PROJECT FEASIBILITY REPORT

Proposed Commercial Development

at

Plot E1, Block EP & GP, Sector V,
Salt Lake, Kolkata

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Chapter 1 Overview of Sector V, Salt Lake

1.1 Introduction

Kolkata, the Capital City of West Bengal is the second largest metropolitan city in the country. Kolkata city (KMC) the key economic hub of eastern India and is home to 4.48 million (Census 2011, provisional) urban population. Kolkata is a primate city with dependence of a huge hinterland. Also known as 'The City of Joy', the city has a long political and cultural history to boast.

Following are some of the salient features of the city:

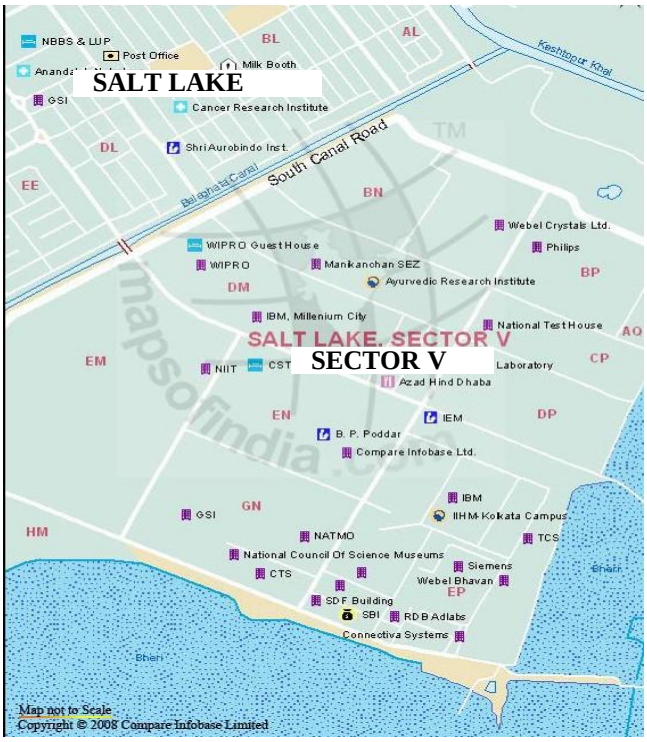
Table **1.1: Salient features of Kolkata city**

Particulars	Details
State	West Bengal
Area	Kolkata Municipal Corporation area – 185 sq. km Kolkata Metropolitan Area – 1,785 sq.km
Geographic Location	88º 30'E – Longitude and 22º 33' N – Latitude; Altitude: 6.4 m above the mean sea level
Connectivity	**Air:** International Airport providing flight services to all major cities within India and abroad. **Road:** Well connected to other states by a road network is major National Highways, leading to Delhi (NH-2), Jharkhand (NH-2, 34), Bihar (NH-2, 6), Orissa(NH-6, 60) and Assam (NH-31) and connected to different cities and towns within the State through State Highways. **Rail:** Well connected by rail network to all major citiesand towns in the country
Growth Potentials	✓ Location advantages – well connected by road, air, rail and water; ✓ The administrative status as the metropolitan city and the capital city of the State; ✓ Good potential for expanding its economic base as it is the major economic hub of eastern India. ✓ QKolkata and Haldia are also major ports supporting entire north-eastern and parts of eastern India ✓ Primate city with dependence of huge hinterland. The only other 1 million+ city in the entire eastern and north-eastern region is Patna. ✓ Quality higher education institutes
Satellite Townships	Salt Lake City and New Town Kolkata (Rajarhat)

Kolkata, being the commercial and financial centre of eastern India, enjoys primacy over all nearby cities. As a result, the city attracts huge number of migrants from cities in West Bengal and other states. The resultant population pressure has led to establishment of new urban centres like Salt Lake (1960's) and New Town Rajarhat (2000's).

1.2 Genesis of Sector V

Salt Lake is one of the first planned initiatives to decongest the city. It was developed as a satellite township at the north-eastern side of Kolkata city between 1958 and in 1962, at the initiative of Dr Bidhan Chandra Roy, the then Chief Minister of West Bengal. The Bidhannagar Municipality was established in 1995 administering 5 sectors of Salt Lake City, including sector V. Today the Salt Lake is a hub of major social and economic activities of the state.



