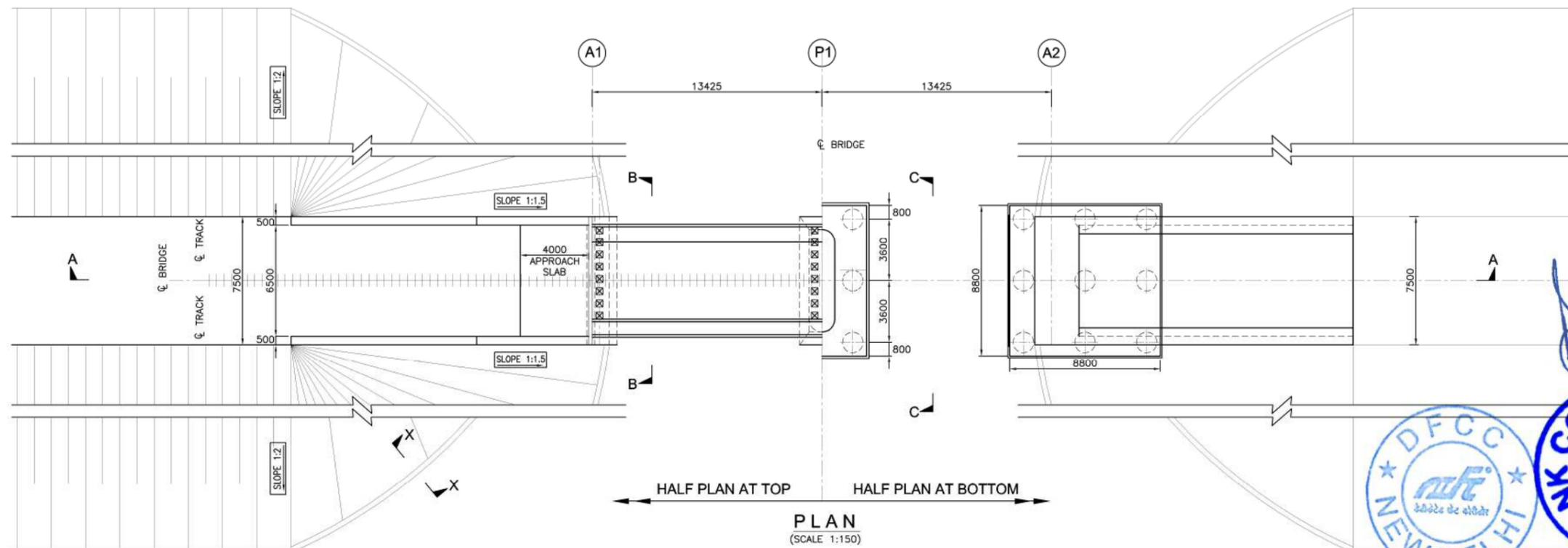
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CONSULTING Engineers Group Ltd. E-12, Mofji Colony, Malviya Nagar, Jaipur-302017. Tel: +91-141-2520899, 2521899, 2520556 Fax: 2521899, E-Mail:ceg@cegindia.com

REFERENCE DRAWINGS:	
DRAWING NO. CEG/SACHIN-NADIADI PLAN-PROFILE-S-110	SUBJECT. L-SECTION CONTIGUOUS BOX
APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / C.P.O.	CPM/DFCC
MANAGER	GGM(Engg-I)
PROJECT: WESTERN RAILWAY DEVELOPMENT CORRIDOR BETWEEN MUMBAI (NEAR MUMBAI) AND DADRI (NEAR DELHI)	
CMENT: - DFCC	
TITLE: SECTION NO. 05C6 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-13, (FOR NALLA), 2X12.20m PRESTRESSED CONTIGUOUS BOX AT (REV. CH.3520.000) GENERAL ARRANGEMENT DRAWING (SHEET: 3 OF 3)	
DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 2:28pm
PROJECT NO. 12008	REV. No.
DRG. NO. CEG/SACHIN-NADIADI GAD-BRIDGE/S-50A/MUP-13	APPROVED BY: G.U.R.



GROUND LVL. (m)	22.4	22.38	22.51	22.8	22.8
CHAINAGE (m)	3580.0	3600.0	3620.0	3640.0	3660.0



Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

- GENERAL NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
 2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
 3. ALL DIMENSIONS AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 4. THIS GENERAL ARRANGEMENT DRAWING IS INDICATIVE AND IS MEANT ONLY FOR GUIDANCE FOR THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DEVELOPED & DESIGNED BY THE CONTRACTOR AS PER THE EMPLOYER'S REQUIREMENTS, SPECIFICATIONS AND SITE DIMENSIONS / CONDITIONS AND SHALL BE APPROVED BY ENGINEER / EMPLOYER.
 5. ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
 6. FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
 7. LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
 8. GROUND PROFILE SHOULD BE VERIFIED BEFORE EXECUTION.

- SUPERSTRUCTURE & SUBSTRUCTURE**
- 1) THE BRIDGE SHALL BE DESIGNED AS PER DFCC LOADING (32.5T AXLE LOAD) BRIDGE RULE, ISSUED BY RDSO. (WITH LATEST CORRECTION SLIP).
 - 2) THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
 - 3) BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - 4) WEEP HOLES SHALL BE PROVIDED IN RETURN WALL & ABUTMENT.
 - 5) JOINT FOUNDATION BOLTS SHALL BE PROVIDED IN CONSULTATION WITH THE CONTRACTOR OF EMP-4.
 - 6) RAILING EXPANSION JOINTS, BEARING, WEARING COAT, FOOTPATH, SERVICE DUCT, DRAINAGE SHALL BE PROVIDED AS PER SPECIFICATION.
 - 7) FOR INSPECTION OF BEARING / SUPERSTRUCTURE, SUITABLE ARRANGEMENT SHALL BE PROVIDED.
 - 8) FOR CHANGING OF BEARING SUITABLE ARRANGEMENT SHALL BE PROVIDED.

- GEO-TECHNICAL**
- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT.
 - 2) GEO-TECHNICAL BORE HOLE DATA REFERRED IN GAD IS INDICATIVE ONLY.
 - 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

TABLE-1

DETAILS	PROPOSED DFC
PACKAGE	3
SECTOR	5Co.
BRIDGE NO.	MUP-14
CHAINAGE	3620.000
SPAN CONFIGURATION (C/C) OF PIER	2X12.2m
OVERALL SPAN (mm)	13375
EFFECTIVE SPAN (mm)	12525
CLEAR SPAN (mm)	12200
TYPE OF STRUCTURE	PRESTRESSED CONTIGUOUS BOX
DEPTH OF SUPERSTRUCTURE (mm)	1780
TYPE OF CROSSING	NALLA
BRIDGE (STRAIGHT/CURVE/SKEW)	STRAIGHT
FORMATION LEVEL R.L. (METER)	31.996
H.F.L. R.L. (METER)	23.612
BED LEVEL R.L. (METER)	22.510
DESIGN DISCHARGE (Cumec)	-
VERTICAL CLEARANCE MIN. (mm)	-
TYPE OF FOUNDATION	PILE FOUNDATION
BRIDGE BEARING (ELASTOMER WITH-SUITABLE RESTRAINTS)	FIX - FREE

REFERENCE DRAWINGS:

DRAWING NO.	SUBJECT.
CEG/SACHIN-NADIADI PLAN-PROFILE-S-10	L-SECTION
	CONTIGUOUS BOX

APPROVED

DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFCC	CPM/DFCC
MANAGER / DFCC	GGM(Engg.)
ASSET. MANAGER / DFCC	

STANDARD OF LOADING: 32.50 TONNE AXLE LOAD, 12 T/M TRAILING LOAD.
 PROJECT: - WESTERN DEDICATED FRIGHT CORRIDOR BETWEEN JNPT (NEAR MUMBAI) - DADRI (NEAR DELHI)

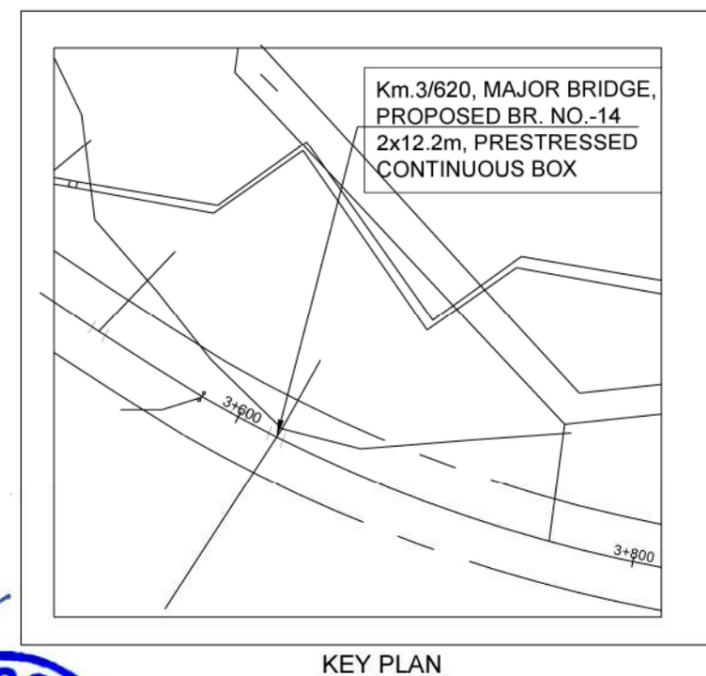
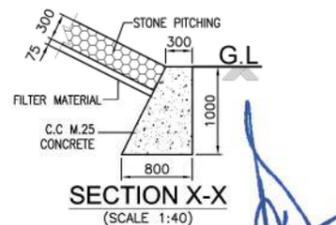
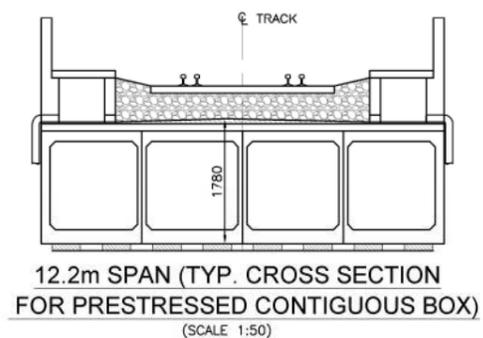
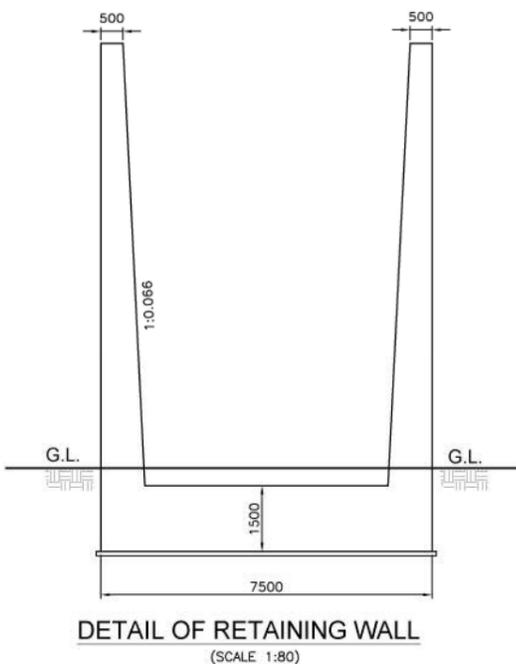
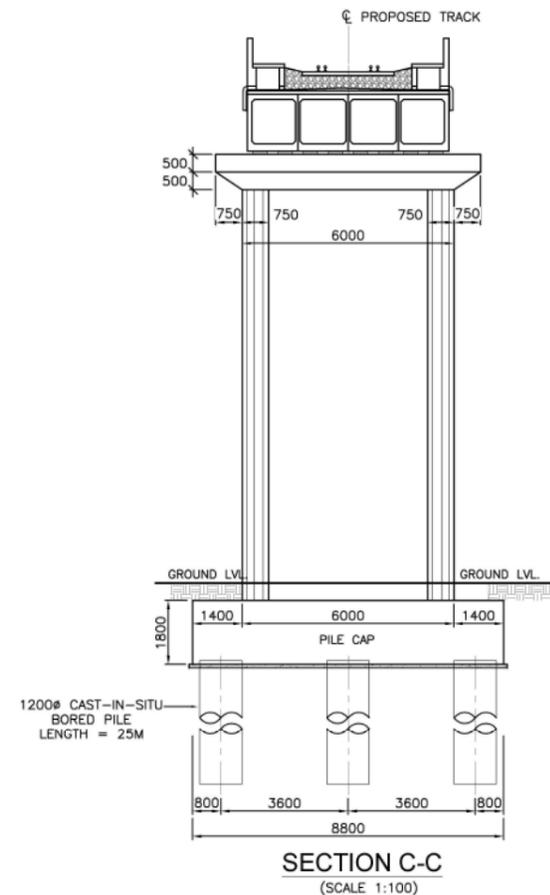
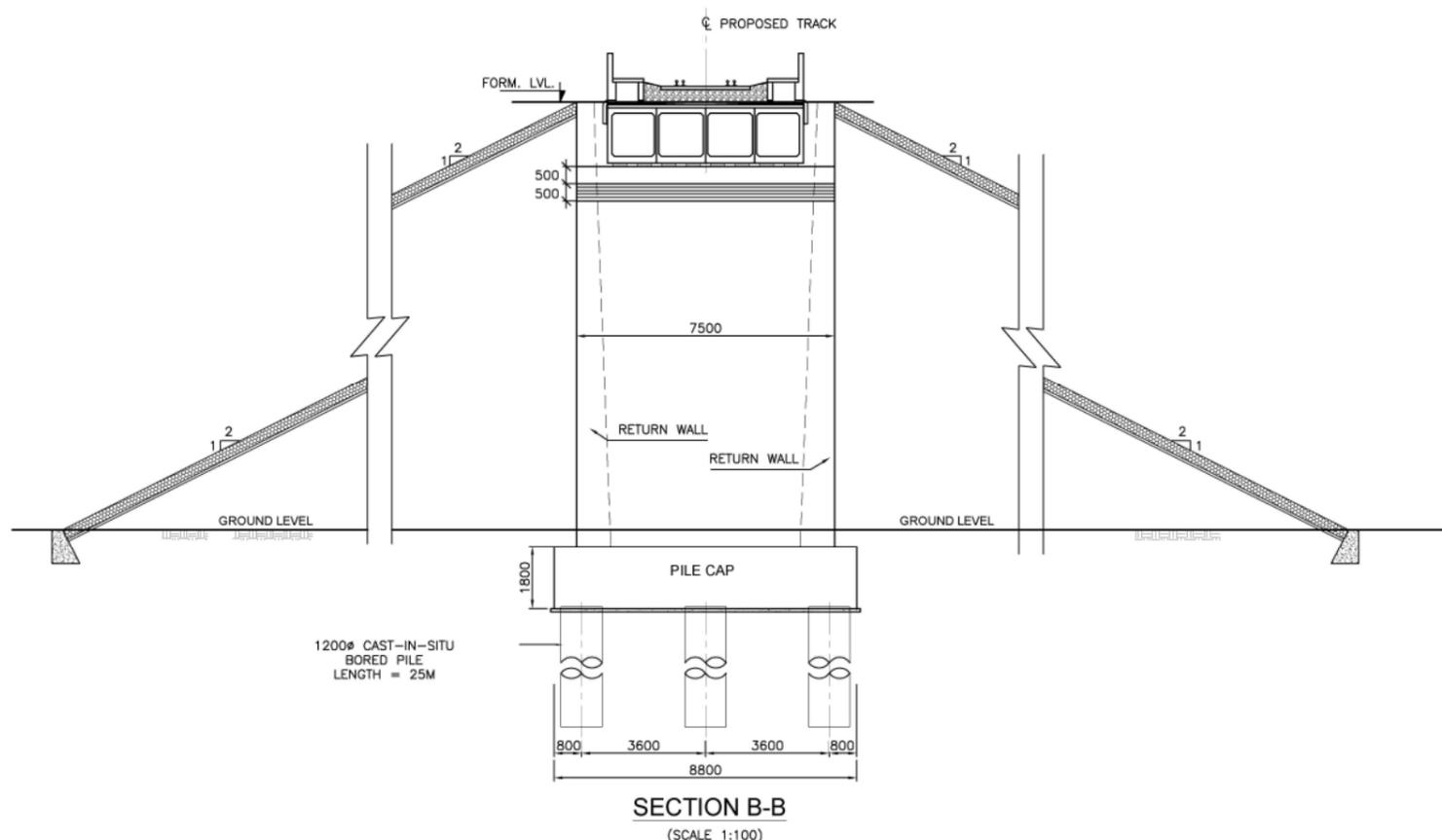


TITLE: - SECTION NO. 05Co. (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-14, (FOR NALLA), 2X12.20m. PRESTRESSED CONTIGUOUS BOX AT (REV. CH.3620.000)
 GENERAL ARRANGEMENT DRAWING (SHEET : 1 OF 3)

THIS DRAWING WAS ORIGINALLY PREPARED BY: C E G CONSULTING Engineers Group Ltd. CONSULTANT AND REVIEWED / MODIFIED BY: NIPPON KOEI CONSORTIUM.

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 CONSULTING Engineers Group Ltd.
 E-12, Mofji Colony, Malviya Nagar, Jaipur-31
 Tel: +91-141-2520899, 2521899, 2520556
 Fax: 2521899, E-Mail: ceg@ceginia.com

DRAWN BY: R.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 2:29pm	REV. No.
PROJECT NO: 12008	DRG. NO: CEG/SACHIN-NADIADI GAD-BRIDGE/S-5Co/MUP-14	



Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder



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CONSULTING Engineers Group Ltd.
E-12, Moji Colony, Malviya Agr. Jaipur-17
Tel: +91-141-2520899, 2521899, 2520556
Fax: 2521899, E-Mail: ceg@ceindia.com

REFERENCE DRAWINGS:	
DRAWING NO.	SUBJECT.
CEG/SACHIN-NADIADI PLAN-PROFILE/S-11C	L-SECTION
	CONTIGUOUS BOX

APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFCC	CPM/DFCC
MANAGER / DFCC	GGM(Engg-I)
ASSET. MANAGER / DFCC	

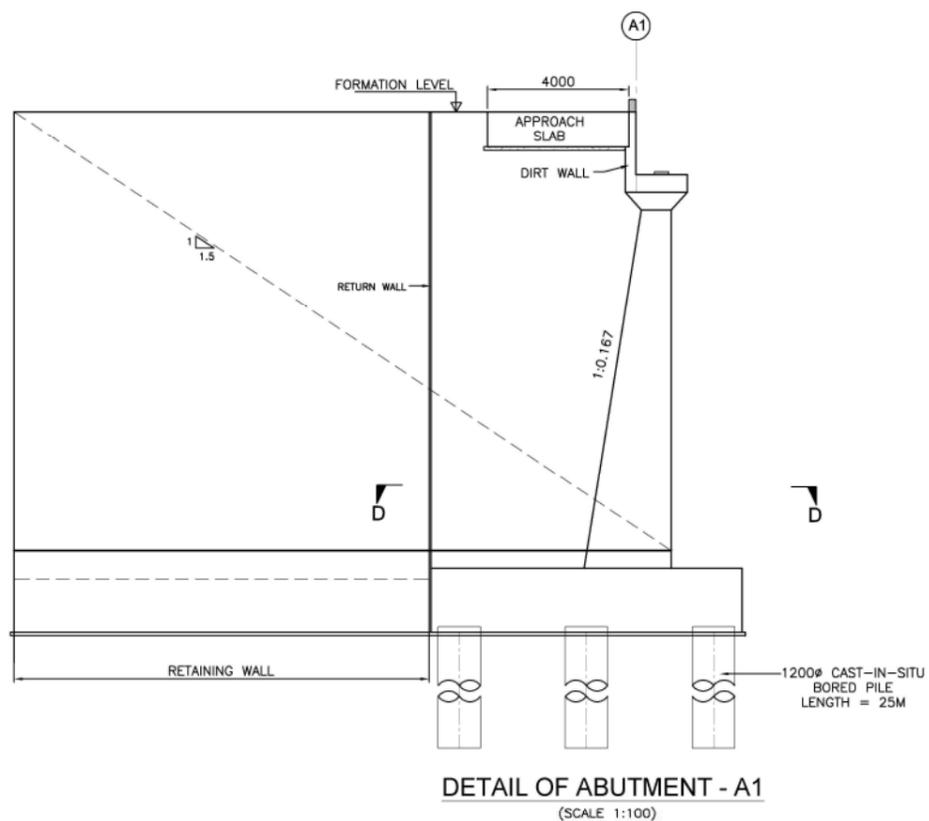
STANDARD OF LOADING: 32.50 TONNE AXLE LOAD, 12 T/M TRAILING LOAD.

