

CHAPTER 4.0 CIVIL ENGINEERING

4.0 GEOMETRIC DESIGN NORMS

The design parameters related to the Metro system described herewith have been worked out based on a detailed evaluation, experience and internationally accepted practices. Various alternatives were considered for most of these parameters but the best-suited ones have been adopted for the system as a whole.

4.1 HORIZONTAL ALIGNMENT

4.1.1 Median Position

For the elevated stretches endeavour has been made to locate the centre of alignment on the median of the roads, as far as feasible. Deviations from this position have been made, where they are necessitated either by the road geometry or presence of road over bridges/flyovers or for leaving room for future flyovers on the route. The median location of alignment is of particular interest in case of elevated sections as acquisition of land is kept to absolute minimum.

4.1.2 Underground v/s Elevated Alignment

For Metro System the corridor is located on busy roads and underground alignment is preferable over the elevated alignment on numerous considerations. However, a single factor that tilts the balance in favour of the latter is its substantially lower construction cost, since a unit length of underground corridor, the cost involved is almost 3 times of that for an elevated alignment and on this consideration the consultants have decided that the length of the underground alignment may not be adopted.

4.1.3 Curves

On consideration of maximum allowable cant of 125 mm and cant deficiency of 100 mm on Metro tracks, the safe speed on curves of radii of 400 m or more is 80 km/h. On elevated section use of curves with minimum radius of 200 m, having speed potential of 55 km/h shall be adopted. There are, however, exceptional situations where due to site constraints; use of sharper curves is unavoidable. Under such situations on this project, curves of 120-m radius (safe speed of 40 km/h) can be adopted.

For maximum permissible speed on curve with various radii **Table 4.1** may be referred.

Horizontal curves

Curve radius in mid section:

Desirable	:	200 m
Absolute minimum	:	120 m
Minimum radius of curve at stations	:	1000 m
Maximum permissible cant (Ca)	:	125 mm
Maximum cant deficiency (Cd)	:	100 mm

Transition curves

The existing roads also have frequent curves. For the Metro alignment, which normally follows the median of the road, similar curves are introduced for the Metro alignment. However it is necessary to provide transition curves at both ends of the circular curves for comfort and safety of the passengers. Due to change in gradients at various locations in the corridor it is necessary to provide frequent vertical curves along the alignment. In case of ballastless track, to reduce the complexity in construction, it is desirable that the vertical curves and transition curves of horizontal curves do not overlap. These constraints may lead to reduce the lengths of transition curves. However for safety and comfort of passengers, the transition curves have to be designed with certain minimum parameters.

- Minimum length of Transitions of Horizontal curves (m) : 0.44 times actual cant or cant deficiency (in mm), which ever is higher.
- Desirable : 0.72 times actual cant or cant deficiency, (in mm) which ever is higher
- No overlap is allowed between transition curves and vertical curves.
- Minimum straight between two Transition curves: either **25 m or NIL**.
- Minimum curve length between two transition curves: either **25 m or NIL**

4.2 VERTICAL ALIGNMENT

4.2.1 Elevated Sections

The viaducts carrying the tracks will have a vertical clearance of minimum 5.5 m above road level. For meeting this requirement with the 'U' shaped pre-stressed concrete girders, the rail level will be about 8.5 m above the road level. However, at stations, which are located above central median, the rail level will be 10.5 m above the road level if no mezzanines are provided and the ticketing and other technical areas are located outside the right of way of the roads. If, however, concourses are provided below the station structures, then the rail level shall be 12 m above road level. These levels will, however, vary marginally depending upon where the stations are located.

4.2.2 Gradients

Normally the stations shall be on level stretch. In limiting cases station may be on a grade of 0.1 %. Between stations, generally the grades may not be steeper than 2.0 %. However, where existing road gradients are steeper than 2.0 %, gradients upto 4% (compensated) can be provided in short stretches on the main line.

-	Maximum gradient at stations	:	0.1 %
-	Desirable gradient at stations	:	Level
-	Maximum gradient in mid section:		
	Normal	:	2.0 %
	Exceptional	:	4.0 %

4.2.4 Vertical Curves

Vertical curves are to be provided when change in gradient exceeds 0.4%. However it is recommended to provide vertical curves at every change of gradient.

Radius of vertical curves:

•	On main line (desirable)	:	2500 m
	minimum	:	1500 m
•	Other Locations	:	1500 m
•	Minimum length of vertical curve	:	20 m

4.3 TRACKS

4.3.1 Track Structure

The Metro route consists of double tracks with 54-kg UIC rails – IRS T-12, constructed as ballastless track (BLT) for elevated sections. In at-grade stretch, the tracks are to be ballasted, with pre-stressed concrete sleepers laid at 600-mm centre to centre distance.

4.3.2 Track centre

The distance between track centres on the elevated section is 3.7m on straight stretches and increased on curves to a maximum of 4.0 m for curves with a radius of 200m. At locations where scissors crossovers are to be provided, minimum track centres are 4.5m.

4.3.3 Gauge

The tracks will be laid to Standard Gauge (1.435m). Gauge widening at curves will conform to the design norms of Standard Gauge.

4.4 DESIGN SPEED

The maximum sectional speed will be 80 km/h. However, the applied cant, and length of transition will be decided in relation to normal speeds at various locations, as determined by simulation studies of alignment, vertical profile and station locations. This is with the objective of keeping down the wear on rails on curves to the minimum.

Table 4.1
Cant, Permitted speed and Minimum Transition length for various Curves

Radius	Actual Cant	Cant Deficiency	Permitted Speed	Minimum Transition
(m)	(mm)	(mm)	(km/h)	(m)
3000	20	8.72	80	10
2000	30	13.09	80	15
1000	50	36.17	80	25
800	60	47.72	80	30
500	90	82.35	80	40
400	125	90.43	80	55
300	125	100	70	55
200	125	100	55	55
150	125	100	50	55
120	125	100	40	55
100	125	100	40	55

4.5 STATION LOCATIONS

Stations have been located so as to serve major passenger destinations and to enable convenient integration with other modes of transport. However effort has also been made to propose station locations, such that inter station distances are as uniform as possible. The average spacing of stations is kept close to one km.

4.6 ROUTE ALIGNMENT

The report of Stage –I of DPR which was submitted in Feb'2004 recommended the following corridors for the full system of Metro Rail and Regional Rail system for Ahmedabad and Gandhinagar:

1. Metro Rail System
 - Line –1 Changodar-APMC Vasna-Aayakar Bhawan-Sabarmati-Akshardham
 - Line –2 Kalupur-ITO-Thaltej
 - Line –3 APMC / Vasna -RTO via 132 Raod
 - Line –4 Sarkhej-Indroda Circle via NH-8C
2. Regional Rail System
 - Line –1 Barajedi-Kalupur-Kalol
 - Line –2 Kalupur-Naroda

Based on the traffic and transport demand the following corridors have been recommended in Phase – I of the Metro Rail System:

Line –1 APMC Vasna –Aayakar Bhawan-Sabarmati-Akshardham
(North-South corridor)

Line –2 Kalupur-Aayakar Bhawan -Thaltej (East-West corridor)

The Detailed Project Report for Regional Rail System will be submitted separately.