The township houses a population of 2.16 lakhs as per Census 2011. Popularly known as Salt Lake, the township is also named Bidhan Nagar, after the then Chief Minister of West Bengal Dr. Bidhan Chandra Roy, who was instrumental in formulating the plan to build this satellite township. The township was built on a reclaimed salt-water lake.

With rapid growth of 430 acre-Sector V as a business hub of the city, it became an uphill task for the Bidhannagar Municipality to cope with the increasing demand for civic amenities. Thereafter Sector V was established as Nabadiganta Industrial Township under Section 385A of the West Bengal Municipal Act, 1993. Nabadiganta Industrial Township came into being from 2006.

1.3 Connectivity and linkages – Sector V

Sector V of Salt Lake is located towards the south east of Salt Lake. It is sandwiched between Sector II and III of Salt Lake on part of its north and west, New Town on its part of north and east

and wetland on its south. It has several entry points from other sectors of Salt Lake.

1.4 Economic activities

Kolkata, the capital of West Bengal is the economic hub of entire eastern region and north-eastern states of the country. Kolkata is home to the Calcutta Stock Exchange; it has major ports, an international airport and has many higher education institutes contributing to a highly skilled workforce for the local economy. Due to one of the highest literacy rates in the country, the city offers the corporate sector a large ready available pool of educated human resources. This, coupled with lower real estate and other operating costs, makes Kolkata a highly attractive location for companies.

Recent growth in economy of Kolkata is primarily led by the IT/ITES (Information Technology Enabled Services) sector, reflected by an increasing number of companies setting up operations in the city. The proposed undersea telecom cable landing station in West Bengal will further improve the prospects for IT operations, by enhancing the quality of the city's telecom connectivity and also reducing telecom costs. Few of the IT and ITeS giants to make a foray into the city are Tata Consultancy Services (TCS), Cognizant (CTS), IBM, Accenture, Wipro, Capgemini, Genpact, IBM, CA-TCG, Skytech solutions, Computech International Ltd., TCG, and Ontrack Systems etc. till date majority of these IT/ITeS companies are located in Sector V of Salt Lake.

1.5 Growth Catalysts of Sector V

With saturation of commercial spaces in the city CBD areas, the current growth of the city has been directed towards the east, comprising of Sector V and New Town. Sector V scores over the traditional business hub of the city in many aspects. This growth has been facilitated by the West Bengal Government's initiative and a very positive IT policy, houses majority of the IT/ITeS buildings in the city till date. Major players in this sub-market are Infinity and TCG. Major occupants are Capgemini, IBM, Wipro, E-Force, CTS, TCS, HCL, Lexmark, PwC, Deloitte etc.

Chapter 2 Site Overview

2.1 Location and connectivity

The subject site **at Plot E1 , Block EP & GP** is a 4 acres land parcel located approximately at a distance of 1.5 Km from the Nicco Park crossing. It is surrounded by commercial offices on one side and vast area of waterbody (wetlands) on the other sides.

Figure 2-1: Location of Site in the city

The site enjoys connectivity from three sides. The access road from Nicco Park crossing bifurcates into two routes at SDF crossing. One of the routes continues in the same direction towards the Wetlands and then turns North immediately after the subject plot and end near Tecnopolis Complex on New Town / Rajarhat Road. The other route takes a left turn from SDF, passes by Infinity Business Park and connects the site to its right hand site. The former route provides 150 m frontage to the site. The second route provides about 50 m frontage to the site. The following illustration shows the micro-level connectivity of the site.