PROJECT: - WESTERN DEDICATED FREIGHT CORRIDOR BETWEEN JNPT (NEAR MUMBAI) - DADRI (NEAR DELHI)

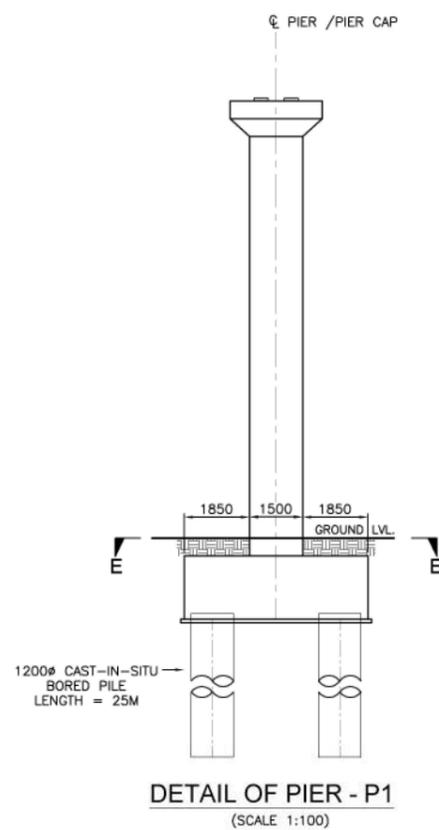


TITLE: SECTION NO. 05C6 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-14, (FOR NALLA), 2X12.20m, PRESTRESSED CONTIGUOUS BOX AT (REV. CH.3620.000)

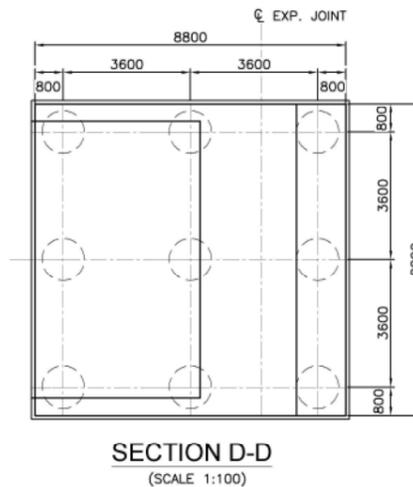
GENERAL ARRANGEMENT DRAWING (SHEET: 2 OF 3)			
DRAWN BY:	CHECKED BY:	DATE:	APPROVED BY:
R.K.Y.	V.K.S.	01/06/2015 - 2:29pm	G.U.R.
SCALE: - AS SHOWN	DATE:	REV. No.	
PROJECT NO. 12008	DRG. NO. CEG/SACHIN-NADIADI GAD-BRIDGE/S-5C/MUP-14		



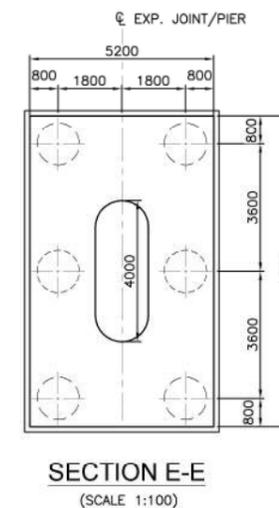
DETAIL OF ABUTMENT - A1
(SCALE 1:100)



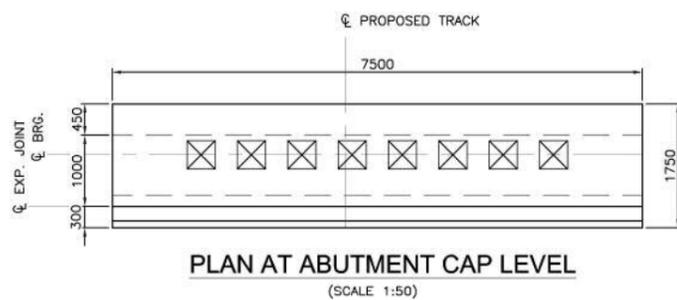
DETAIL OF PIER - P1
(SCALE 1:100)



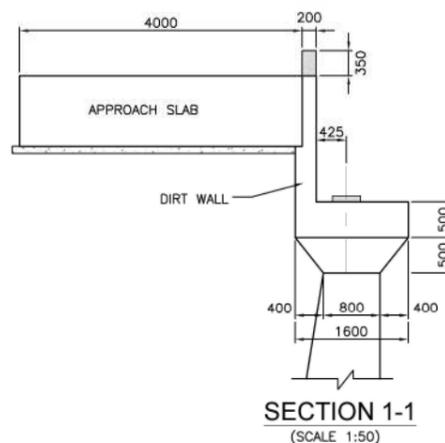
SECTION D-D
(SCALE 1:100)



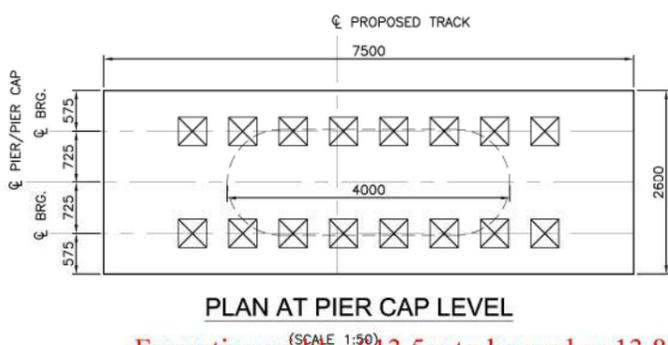
SECTION E-E
(SCALE 1:100)



PLAN AT ABUTMENT CAP LEVEL
(SCALE 1:50)

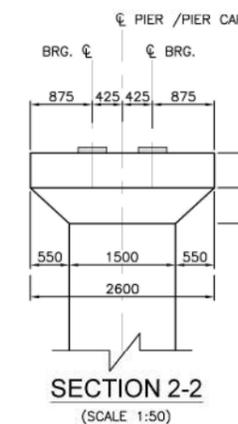


SECTION 1-1
(SCALE 1:50)



PLAN AT PIER CAP LEVEL
(SCALE 1:50)

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder



SECTION 2-2
(SCALE 1:50)



REFERENCE DRAWINGS:	
DRAWING NO	SUBJECT
CEG/SACHIN-NADIADI PLAN-PROFILE/S-110	L-SECTION
	CONTIGUOUS BOX

APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFCC	CPM/DFCC
MANAGER / DFCC	GGM(Engg-I)
ASSET. MANAGER / DFCC	

STANDARD OF LOADING: 32.50 TONNE AXLE LOAD, 12 T/M TRAILING LOAD.
PROJECT: - WESTERN DEDICATED FRIGHT CORRIDOR BETWEEN JNPT (NEAR MUMBAI) - DADRI (NEAR DELHI)

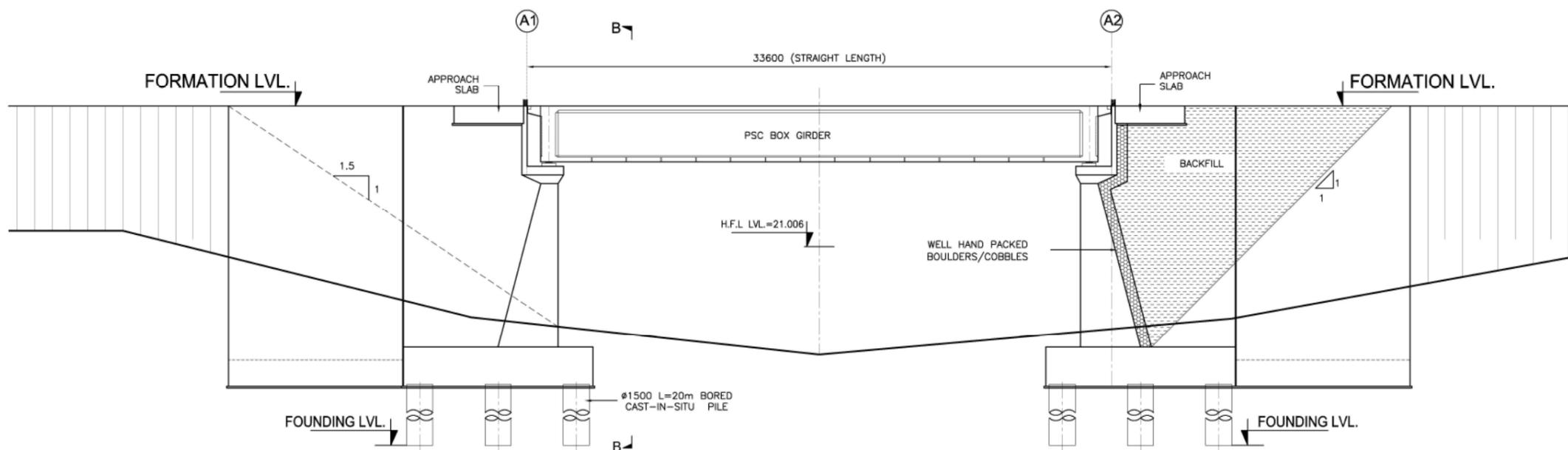


TITLE:- SECTION NO. 05C6. (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-14, (FOR NALLA), 2X12.20m. PRESTRESSED CONTIGUOUS BOX AT (REV. CH.3620.000)

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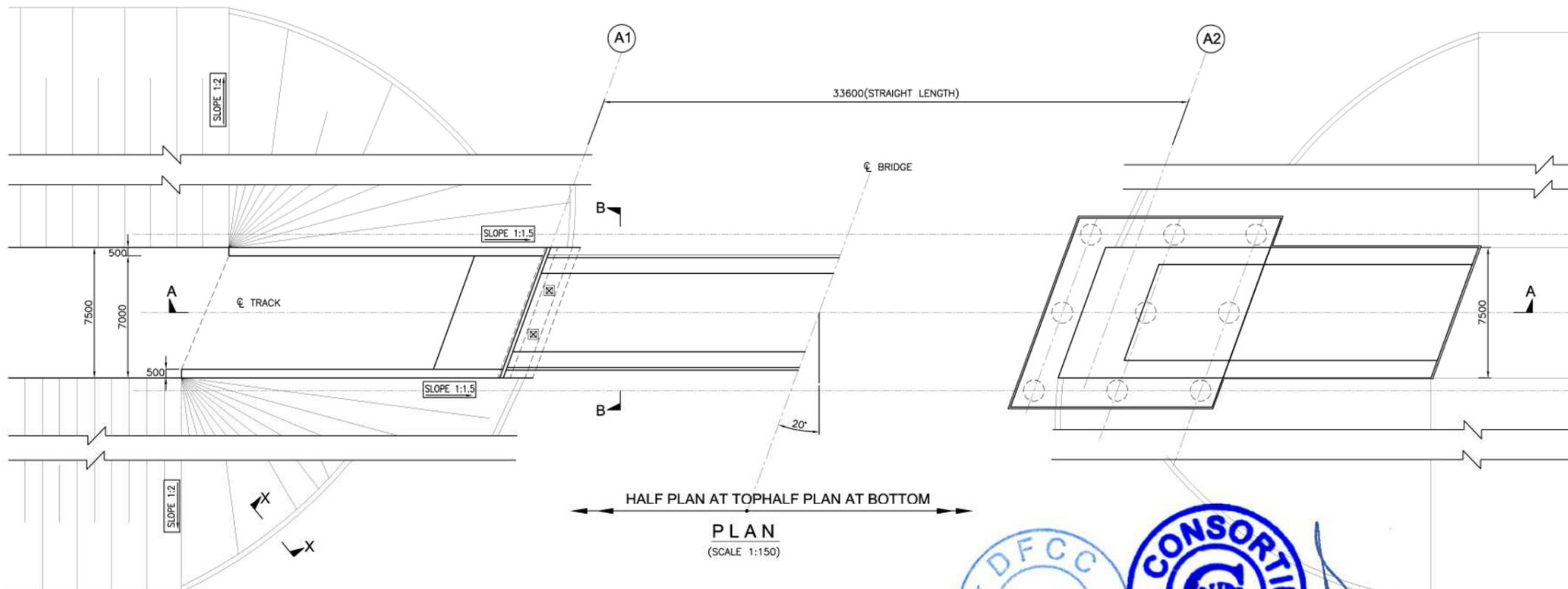
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CONSULTING Engineers Group Ltd.
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Tel: +91-141-2520899, 2521899, 2520556
Fax: 2521899, E-Mail:cegin@ceginia.com

GENERAL ARRANGEMENT DRAWING (SHEET: 3 OF 3)		
DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 2:29pm	REV. No.
PROJECT NO. 12008	DRG. NO. CEG/SACHIN-NADIADI GAD-BRIDGE/S-50A/MUP-14	



FORMATION LVL.(m)			
GROUND LVL.(m)		18.006	29.075
CHAINAGE (m)	4390.810	4407.610	4424.410

SECTION ELEVATION A-A
(SCALE 1:150)



PLAN
(SCALE 1:150)

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

- GENERAL NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
 2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
 3. ALL DIMENSIONS AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 4. THIS GENERAL ARRANGEMENT DRAWING IS INDICATIVE AND IS MEANT ONLY FOR GUIDANCE FOR THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DEVELOPED & DESIGNED BY THE CONTRACTOR AS PER THE EMPLOYER'S REQUIREMENTS, SPECIFICATIONS AND SITE DIMENSIONS / CONDITIONS AND SHALL BE APPROVED BY ENGINEER / EMPLOYER.
 5. ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING IR BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
 6. FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
 7. LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
 8. GROUND PROFILE SHOULD BE VERIFIED BEFORE EXECUTION.
- SUPERSTRUCTURE & SUBSTRUCTURE**
- 1) THE BRIDGE SHALL BE DESIGNED AS PER DFCC LOADING (32.5T AXLE LOAD) BRIDGE RULE, ISSUED BY RD&O. (WITH LATEST CORRECTION SLIP).
 - 2) THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
 - 3) BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - 4) WEEP HOLES SHALL BE PROVIDED IN RETURN WALL & ABUTMENT.
 - 5) SHE FOUNDATION BOLTS SHALL BE PROVIDED IN CONSULTATION WITH THE CONTRACTOR OF EMP-4.
 - 6) RAILING EXPANSION JOINTS, BEARING, WEARING COAT, FOOTPATH, SERVICE DUCT, DRAINAGE SHALL BE PROVIDED AS PER SPECIFICATION.
 - 7) FOR INSPECTION OF BEARING / SUPERSTRUCTURE, SUITABLE ARRANGEMENT SHALL BE PROVIDED.
 - 8) FOR CHANGING OF BEARING SUITABLE ARRANGEMENT SHALL BE PROVIDED.
- GEO-TECHNICAL**
- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT.
 - 2) GEO-TECHNICAL BORE HOLE DATA REFERRED IN GAD IS INDICATIVE ONLY.
 - 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

TABLE-1

DETAILS	PROPOSED DFC
PACKAGE	3
SECTOR	5Ca
BRIDGE NO.	MUP-16
CHAINAGE	4407.610
SPAN CONFIGURATION (C/C) OF PIER	1 X 30.50m
OVERALL SPAN (mm)	33500
EFFECTIVE SPAN (mm)	31110
CLEAR SPAN (mm)	30500
TYPE OF STRUCTURE	POST TENSIONED BOX GIRDER
DEPTH OF SUPERSTRUCTURE (mm)	3280
TYPE OF CROSSING	NALLA
BRIDGE (STRAIGHT/CURVE/SKEW)	SKEW 20°
FORMATION LEVEL R.L. (METER)	29.075
H.F.L. R.L. (METER)	21.006
BED LEVEL R.L. (METER)	18.006
DESIGN DISCHARGE (Cumecs)	-
VERTICAL CLEARANCE MIN. (mm)	-
TYPE OF FOUNDATION	PILE FOUNDATION
BRIDGE BEARING (ELASTOMER WITH - SUITABLE RESTRAINTS)	(FIXED & FREE)

REFERENCE DRAWINGS:

DRAWING NO	SUBJECT
CEG/SACHIN-NADIADI PLAN-PROFILE/S-510	L-SECTION
	POST TENSIONED BOX GIRDER

APPROVED

DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFCC	CPM/DFCC
MANAGER / DFCC	GGM(Engg-I)
ASSET. MANAGER / DFCC	

STANDARD OF LOADING: 32.50 TONNE AXLE LOAD, 12 T/M TRAILING LOAD.

PROJECT: -
WESTERN DEDICATED FREIGHT CORRIDOR BETWEEN JNPT (NEAR MUMBAI) - DADRI (NEAR DELHI)

CLIENT: - 

TITLE: SECTION NO. 05 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-16, (FOR NALLA), 1x30.50m. PSC BOX GIRDER AT KM. (REV. CH.4407.610).
GENERAL ARRANGEMENT DRAWING (SHEET: 1 OF 2)

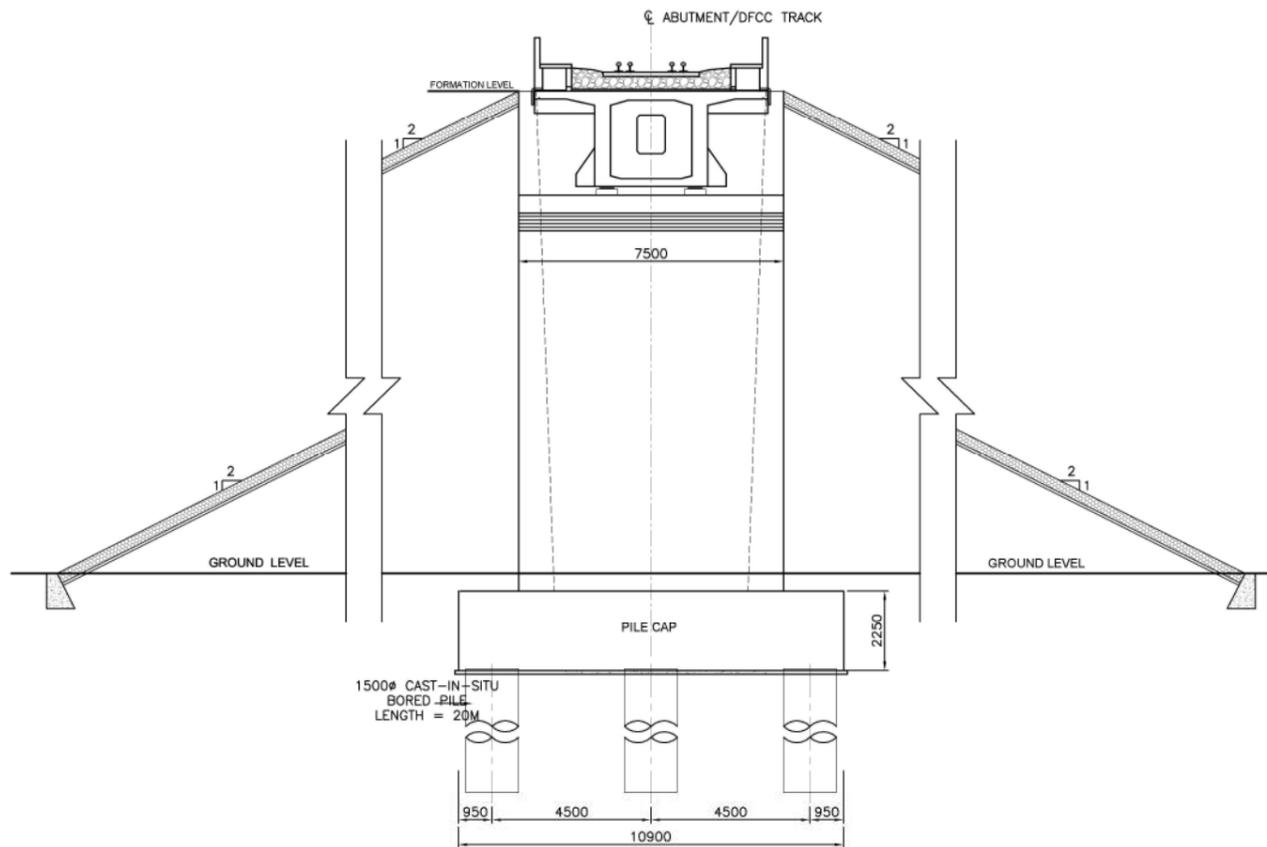
DRAWN BY	CHECKED BY	APPROVED BY
R.K.Y	V.K.S	G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 2:30pm	REV. No.
PROJECT NO: 12008	DRG NO: CEG/SACHIN-NADIADI GAD-BRIDGE/S-50A/MUP-16	



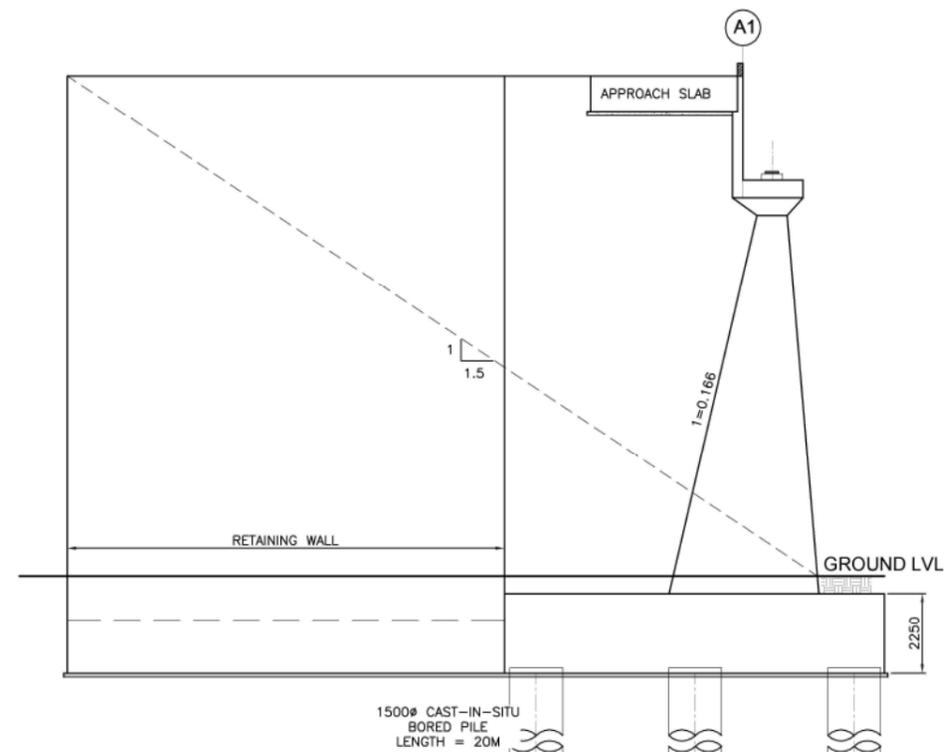
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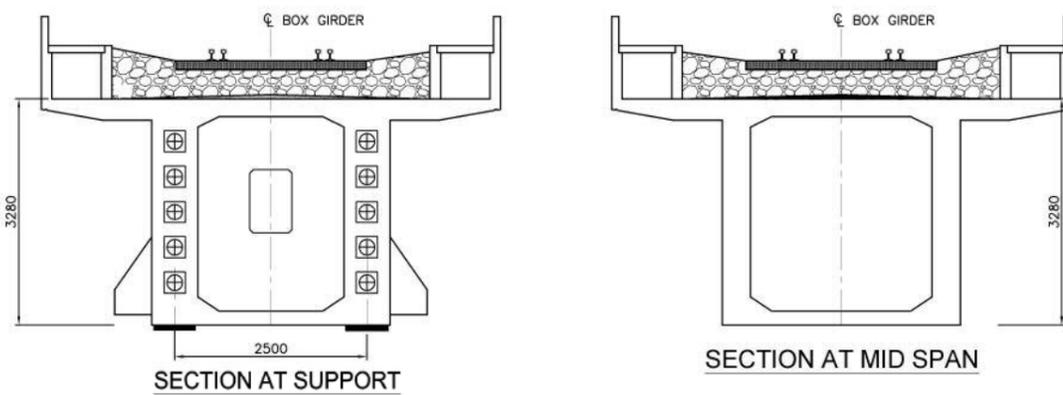
CONSULTING Engineers Group Ltd.
E-12, Moji Colony, Malviya Agar Jaipur-17
Tel: +91-141-2520899, 2521899, 2520556
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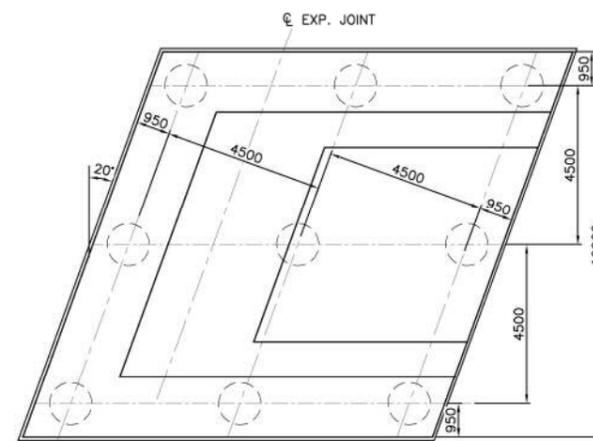
SECTION B-B
(SCALE 1:100)