4.7 REFERENCE POINT

For planning convenience and also to enable flexibility in deciding end points in either direction, the centre line of APMC / Vasna station for North-South line and Ahmedabad station for East-West line is assumed as Reference Point **ZERO**. The chainage shall be increasing in North direction towards Gandhi Nagar for North-South line and for East-West line it's increasing in West direction towards Thaltej. The reference Co-ordinate has been assumed as N-50000, E-50000 near Ahmedabad Railway station for both the corridors. The GTS benchmark has been received from Survey of India.

4.8 PROJECT ROUTE: NORTH SOUTH CORRIDOR

4.8.1 General Description Of The Route

The corridor starts near the junction of Ashram road with NH 8A at APMC /Vasna. The Vishala is the West terminal station near to 132 road junction. The centre line of the station is taken as Zero chainage. The stabling facility beyond the station is provided in elevated position, which will also be used, for future extension of the alignment towards Sarkhej/Changodhar in the Southwest side. Stabling facility for six rakes have been proposed at this station so that rakes are stabled during the night and morning services can be started from this end on time.

The alignment moves on the median of the Ashram Road towards North covering Vasna, Paldi, V.S. Hospital, Townhall, Navarangpura and reaches ITO junction. At this location the North – South corridor crosses the East – West corridor in double elevated position. It further moves North via Usmanpura and Vadaj. From Vadaj the alignment takes a right turn towards Gandhi Ashram and crosses the Dandi nallah in down stream side for serving the Ashram. The alignment runs straight towards Subhash Circle for serving offices complex like Jilla Sadan, RTO etc. After crossing the Chimmanbhai bridge in double elevation the alignment takes right turn and crosses railway lines very close to Sabarmati Metre Gauge station and parallel to Chimmanbhai Bridge. No serious difficulty is envisaged at this location for structural arrangement. The passenger interchange facilities with Regional Rail System have been planned at this location. The alignment further moves on the median of the road near AEC plant circle and runs

toward Aicher on Mehsana State Highway. From Aicher the alignment takes right hand turn towards Motera and passes in front of Sardar Patel Gujarat Cricket Stadium. Further the alignment reaches on SH-43 near Radha Swamy Satsang Vyas and reaches Koba Circle. From Koba Circle, the alignment turns left and continues on the central median of SH 71 towards Gandhinagar. Before reaching Indroda Circle, a connection to the depot near Indroda circle is provided from Dhaula Kuan station, as connection to depot is feasible from this station. The alignment continues in Gandhinagar area on the central median and passes in front of the secretariat and moves forward and is terminated at CH-6 near Akshardham temple.

The total route length is 32.650 km and the whole alignment is elevated, mostly on the central median. The 26% length is in curves and sharpest radius of curve is 130 m radius. The maximum gradient is 2.00% at ITO junction where both the corridor are crossing each other. Total 31 stations are proposed on the corridor out of which 5 are for future. The list of station proposed on the route is given in **table 4.2**.

Table 4.2
List of station for North-South line

SNo.	Name of station	Chainage	Inter-station distance	Remarks
1.	APMC Vasna	0.00	-	
2.	Vasana	1015	1015	
3.	Narayan Nagar	2100	1095	
4	Paldi	3550	1450	
5	Madalpur	4350	800	
6	Nava Gandhigram	5175	825	
7	Navrangpura	6100	925	
8	AAayakar Bhavan	6750	650	
9	Ushamanpura	7900	1150	
10	Vadaj	8780	880	
11	Gandhi Ashram	9700	920	
12	Subhash Circle	10475	775	
13	Sabarmati	11300	825	
14	Shankarpura	12400	1100	
15	Acher	13250	850	
16	Motera Stadium	14200	950	
17	Motera	15400	1200	
18	Amiyapur	16850	1450	Future
19	Sughad	18200	1350	
20	Narmada Canal	19550	1350	Future
21	Koba Circle	20400	850	
22	Koba	21600	1200	
23	Por	22900	1300	Future
24	Kudasan	24200	1300	Future
25	Dhaulta Kuva	25350	1150	
26	Infocity	26300	950	Future
27	Indroda Circle	27250	950	

SNo.	Name of station	Chainage	Inter-station distance	Remarks
28	Sector - 7	28200	950	
29	S.T. Depot	29300	1100	
30	Sachivalaya	30600	1300	
31	Akshardham	31850	1250	

Total Route length (Dead end to dead end) = 32.650 Km
Centres of terminal stations = 31.850 Km

4.8.2 Terminal Stations

Southern Terminal:

APMC Vasna terminal station will be the Southern terminal station on North-South corridor having stabling facilities and provision for future extension towards Sarhkej/Changodhar. The location of this station has been chosen with following reasons:

- Further extension towards south side to link Sarhkej/Changodhar is possible.
- This station provides integration with 132' wide ring road junction as well as NH-8 (Towards Vadodra) on Ashram road and can be integrated with feeder bus services.
- There is a future proposal to have the Metro through the 132' wide required. The location of the station is ideal to provide the passenger interchange facilities for both the corridors.
- The Vacant land near APMC is available near this station for utilizing for location the station as well as traffic integration facilities.

Northern Terminal:

Akshardham station is the Northern terminal station on North-South corridor having stabling facilities and located near CH-6 in elevated position with following considerations:

- The station terminates near CH-6 circle for providing better traffic integration to Akshardham temple and Ghandinagar Power House.
- Road is quite wide with a strip of green belt, hence there will not be any problem for location the station.

4.9 EAST-WEST CORRIDOR

4.9.1 General Description Of The Route

The East – West corridor starts from Ahmedabad, near the existing Ahmedabad railway station. The terminal station Ahmedabad is opposite the Indian Railway Ahmedabad station with zero chainage at the centre of station. This station is off the road and in the circulation area of the railway station. The stabling facility beyond the station is provided on elevated section, which will also be used, for future extension of the alignment towards Geeta Mandir in the South side.

Stabling facility for six rakes have been proposed at this station so that rakes are stabled during the night and morning services can be started from this end on time.

Thereafter the alignment moves on the centre of the road towards Prem darwaja/Sarangpur with left-hand curve. The road from DRM office/AMTS control Room to Prem Darwaja is one way and having high intensity of traffic with a ROW of 19 to 21m. The road does not have a median at present. Further the alignment moves on to the central median and skirts around the walled city on the eastern and northern side. The alignment moves on/along the periphery road of walled city and Kasturba Gandhi road and passes close to Prem Darwaja, Delhi Darwaja and Shahpur Darwaja. Alignment is taken on 20 m south of Gandhi Bridge to cross Sabarmati river and again comes to the central median short of ITO (and North – South corridor). Few buildings are to be relocated on both approaches of the river and at ITO junction for alignment and integration of the two corridors. The alignment further moves towards west over the MG railway line, crosses SP five road crossing, Commerce six road crossing and moves straight on Manav Mandir Marg via Manav Mandir, 132' road crossing and Drive in road before reaching Thaltej on NH 8C. For the purpose of depot and stabling lines, the alignment crosses NH 8C and turns right to reach depot area adjacent to railway line. The corridor shall be provided with stabling facilities at Ahmedabad end only. This corridor also serves Gujarat University area as well as new development along NH 8 C. Integration with proposed corridor on NH 8C in phase 2 shall also be integrated.