Figure 2-2: Site connectivity
Distances of the site from relevant landmarks of the city are tabulated below:

Table 2-1 Distances from nodes relevant to the site

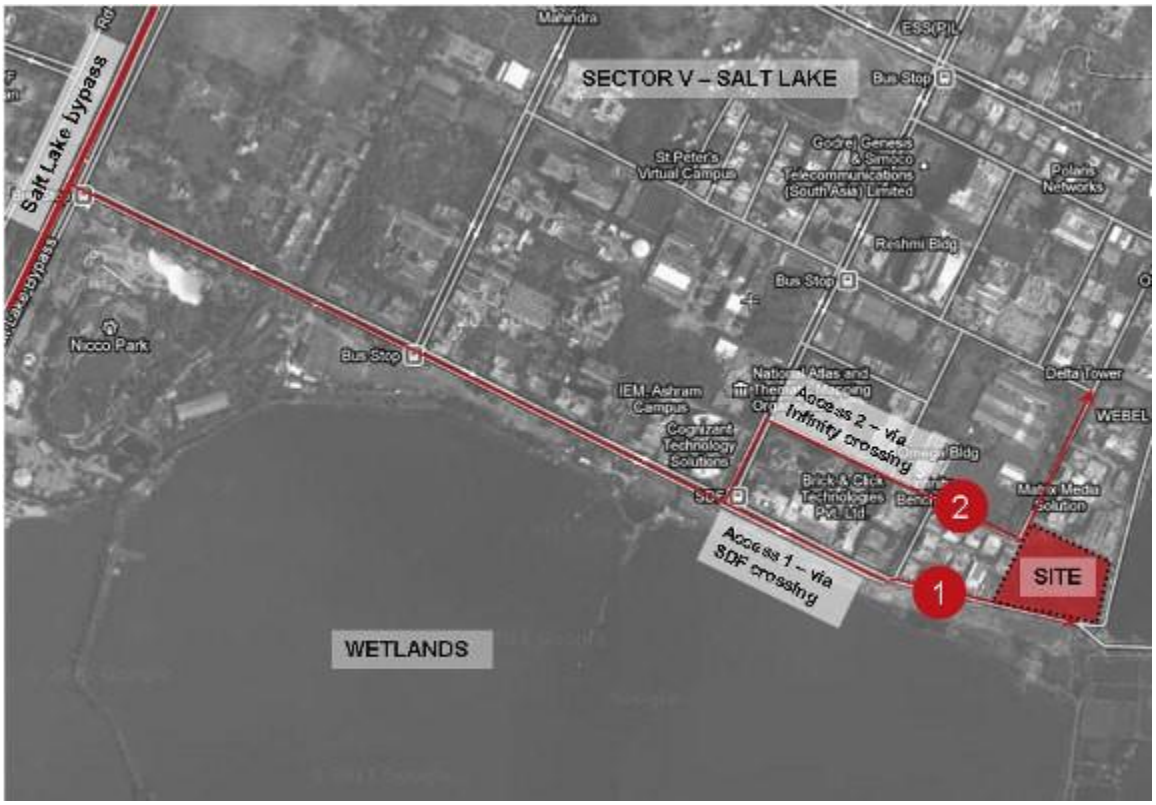
Node	Distance (Km)
Airport	10
Nearest Rly station (Bidhannagar)	8
CBD	14
Proposed Karunamoyee Metro Station	3.5

2.2 Site surroundings

The area of Sector V is the designated computer software, hardware, information technology and information technology enabled services hub of West Bengal. The area houses all the major brand names of IT and ITeS industry present in the state. Renowned developers specialized in IT commercial projects have developed and still developing real estate here. There are 2 Special Economic Zones in this sector, namely – Manikanchan SEZ, for gems and jewelry manufacturing and export and WIPRO SEZ for IT product development and export.

The immediate neighborhood of the site comprises of upcoming commercial and Govt. office buildings.

Figure 2-3: Site surroundings



The site and its immediate neighborhood are shown below in a few photographs.