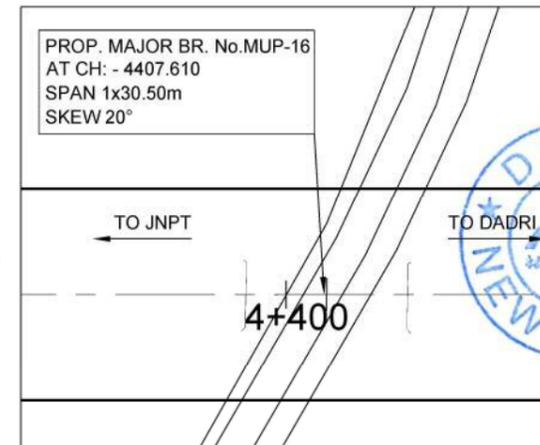
DETAIL OF ABUTMENT A1
(SCALE 1:100)



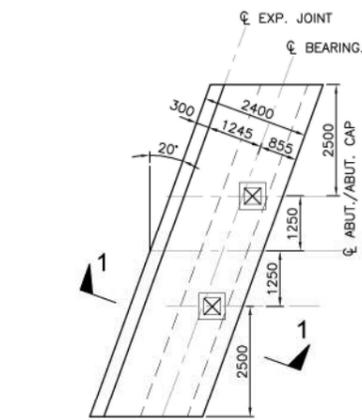
30.50m (SPAN POST TENSION BOX GIRDER)
(SCALE 1:50)



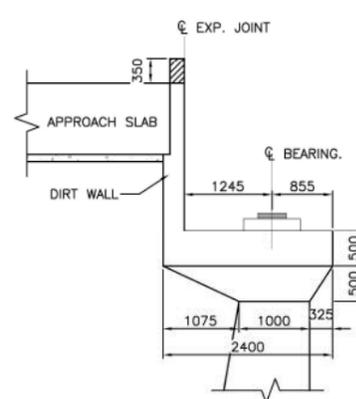
PLAN AT PILE CAP LEVEL
(SCALE 1:100)



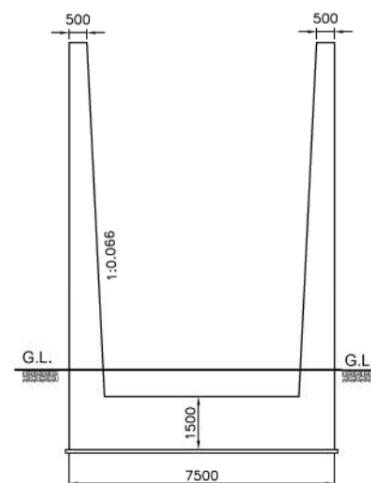
KEY PLAN



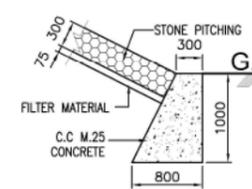
PLAN AT ABUT. CAP LEVEL
(SCALE 1:80)



SECTION 1-1
(SCALE 1:40)



DETAIL OF RETAINING WALL
(SCALE 1:100)



SECTION X-X
(SCALE 1:40)

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder



REFERENCE DRAWINGS:	
DRAWING NO	SUBJECT
CEG/SACHIN-NADIAD/PLAN-PROFILE/S-51C	L-SECTION
	POST TENSIONED BOX GIRDER

APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFCC	CPM/DFCC
MANAGER / DFCC	GGM(Engg.)
ASSET. MANAGER / DFCC	

STANDARD OF LOADING: 32.50 TONNE AXLE LOAD, 12 T/M TRAILING LOAD.
PROJECT: - WESTERN DEDICATED FRIGHT CORRIDOR BETWEEN JNPT (NEAR MUMBAI) - DADRI (NEAR DELHI)

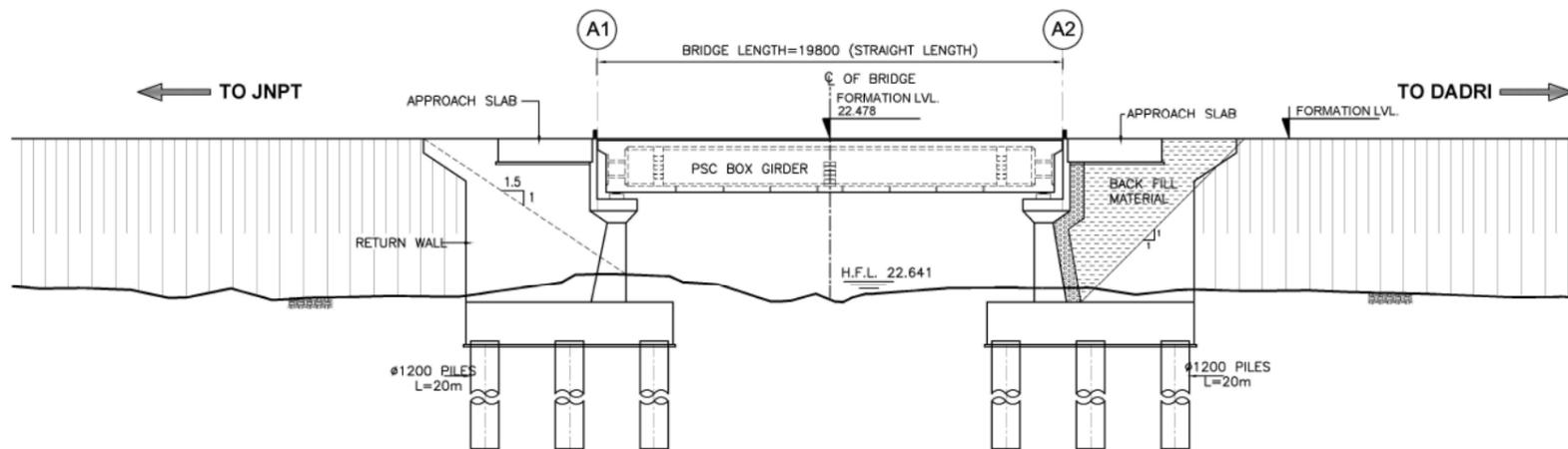


TITLE:- SECTION NO. 05 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-16, (FOR NALLA), 1x30.50m. PSC BOX GIRDER AT KM. (REV. CH.4407.610). GENERAL ARRANGEMENT DRAWING (SHEET- 2 OF 2)

THIS DRAWING WAS ORIGINALLY PREPARED BY C E G (CONSULTING Engineers Group Ltd.) CONSULTANT AND REVIEWED / MODIFIED BY NIPPON KOEI CONSORTIUM.

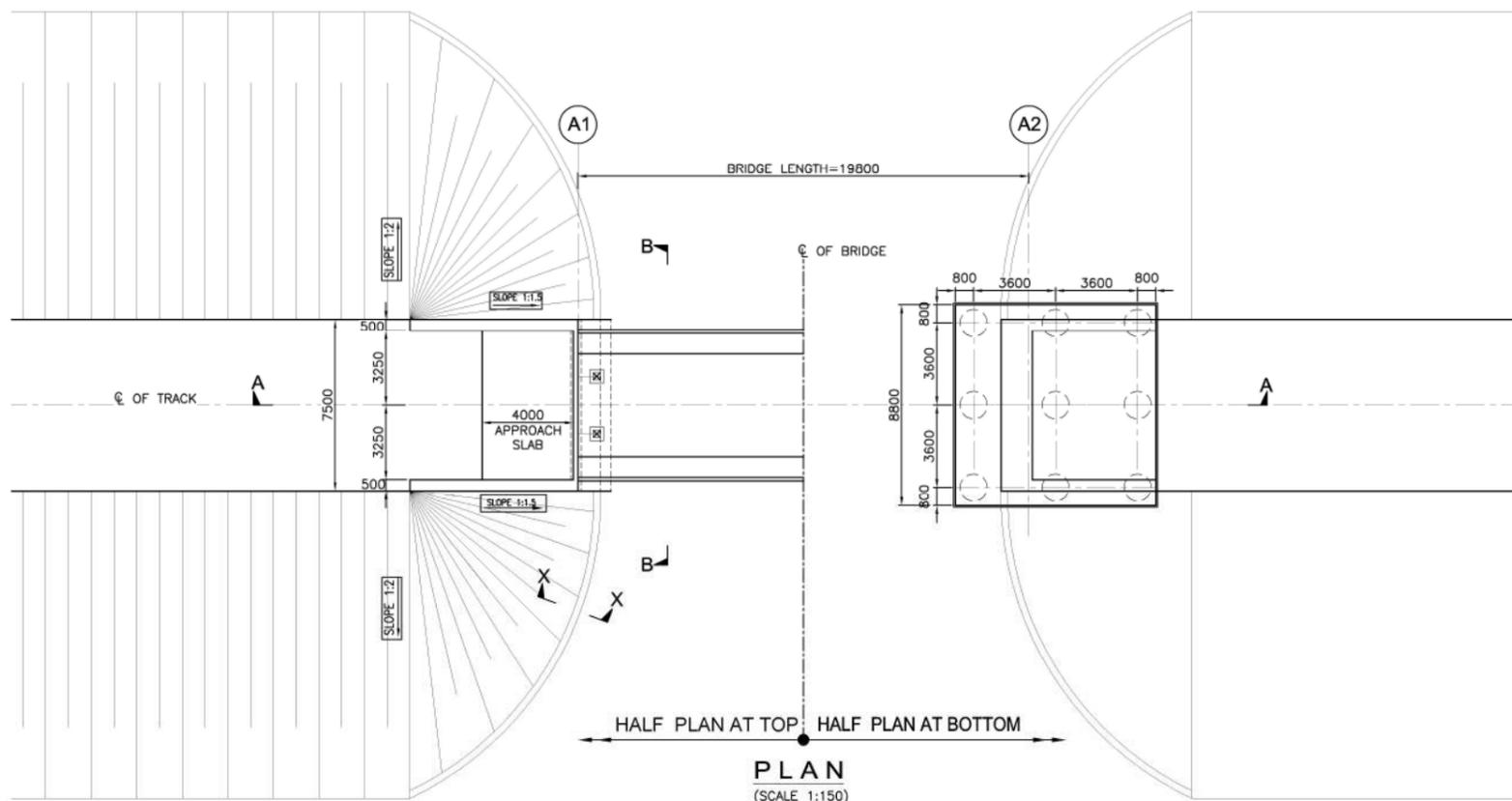
CONSULTING Engineers Group Ltd. E-12,Meji Colony,Malviya Agar Jaipur-17 Tel: +91-141- 2520899, 2521899, 2520556 Fax: 2521899, E-Mail:ceg@cegindia.com

DRAWN BY: R.K.Y.	CHECKED BY: V.K.S.	APPROVED BY: G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 2:30pm	REV. No.
PROJECT NO. 12008	DRG NO: CEG/SACHIN-NADIAD/ GAD-BRIDGE /S-50/MUP-16	



GROUND LVL.(m)	22.105
CHAINAGE(m)	4669.100, 4679.000, 4688.900

SECTIONAL ELEVATION A-A
(SCALE 1:150)



PLAN
(SCALE 1:150)

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
2. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
3. ALL DIMENSIONS AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
4. THIS GENERAL ARRANGEMENT DRAWING IS INDICATIVE AND IS MEANT ONLY FOR GUIDANCE FOR THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DEVELOPED & DESIGNED BY THE CONTRACTOR AS PER THE EMPLOYER'S REQUIREMENTS, SPECIFICATIONS AND SITE DIMENSIONS / CONDITIONS AND SHALL BE APPROVED BY ENGINEER / EMPLOYER.
5. ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING IR BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
6. FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
7. LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
8. GROUND PROFILE SHOULD BE VERIFIED BEFORE EXECUTION.

SUPERSTRUCTURE & SUBSTRUCTURE

- 1) THE BRIDGE SHALL BE DESIGNED AS PER DFCC LOADING (32.5T AXLE LOAD) BRIDGE RULE, ISSUED BY RDSO. (WITH LATEST CORRECTION SLIP).
- 2) THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
- 3) BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
- 4) WEEP HOLES SHALL BE OF PROVIDED IN RETURN WALL & ABUTMENT.
- 5) JOE FOUNDATION BOLTS SHALL BE PROVIDED IN CONSULTATION WITH THE CONTRACTOR OF EMP-4.
- 6) RAILING EXPANSION JOINTS, BEARING, WEARING COAT, FOOTPATH, SERVICE DUCT, DRAINAGE SHALL BE PROVIDED AS PER SPECIFICATION.
- 7) FOR INSPECTION OF BEARING / SUPERSTRUCTURE, SUITABLE ARRANGEMENT SHALL BE PROVIDED.
- 8) FOR CHANGING OF BEARING SUITABLE ARRANGEMENT SHALL BE PROVIDED.

GEO-TECHNICAL

- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT.
- 2) GEO-TECHNICAL BORE HOLE DATA REFERRED IN GAD IS INDICATIVE ONLY.
- 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

TABLE-1

DETAILS	PROPOSED DFC
PACKAGE	3
SECTOR	5 Co.
BRIDGE NO.	MUP-17
CHAINAGE	4679.000
SPAN CONFIGURATION	1X18.3m
OVERALL SPAN (mm)	19750
CLEAR SPAN (mm)	18300
TYPE OF STRUCTURE	POST TENSIONED BOX GIRDER
DEPTH OF SUPERSTRUCTURE (mm)	2280
TYPE OF CROSSING	NALA + CART TRACK
BRIDGE (STRAIGHT/CURVE/SKEW)	STRAIGHT
FORMATION LEVEL R.L. (METER)	28.478
H.F.L. R.L. (METER)	22.641
BED LEVEL R.L. (METER)	22.105
ROAD LEVEL (METER)	22.386
VERTICAL CLEARANCE MIN. (mm)	-
TYPE OF FOUNDATION	PILE FOUNDATION
BRIDGE BEARING (ELASTOMER WITH - SUITABLE RESTRAINTS)	FIX & FREE

REFERENCE DRAWINGS:

DRAWING NO	SUBJECT
CEG/SACHIN-NADIAD/PLAN-PROFILE/S-510	L-SECTION
	BOX GIRDER

APPROVED

DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFCC	CPM/DFCC
MANAGER / DFCC	GGM/Engg.H
ASSET. MANAGER / DFCC	

STANDARD OF LOADING: 32.50 TONNE AXLE LOAD, 12 T/M TRAILING LOAD.

PROJECT: - WESTERN DEDICATED FRIGHT CORRIDOR BETWEEN JNPT (NEAR MUMBAI) - DADRI (NEAR DELHI)



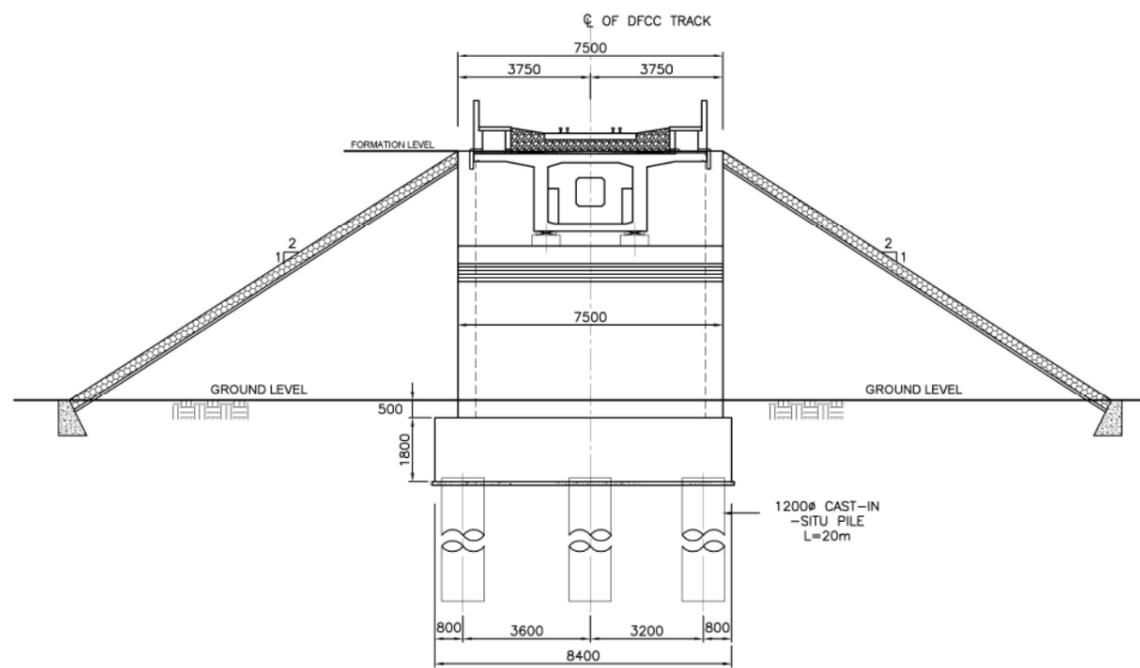
TITLE:- SECTION NO. 05 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-17, (FOR CANAL), 1X18.30m. PSC BOX GIRDER AT KM , (REV. CH.4679.000) GENERAL ARRANGEMENT DRAWING (SHEET - 1 OF 2)

DRAWN BY	CHECKED BY	APPROVED BY
S.A.K	V.K.S	G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 2:32pm	REV. No.
PROJECT NO. 12008	DIRTY NO. CEG/SACHIN-NADIAD/GAD-BRIDGE/S-502/MUP-17	

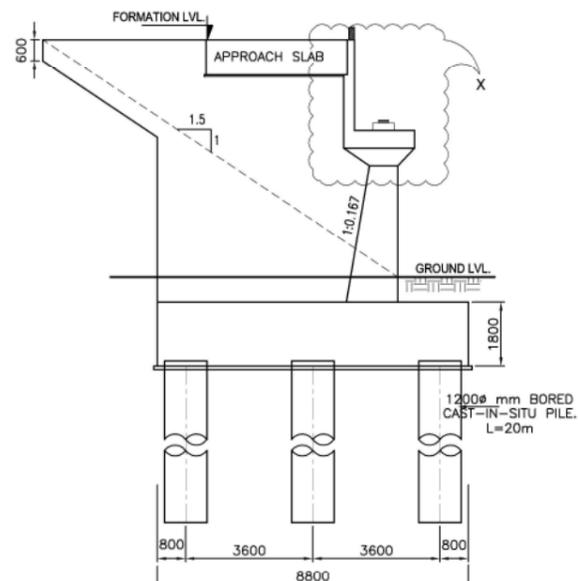


THIS DRAWING WAS ORIGINALLY PREPARED BY C E G CONSULTING Engineers Group Ltd.'S CONSULTANT AND REVIEWED / MODIFIED BY NIPPON KOEI CONSORTIUM.

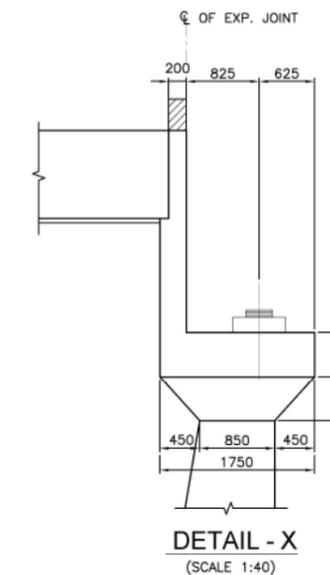
C E G CONSULTING Engineers Group Ltd. E-12, Moj Colony, Malviya Agrar Jaipur-17. Tel: +91-141-2520899, 2521899, 2520556 Fax: 2521899, E-Mail: ceg@cegindia.com



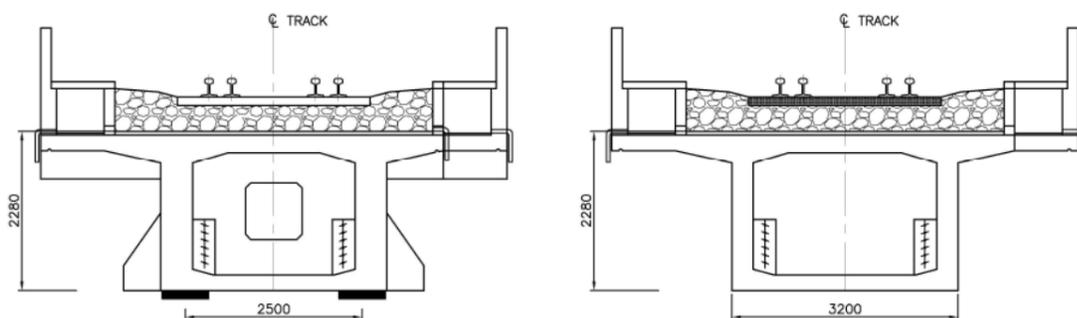
SECTION B-B
(SCALE 1:100)



DETAIL OF ABUTMENT - A1
(SCALE 1:100)



DETAIL - X
(SCALE 1:40)

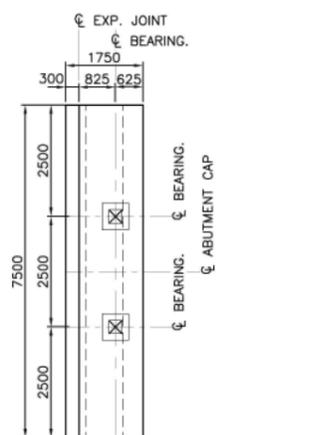


SECTION AT SUPPORT

SECTION AT MID SPAN

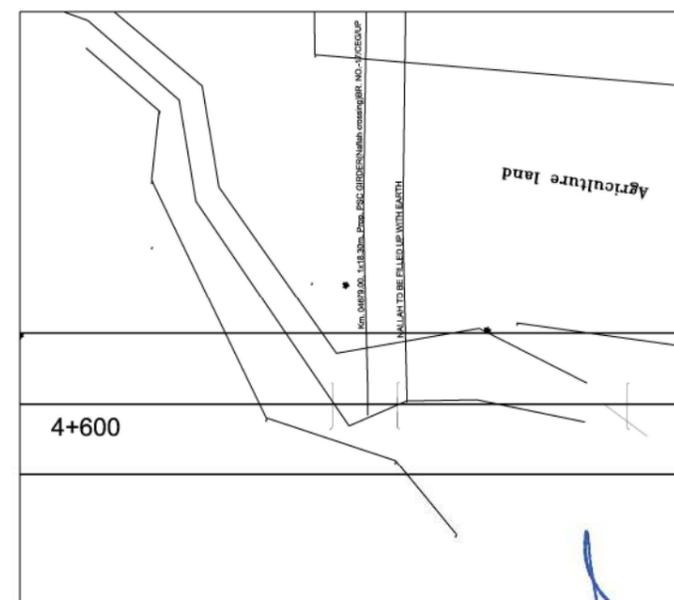
18.3m SPAN (POST TENSIONED BOX GIRDER)

(SCALE 1:50)

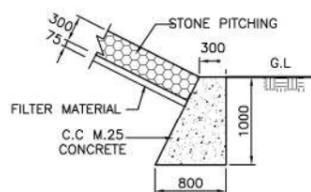


PLAN AT ABUTMENT CAP LVL.