The total route length is 10.90 km and the alignment is elevated throughout on the central median. A total of 11 stations are provided on the corridor. 53% of corridor is on curves with minimum radius being 130 m. The steepest gradient is 2.87 % while crossing the Sabarmati River. The list of stations proposed on the route is given in **table 4.3**

Table 4.3
List of station for East-West line

SNo.	Name of station	Chainage	Inter-station distance	Remarks
1.	Ahmedabad Metro	0.00	-	Elevated
2.	Prem Darwaja	865	865	-Do-
3.	Delhi Darwaja	2040	1175	-Do-
4	Shahpur Darwaja	3080	1040	-Do-
5	AAayakar Bhavan	4130	1050	-Do-
6	Sardar Patel Stadium	4800	670	-Do-
7	Commerce Circle	5750	950	-Do-
8	Gujarat University	6845	1095	-Do-
9	Gurukul	7748	903	-Do-
10	Doordarshan Kendra	8800	1052	-Do-
11	Theltej	9845	1045	-Do-

Total Route length (Dead end to dead end) = 10.900 Km
Centres of terminal stations = 9.845 Km

4.9.2 Terminal Stations:

East Terminal:

The Ahmedabad metro station is the East terminal station on this corridor having stabling facilities and provision for future extension towards Geeta Mandir. The location of this station has been chosen with following reasons:

- Station has been located just adjacent to the existing Ahmedabad Railway Station, which provides passenger integration for long distance passengers of Indian Railways as well as the commuters from proposed Regional Rail System for Ahmedabad.
- Future extension is possible to further South of the city.

West Terminal:

Thaltej station is the West terminal station on this corridor with following considerations.

- This alignment can be further extended to connect depot.
- The passenger interchange facilities can be planned in future with Phase –II corridor (Sarkhej/Changodhar – Indroda circle via NH-8C).
- Presently sufficient space is available along the service road for making the terminal station. Without affecting the properties.

4.10 MAINTENANCE FACILITIES FOR ROLLING STOCK

The East –West corridor and the North - South corridors are two operational corridors. Hence, it is envisaged that there would be interlinking between two corridors so that the rakes would be able to move from one corridor to another for major repair and overhauling (IOH and POH). This will facilitate having only one mother workshop for the two corridors at Indroda circle on North-South corridor and only an inspection shed with stabling facilities are required at Thaltej on the East-West corridor. Adequate facilities for the stabling would be provided at the terminal stations as well as at the depots. All the minor maintenance schedules would be independently taken over in each corridor thus saving the idle run of trains for the minor maintenance. For major repair, IOH and POH the rakes would be taken to the mother workshop through the rake transfer facility proposed at Aayakar Bhawan. This would require relocation of Prasar Bharti Building and part of custom house. The interchange facility is shown in Fig 4.1.

However, during presentation on 26.05.2005, it was suggested that DMRC should also study alternative arrangement in case acquisition of Prshar Bharti Building is not possible. In that case it will be necessary to have mother workshop in thaltej also.

Additional expenditure required for providing interchange facilities at Aayakar Bhawan :

Depot Locations:

A site suitable for mother workshop has been proposed near Indroda Circle on eastern side of the North-South corridor. Presently this land is vacant. As per draft development plan (proposed land use 2011 AD) of Gandhi Nagar Development Authority (GUDA), a strip of 275 m along the SH-71 has been proposed to develop as institutional use and beyond that the land will be developed as recreational use. GIDB have already been requested to freeze this land for depot purpose. Further, it is feasible to provide entry to depot from Ahmedabad side.

Another depot having similar facilities of mother workshop for East-West corridor has been proposed near NH-8C and Viramgam Railway line in the Town planning scheme – 38 (Theltej). Presently this land is partly vacant. About 7.0 ha. land was acquired earlier by Indian Railway for Container Depot which is shifted elsewhere. At some location the construction has been started by the builders/developers. GIDB have already been asked to freeze this land and to pursue with IR to transfer it to Ahmedabad Metro Rail Project.

4.11 TERRAIN

The terrain is generally plain throughout the corridor. However maximum grade has been proposed at banks of Sabarmati River while crossing the river to reduce the height of piers.

4.11.1 HERITAGE STRUCTURES

The city, known as Ashapalli or Ashaval in ancient times, was founded by King Karnadeva Vaghela as Karnavati in 11th Century as capital of his kingdom. Later on Sultan Ahmed Shah of Gujarat Sultanate shifted his capital from Patan to Karnavati and renamed it as Ahmedabad in 1411 AD. A number of monuments built during his era are spread over the old city area. The walled city was also built during this era and its 12 gates still exist though the city walls are now virtually not available.

The East-West Metro corridor is proposed out side the walled city on Eastern and Northern sides and passing 37m, 28m and 18m away from Prem Darwaja, Dariyapur Darwaja and Delhi Darwaja respectively. As per record these structures are ASI protected monuments. However, road traffic is passing through these gates. By planning a Metro System, the areas shall be decongested and number of vehicle passing through these gates will reduce. Thus the life of these structures can be increased.

Necessary protection of these gates can be ensured easily during construction due to advanced technologies. It is also observed in Delhi that both noise and vibration for elevated Metro System is much less than the noise and vibration produced by the vehicular traffic on the road.

A Metro System, being environmental friendly, will also help in reducing the pollution in the area. A formal N.O.C. will be required from A.S.I.

4.12 ROAD OVER BRIDGE AND FLYOVERS

Only one flyover namely Chimmanbhai Bridge has to be negotiated by the N-S Metro alignment at Km.10.730. The Metro alignment will cross this flyover in double elevation with a height of 17.25m from ground level and 9.0 m from bridge. At this location the alignment is on curve of radius 200m. A 60m single span is proposed while crossing the bridge.

4.13 AT-GRADE RAMP

As the alignment has been planned in elevated position. Hence, at Grade ramp have been proposed while providing entry to Indroda Circle depot as well as Thaltej depot.

4.14 CROSSOVERS

The crossovers have been provided at the following locations:

S. No.	Location	Position	Remarks
a) For North-South Corridor (Vishala to Gandhi Nagar)			
1	APMCVasna	For reversal back	Scissor crossing
2	Paldi	On North side of station	Emergency crossover
3	Aayakar Bhawan	On South side of station	Emergency crossover
4	Gandhi Ashram	On North side of station	Emergency crossover
5	Shankarpura	On South side of station	Emergency crossover
6	Motera Stadium	Both side of station	Emergency crossover
7	Koba	Both side of station	Emergency crossover
8	Dhaura Kuva	Depot entry on North side of station	Scissor crossing
9	Sector – 7	Both side of station	Emergency crossover
10	Akshardham	For reversed back	Scissor crossing
b) For East-West corridor (Ahmedabad to Thaltej)			
1	Ahmedabad	For reversed back	Scissor crossing
2	Delhi Darwaja	On West side of station	Emergency crossover
3	Commerce circle	On West side of station	Emergency crossover
4	Gurukul	On West side of station	Emergency crossover
5	Thaltej	After the station for depot entry	Scissor crossing

The Schematic plan showing the crossovers are shown in **Figure 4.2 A&B**.

4.15 MODIFICATION TO ROAD PROFILE

4.15.1 The entry to Indroda Circle depot for N-S corridor has been planned from Dhaura Kuan station towards Ahmedabad side. The road to Dhaura Kuan village does not have sufficient clearance below the soffit of the viaduct connection to depot for passing the vehicular traffic. Accordingly additional connecting road parallel to the metro alignment has been planned.