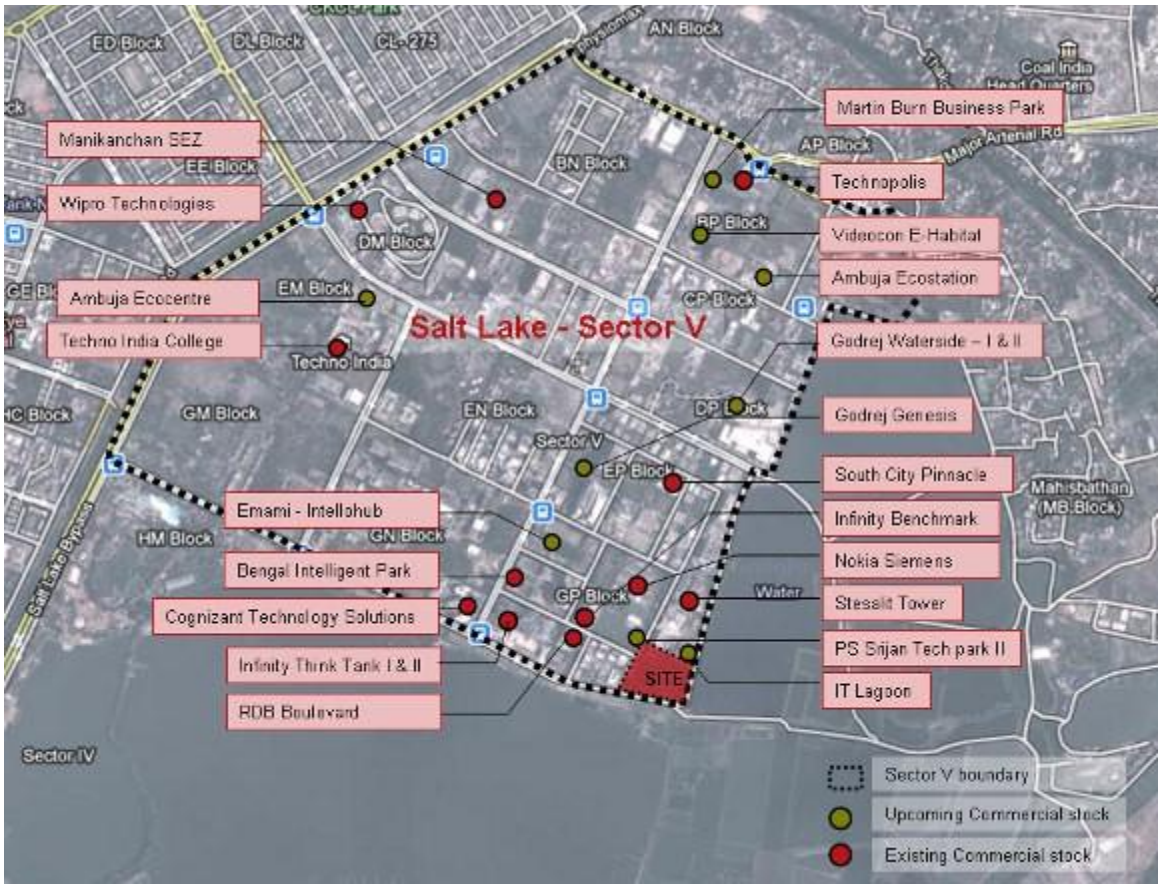
Road approaching site from SDF crossing	Road approaching site from Infinity crossing	Site boundary at the right (wetland side)	Wetland as seen from the site location
Site boundary (Infinity side)	Site boundary (Infinity side)	PS Srijan Tech Park II	IT Lagoon at immediate neighbourhood of the site
Stesalit Centre	Infinity Think Tank I & II	Infinity Benchmark	RDB Boulevard – RDB Cinemas

Chapter 3 Micro Market Real Estate Trends

3.1 Commercial real estate in Sector V - Salt Lake

Sector V as a sub-market houses majority of the IT offices in the city. Apart from IT offices Sector V is home for a number of non-IT offices as well. Major players in this sub-market are Infinity, TCG, Godrej Properties, Rungta Group, PS Srijan Group, South City Group. Major occupants in this submarket are Capgemini, IBM, Wipro, E-Force, CTS, TCS, HCL, Lexmark, PwC, Accenture, Deloitte, CES, Alstom, etc. Noted commercial projects in Sector V are shown below in a map:

Figure 3-1: Commercial Office Development in the Micro-market



3.1.1 Completed Buildings

Table 3-1 Some of the major Grade A completed buildings

Bengal Intelligence Park I
Millennium City I
Millennium City II
Technopolis
Infinity - Think Tank I & II
RDB Boulevard
Bengal Intelligence Park II
Globsyn Crystals I
PS Srijan Tech Park
Infinity Benchmark
South City Pinnacle
Godrej Waterside -Phase I
Convergent Centre
Mira Tower
Eternity
Kariwala Towers
Assyst Park
Reshmi Tower I
Advantage Tower
Techno India
Vision Comptech
Godrej Waterside
Martin Burn Business Park
IT Lagoon

3.1.2 *End users*

Presently more than 500 companies, including local and leading national and multi-national players, have their presence in Kolkata. There are also a number of non-IT companies like consultant firms, banks and other financial institutes, who require IT enabled buildings of Grade A quality. A small share of the built up areas is occupied by retail and food outlets. Further leniency is provided by a rather broad definition of ITeS by West Bengal IT Policy 2003 and ITeS Policy 2003. Such a broad definition of ITeS has enabled many non core-IT companies to find a place in business parks in Sector V.