(SCALE 1:80)



KEY PLAN



SECTION X-X

(SCALE 1:40)

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

REFERENCE DRAWINGS:	
DRAWING NO	SUBJECT
CEG/SACHIN-NADIADI PLAN-PROFILE'S-510	L-SECTION
	POST TENSIONED BOX GIRDER

APPROVED	
DESIGNATION	INITIALS OF APPROVING OFFICIALS
G.M. / DFCC	CPM/DFCC
MANAGER / DFCC	GGM(Engg-I)
ASSET. MANAGER / DFCC	

STANDARD OF LOADING: 32.50 TONNE AXLE LOAD, 12 T/M TRAILING LOAD.
PROJECT: - WESTERN DEDICATED FRIGHT CORRIDOR BETWEEN MUMPT (NEAR MUMBAI) - DADRI (NEAR DELHI)

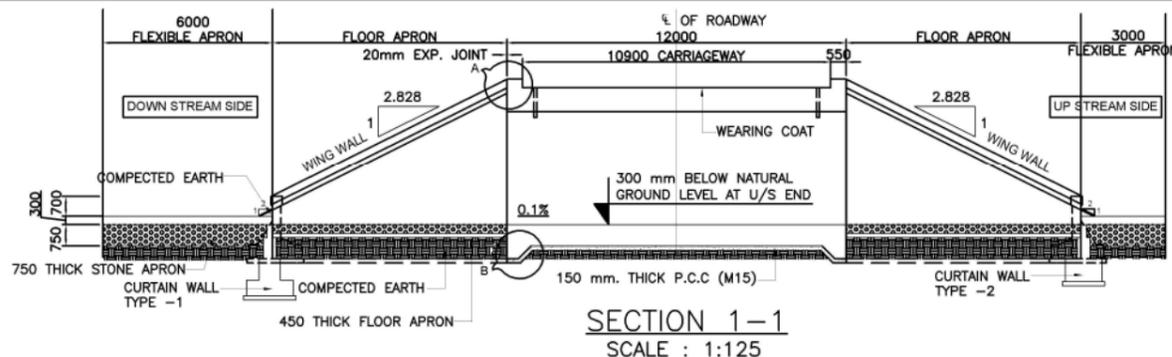


TITLE:- SECTION NO. 05 (VASAD - PALEJ) ON DETOUR CONSTRUCTION OF BRIDGE NO. MUP-17, (FOR JANAI), 1X18.30m. PSC BOX GIRDER AT KM (REV. CH.4679.000, GENERAL ARRANGEMENT DRAWING (SHEET: 2 OF 2)

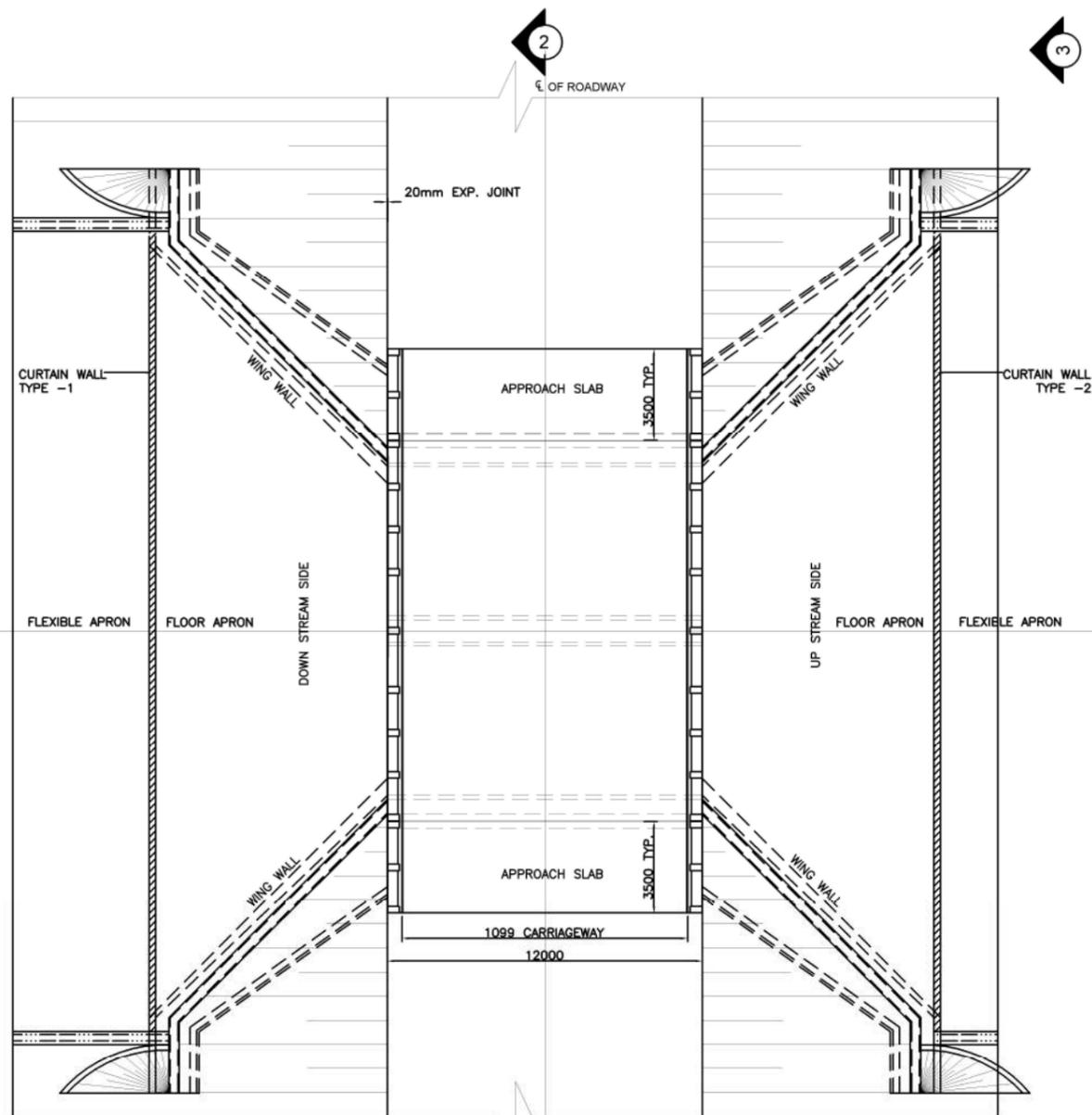
THIS DRAWING WAS ORIGINALLY PREPARED BY C E G (CONSULTING Engineers Group Ltd.) CONSULTANT AND REVIEWED / MODIFIED BY NIPPON KOEI CONSORTIUM.

CONSULTING Engineers Group Ltd. E-12, Moji Colony, Malviya Agr. Jaipur-17. Tel: +91-141-2520899, 2521899, 2520556 Fax: 2521899, E-Mail:ceg@ceginia.com

DRAWN BY: S.A.K	CHECKED BY: V.K.S	APPROVED BY: G.U.R.
SCALE: - AS SHOWN	DATE: 01/06/2015 - 2:32pm	REV. No.
PROJECT NO. 12008	DRG. NO. CEG/SACHIN-NADIADI GAD-BRIDGE/S-50A/MUP-17	



SECTION 1-1
SCALE : 1:125



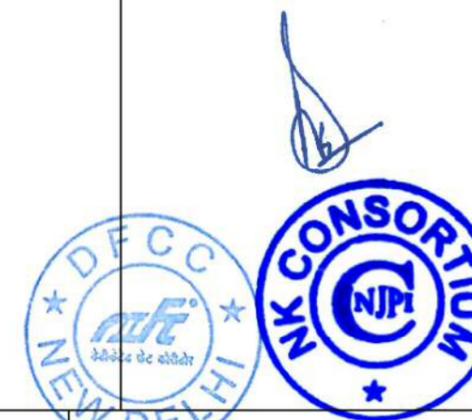
PLAN
(SCALE 1:125)

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

- GENERAL NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE MENTIONED. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED. NO DRAWING SHALL BE SCALED.
 - DESIGN CRITERIA:
(1.) THIS DESIGN IS ACCORDING TO THE FOLLOWING CODES:
a. IRC : 5 - 1985
b. IRC : 6 - 1966 (1985 REPRINT)
c. IRC : 21- 1987 (1997 REPRINT)
d. IRC : 78 - 1985
(2.) THE FOLLOWING LOADS HAVE BEEN CONSIDERED IN THE DESIGN:
(a) ONE LANE OF IRC CLASS 70R OR TWO LANES OF CLASS A ON CARRIAGE WAY, WHICH EVER GAVERNS.
(b) WEARING COAT LOAD OF 3 KN/Sq.M.
(3.) THE DESIGN ARE APPLICABLE FOR 'MODERATE' AND 'SEVERE' CONDITIONS OF EXPOSURE.
 - TYPE/POSITION OF RETURN WALLS RAILINGS , GUARDS, POSTS, RAMP, ETC. IN APPROACH PORTION SHALL BE DECIDED BY THE ENGINEER-IN-CHARGE.
 - INVERT LEVEL OF TOP SURFACE OF BOTTOM SLAB IS ASSUMED AS BED LEVEL.
 - BACK FILLING MATERIAL SHOULD CONFIRM TO CL 305.2 OF MOST SPECIFICATION AND EARTH CUSHION EMBANKMENT SHOULD BE CONSTRUCTED IN ACCORDANCE TO SECTION 300 OF MOST SPECIFICATION (THIRD REVISION 1995).
 - THE ASPHALT PLUG EXPENTION JOINT SHALL BE PROVIDED IN ACCORDANCE WITH MOST SPECIFICATION AND SHALL BE PROCURED FROM MANUFACTURERS AS APPROVED BY MOST
 - THE WORK SHALL BE EXECUTED IN ACCORDANCE WITH MOST'S SPECIFICATION FOR ROAD AND BRIDGE WORKS (THIRD REVISION, 1994) EXCEPT WHEREVER OTHERWISE MENTIONED.

TABLE-1

DETAILS	PROPOSED DFC
PACKAGE	3
SECTOR	5
BRIDGE NO.	202C
CHAINAGE	131760
SPAN CONFIGURATION	1 x 2.0m x 2.0m
TYPE OF STRUCTURE	RCC BOX (FOR ROAD)
TYPE OF CROSSING	ROAD
BED LEVEL R.L. (METER)	22.700



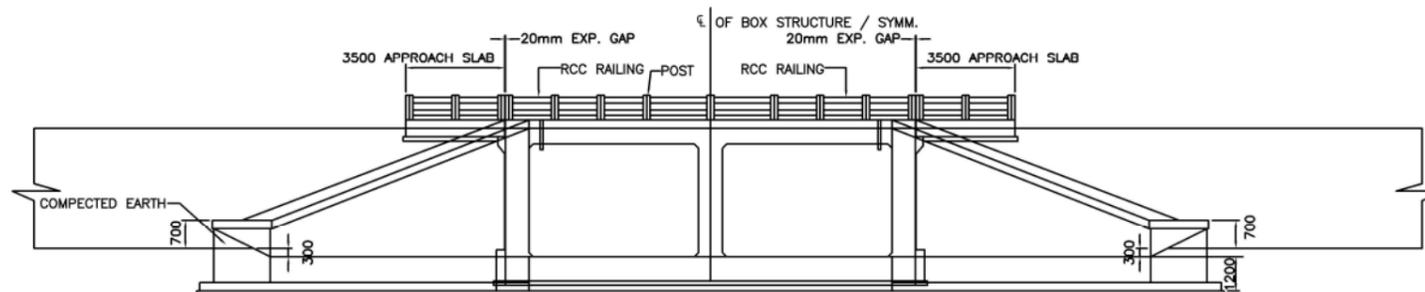
Project Title :
Dedicated Freight Corridor Project
(Western Corridor Phase-1:
Rewari - Vadodara Section)

Client :
 **Dedicated Freight Corridor Corporation of India**
(A GOVERNMENT OF INDIA UNDERTAKING)
5th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA

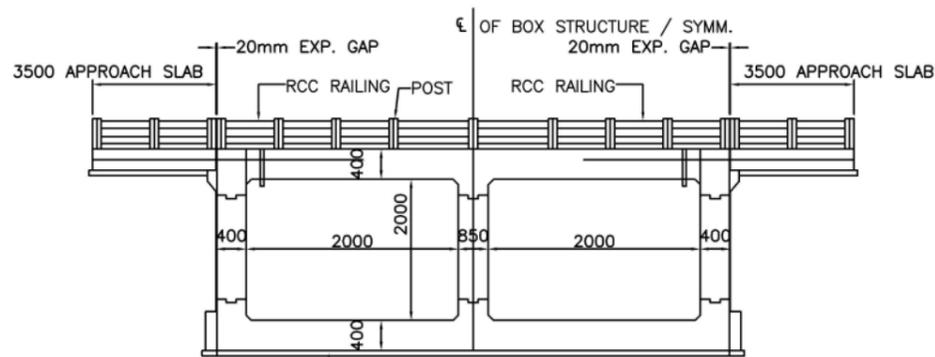
Drawing Title :
STANDARD DRAWING FOR DOUBLE
CELL BOX CULVERT
(FOR ROAD LOADING)

Drawing Number :
NKC-CTS-ROAD-00010 (SHEET 1 OF 2)
Scale : AS SHOWN
Reference :
Drawn By : RADHA
Checked By : DINESH SHARMA
Approved By : T-NAKANO

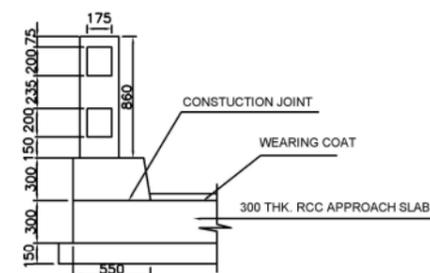
 **NK Consortium**
4th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA



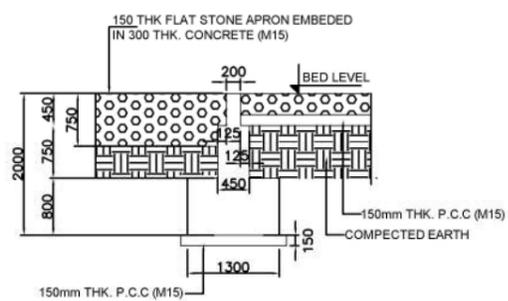
VIEW 3-3
SCALE : 1:100



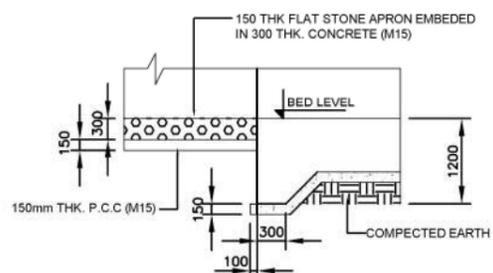
SECTION 2-2
SCALE : 1:100



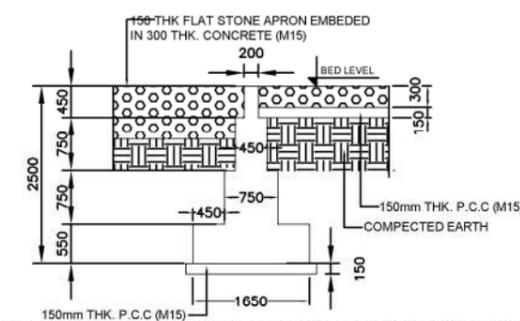
DETAILS AT 'A'



TYPICAL CROSS SECTION OF CURTAIN WALL TYPE - 2
SCALE 1:50

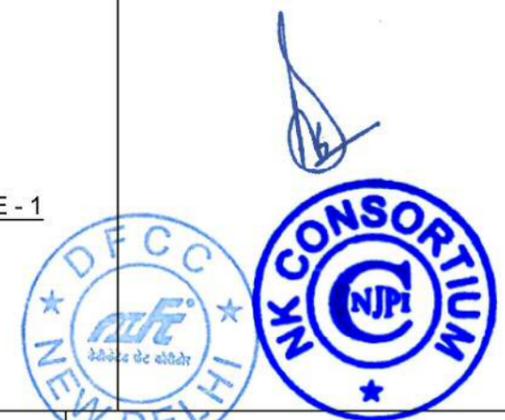


DETAILS AT 'B'
SCALE 1:50



TYPICAL CROSS SECTION OF CURTAIN WALL TYPE - 1
SCALE 1:50

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder



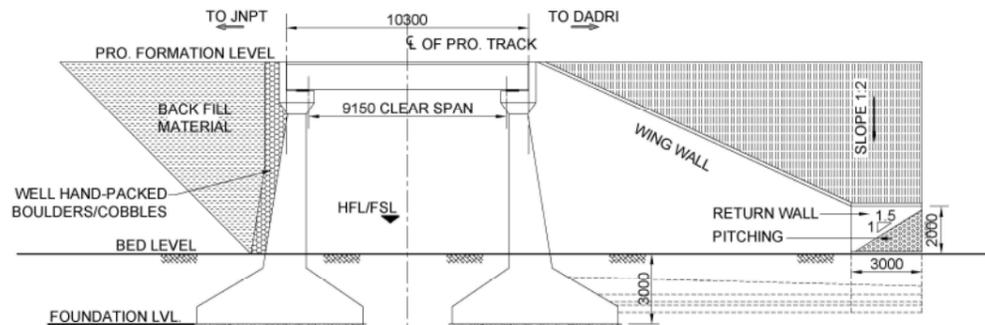
Project Title :
**Dedicated Freight Corridor Project
(Western Corridor Phase-1:
Rewari - Vadodara Section)**

Client :
DFCC Dedicated Freight Corridor Corporation of India
(A GOVERNMENT OF INDIA UNDERTAKING)
5th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA

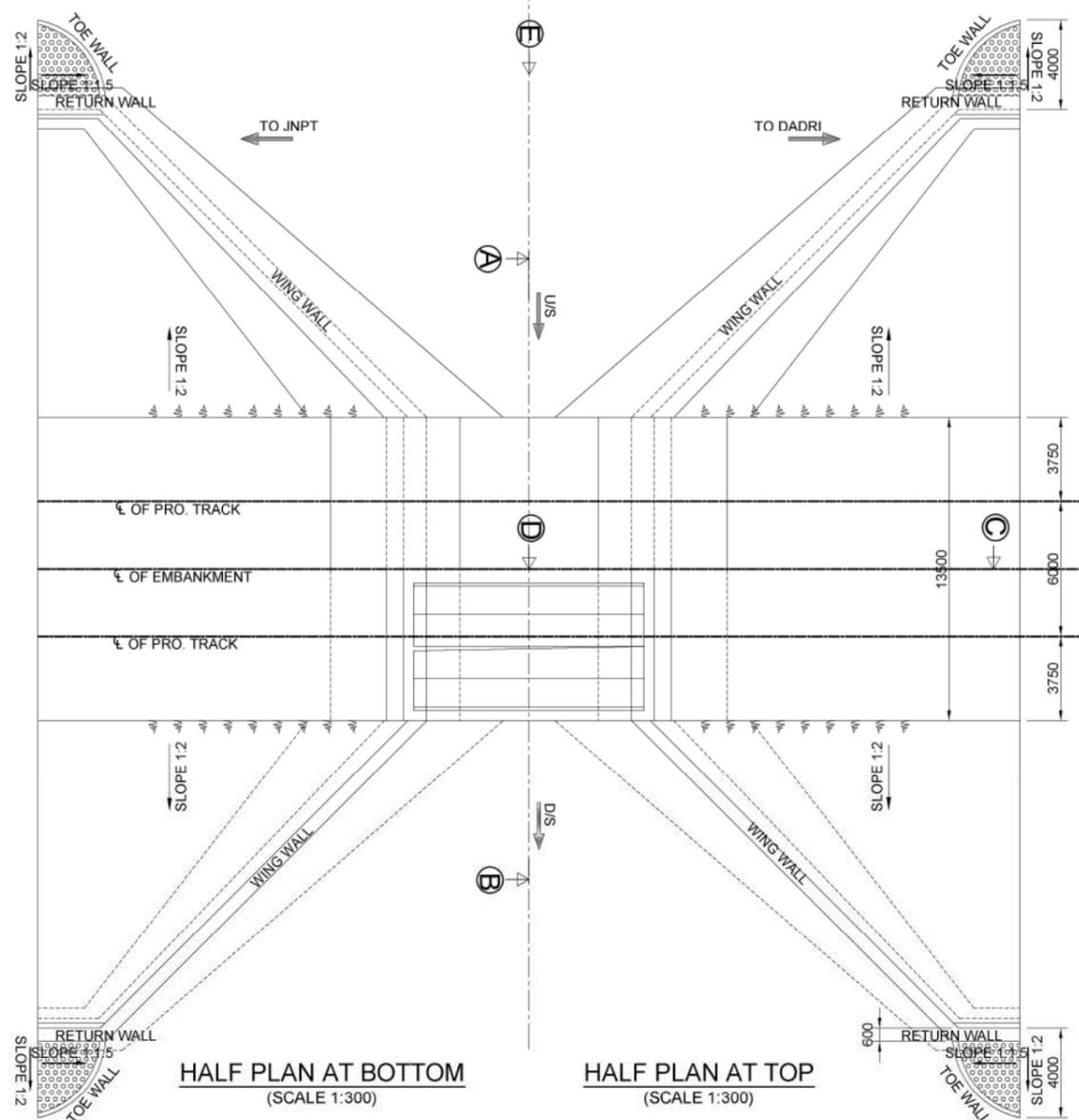
Drawing Title :
**STANDARD DRAWING FOR DOUBLE
CELL BOX CULVERT
(FOR ROAD LOADING)**

Drawing Number :
NKC-CTS-ROAD-00010 (SHEET 2 OF 2)
Scale : **AS SHOWN**
Reference :
Drawn By : **RADHA** Checked By : **DINESH SHARMA** Approved By : **T-NAKANO**