4.15.2 Further the entry to Thaltej depot for E-W corridor has also been planned from Thaltej station, the terminal station. After this station the alignment at Km 10.05 ramps down at surface at Km 10.525 before entry to depot. Hence TP road at Km 10.515 connecting to TP-38 (Scheme) is required to be closed and additional connecting road parallel to the alignment will be provided.

The major roads along and across the alignment are given in the **Table 4.4**.

TABLE 4.4
Major Roads Along/Across the Alignment

a) For North-South Corridor (Vishala to Gandhi Nagar)

Road along the alignment	Chainage	Name of the Road across the alignment	ROW in meter
ASHRAM ROAD			38
	-330	NH-8A	78
	114	132' Ring Road	43
	1156	To Vasna Barrage Road	23
	1300	(Vasna Crossing) Road to Jeevan Mehta Hospital	51
	1962	(Anjali Vasna Crossing) Road From Chandernagar To Nehru Nagar Crossing	51
	2630	Vijalpur Road	33
	3100	Museum to Vikasgruh Road	22
	3270	(Mahalaxmi Crossing) From Museum to Parimal Garden	30
	3665	Gita Mandir to Law Garden (Paldi Circle)	35
	4309	Kocharab Gam to Madalpur Gam	21
	4820	Ellisbridge Road to Gujarat College	38(R) & 20(L)
	4945	To Gujarat College Road	26
	5269	Nehru Bridge Road (Lal Darwaja to Gandhi Gram Railway Station)	45(R) & 27(L)
	5722	Mithakhali Six Road	24
	6215	Navrangpura Road	28
	6496	Tera Panth Road	19
	6823	(ITO Crossing) Kasturba Gandhi Marg	28
ASHRAM ROAD			39
	7052	Mahadev Nagar Chandrodaya Society	14

Road along the alignment	Chainage	Name of the Road across the alignment	ROW in meter
	7580	Usmanpura Road To SP Colony	28
	8195	Narain Pur Road to Narain Pur	18
	8419	Nava Vadaj Road	15
	8588	(Vadaj Crossing) Samshan Grah to New Vadaj	16
	8600	To Hanumanpura	15
	9510	To Society Road	16
	10325	Subhash Circle to 132' Ring Road	40
MAHESANA STATE HIGHWAY			35
	11605	(AEC Circle) Ram Nagar Chowk	27
	13400	(J-1 Motera Village) Kalol Road	35
MOTERA LINK ROAD			23
	14223	Sardar Patel Stadium Road	29
	14520	Sangath Road	17
	14900	To Asaram Ashram Road	35
	16350	To Sughad Road	15
	16674	State Highway –43	90
STATE HIGHWAY -43			90
	18265	Amiyapur Road	15
		S.P.Ring Road	90
	19713	Kabir Ashram Road	75
STATE HIGHWAY - 71			130
	25503	Dholeswar Mahadev Road	13
	25933	Shahpur Road	35
	27069	(Ch-0, Indroda Circle) NH-8C	50
CH ROAD			61
	27677	Gayatri Temple Road	48
	28082	Ch-2 Circle Road No-2	37
	29123	Ch-3 Circle Road No-3	61
	30440	Town Hall Road, Road No. 4	77
	30725	Road to Sector-19	100
	31271	Ch-5 Road No. 5	62
	31794	Panchdev Temple Road	77
	32315	Ch-6, Road No. 6	44

b) For East-West corridor (Ahmedabad to Thaltej)

Road along the alignment	Chainage	Name of the Road across the alignment	ROW in meter
DRM OFFICE TO PREM DARWAJA			22
	200	Relief Road	18
	580	Kalupur Road	25
	585	Road to Prem Darwaja	18
	600	Road to Naroda	20
	1070	Road to Prem Darwaja	19
WALL CITY ROAD			30
	1540	Idgah Road	25
	1600	Dariyapur Road	82
	2115	Crossing of Delhi Darwaja	25R, 35L
	2970	Shahpur – Chakla Road	16
	2995	Road to Dudeshwar	16
	3170	Shahpur Road	28
KASTOORBA GANDHI MARG			31
	3939	Usmanpura Village Road	22
	4055	Crossing of Income Tax Ashram Road	35
SP FIVE ROAD TO COMMERCE SIX ROAD CROSSING			25
	4625	S P Stadium five Road Crossing From Navrangpura to S P Stadium	26R, 18L
	4635	C G Road	31
	5550	Commerce Six Road Crossing Navrang Pura to Naranpura	36L, 24R
MANAV MANDIR MARG			29
	6210	Vijay Circle From L D Engg.College to Darpan Six Road	42L, 36R
	7000	132' Ring Road	43
DRIVE IN ROAD			30
	7220	Mem Nagar Road	16
	7900	Subhash Chowk Road	24
	9000	From Ramdev Nagar to Ghatlodiya Village	27R, 55L
NH 8C			76

4.16 VERTICAL PROFILE

The vertical profile for the proposed alignment is generally governed by the ground profile. The ground profile does not vary much along the route except at few locations like Sabarmati River, Drive-in-road near Sardar Patel Institute etc. Further, there are three bottlenecks namely crossing the Sabarmati River, junction arrangement E-W & N-W alignment at ITO and Chimmanbhai bridge. At these location the steep gradient (not more than 2.9%) has been provided. Further at grade ramps have been proposed near depot entry. Here also the gradients are steep to minimise the length of at grade ramps.

The vertical profile adopted along the alignment are shown in the **Table 4.5**.

TABLE 4.5
VERTICAL PROFILE

a) North-South corridor (Vishala to Gandhinagar)

FROM CHAINAGE	TO CHAINAGE	GRADE	RISE/FALL
-400	-100	0.2	RISE
-100	120	0	LEVEL
120	500	-0.99	FALL
500	700	0.5	RISE
700	875	1.5	RISE
875	1050	0	LEVEL
1050	1300	-1.0	FALL
1300	2000	1.06	RISE
2000	2225	0	LEVEL
2225	2550	-1.06	FALL
2550	3375	0.373	RISE
3375	3675	0	LEVEL
3675	3900	-1.6	FALL
3900	4225	1.23	RISE
4225	4450	0	LEVEL
4450	4725	-0.59	FALL
4725	5075	1.0	RISE
5075	5300	0	LEVEL
5300	5685	-1.27	FALL
5685	6000	1.80	RISE
6000	6275	0	LEVEL
6275	6650	2.0	RISE
6650	6900	0	LEVEL
6900	7375	-2.0	FALL
7375	7810	0.80	RISE
7810	8000	0	LEVEL
8000	8275	-1.39	FALL