Keeping in pace with the growing office population in the new commercial destination of Kolkata in Sector V, development of suitable retail / entertainment facilities as a package along with the commercial offering has also taken place. Occupiers in the retail spaces include restaurants, coffee shops, salon shop, office stationery shops, financial institutions etc.

3.2 Hospitality Segment in Sector V, Salt Lake

Sector V of Salt Lake, as a hub for commercial activities in the city, generates considerable demand for hospitality segment. The demand is both for short-term stay as well as medium-long term stay. A few formats of hospitality sector developments being :-

a. Stand alone hotel
b. Hotel as part of large scale commercial project
c. Serviced Apartments

3.2.1 *Stand alone hotel*

Till date, the only operational hotel in Sector V is the **Indismart Hotel**, a 77-room accommodation located in EP-block.

3.2.2 *Hotel or Serviced Apartments as part of large scale commercial project*

Some of the upcoming large scale commercial projects also have hotel and Serviced Apartments as one of the components. Few such examples are provided below:

Table 5-5 Upcoming hotels – as a part of commercial project

Name of project	Developer	Area (sq.ft.)	No. of rooms	Status
Videocon E- Habitat	Videocon	150,000	147	Under construction
Bengal Eco-Intelligent Park	TCG	55,000	56	Under construction

The photographs of real estate activities in the micro market are provided below:

Godrej Genesis	PS Srijan Tech Park I	Godrej Waterside	Videocon E-habitat
Retail outlets at RDB	Martin Burn Business Park	Emami Intellohub site	Food outlets at EP block
Retail outlets at RDB	Indismart Hotel Sector V	KFC at Globsyn Crystals	Food outlets at Globsyn Crystals

3.3 Business Centres

Business centres could be of two types:

3.3.1 **as a part of the 4/5 star hotels** – These are meant for offices, who would like to hire for very short term (few days or even few hours during the day) to complete certain operations such as meetings, conferences, interviews, etc.

3.3.2 **Stand-alone as a part of a commercial building** – These are meant for the offices, who would like to have a ready-made (furnishings and facilities) office to operate for medium term (few months). This business centre would act as an incubation centre to those offices.

Business centre as a part of the 4/5 star hotel

There is no 4/5 star hotel in Sector V, Salt Lake at present..

Stand-alone business centres as a part of a commercial building

Presently, such business centres are available in two locations in Sector V;

- Infinity Business Centre in Infinity Benchmark; and
- Mangalam Business Centre in South City Pinnacle.

The concept of Stand-Alone Business Centre (as a part of a commercial building) has becoming prevalent as it does not demand large capital expenditure to start new businesses. Moreover, it acts as an incubation centre for the 'test runs' of the new businesses. A 'business centre' can definitely be recommended.

Chapter 4 Project & Building Details

4.1 Building Configuration

The buildings comprise of three interconnected wings :-

a. Block 1 – Banquet Hal : G+1
b. Block 2 – Office : G +15
c. Block 3 - Service Apartment : G+17

The FAR to be consumed by the building is within 2.75 and the Ground Coverage around 30%.

4.2 Design issues

The urban form & design considerations are based on the global trend for modern office and commercial buildings and that has been the prevalent trend in the locality, i. e., Sector V

The facility envisages to use
low-flow fixtures and have waste-water recycling systems and rain-water harvesting, green buildings to reduce the load on both the municipal supplies as well as the sewerage system and to improve the groundwater level . Treated water shall meet disposal and/or reuse standards.