NK Consortium
4th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA

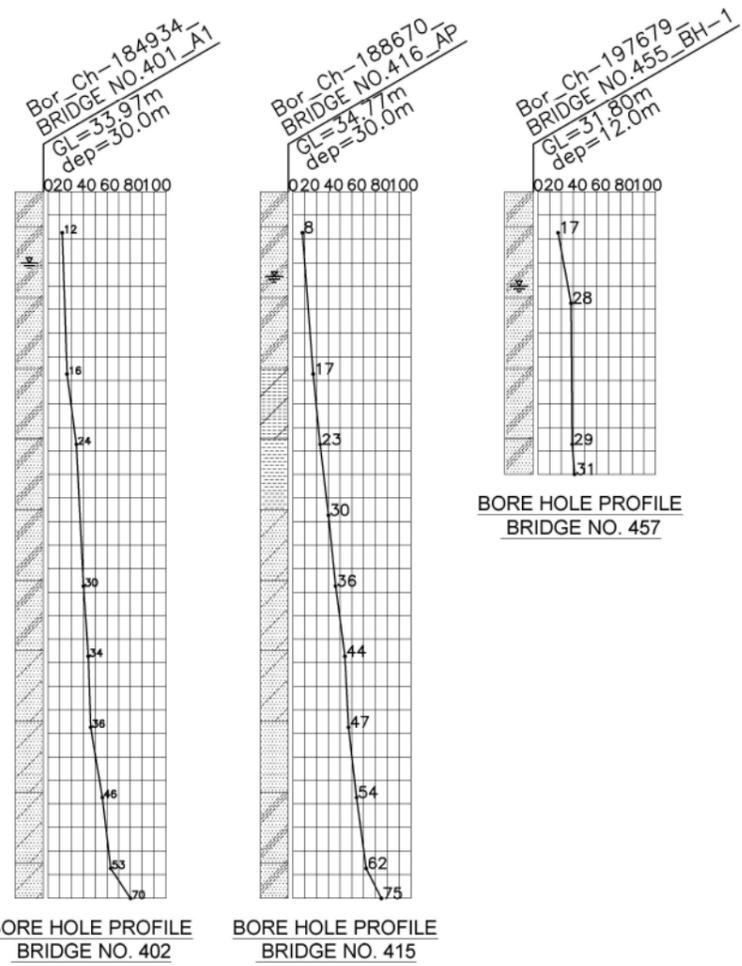


SECTION AT C-D-E-F
(SCALE 1:300)



HALF PLAN AT BOTTOM
(SCALE 1:300)

HALF PLAN AT TOP
(SCALE 1:300)



BORE HOLE PROFILE
BRIDGE NO. 402

BORE HOLE PROFILE
BRIDGE NO. 415

BORE HOLE PROFILE
BRIDGE NO. 457

LEGEND:

SDR	GW	MH	SP
CI-CH	GP	MI	SP-SM
CL	GP-CM	ML	SW
CL-ML	GM	SC	SW-SM
CI	GM-GC	SM	WR
CH	GW-GM	SM-SC	SR
			HR

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

- GENERAL NOTES:**
- 1) ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
 - 2) ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
 - 3) THIS GENERAL ARRANGEMENT DRAWING IS INDICATIVE AND IS MEANT ONLY FOR GUIDANCE FOR THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DEVELOPED & DESIGNED BY THE CONTRACTOR AS PER THE EMPLOYER'S REQUIREMENTS, SPECIFICATIONS AND SITE CONDITIONS / CONDITIONS AND SHALL BE APPROVED BY ENGINEER / EMPLOYER.
 - 4) ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING IR BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
 - 5) FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
 - 6) LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
 - 7) DURING THE COURSE OF CONSTRUCTION, SAFETY & PROTECTION OF THE PROPOSED WORK AND SAFETY & PROTECTION OF THE RUNNING TRAINS ON THE EXISTING IR TRACKS IS TO BE ENSURED BY THE CONTRACTOR. EXCAVATION / DISMANTLING OF ANY PORTION OF EXISTING BRIDGE OR ANY ELEMENT OF EXISTING PERMANENT WAY OR ANY WORK AFFECTING THE SAFETY OF THE EXISTING BRIDGE / PERMANENT WAY OR SAFETY OF THE RUNNING TRAINS WILL BE CARRIED OUT WITH THE PRIOR WRITTEN APPROVAL OF THE ENGINEER / EMPLOYER.
- SUPERSTRUCTURE & SUBSTRUCTURE**
- 1) SUPERSTRUCTURE DETAIL IS INDICATIVE ONLY AND SHOULD BE DESIGNED AS PER CODAL PROVISION.
 - 2) SUBSTRUCTURE OF BRIDGE SHALL BE DESIGNED AS PER DFCC LOADING (22.5T AXLE LOAD) BRIDGE RULE, ISSUED BY DFCC (WITH LATEST CORRECTION SLIP).
 - 3) SUBSTRUCTURE SHALL BE DESIGNED TO TAKE CARE OF TEMPORARY STAGE LOADS ALSO.
 - 4) SUBSTRUCTURE OF THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
 - 5) SEISMIC ARRANGEMENT (RESTRAINER) SHALL BE PROVIDED IN SUBSTRUCTURE AS PER SEISMIC FORCES.
- FOUNDATION**
- 1) SCOUR LEVEL SHALL BE AS PER IRS SUB STRUCTURE & FOUNDATION CODE.
 - 2) FOUNDATION LEVEL OF BRIDGE SHALL BE BELOW THE SCOUR LEVEL.
 - 3) SETTLEMENT OF FOUNDATION SHALL BE CHECKED SO THAT IT IS WITHIN ACCEPTABLE LIMIT OF TOTAL & DIFFERENTIAL SETTLEMENTS AS PER CLAUSE 6.1 OF IRS. BRIDGE SUB STRUCTURE & FOUNDATION CODE.
 - 4) SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE DESIGN OF STRUCTURES IF REQUIRED.
- GEO-TECHNICAL**
- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT IN DATA BOOK 2/2.
 - 2) GEO-TECHNICAL BORE HOLE DATA REFERRED IN GAD IS INDICATIVE ONLY.
 - 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

Project Title :
**Dedicated Freight Corridor Project
(Western Corridor Phase-1:
Rewari - Vadodara Section)**

Client :
 **Dedicated Freight Corridor Corporation of India**
(A GOVERNMENT OF INDIA UNDERTAKING)
5th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA

Drawing Title :
GENERAL ARRANGEMENT DRAWING FOR
1X9.15m PRESTRESSED VOIDED SLAB
TYPE MINOR BRIDGE MAIN LINE 01

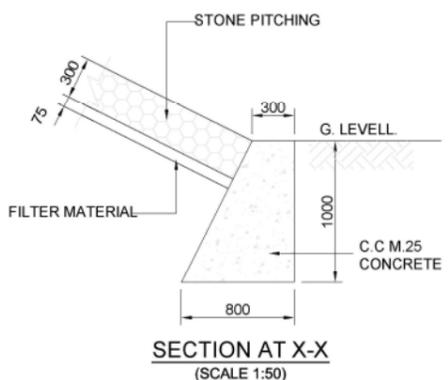
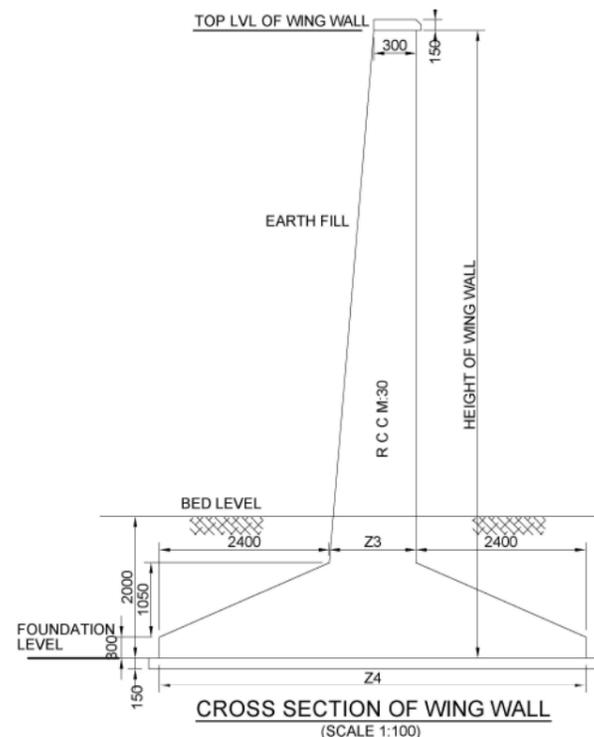
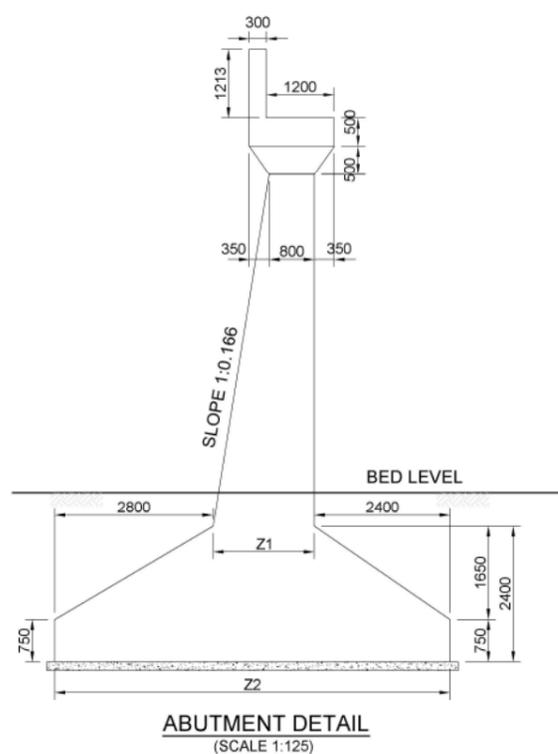
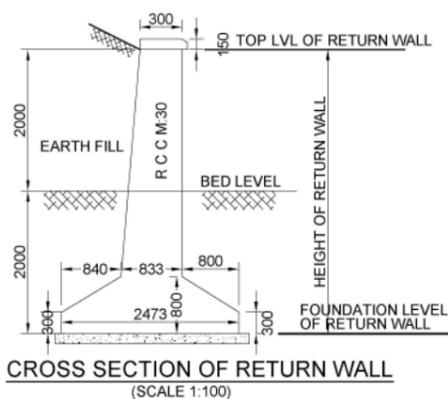
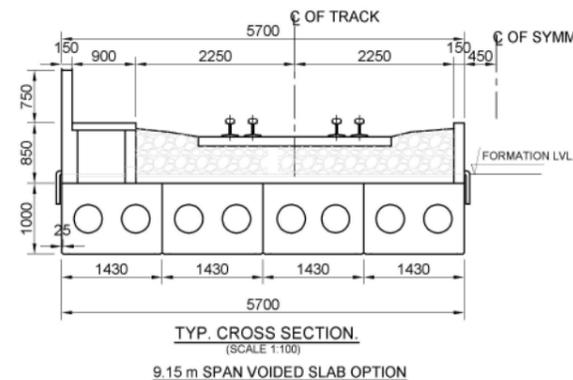
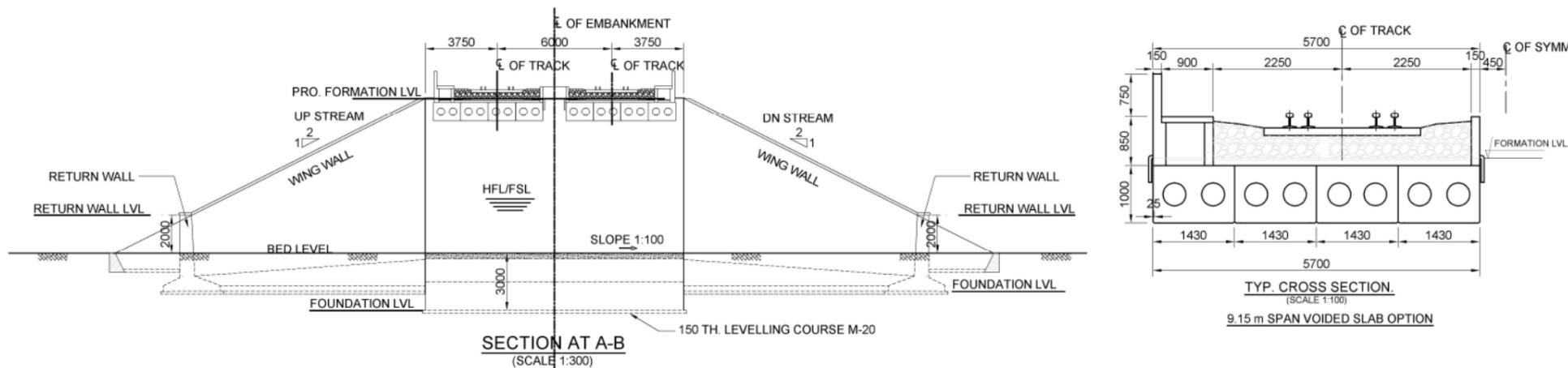
Drawing Number :
NKC-CTS-BRD-VD-00001 (SHEET 1 OF 2)

Scale :
AS SHOWN

Reference :
GAD PREPARED BY CPM VADODARA

Drawn By : _____ Checked By : _____ Approved By : _____
Date : _____ Date : _____ Date : _____

Consultant
 **NK Consortium**
4th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA



Sec. No.	Structure Chainage	Proposed Bridge No.	Formation Level (m)	Ground Level (m)	HFL/FSL (m)	Proposed Span (m)	No. of tracks Proposed for DFCC	Skew Angle	Type of Structure	Structure configuration	Type of Crossing	Barrel Length	Return Wall				Wing Wall				Abutment				
													TOP LVL (m)	FDN LVL (m)	Height (m)	Length (m)	TOP LVL (m)	FDN LVL (m)	BERM LVL (m)	Height (m)	Length (m)	Z3(m)	Z4(m)	Z1(m)	Z2(m)
5	185,152.838	402	39.545	34.602	35.103	1 x 9.15m	2	33	Minor Bridge	PSC Voided Slab	Canal	16.10	36.602	32.602	4.000	3.000	39.545	32.602	-	6.943	9.201	1.232	6.032	1.355	6.855
5	188,408.406	415	39.848	35.042	35.856	1 x 9.15m	2	55	Minor Bridge	PSC Voided Slab	Canal	23.54	37.042	33.042	4.000	3.000	39.848	33.042	-	6.806	8.813	1.209	6.009	1.332	6.832
5	197,730.213	457	38.215	33.133	35.856	1 x 9.15m	3	0	Minor Bridge	PSC Voided Slab	Canal	19.50	35.133	31.133	4.000	3.000	38.215	31.133	-	7.082	11.008	1.255	6.055	1.378	6.878

- NOTE
- (i) F.L is based on the alignment drawing modified by NKC and should be reconfirmed in detailed design survey.
 - (ii) G.L is based on GAD prepared by CPM and should be reconfirmed in detailed design and survey.
 - (iii) Nos. of Track shall be confirmed from FLS & Station Yard Plan
 - (iv) Berm of 1.5 m width shall be provided on the slope of every 6 m height.
 - (v) Barrel Length may vary as per site condition.

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder



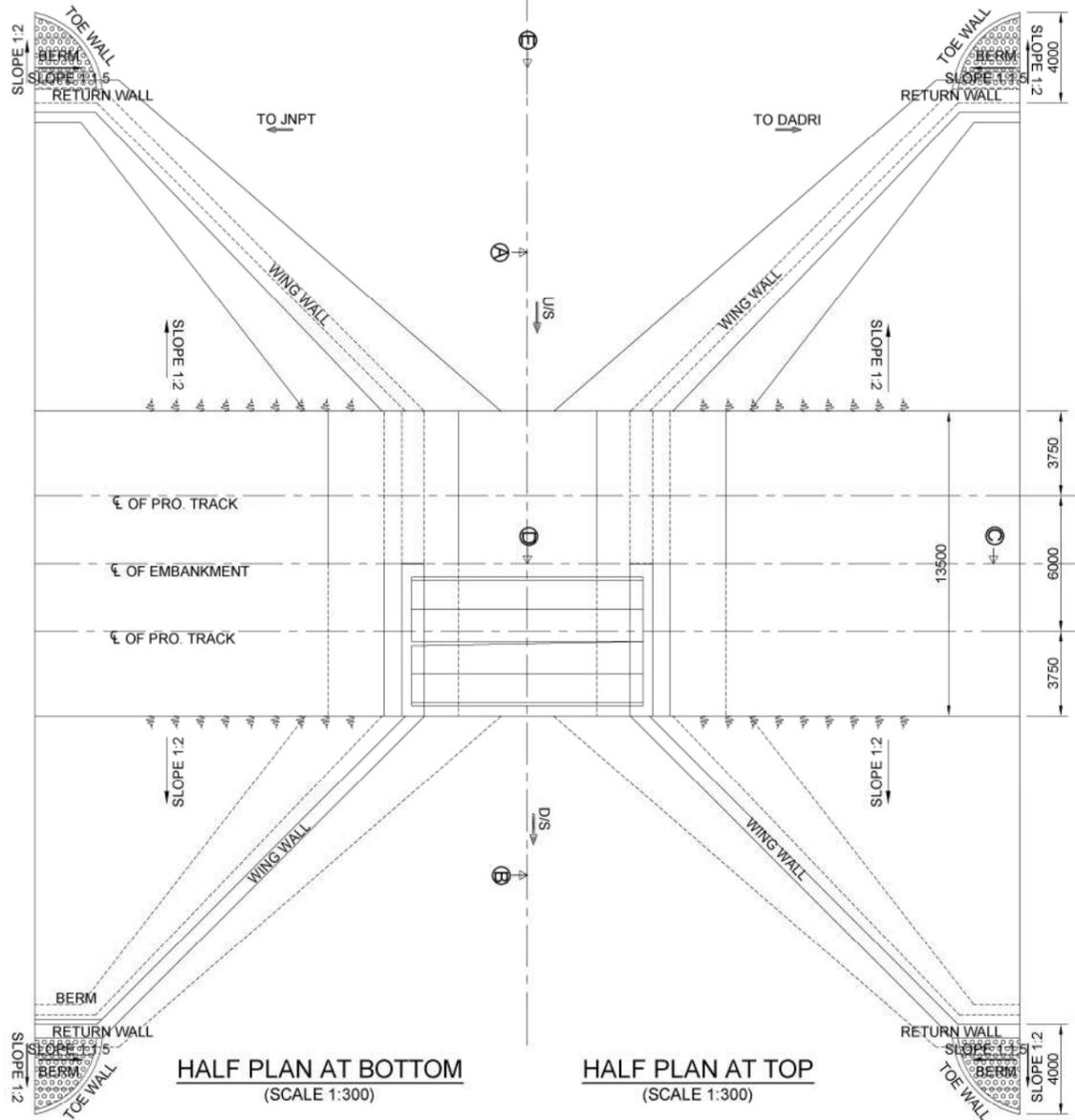
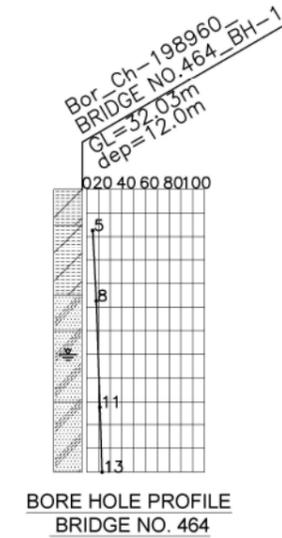
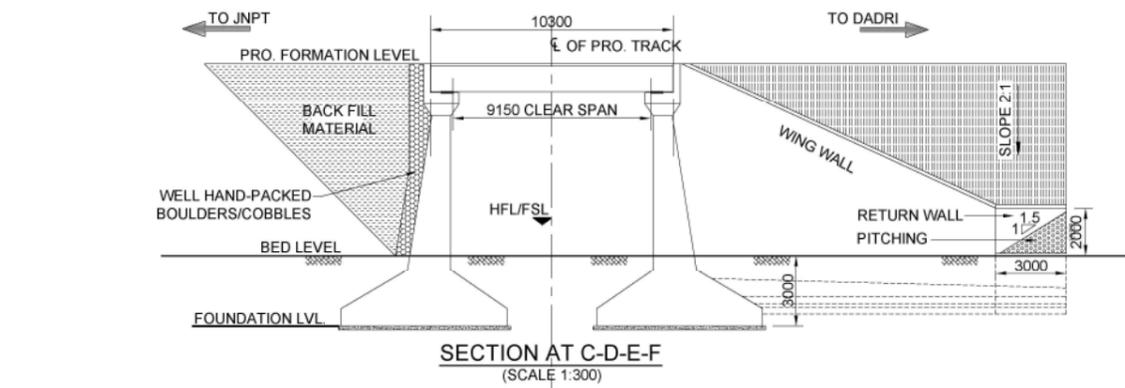
Project Title :
Dedicated Freight Corridor Project
(Western Corridor Phase-1:
Rewari - Vadodara Section)

Client :
DFCC
Dedicated Freight Corridor Corporation of India
(A GOVERNMENT OF INDIA UNDERTAKING)
5th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA

Drawing Title :
GENERAL ARRANGEMENT DRAWING FOR
1X9.15m PRESTRESSED VOIDED SLAB
TYPE MINOR BRIDGE MAIN LINE 01

Drawing Number :
NKC-CTS-BRD-VD-00001 (SHEET 2 OF 2)
Scale :
AS SHOWN
Reference :
GAD PREPARED BY CPM VADODARA
Drawn By :
Checked By :
Approved By :
Date : / / Date : / / Date : / /

Consultant :
NK Consortium
4th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA



Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

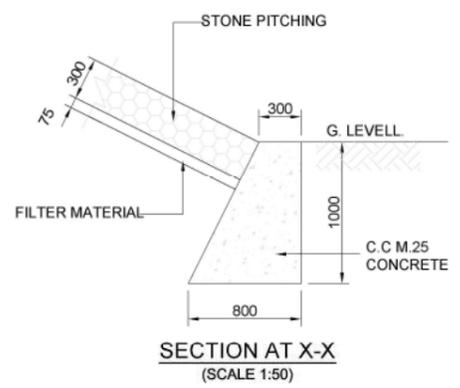
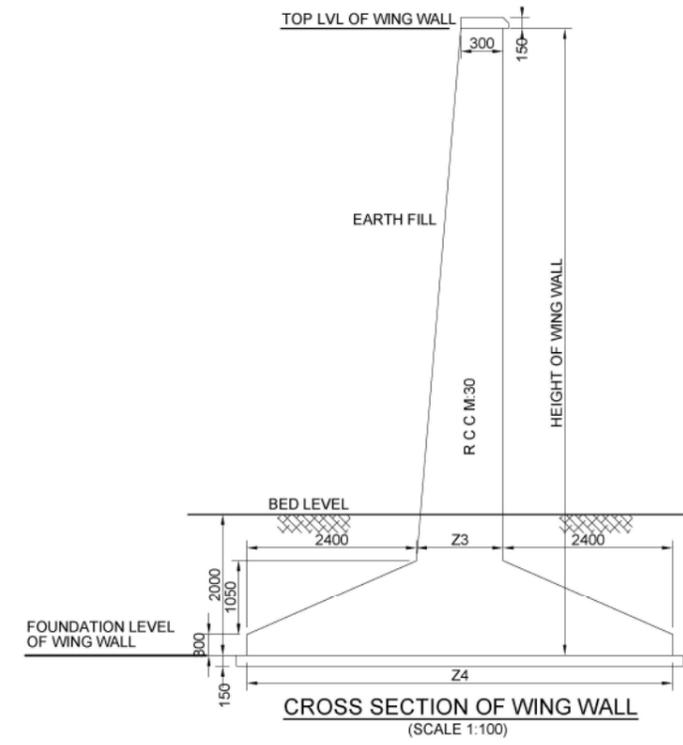
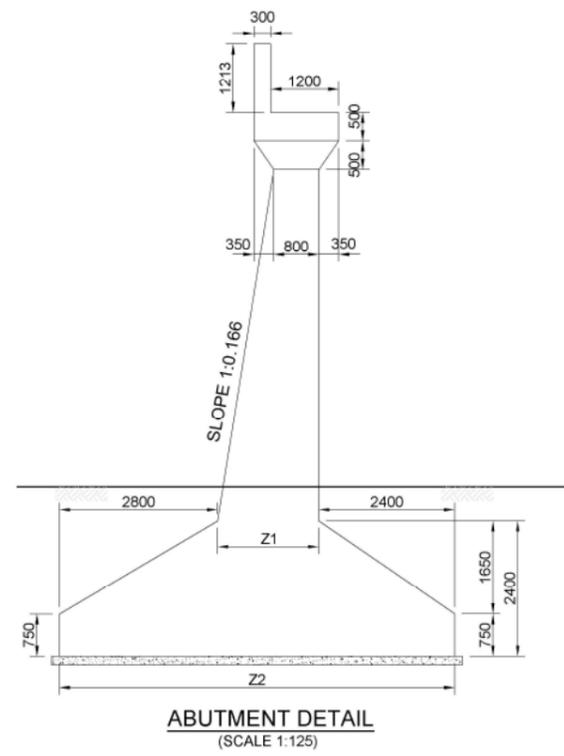
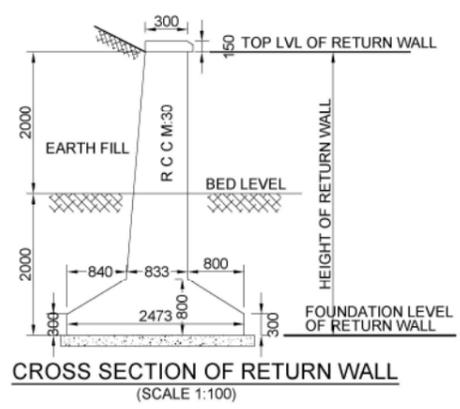
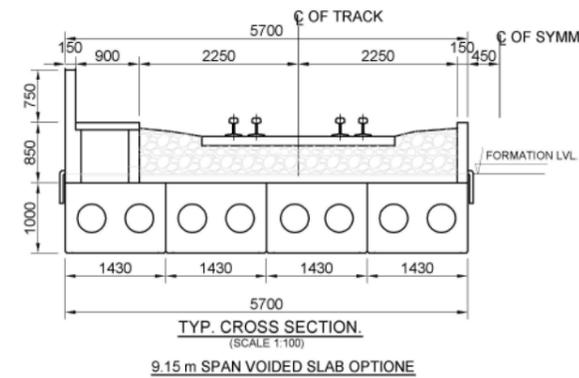
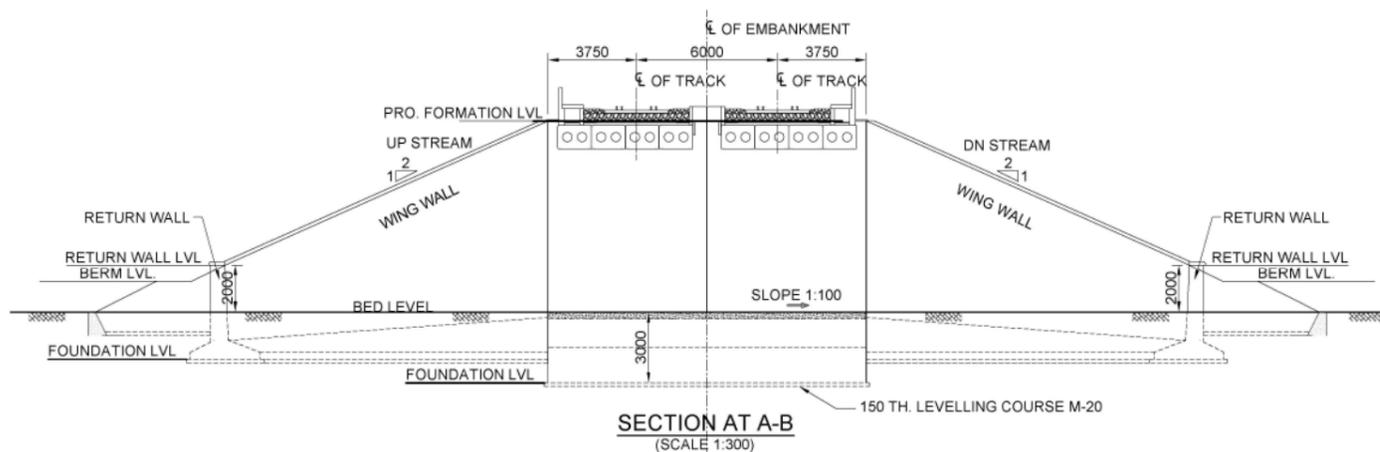
LEGEND:

SDR	CW	MH	SP
CI-CH	GP	MI	SP-SM
CL	GP-GM	ML	SW
CL-ML	GM	SC	SW-SM
CI	GM-GC	SM	WR
CH	GW-GM	SM-SC	SR
			HR

- GENERAL NOTES:**
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 - 2) ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
 - 3) THIS GENERAL ARRANGEMENT DRAWING IS INDICATIVE AND IS MEANT ONLY FOR GUIDANCE FOR THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DEVELOPED & DESIGNED BY THE CONTRACTOR AS PER THE EMPLOYER'S REQUIREMENTS, SPECIFICATIONS AND SITE CONDITIONS / CONDITIONS AND SHALL BE APPROVED BY ENGINEER / EMPLOYER.
 - 4) ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING IR BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
 - 5) FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
 - 6) LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
 - 7) DURING THE COURSE OF CONSTRUCTION, SAFETY & PROTECTION OF THE PROPOSED WORK AND SAFETY & PROTECTION OF THE RUNNING TRAINS ON THE EXISTING IR TRACKS IS TO BE ENSURED BY THE CONTRACTOR. EXCAVATION / DISMANTLING OF ANY PORTION OF EXISTING BRIDGE OR ANY ELEMENT OF EXISTING PERMANENT WAY OR ANY WORK AFFECTING THE SAFETY OF THE EXISTING BRIDGE / PERMANENT WAY OR SAFETY OF THE RUNNING TRAINS WILL BE CARRIED OUT WITH THE PRIOR WRITTEN APPROVAL OF THE ENGINEER / EMPLOYER.
- SUPERSTRUCTURE & SUBSTRUCTURE**
- 1) SUPERSTRUCTURE DETAIL IS INDICATIVE ONLY AND SHOULD BE DESIGNED AS PER CODAL PROVISION.
 - 2) SUBSTRUCTURE OF BRIDGE SHALL BE DESIGNED AS PER DFCCI LOADING (32.5T AXLE LOAD) BRIDGE RULE, ISSUED BY RDSO. (WITH LATEST CORRECTION SLIP).
 - 3) SUBSTRUCTURE SHALL BE DESIGNED TO TAKE CARE OF TEMPORARY STAGE LOADS ALSO.
 - 4) SUBSTRUCTURE OF THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
 - 5) SEISMIC ARRANGEMENT (RESTRAINER) SHALL BE PROVIDED IN SUBSTRUCTURE AS PER SEISMIC FORCES.
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 - 4) SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE DESIGN OF STRUCTURES IF REQUIRED.
- GEO-TECHNICAL**
- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT IN DATA BOOK 2/2.
 - 2) GEO-TECHNICAL BORE HOLE DATA REFERED IN GAD IS INDICATIVE ONLY.
 - 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.



<p>Project Title : Dedicated Freight Corridor Project (Western Corridor Phase-1: Rewari - Vadodara Section)</p>	<p>Client : DFCC Dedicated Freight Corridor Corporation of India (A GOVERNMENT OF INDIA UNDERTAKING) 5th Floor, Pragati Maidan Metro Station Building, New Delhi-110001, INDIA</p>	<p>Drawing Title : GENERAL ARRANGEMENT DRAWING FOR 1X9.15m PRESTRESSED VOIDED SLAB TYPE MINOR BRIDGE MAIN LINE 02</p>	<p>Drawing Number : NKC-CTS-BRD-VD-00002 (SHEET 1 OF 2)</p> <p>Scale : AS SHOWN</p> <p>Reference : GAD PREPARED BY CPM VADODARA</p> <p>Drawn By : Checked By : Approved By :</p> <p>Date : Date : Date :</p>	<p>Consultant NK Consortium 4th Floor, Pragati Maidan Metro Station Building, New Delhi-110001, INDIA</p>
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Sec. No.	Structure Chainage	Proposed Bridge No.	FL (m)	GL (m)	HFL/FSL (m)	Proposed Span (m)	No. of tracks Proposed for DFCC	Skew Angle	Type of Structure	Structure configuration	Type of Crossing	Barrel Length	Return Wall				Wing Wall				Abutment				
													TOP LVL (m)	FDN LVL (m)	Height (m)	Length (m)	TOP LVL (m)	FDN LVL (m)	BERM LVL (m)	Height (m)	Length (m)	Z3(m)	Z4(m)	Z1(m)	Z2(m)
5	198,959.791	464	38.421	32.173	33.326	1 x 9.15m	2	15	Minor Bridge	PSC Voided Slab	Canal	13.98	34.173	30.173	4.000	3.000	38.421	30.173	32.421	8.248	12.892	1.450	6.250	1.573	7.073

NOTE
 (i) F.L is based on the alignment drawing modified by NKC and should be reconfirmed in detailed design survey.
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 (iii) Nos. of Track shall be confirmed from FLS & Station Yard Plan
 (iv) Berm of 1.5 m width shall be provided on the slope of every 6 m height.
 (v) Barrel Length may vary as per site condition.

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder



Project Title :
**Dedicated Freight Corridor Project
 (Western Corridor Phase-1:
 Rewari - Vadodara Section)**

Client :
 **Dedicated Freight Corridor Corporation of India**
(A GOVERNMENT OF INDIA UNDERTAKING)
 5th Floor, Pragati Maidan Metro Station Building,
 New Delhi-110001, INDIA

Drawing Title :
 GENERAL ARRANGEMENT DRAWING FOR
 1X9.15m PRESTRESSED VOIDED SLAB
 TYPE MINOR BRIDGE MAIN LINE 02

Drawing Number :
NKC-CTS-BRD-VD-00002 (SHEET 2 OF 2)
 Scale :
AS SHOWN
 Reference :
GAD PREPARED BY CPM VADODARA
 Drawn By :
 Checked By :
 Approved By :
 Date : / /

Consultant :
 **NK Consortium**
 4th Floor, Pragati Maidan Metro Station Building,
 New Delhi-110001, INDIA

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SUPERSTRUCTURE & SUBSTRUCTURE

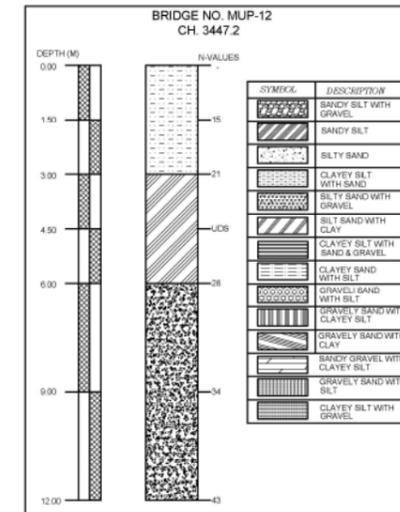
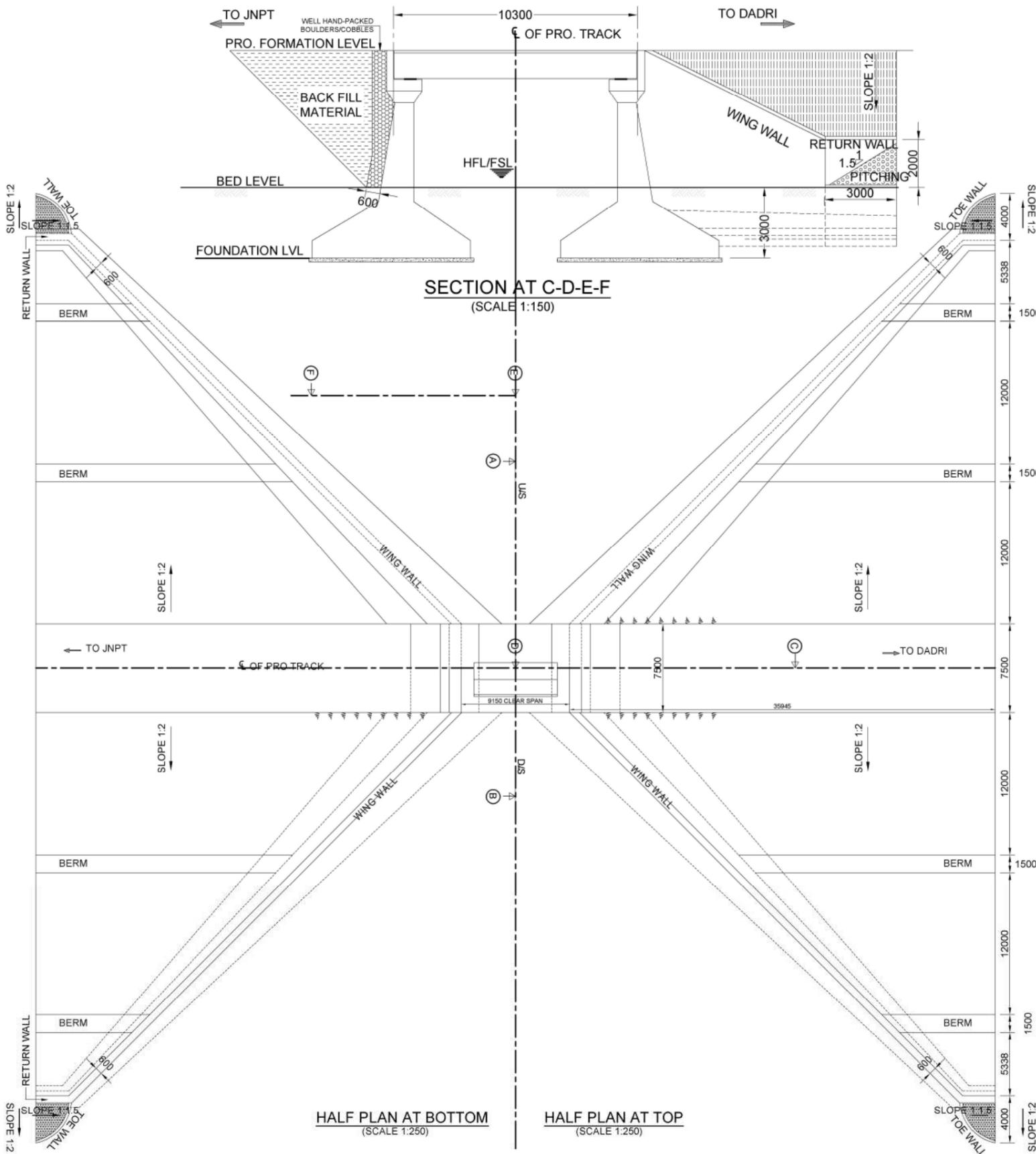
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GEO-TECHNICAL

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Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

Project Title :
**Dedicated Freight Corridor Project
(Western Corridor Phase-1:
Rewari - Vadodara Section)**

Client :
DFCC
Dedicated Freight Corridor Corporation of India
(A GOVERNMENT OF INDIA UNDERTAKING)
5th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA

Drawing Title :
GENERAL ARRANGEMENT DRAWING
FOR 1X9.15m PSC VOIDED SLAB TYPE
MINOR BRIDGE CONNECTING LINE 01

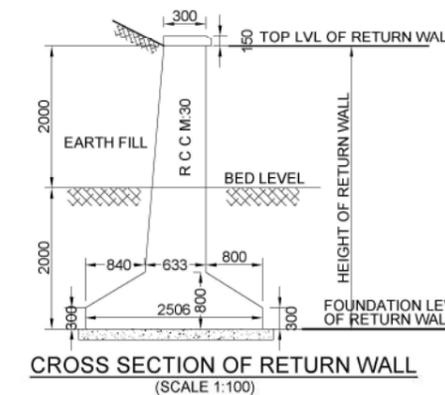
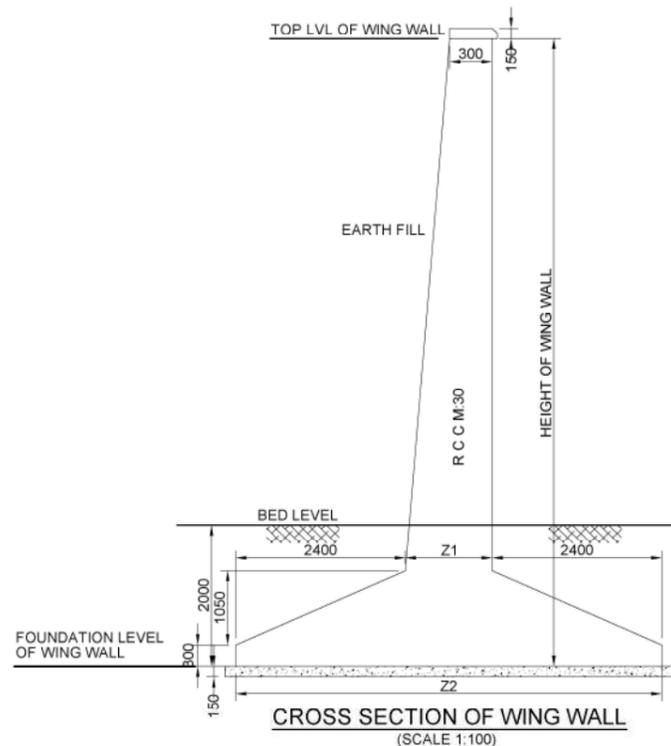
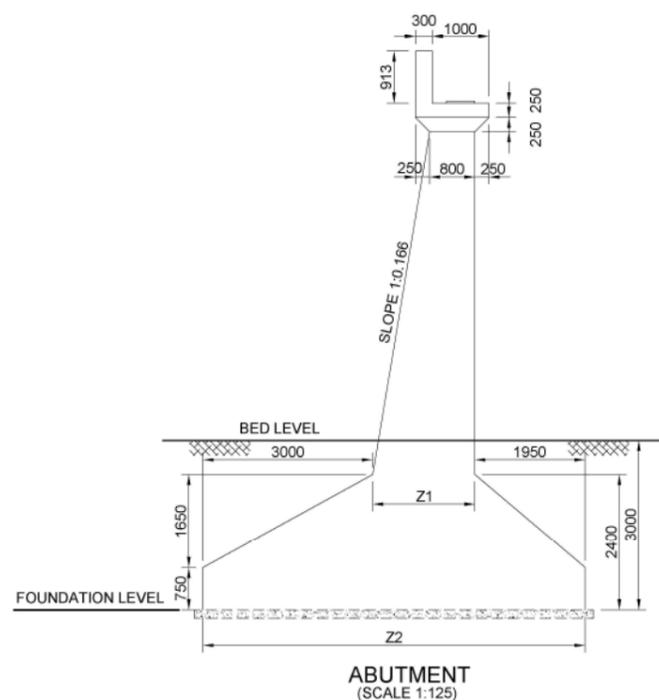
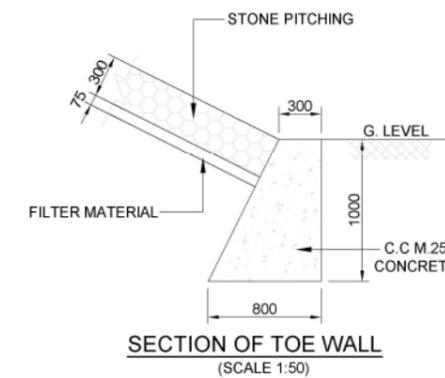
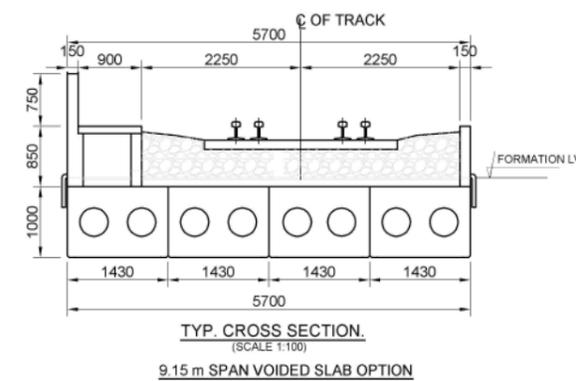
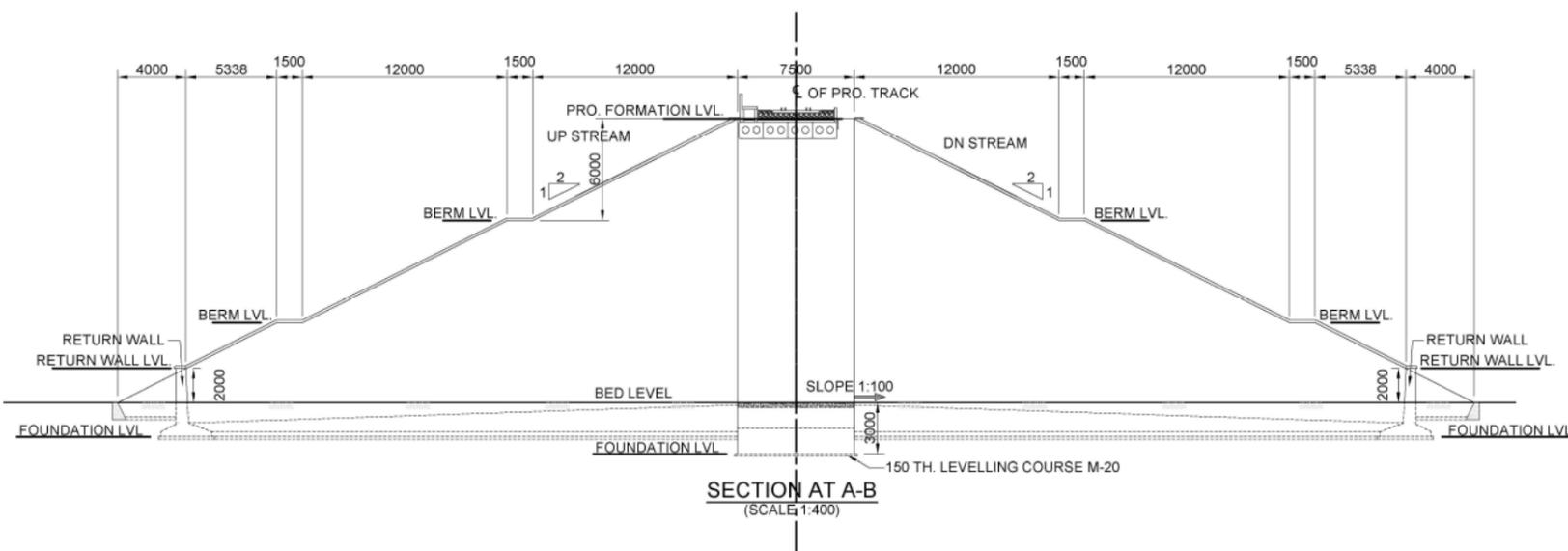
Drawing Number :
NKC-CTS-BRD-VD-00003 (SHEET 1 OF 2)