FROM CHAINAGE	TO CHAINAGE	GRADE	RISE/FALL
8275	8600	0.79	RISE
8600	8925	0	LEVEL
8925	9125	-0.85	FALL
9125	9545	0.61	RISE
9545	9800	0	LEVEL
9800	9975	-2.0	FALL
9975	10325	1.0	RISE
10325	10515	0	LEVEL
10515	10735	1.75	RISE
10735	10830	0	LEVEL
10830	11150	-1.0	FALL
11150	11400	0	LEVEL
11400	11580	-0.83	FALL
11580	12225	0.63	RISE
12225	12630	0	LEVEL
12630	13150	0.5	RISE
13150	13425	0	LEVEL
13425	13700	-1.15	FALL
13700	14100	0.91	RISE
14100	14300	0	LEVEL
14300	14500	-1.68	FALL
14500	15300	0.54	RISE
15300	15525	0	LEVEL
15525	15825	-1.0	FALL
15825	16750	0.52	RISE
16750	16950	0	LEVEL
16950	17275	-1.03	FALL
17275	18100	0.57	RISE
18100	18300	0	LEVEL
18300	18675	-1.08	FALL
18675	19100	0.68	RISE
19100	19450	0.53	RISE
19450	19650	0	LEVEL
19650	19950	-1.08	FALL
19950	20300	1.08	RISE
20300	20525	0	LEVEL
20525	20825	-1.18	FALL
20825	21475	0.58	RISE
21475	21700	0	LEVEL
21700	22000	-0.9	FALL
22000	22775	0.74	RISE
22775	23025	0	LEVEL
23025	23325	-1.23	FALL
23325	24075	0.667	RISE
24075	24325	0	LEVEL
24325	24625	-0.93	FALL
24625	25225	0.79	RISE

FROM CHAINAGE	TO CHAINAGE	GRADE	RISE/FALL
25225	25450	0	LEVEL
25450	25750	-1.31	FALL
25750	26200	1.23	RISE
26200	26400	0	LEVEL
26400	26675	-1.22	FALL
26675	27125	1.0	RISE
27125	27425	0	LEVEL
27425	27650	-1.46	FALL
27650	28100	1.02	RISE
28100	28325	0	LEVEL
28325	28600	-1.07	FALL
28600	29150	0.8	RISE
29150	29425	0	LEVEL
29425	29750	-0.86	FALL
29750	30500	0.53	RISE
30500	30700	0	LEVEL
30700	31075	-0.83	FALL
31075	31750	0.73	RISE
31750	31950	0	LEVEL
31950	32250	0.18	FALL

b) East-West Corridor (Ahmedabad to Thaltej)

FROM CHAINAGE	TO CHAINAGE	GRADE	RISE/FALL
-400	-80	0.09	RISE
-80	175	0	LEVEL
175	450	-1.00	FALL
450	715	0.4	RISE
715	1000	0	LEVEL
1000	1375	-1.0	FALL
1375	1750	0.3	RISE
1750	1975	1	RISE
1975	2175	0	LEVEL
2175	2450	-1.25	FALL
2450	2950	0.87	RISE
2950	3290	0	LEVEL
3290	3510	-2.73	FALL
3510	3750	0	LEVEL
3750	3985	2.87	RISE
3985	4300	0	LEVEL
4300	4525	-1.0	FALL
4525	4700	0.4	RISE
4700	4900	0	LEVEL
4900	5175	-1.0	FALL
5175	5675	0.57	RISE
5675	5850	0	LEVEL
5850	6225	-0.99	FALL

FROM CHAINAGE	TO CHAINAGE	GRADE	RISE/FALL
6225	6400	0.50	RISE
6400	6732	0.98	RISE
6732	6990	0	LEVEL
6990	7200	-1.79	FALL
7200	7425	0.50	RISE
7425	7700	1.0	RISE
7700	7900	0	LEVEL
7900	8300	-0.5	FALL
8300	8675	1.39	RISE
8675	8975	0	LEVEL
8975	9400	1.73	RISE
9400	9760	-1.53	FALL
9760	10050	0	LEVEL
10050	10525	-3.0	FALL
10525	11247	0	LEVEL

4.17 CURVATURE

The elevated alignment is designed along the median of the major roads to minimise the land requirement. This necessitates provision of curves for metro alignment. The radius of curves is kept as low as 130 m to reduce the property acquisition. For North-South corridor, the 26% length of the alignment is on curves whereas for East-West corridor it is 53%. The details of curves are given Table 4.6.

**TABLE 4.6
DETAILS of CURVES**

a) North-South corridor (APMC VASNA to Gandhinagar)

Curve No.	Direction of Curve	Radius (m)	Deflection			Transition Length		Chainage				Circular curve length	Total Curve length	Straight between curves
			Deg	Min	Sec	L1	L2	TS	SC	CS	ST			
														40.917
1	Right	2000	1	30	12	15	15	-359.083	-344.083	-291.602	-276.602	52.481	82.481	350.960
2	Left	1500	1	30	37	20	20	74.358	94.358	133.900	153.900	39.542	79.542	45.289
3	Left	600	2	56	44	40	40	199.189	239.189	270.035	310.035	30.846	110.846	60.160
4	Left	2000	1	45	57	15	15	370.195	385.195	446.832	461.832	61.637	91.637	283.147
5	Left	1500	9	32	21	20	20	744.979	764.979	1014.713	1034.713	249.734	289.734	26.880
6	Left	166.25	9	30	59	55	55	1061.593	1116.593	1144.206	1199.206	27.613	137.613	0.013
7	Right	160	36	0	13	55	55	1199.219	1254.219	1354.760	1409.760	100.541	210.541	0.013
8	Left	1140	3	7	20	25	25	1409.773	1434.773	1496.897	1521.897	62.124	112.124	31.066
9	Left	221.25	22	24	55	55	55	1552.963	1607.963	1694.521	1749.521	86.558	196.558	0.043
10	Right	950	23	45	27	25	25	1749.564	1774.564	2168.481	2193.481	393.917	443.917	80.881
11	Left	250	10	34	40	55	55	2274.362	2329.362	2375.516	2430.516	46.154	156.154	30.291
12	Right	300	18	18	56	55	55	2460.807	2515.807	2611.706	2666.706	95.899	205.899	44.820