Generally standard building materials are used. However, for some of the components, low-energy building materials are planned to be used. The building layout (and consequently, the street layout) has been conceived in such a manner that they facilitate isolation of sun rays for maximum period of the day. A percentage of outdoor lighting, especially street lighting, is conceived to be solar powered. The Service Apartment will have solar water heater for use by the occupants

Around 20% of the total external illumination of the project will be done through non-conventional energy. For this solar photovoltaic panels will be used suitably.

Energy efficient HVAC equipment will be specified and used for all the Buildings, namely,Building-1 (G+1-Banquet), Building-2 (G+15- Offices) and Building-3 (G+17-Service Apartment). All Air Conditioned areas/rooms will be pressurized with the addition of fresh air and hence there will not be any infiltration of air to the AC areas, rather ex-filtration will occur.

AC load as has been assumed for the buildings are as follows:

- For Block -1 - 150TR (Approx.)
- For Block -2 & 3 - 2000TR(Approx.)

Approximate power demand for the project is envisaged as 3.5 MW. It is proposed to received power at 33KV from WBSEB. During normal power failure, Diesel Generator sets of adequate capacity will cater the proposed load. Electrical design calculation is done with an average 10.8 Watt/Sq.m, maintaining LPD (lighting power density watt/Sq. meter) area wise as per ECBC 2007 code on buildup area. To minimize energy consumption, energy efficient equipment and lighting fixtures like CFL/T5/LED is proposed with occupancy sensor lighting control system. Non-conventional Solar power will be adopted to minimize energy consumption.

Further detail of the building has been mentioned ion FORM 1 & FORM 1A

4.3 Area Statement & Use

Usages	Proposed Mix (sq.ft)
Address	Plot E1, Bloc EP & GP, Sctor V, Salt Lake
Land Area	4.03 acres / 16302.00 sqm
FAR Consumed	2.748 (44806.37 Sq M)
Ground Coverage Utilised	30.27% (4933.84 Sq M)
Built Up Area	
a) Commercial Wing (Block 2): G+15	**19441.92 Sq M**
• Office Space	
• Business Centre	
• Retail Outlets	
• Health Club / Spa / Gym	
• Banquet, seminar hall etc	
• Landscaped Terrace	
• Swimming Pool	
• Cafeteria	
• Parking	
b) Service Apartment Wing (Block 3): G+17	**28882.18 Sq M**
• Apartments (160 rooms)	
• Business Centre	
• Audio Visual Room / Library	
• Convenience Shop	
• Pharmacy	
• Travel assistance Desk	
• ATM	
• Restaurant	
• Salon & Spa	
• Gymnasium	
• Laundry	
• Swimming Pool	
• Parking	
c) Banquet Wing (Block 1): G+1	**1868.47 Sq M**
• Hall	
• Shops	
• Terrace garden	
• Parking	
Gate Kiosk (2 nos)	**14.12 Sq M**

Service and other Miscellaneous Areas including connecting corridors	**143.52 Sq M**
Grand Total Area	**50350.21** **SAY 50350 Sq M**
Total Number of Parking	**448** **Covered – 131** **Open to sky – 173** **Open to sky (2 level stack) - 144**

4.4 Cost Assumptions – Construction Related

Cost Heads	Proposed Mix	Unit
Land Development	300	**INR / sq.m of Land Area**
Warm-Shell Cost	17000	**INR / sq.m of BUA**
Extra Costs forServiced Apartments	5000	**INR / sq.m of Serviced Apartment Area**
Parking	**5000**	**INR / sq.m of Parking Area**