Scale :
AS SHOWN

Reference :
GAD PREPARED BY CPM VADODARA

Drawn By : S. Salamuddin | Checked By : M. N. Ahmad | Approved By : H. Kawahara
Date : 30th, Sept, 2012 | Date : 1st, Oct, 2012 | Date : 3rd, Oct, 2012

Consultant :
NK CONSORTIUM
4th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA



Sect. No.	Structure Chainage	Proposed Bridge No.	Formation Level (m)	Bed Level (m)	Ground Level (m)	HFL/FSL (m)	Type of Structure	Structure configuration	Type of Crossing	No. of tracks Proposed for DFCC	Skew Angle	Proposed Span (m)	Return Wall			Wing Wall				Abutment					
													TOP LVL (m)	FDN LVL (m)	Height (m)	TOP LVL (m)	FDN LVL (m)	BERM LVL-1 (m)	BERM LVL-2 (m)	Height (m)	Length (m)	Z3(m)	Z4(m)	Z1(m)	Z2(m)
5Co.-M/Up	3447.2	MUP-12	32.687	18.579	18.579	19.020	Minor Bridge	PSC Voided Slab	Nalla	1	0	1 x 9.15m	20.579	16.579	4.000	32.687	16.579	26.687	20.687	16.108	39.338	2.760	7.560	3.016	7.966

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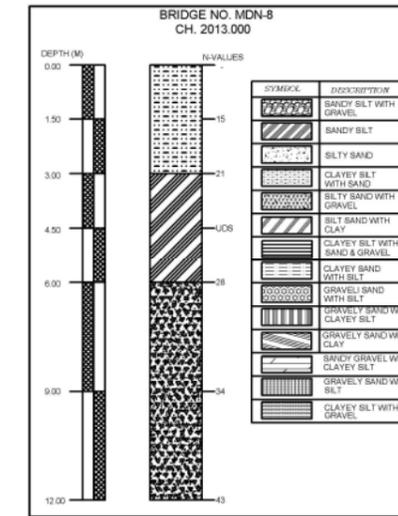
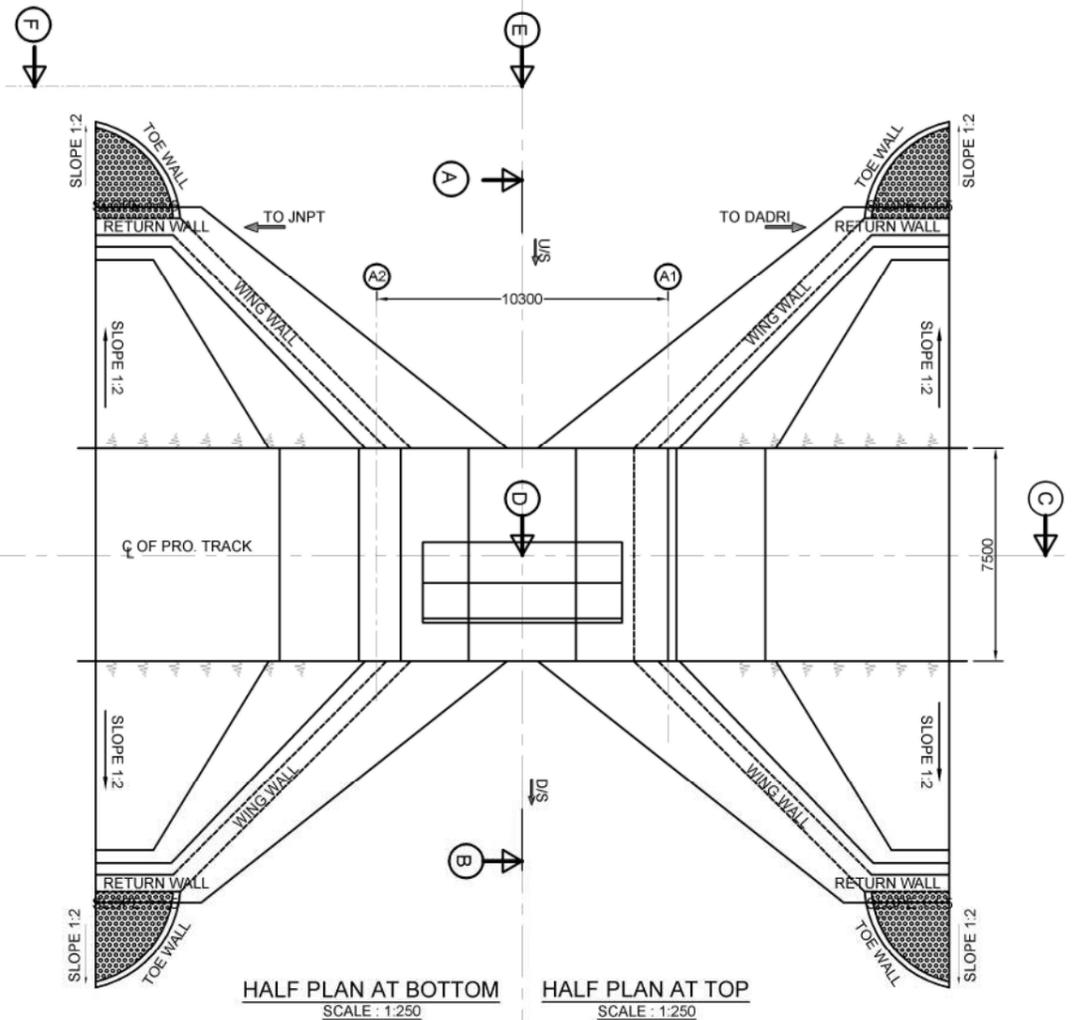
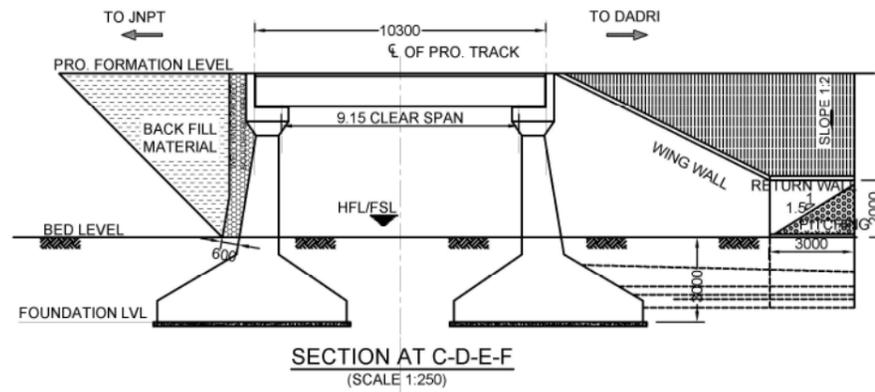
Project Title :
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 (Western Corridor Phase-1:
 Rewari - Vadodara Section)**

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(A GOVERNMENT OF INDIA UNDERTAKING)
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Drawing Title :
 GENERAL ARRANGEMENT DRAWING
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 MINOR BRIDGE CONNECTING LINE 01

Drawing Number :
NKC-CTS-BRD-VD-00003 (SHEET 2 OF 2)
 Scale :
AS SHOWN
 Reference :
 GAD PREPARED BY CPM VADODARA
 Drawn By : S. Salamuddin | Checked By : M. N. Ahmad | Approved By : H. Kawahara
 Date : 30th, Sept, 2012 | Date : 1st, Oct, 2012 | Date : 3rd, Oct, 2012

Consultant :
 **NK Consortium**
 4th Floor, Pragati Maidan Metro Station Building,
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(Western Corridor Phase-1:
Rewari - Vadodara Section)

Client :
 Dedicated Freight Corridor Corporation of India
(A GOVERNMENT OF INDIA UNDERTAKING)
5th Floor, Pragati Maidan Metro Station Building,
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Drawing Title :
GENERAL ARRANGEMENT DRAWING
FOR 1X9.15m VOIDED SLAB TYPE
MINOR BRIDGE CONNECTING LINE 02
(WITHOUT BERM)

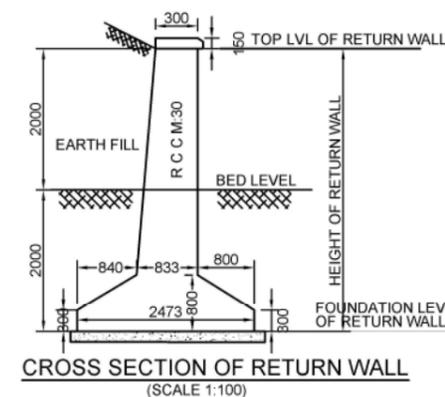
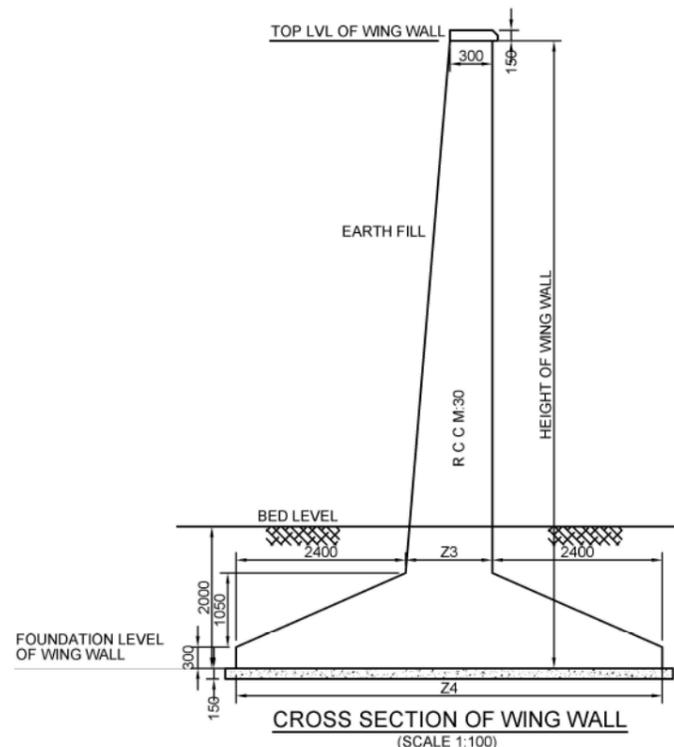
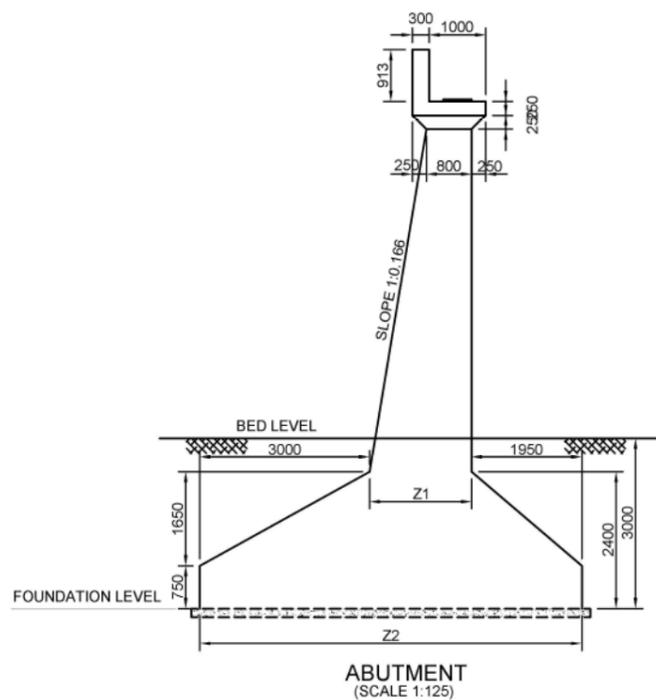
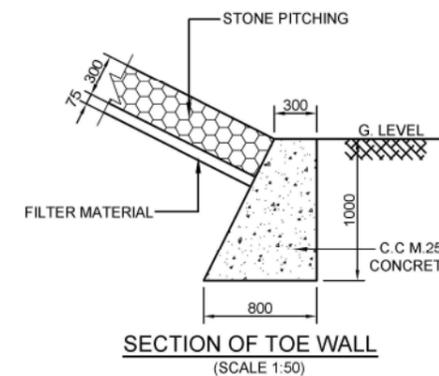
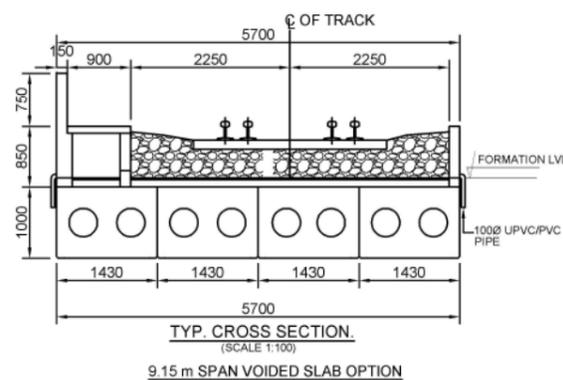
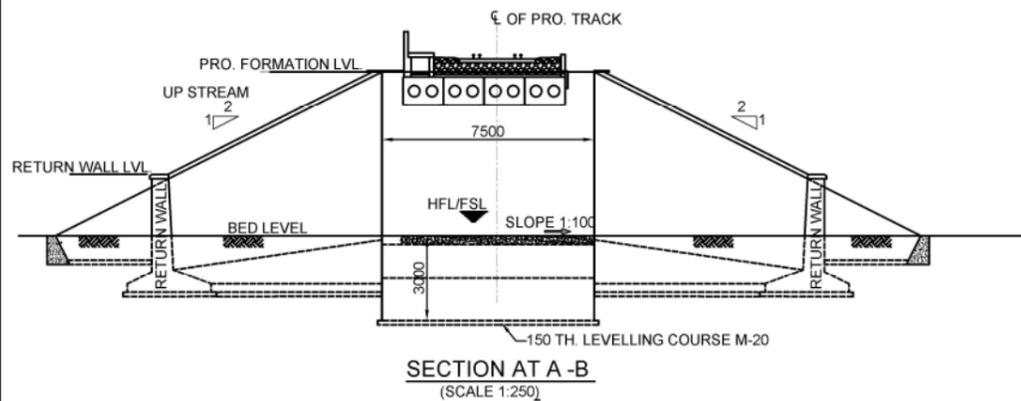
Drawing Number :
NKC-CTS-BRD-VD-00004 (SHEET 1 OF 2)

Scale :
AS SHOWN

Reference :
GAD PREPARED BY CPM VADODARA

Drawn By : S. Salamuddin | Checked By : M. N. Ahmad | Approved By : H. Kawahara
Date : 30th, Sept, 2012 | Date : 1st, Oct, 2012 | Date : 3rd, Oct, 2012

Consultant
 NK Consortium
4th Floor, Pragati Maidan Metro Station Building,
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Sect. No.	Structure Chainage	Proposed Bridge No.	Formation Level (m)	Bed Level (m)	Ground Level (m)	HFL/FSL (m)	Type of Structure	Structure configuration	Type of Crossing	No. of tracks	Skew Angle	Proposed Span (m)	Return Wall			Wing Wall					Abutment				
													TOP LVL (m)	FDN LVL (m)	Height (m)	TOP LVL (m)	FDN LVL (m)	BERM LVL-1 (m)	BERM LVL-2 (m)	Height (m)	Length (m)	Z3(m)	Z4(m)	Z1(m)	Z2(m)
5Co.-M/Dn	2013	MDN-7	23.807	21.615	18.056	19.340	Minor Bridge	PSC Voided Slab	Nalla	1	15	1 x 9.15m	23.615	19.615	4.000	23.807	19.615	-	-	4.192	1.420	0.774	5.574	1.030	5.980

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GENERAL ARRANGEMENT DRAWING
FOR 1X9.15m VOIDED SLAB TYPE
MINOR BRIDGE CONNECTING LINE 02
(WITHOUT BERM)

Drawing Number :
NKC-CTS-BRD-VD-00004 (SHEET 2 OF 2)

Scale :
AS SHOWN

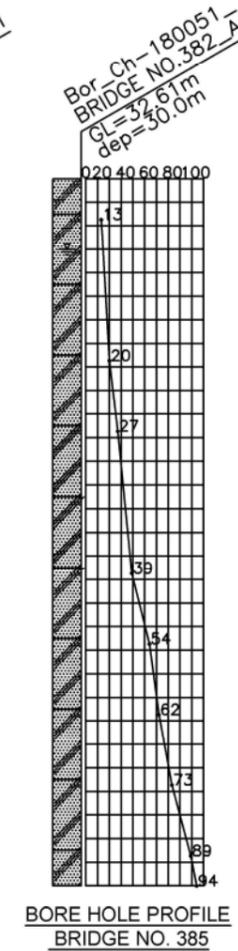
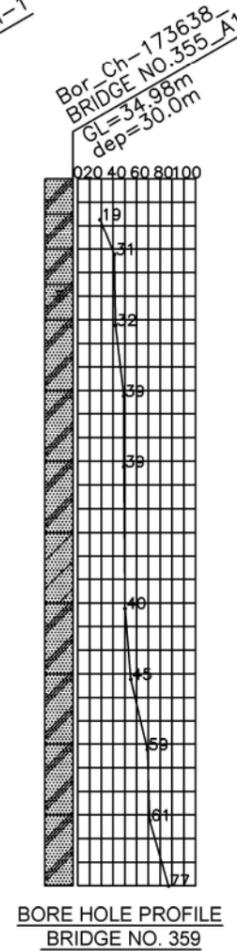
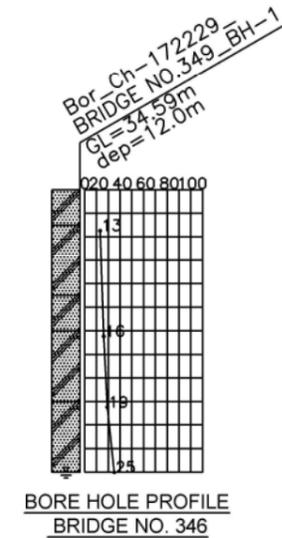
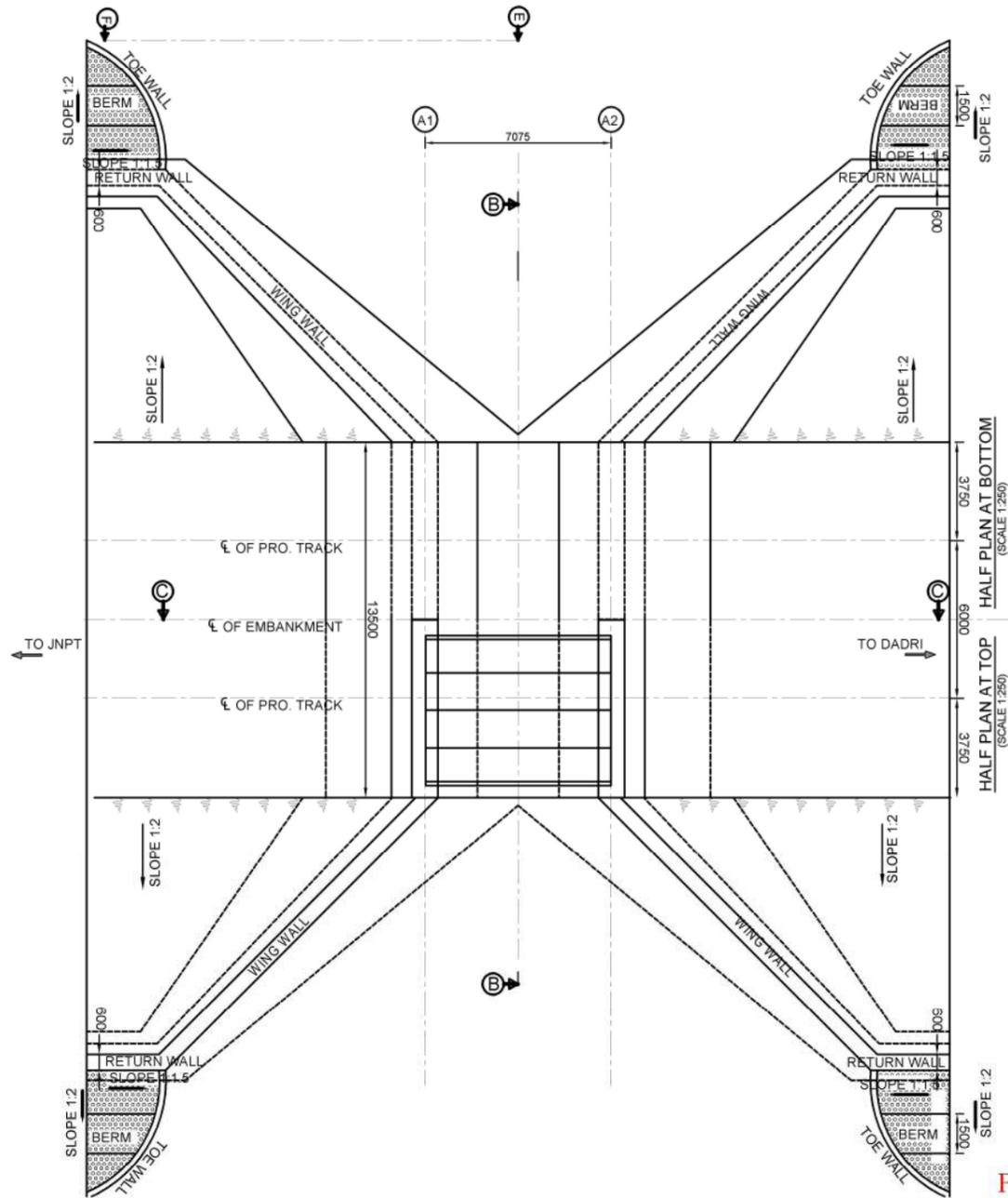
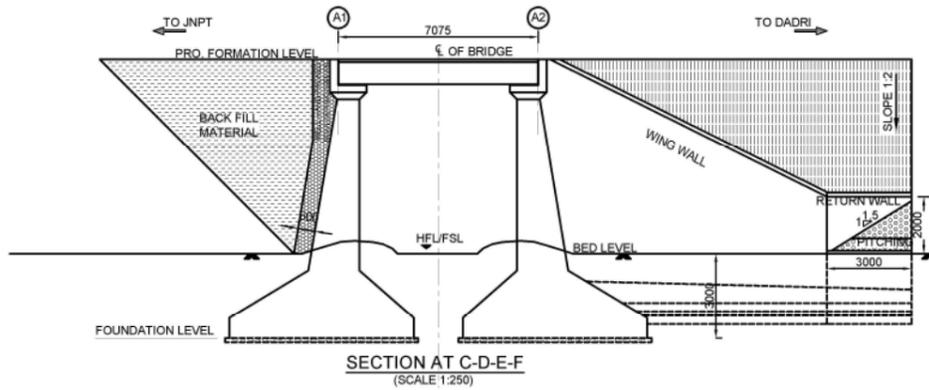
Reference :
GAD PREPARED BY CPM VADODARA