Curve No.	Direction of Curve	Radius (m)	Deflection			Transition Length		Chainage				Circular curve length	Total Curve length	Straight between curves
			Deg	Min	Sec	L1	L2	TS	SC	CS	ST			
13	Left	400	5	30	41	55	55	2711.526	2766.526	2805.002	2860.002	38.476	148.476	113.159
14	Left	135	11	6	38	55	55	2973.161	3028.161	3054.339	3109.339	26.178	136.178	204.944
15	Right	750	6	45	43	30	30	3314.283	3344.283	3432.797	3462.797	88.514	148.514	172.236
16	Right	1000	2	29	32	25	25	3635.033	3660.033	3703.529	3728.529	43.496	93.496	512.794
17	Right	2000	1	4	48	15	15	4241.323	4256.323	4294.026	4309.026	37.703	67.703	45.664
18	Left	1155.5	5	12	49	25	25	4354.690	4379.690	4484.833	4509.833	105.143	155.143	0.002
19	Right	187.5	0	0	27	55	55	4509.835	4564.835	4564.860	4619.860	0.025	110.025	0.002
20	Left	153.15	31	8	34	55	55	4619.862	4674.862	4758.106	4813.106	83.244	193.244	436.623
21	Left	800	12	37	15	30	30	5249.729	5279.729	5455.948	5485.948	176.219	236.219	35.866
22	Right	200	8	5	7	55	55	5521.814	5576.814	5605.036	5660.036	28.222	138.222	54.007
23	Left	200	12	33	56	55	55	5714.043	5769.043	5812.905	5867.905	43.862	153.862	317.289
24	Right	400	19	53	48	55	55	6185.194	6240.194	6379.098	6434.098	138.904	248.904	512.575
25	Right	1100	1	31	26	25	25	6946.673	6971.673	7000.933	7025.933	29.260	79.260	429.945
26	Right	300	9	25	38	55	55	7455.878	7510.878	7560.239	7615.239	49.361	159.361	0.022
27	Left	302.25	14	22	31	55	55	7615.261	7670.261	7746.094	7801.094	75.833	185.833	638.337
28	Right	130	55	8	24	55	55	8439.431	8494.431	8619.540	8674.540	125.109	235.109	176.897
29	Left	300	24	4	38	55	55	8851.437	8906.437	9032.505	9087.505	126.068	236.068	80.835
30	Left	500	5	6	28	40	40	9168.340	9208.340	9252.915	9292.915	44.575	124.575	0.003
31	Right	500	4	4	7	40	40	9292.918	9332.918	9368.422	9408.422	35.504	115.504	55.836
32	Left	200	11	38	17	55	55	9464.258	9519.258	9559.882	9614.882	40.624	150.624	432.701
33	Right	500	6	51	54	40	40	10047.583	10087.583	10147.491	10187.491	59.908	139.908	394.343
34	Right	200	35	27	39	55	55	10581.834	10636.834	10760.615	10815.615	123.781	233.781	118.063
35	Left	300	35	25	19	55	55	10933.678	10988.678	11174.147	11229.147	185.469	295.469	186.643
36	Right	400	4	45	42	55	55	11415.790	11470.790	11504.033	11559.033	33.243	143.243	36.357
37	Left	400	5	0	3	55	55	11595.390	11650.390	11685.303	11740.303	34.913	144.913	326.953
38	Left	150	46	15	36	55	55	12067.256	12122.256	12243.364	12298.364	121.108	231.108	168.596
39	Right	400	5	50	5	55	55	12466.960	12521.960	12562.695	12617.695	40.735	150.735	563.420
40	Right	2000	0	52	56	15	15	13181.115	13196.115	13226.915	13241.915	30.800	60.800	84.359
41	Right	200	30	48	23	55	55	13326.274	13381.274	13488.809	13543.809	107.535	217.535	990.496
42	Right	400	5	18	45	55	55	14534.305	14589.305	14626.393	14681.393	37.088	147.088	463.213
43	Left	225	6	34	26	55	55	15144.606	15199.606	15225.421	15280.421	25.815	135.815	1046.808
44	Right	1000	2	12	8	25	25	16327.229	16352.229	16390.663	16415.663	38.434	88.434	144.318
45	Right	300	11	17	29	55	55	16559.981	16614.981	16674.102	16729.102	59.121	169.121	2029.477
46	Right	500	5	8	55	40	40	18758.579	18798.579	18843.510	18883.510	44.931	124.931	41.673
47	Left	500	5	25	22	40	40	18925.183	18965.183	19012.506	19052.506	47.323	127.323	946.992
48	Left	250	30	47	48	55	55	19999.498	20054.498	20188.874	20243.874	134.376	244.376	3153.916
49	Right	10000	0	12	56	10	10	23397.790	23407.790	23445.437	23455.437	37.647	57.647	3701.938
50	Right	1200	8	56	7	25	25	27157.375	27182.375	27369.515	27394.515	187.140	237.140	153.728
51	Right	1000	12	39	1	25	25	27548.243	27573.243	27794.034	27819.034	220.791	270.791	4431.071

b) East-West Corridor (Ahmedabad to Thaltej)

Curve No.	Direction of Curve	Radius (m)	Deflection			Transition Length		Chainage				Circular curve length	Total Curve length	Straight between curves
			Deg	Min	Sec	L1	L2	TS	SC	CS	ST			
														107.573
1	Right	150	16	50	17	0	0	-292.427	-292.427	-248.346	-248.346	44.082	44.082	29.745
2	Right	150	46	48	29	0	0	-218.601	-218.601	-96.058	-96.058	122.543	122.543	183.746
3	Left	225	11	40	49	55	55	87.688	142.688	188.556	243.556	45.868	155.868	396.449
4	Right	450	4	32	37	55	55	640.005	695.005	730.691	785.691	35.686	145.686	147.602
5	Left	220	11	39	46	55	55	933.293	988.293	1033.074	1088.074	44.781	154.781	84.087
6	Left	425	23	28	0	50	50	1172.161	1222.161	1396.230	1446.230	174.069	274.069	0.046
7	Left	433.5	17	38	8	50	50	1446.276	1496.276	1629.707	1679.707	133.431	233.431	141.602
8	Right	360	4	23	10	55	55	1821.309	1876.309	1903.867	1958.867	27.558	137.558	74.648
9	Right	1500	3	10	7	20	20	2033.515	2053.515	2136.471	2156.471	82.957	122.956	354.147
10	Left	1200	2	51	58	25	25	2510.618	2535.618	2595.648	2620.648	60.030	110.030	36.610
11	Left	900	2	46	2	30	30	2657.258	2687.258	2730.728	2760.728	43.469	103.470	113.172
12	Right	900	4	39	10	30	30	2873.900	2903.900	2976.988	3006.988	73.088	133.088	25.373
13	Left	1100	1	29	42	25	25	3032.361	3057.361	3086.064	3111.064	28.703	78.703	86.102
14	Left	503	9	9	8	40	40	3197.166	3237.166	3317.513	3357.513	80.347	160.347	0.018
15	Right	502.5	4	54	57	40	40	3357.531	3397.531	3440.645	3480.645	43.114	123.114	307.757
16	Right	540	2	40	34	40	40	3788.402	3828.402	3853.625	3893.625	25.223	105.223	25.438
17	Left	600	9	26	10	40	40	3919.063	3959.063	4057.880	4097.880	98.816	178.817	0.011
18	Left	2000	5	49	60	15	15	4097.891	4112.891	4316.509	4331.509	203.618	233.618	62.504
19	Left	600	3	51	15	40	40	4394.013	4434.013	4474.373	4514.373	40.360	120.360	35.272
20	Right	170	8	29	24	55	55	4549.645	4604.645	4629.835	4684.835	25.190	135.190	28.526
21	Left	1000	6	12	36	25	25	4713.361	4738.361	4846.744	4871.744	108.383	158.383	68.807
22	Left	3000	0	35	50	10	10	4940.551	4950.551	4981.828	4991.828	31.277	51.277	234.859
23	Left	700	3	16	19	35	35	5226.687	5261.687	5301.661	5336.661	39.974	109.974	59.923
24	Left	1000	2	11	18	25	25	5396.584	5421.584	5459.778	5484.778	38.194	88.194	30.389
25	Right	130	16	7	44	55	55	5515.167	5570.167	5606.763	5661.763	36.596	146.596	113.032
26	Left	1000	4	49	57	25	25	5774.795	5799.795	5884.136	5909.136	84.341	134.341	182.726
27	Right	1100	6	48	17	25	25	6091.862	6116.862	6247.506	6272.506	130.644	180.644	178.299
28	Left	332	20	27	50	55	55	6450.805	6505.805	6624.382	6679.382	118.577	228.577	0.036
29	Right	533	3	1	8	40	40	6679.418	6719.418	6747.501	6787.501	28.083	108.083	138.914
30	Right	500	8	45	46	40	40	6926.415	6966.415	7042.885	7082.885	76.470	156.470	0.001
31	Left	311.8	15	12	45	55	55	7082.886	7137.886	7220.672	7275.672	82.786	192.786	206.786
32	Right	800	1	53	38	30	30	7482.458	7512.458	7538.900	7568.900	26.442	86.442	0.007
33	Left	610	2	27	50	40	40	7568.907	7608.907	7635.138	7675.138	26.231	106.231	177.041
34	Right	1000	5	46	40	25	25	7852.179	7877.179	7978.020	8003.020	100.841	150.841	182.410
35	Right	400	20	22	45	55	55	8185.430	8240.430	8382.705	8437.705	142.275	252.275	34.529
36	Left	590	19	2	24	40	40	8472.234	8512.234	8708.297	8748.297	196.063	276.063	169.289
37	Right	1000	8	14	53	25	25	8917.586	8942.586	9086.540	9111.540	143.954	193.954	355.449
38	Right	150	63	31	29	55	55	9466.989	9521.989	9688.297	9743.297	166.308	276.308	1520.330