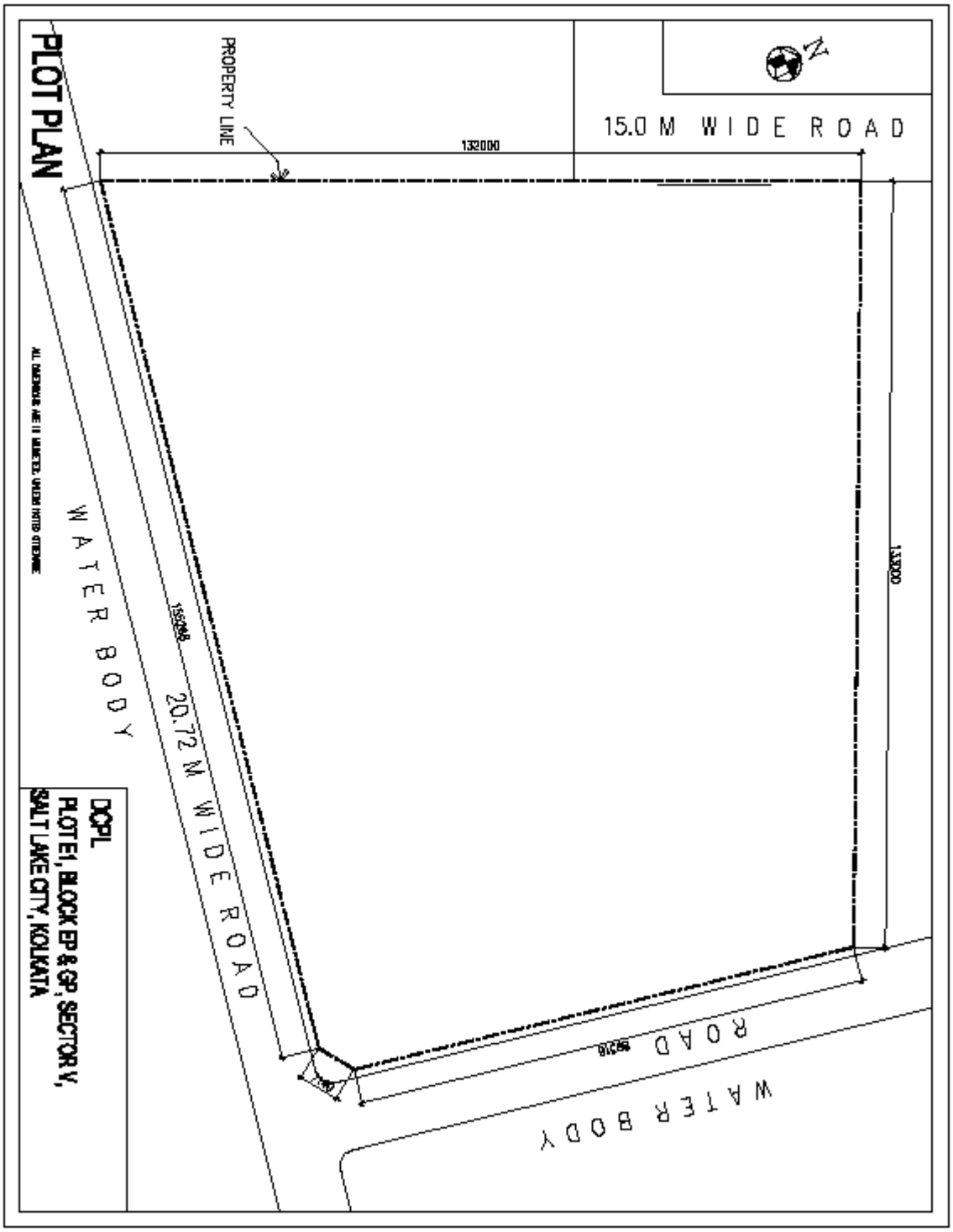
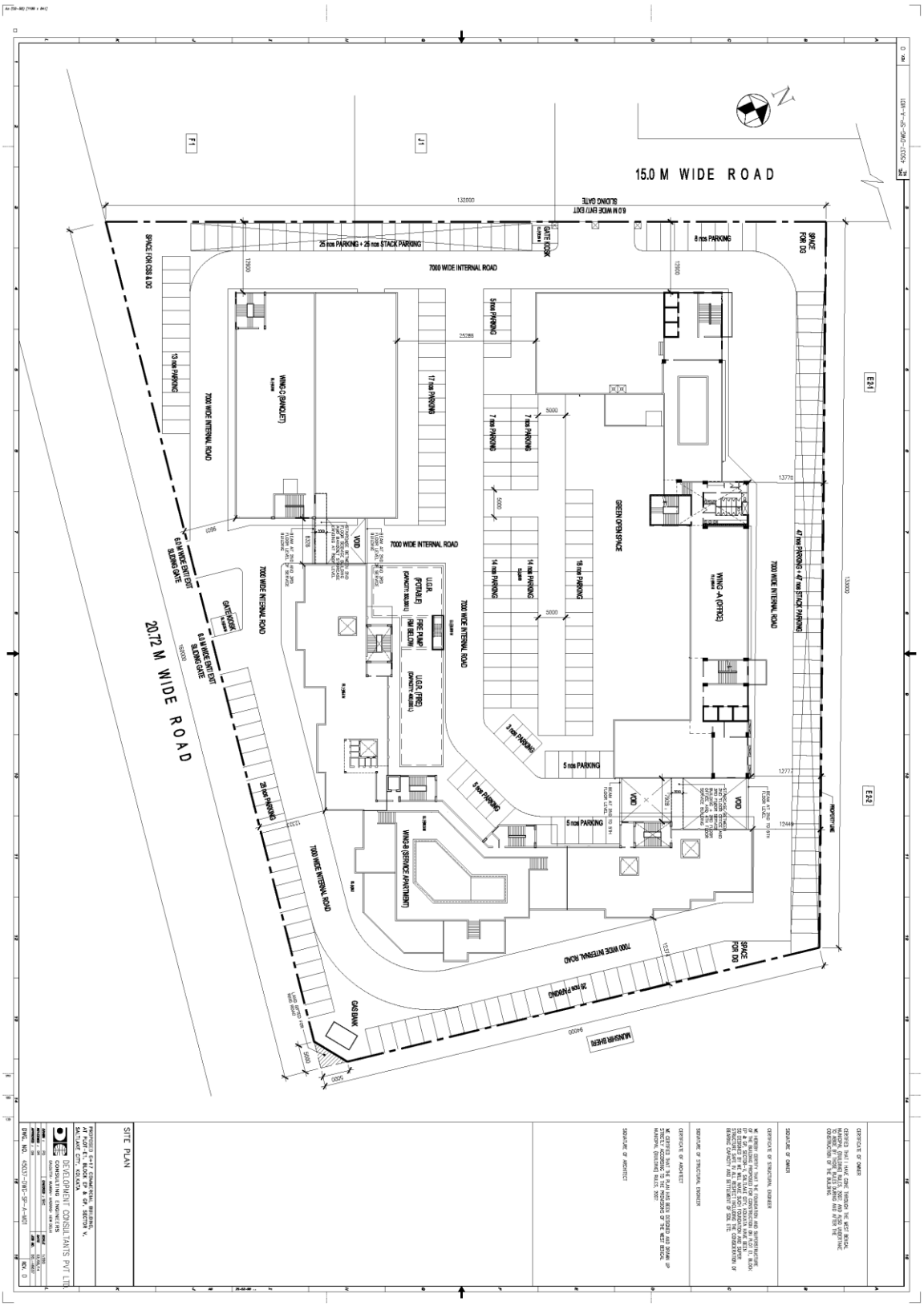
4.5 Construction Phasing