Drawn By : S. Salamuddin | Checked By : M. N. Ahmad | Approved By : H. Kawahara
Date : 30th, Sept, 2012 | Date : 1st, Oct, 2012 | Date : 3rd, Oct, 2012



NK Consortium

4th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA



- GENERAL NOTES:**
- 1) ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
 - 2) ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
 - 3) THIS GENERAL ARRANGEMENT DRAWING IS INDICATIVE AND IS MEANT ONLY FOR GUIDANCE FOR THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DEVELOPED & DESIGNED BY THE CONTRACTOR AS PER THE EMPLOYER'S REQUIREMENTS, SPECIFICATIONS AND SITE DIMENSIONS / CONDITIONS AND SHALL BE APPROVED BY ENGINEER / EMPLOYER.
 - 4) ALL DIMENSIONS SHALL BE VERIFIED WITH RESPECT TO EXISTING IR BRIDGES ON THE PARALLEL ALIGNMENT AND RECONCILED BEFORE EXECUTION.
 - 5) FORMATION LEVEL SHOWN IN GAD IS AS PER PROPOSED LONGITUDINAL SECTION OF THE ALIGNMENT AND MAY CHANGE DURING DEVELOPMENT OF DETAILED DESIGN STAGE.
 - 6) LENGTH OF RETURN WALL / WING WALL / TOE WALL / PITCHING ETC. IS TO BE DECIDED AS PER THE SITE CONDITION.
 - 7) DURING THE COURSE OF CONSTRUCTION, SAFETY & PROTECTION OF THE PROPOSED WORK AND SAFETY & PROTECTION OF THE RUNNING TRAINS ON THE EXISTING IR TRACKS IS TO BE ENSURED BY THE CONTRACTOR. EXCAVATION / DISMANTLING OF ANY PORTION OF EXISTING BRIDGE OR ANY ELEMENT OF EXISTING PERMANENT WAY OR ANY WORK AFFECTING THE SAFETY OF THE EXISTING BRIDGE / PERMANENT WAY OR SAFETY OF THE RUNNING TRAINS WILL BE CARRIED OUT WITH THE PRIOR WRITTEN APPROVAL OF THE ENGINEER / EMPLOYER.
- SUPERSTRUCTURE & SUBSTRUCTURE**
- 1) SUPERSTRUCTURE DETAIL IS INDICATIVE ONLY AND SHOULD BE DESIGNED AS PER CODAL PROVISION.
 - 2) SUBSTRUCTURE OF BRIDGE SHALL BE DESIGNED AS PER DFCCI LOADING (32.5T AXLE LOAD) BRIDGE RULE, ISSUED BY RDSO. (WITH LATEST CORRECTION SLIP).
 - 3) SUBSTRUCTURE SHALL BE DESIGNED TO TAKE CARE OF TEMPORARY STAGE LOADS ALSO.
 - 4) SUBSTRUCTURE OF THE BRIDGE SHALL BE DESIGNED AS PER THE SEISMIC ZONE FOR THE AREA.
 - 5) SEISMIC ARRANGEMENT (RESTRAINER) SHALL BE PROVIDED IN SUBSTRUCTURE AS PER SEISMIC FORCES.
- FOUNDATION**
- 1) SCOUR LEVEL SHALL BE AS PER IRS SUB STRUCTURE & FOUNDATION CODE.
 - 2) FOUNDATION LEVEL OF BRIDGE SHALL BE BELOW THE SCOUR LEVEL.
 - 3) SETTLEMENT OF FOUNDATION SHALL BE CHECKED SO THAT IT IS WITHIN ACCEPTABLE LIMIT OF TOTAL & DIFFERENTIAL SETTLEMENTS AS PER CLAUSE 6.1 OF IRS: BRIDGE SUB STRUCTURE & FOUNDATION CODE.
 - 4) SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE DESIGN OF STRUCTURES IF REQUIRED.
- GEO-TECHNICAL**
- 1) FOR TENDER PURPOSE REFER TO GEOTECHNICAL & HYDROLOGICAL INVESTIGATION REPORT IN DATA BOOK 22.
 - 2) GEO-TECHNICAL BORE HOLE DATA REFERRED IN GAD IS INDICATIVE ONLY.
 - 3) DETAILED GEO-TECHNICAL INVESTIGATION SHALL BE CARRIED OUT DURING DETAILED DESIGN STAGE.

LEGEND:

SDR	CW	MH	SP
CI-CH	CP	MI	SP-SM
CL	GP-GM	ML	SW
CL-ML	GM	SC	SW-SM
CI	GM-GC	SM	WR
CH	GW-GM	SM-SC	SR
			HR

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

Project Title :
Dedicated Freight Corridor Project
(Western Corridor Phase-1:
Rewari - Vadodara Section)

Client :
DFCC Dedicated Freight Corridor Corporation of India
(A GOVERNMENT OF INDIA UNDERTAKING)
5th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA

Drawing Title :
GENERAL ARRANGEMENT
DRAWING FOR 1X6.1m PSC SLAB
TYPE MINOR BRIDGE MAIN LINE 01

Drawing Number :
NKC-CTS-BRD-VD-00005 (SHEET 1 OF 2)

Scale :
AS SHOWN

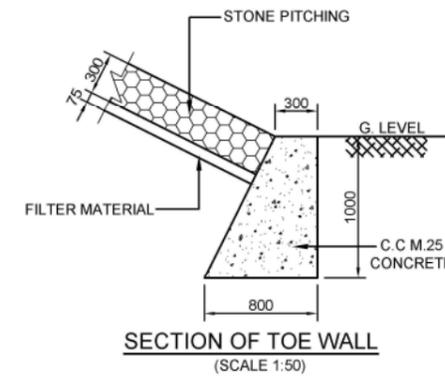
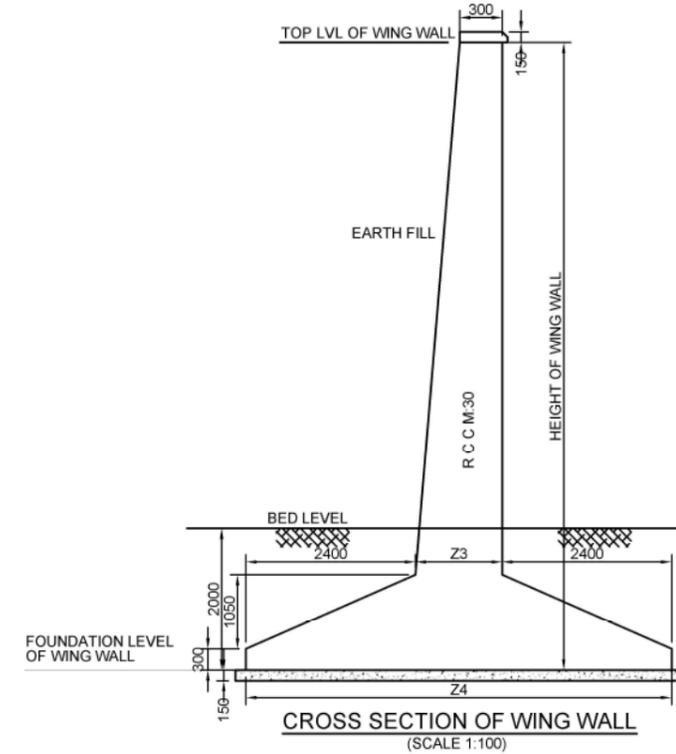
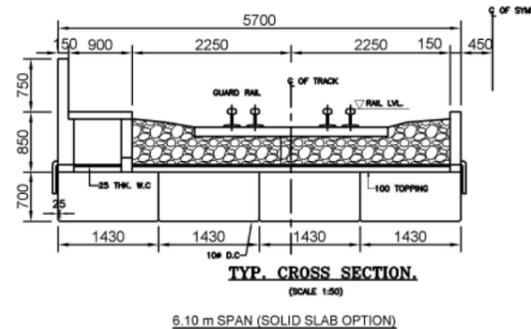
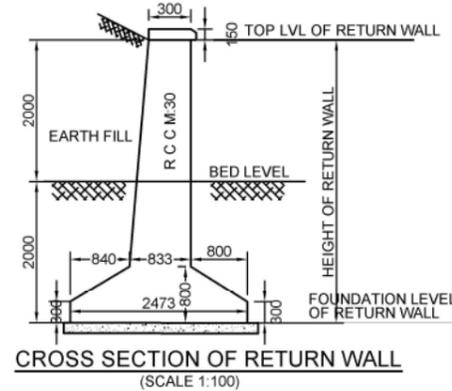
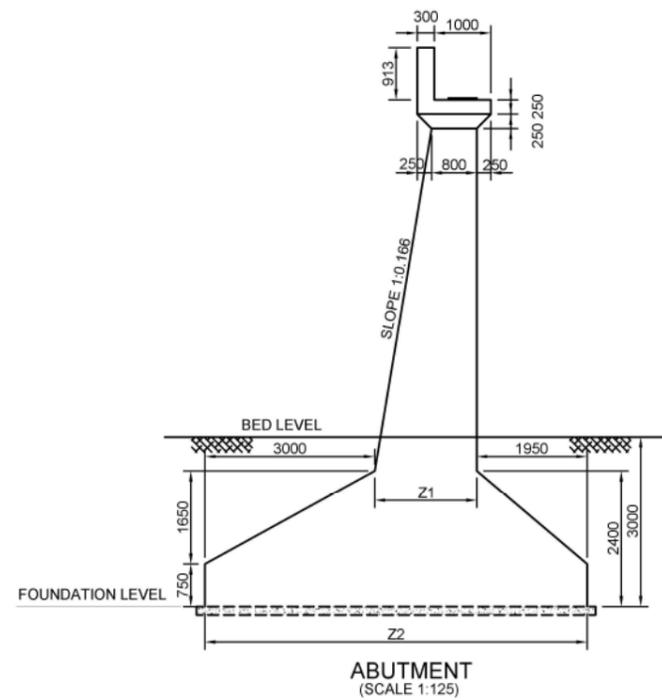
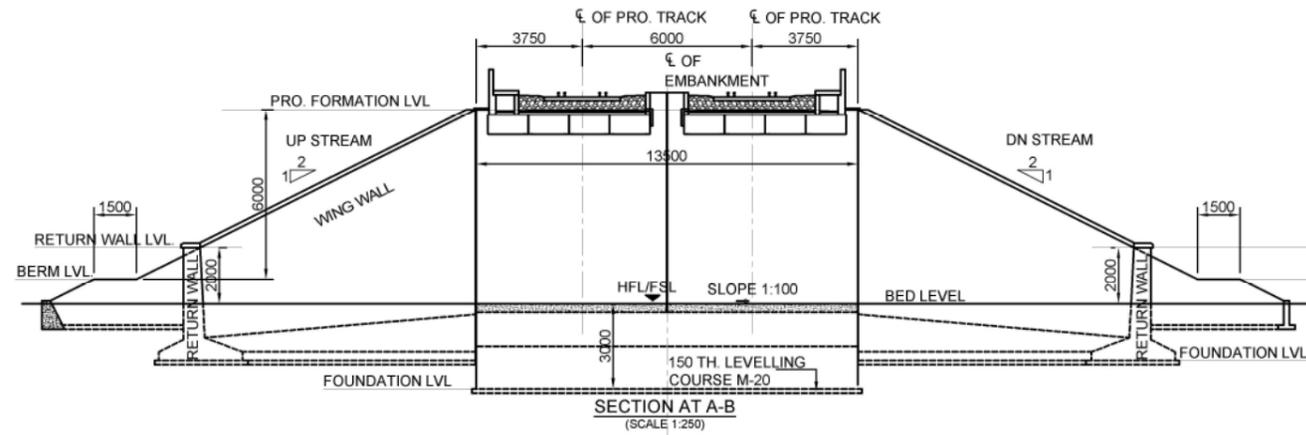
Reference :
GAD PREPARED BY CPM VADODARA

Drawn By : S. Salamuddin
Checked By : M. N. Ahmad
Approved By : H. Kawahara
Date : 30th, Sept, 2012
Date : 1st, Oct, 2012
Date : 3rd, Oct, 2012



NK Consortium

4th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA



Sec. No.	Structure Chainage	Proposed Bridge No.	Formation Level (m)	Ground Level (m)	HFL/FSL (m)	Proposed Span (m)	No. of tracks Proposed for DFCC	Skew Angle	Type of Structure	Structure configuration	Type of Crossing	Barrel Length	Return Wall			Wing Wall				Abutment				
													TOP LVL (m)	FDN LVL (m)	Height (m)	TOP LVL (m)	FDN LVL (m)	BERM LVL (m)	Height (m)	Length (m)	Z3(m)	Z4(m)	Z1(m)	Z2(m)
5	171,508.357	346	41.985	34.620	35.123	1 x 6.1m	2	30	Minor Bridge	PSC Solid Slab	Canal	15.59	36.620	32.620	4.000	41.985	32.620	35.985	9.365	15.627	1.636	6.436	1.892	6.842
5	174,535.569	359	41.684	35.260	35.928	1 x 6.1m	2	0	Minor Bridge	PSC Solid Slab	Canal	13.50	37.260	33.260	4.000	41.684	33.260	35.684	8.424	12.966	1.479	6.279	1.735	6.685
5	180,500.000	385	40.303	33.737	34.526	1 x 6.1m	2	0	Minor Bridge	PSC Solid Slab	Canal	13.50	35.737	31.737	4.000	40.303	31.737	34.303	8.566	13.367	1.503	6.303	1.759	6.709

- NOTE
- (i) F.L is based on the alignment drawing modified by NKC and should be reconfirmed in detailed design survey.
 - (ii) G.L is based on GAD prepared by CPM and should be reconfirmed in detailed design and survey.
 - (iii) Nos. of Track shall be confirmed from FLS & Station Yard Plan
 - (iv) Berm of 1.5 m width shall be provided on the slope of every 6 m height.
 - (v) Barrel Length may vary as per site condition.

Formation width of 13.5m to be read as 13.86m & respective dimensions are to be corrected according by the Bidder

Project Title :
Dedicated Freight Corridor Project
(Western Corridor Phase-1:
Rewari - Vadodara Section)

Client :
DFCC Dedicated Freight Corridor Corporation of India
(A GOVERNMENT OF INDIA UNDERTAKING)
5th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA

Drawing Title :
GENERAL ARRANGEMENT
DRAWING FOR 1X6.1m PSC SLAB
TYPE MINOR BRIDGE MAIN LINE 01

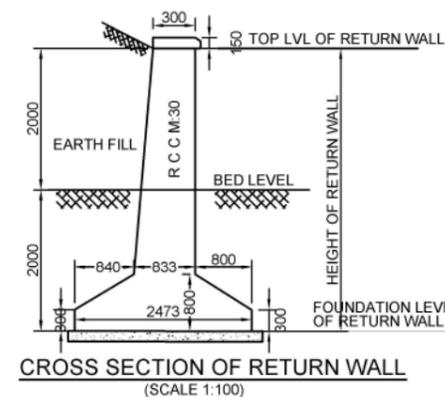
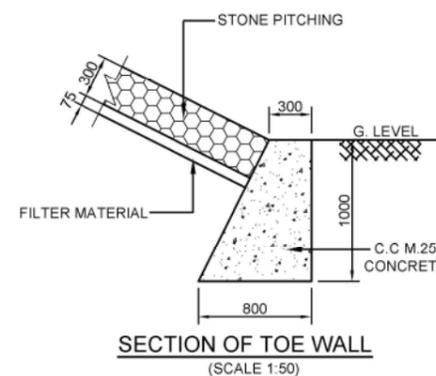
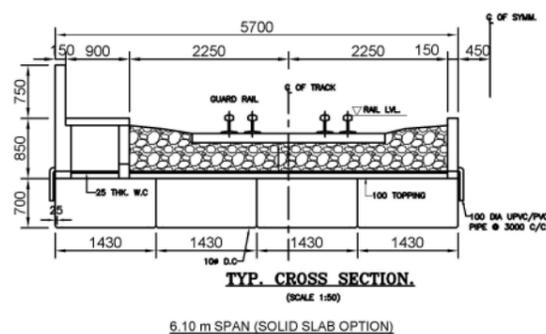
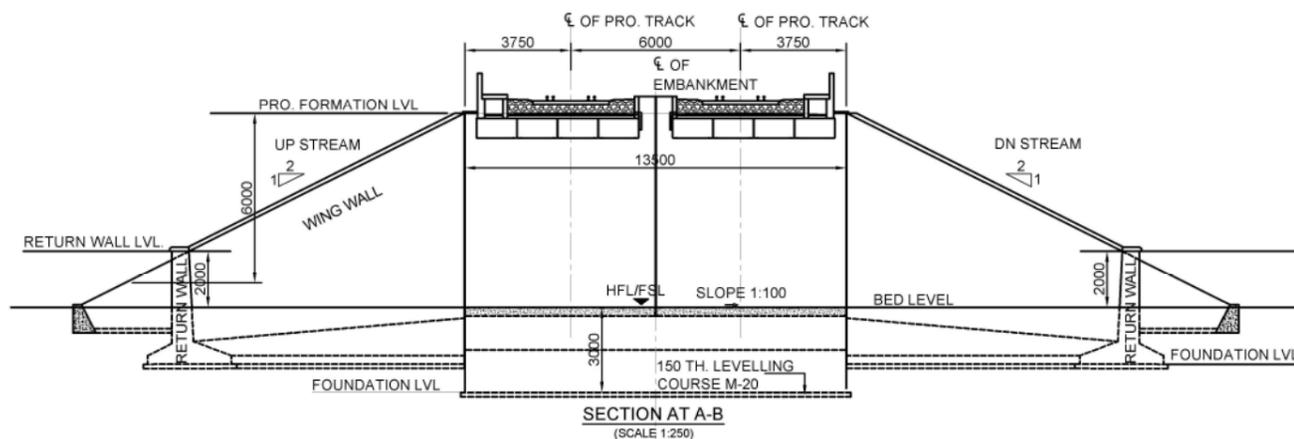
Drawing Number :
NKC-CTS-BRD-VD-00005 (SHEET 2 OF 2)

Scale :
AS SHOWN

Reference :
GAD PREPARED BY CPM VADODARA

Drawn By : S. Salamuddin | Checked By : M. N. Ahmad | Approved By : H. Kawahara
Date : 30th, Sept, 2012 | Date : 1st, Oct, 2012 | Date : 3rd, Oct, 2012

Consultant :
NK CONSORTIUM
NK Consortium
4th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA



Sec. No.	Structure Chainage	Proposed Bridge No.	Formation Level (m)	Ground Level (m)	HFL/FSL (m)	Proposed Span (m)	No. of tracks Proposed for DFCC	Skew Angle	Type of Structure	Structure configuration	Type of Crossing	Barrel Length	Return Wall			Wing Wall				Abutment				
													TOP LVL (m)	FDN LVL (m)	Height (m)	TOP LVL (m)	FDN LVL (m)	BERM LVL (m)	Height (m)	Length (m)	Z3(m)	Z4(m)	Z1(m)	Z2(m)
5	135,467.393	214	29.472	24.713	24.922	1 x 6.1m	4	0	Minor Bridge	PSC Solid Slab	Canal	25.50	26.713	22.713	4.000	29.472	22.713	-	6.759	8.256	1.202	6.002	1.458	6.408
5	139,385.592	225	29.452	25.075	25.382	1 x 6.1m	2	0	Minor Bridge	PSC Solid Slab	Canal	13.50	27.075	23.075	4.000	29.452	23.075	-	6.377	7.176	1.138	5.938	1.394	6.344
5	141,461.394	230	31.113	26.173	26.832	1 x 6.1m	2	0	Minor Bridge	PSC Solid Slab	Field Channel	13.50	28.173	24.173	4.000	31.113	24.173	-	6.940	8.768	1.232	6.032	1.488	6.438
5	142,321.848	234	31.991	26.533	27.019	1 x 6.1m	2	0	Minor Bridge	PSC Solid Slab	Canal	13.50	28.533	24.533	4.000	31.991	24.533	-	7.458	10.233	1.318	6.118	1.574	6.524
5	151,723.718	273	36.341	32.210	32.817	1 x 6.1m	2	0	Minor Bridge	PSC Solid Slab	Canal	13.50	34.210	30.210	4.000	36.341	30.210	-	6.131	6.480	1.097	5.897	1.353	6.303
5	152,800.394	277	37.314	32.620	33.135	1 x 6.1m	2	0	Minor Bridge	PSC Solid Slab	Canal	13.50	34.620	30.620	4.000	37.314	30.620	-	6.694	8.072	1.191	5.991	1.447	6.397
5	165,501.262	315	39.203	33.591	34.125	1 x 6.1m	2	30	Minor Bridge	PSC Solid Slab	Canal	15.59	35.591	31.591	4.000	39.203	31.591	-	7.612	10.669	1.344	6.144	1.600	6.550
5	174,780.059	360	41.446	35.693	36.131	1 x 6.1m	2	20	Minor Bridge	PSC Solid Slab	Canal	14.37	37.693	33.693	4.000	41.446	33.693	-	7.753	11.068	1.367	6.167	1.623	6.573
5	188,185.258	414	38.822	33.682	34.168	1 x 6.1m	2	0	Minor Bridge	PSC Solid Slab	Field Channel	13.50	35.682	31.682	4.000	38.822	31.682	-	7.140	9.334	1.265	6.065	1.521	6.471
5	192,557.549	433	39.866	34.778	35.298	1 x 6.1m	2	0	Minor Bridge	PSC Solid Slab	Canal	13.50	36.778	32.778	4.000	39.866	32.778	-	7.088	9.187	1.256	6.056	1.513	6.463

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Project Title :
Dedicated Freight Corridor Project
(Western Corridor Phase-1:
Rewari - Vadodara Section)

Client :
 **Dedicated Freight Corridor Corporation of India**
(A GOVERNMENT OF INDIA UNDERTAKING)
5th Floor, Pragati Maidan Metro Station Building,
New Delhi-110001, INDIA

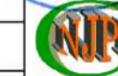
Drawing Title :
GENERAL ARRANGEMENT
DRAWING FOR 1X6.1m PSC SLAB
TYPE MINOR BRIDGE MAIN LINE 02

Drawing Number :
NKC-CTS-BRD-VD-00006 (SHEET 2 OF 3)

Scale :
AS SHOWN

Reference :
GAD PREPARED BY CPM VADODARA

Drawn By : S. Salamuddin | Checked By : M. N. Ahmad | Approved By : H. Kawahara
Date : 30th, Sept, 2012 | Date : 1st, Oct, 2012 | Date : 3rd, Oct, 2012



NK Consortium

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