4.18 STATION PLANNING

4.18.1 Stations on the Line

The proposed East-West Ahmedabad - Thaltej MRTS corridor runs westwards from Ahmedabad to Thaltej via Prem Darwaja, Delhi Darwaja, Shahpur Darwaja, Aayakar Bhawan, Sardar Patel Stadium, Commerce Circle, Gujarat University, Gurukul and Doordarshan Kendra covering a distance of approximately 10-kms from centre of Ahmedabad station to Thaltej station. A total of 11 stations have been planned along the proposed Corridor.

The North-South APMC Vasna - Akshardham MRTS corridor runs northwards from APMC to Akshardham via Vasna, Narayan Nagar, Paldi, Madalpur, Nava Gandhigram, Navrangpura, AAayakar Bhavan, Usmanpura, Vadaj, Gandhi Ashram, Subhash Circle Sabarmati, Shankarpura, Acher, Motera Stadium, Motera, Amiyapur, Sughad, Narmada Canal, Koba Circle, Koba, Por, Kudasán, Dhaula Kuan, Infocity, Indroda Circle, Sector-7, ST Depot and Sachivalaya, covering a distance of approximately 32.0-kms from centre of APMC station to Akshardham station.

Of the above stations in North South corridor Amiyapur, Narmada Canal, Por, Kudasán, and Infocity Stations have been identified to be developed on later stages as traffic demand in these areas is yet to be fully build up. A total of 31 stations have been planned along the proposed Corridor.

All stations are proposed to be elevated. Most of the stations on East West corridor are mezzanine level concourse type stations except those in Prem Darwaja, Delhi Darwaja, Shahpur Darwaja. These three stations have been proposed with At grade side concourse to minimize the land acquisition. Fewer columns of structure on either side of road would provide lighter look. All the stations on North South corridor have been proposed with At grade side concourse as land is available on both side of the road. Stations are generally located around 1000-m to 1200-m apart though it varies from 0.6-km to 1.5-km due to traffic and topographic reasons.

14.18.1.1 Rail Levels and Alignment

The general rail level is approximately 12-m above ground level. Entire alignment is elevated and is governed by a ground clearance of 5.50-m. This in turn determines the level of entire station structure on elevated section. In order to keep the land acquisition to minimum, alignment is planned generally in middle of the road. Entry/exit structures to proposed stations have been planned in the open space available. Wherever necessary, roads are aligned to match the alignment of rail tracks of proposed MRTS to place viaduct on median of road.

14.18.1.2 Platforms

All the stations are elevated having two side platforms. Care has been taken to locate stations on straight alignment. However, in some stations, site

constraints have become the deciding criteria and a curve of 1000-m radius has been introduced.

The sequence of stations along with their respective chainages, site and platform characteristics are presented in the **Table S 1**.