Phasing of Project Components	*Year 1*	*Year 2*	*Year 3*
Land Development	80%	20%	
Retail / Commercial - ConstructionCost	10%	50%	**40%**
Extra Costs for Serviced Apartments			**100%**
Parking	**80%**	**20%**	**0%**

4.6 Construction Cash Flow

Usage	Rate (Rs)	Area (SqM)	Year 1 (Rs)	Year 2 (Rs)	Year 3 (Rs)	Total (Rs in Lacs)
Land Development - RE Dev Area	300	16302	39,12,480	9,78,120	-	**48.91**
Retail / Commercial - ConstructionCost	17000	48700	8,27,90,0	41,39,50,00	33,11,60,000	**8279**
Extra Costs for Serviced Apartments	5000	26559	-	-	13,27,95,000	**1327.95**
Parking	5000	1638	65,52,000	16,38,000	-	**81.90**
Construction & Land Development Cost			**93254480**	**746088120**	**1210043120**	**9737.76**

4.7 Plot Plan


15.0 M WIDE ROAD
PROPERTY LINE
132000
133000
20.72 M WIDE ROAD
WATER BODY
WATER BODY
ROAD
PLOT PLAN
DCPL
PLOT E1, BLOCK EP & GP, SECTOR V,
SALT LAKE CITY, KOLKATA

4.8 Site / Ground floor Plan