PROPOSED METRO RAIL CORRIDORS IN AHMEDABAD

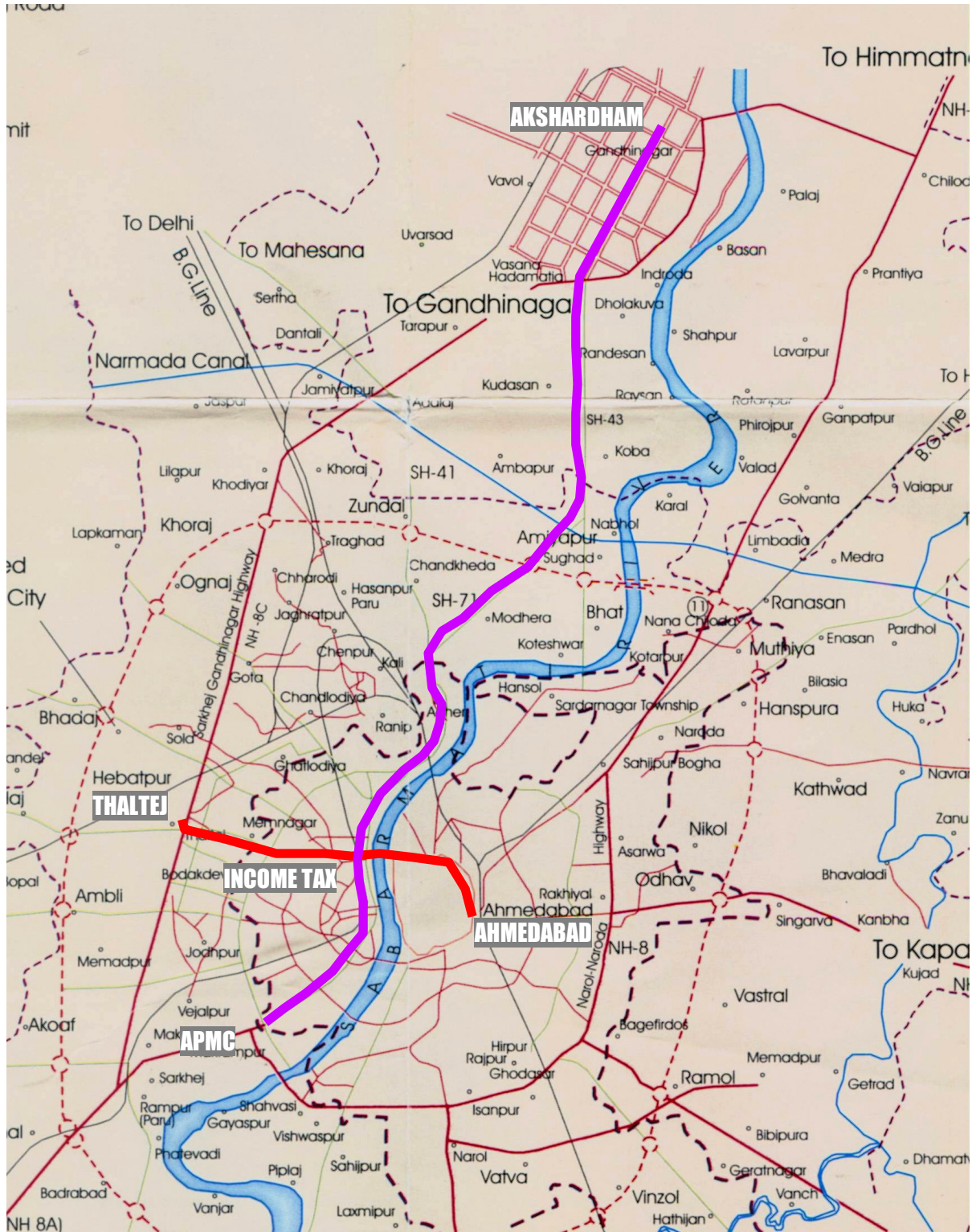


Table S 1 STATION LOCATION CHARACTERISTICS

Name of Station	Chainage (in km)	Distance from Previous Station (in km)	Rail Level (RL in m)	Height from Adjacent Ground (in m)	Platform Type and Nos	Alignment Description
Ahmedabad – Aayakar Bhawan – Thaltej (East West) MRTS Corridor						
Ahmedabad	0.000	0.000	62.80	12.30	Side Platforms, 2 Nos.	Elevated, Straight
Prem Darwaja	0.865	0.865	61.15	11.05	Side Platforms, 2 Nos.	Elevated, Side concourse , Straight
Delhi Darwaja	2.040	1.175	60.78	12.38	Side Platforms, 2 Nos.	Elevated, Side concourse , partly in curve
Shahpur Darwaja	3.080	1.040	61.71	12.29	Side Platforms, 2 Nos.	Elevated, Side concourse , in 1000-m radius
Aayakar Bhawan	4.130	1.050	62.46	11.70	Side Platforms, 2 Nos.	Elevated, partly in curve of 1000-m radius
Sardar Patel Stadium	4.800	0.670	60.91	12.31	Side Platforms, 2 Nos.	Elevated, in curve of 1000-m radius
Commerce Circle	5.750	0.950	61.00	12.31	Side Platforms, 2 Nos.	Elevated, Straight
Gujarat University	6.845	1.110	61.38	12.18	Side Platforms, 2 Nos.	Elevated, Straight
Gurukul	7.748	0.925	61.51	11.81	Side Platforms, 2 Nos.	Elevated, Straight
Doordarshan Kendra	8.800	1.040	64.70	13.40	Side Platforms, 2 Nos.	Elevated, Straight
Thaltej	9.845	0.975	66.57	13.32	Side Platforms, 2 Nos.	Elevated, Straight
APMC – Aayakar Bhawan – Akshardham (North South) MRTS Corridor						
APMC Vasna	0.000	-	54.800	12.18	Side Platforms, 2 Nos.	Elevated, Straight

Name of Station	Chainage (in km)	Distance from Previous Station (in km)	Rail Level (RL in m)	Height from Adjacent Ground (in m)	Platform Type and Nos	Alignment Description
Vasna	1.015	1.015	54.675	12.22	Side Platforms, 2 Nos.	Elevated, Straight
Narayan Nagar	2.100	1.085	59.600	12.01	Side Platforms, 2 Nos.	Elevated, Straight
Paldi	3.550	1.450	59.225	12.13	Side Platforms, 2 Nos.	Elevated, Straight
Madalpur	4.350	0.800	59.600	12.08	Side Platforms, 2 Nos.	Elevated, Straight
Nava Gandhigram	5.175	0.825	61.475	12.07	Side Platforms, 2 Nos.	Elevated, Straight
Navrangpura	6.100	0.925	62.275	12.23	Side Platforms, 2 Nos.	Elevated, Straight
Aayakar Bhavan	6.750	0.650	69.775	18.51	Side Platforms, 2 Nos.	Double Elevated over EW line, Straight
Usmanpura	7.900	1.150	63.750	12.22	Side Platforms, 2 Nos.	Elevated, Straight
Vadaj	8.780	0.880	62.500	12.45	Side Platforms, 2 Nos.	Elevated, Straight
Gandhi Ashram	9.700	0.920	63.360	12.13	Side Platforms, 2 Nos.	Elevated, Straight
Subash Circle	10.475	0.775	63.360	12.26	Side Platforms, 2 Nos.	Elevated, Straight
Sabarmati	11.300	0.825	64.000	12.15	Side Platforms, 2 Nos.	Elevated, Straight
Shankarpura	12.400	1.100	66.550	13.36	Side Platforms, 2 Nos.	Elevated, Straight
Acher	13.250	0.850	69.175	12.97	Side Platforms, 2 Nos.	Elevated, Straight

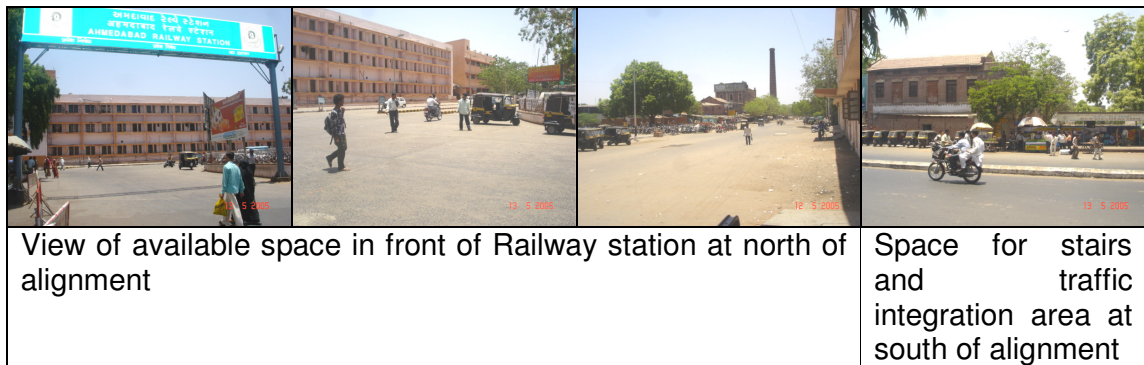
Name of Station	Chainage (in km)	Distance from Previous Station (in km)	Rail Level (RL in m)	Height from Adjacent Ground (in m)	Platform Type and Nos	Alignment Description
Motera Stadium	14.200	0.950	69.650	12.03	Side Platforms, 2 Nos.	Elevated, Straight
Motera	15.400	1.200	70.650	12.02	Side Platforms, 2 Nos.	Elevated, Straight
Amiyapur	16.850	1.450	72.450	12.00	Side Platforms, 2 Nos.	Station on later stages, elevated, Straight
Sughad	18.200	1.350	73.800	12.38	Side Platforms, 2 Nos.	Elevated, Straight
Narmada Canal	19.550	1.350	74.500	13.06	Side Platforms, 2 Nos.	Station on later stages, off the Road, elevated, Straight
Koba Circle	20.400	0.850	75.025	12.05	Side Platforms, 2 Nos.	Elevated, Straight
Koba	21.600	1.200	75.275	12.23	Side Platforms, 2 Nos.	Elevated, Straight
Por	22.900	1.300	78.280	12.16	Side Platforms, 2 Nos.	Station on later stages, elevated, Straight
Kudasan	24.200	1.300	79.580	12.31	Side Platforms, 2 Nos.	Station on later stages, elevated, Straight
Dhaura Kuan	25.350	1.150	81.500	12.07	Side Platforms, 2 Nos.	Elevated, Straight
Infocity	26.300	0.950	83.100	12.32	Side Platforms, 2 Nos.	Station on later stages, elevated, Straight

Name of Station	Chainage (in km)	Distance from Previous Station (in km)	Rail Level (RL in m)	Height from Adjacent Ground (in m)	Platform Type and Nos	Alignment Description
Indroda Circle	27.250	0.950	84.260	12.19	Side Platforms, 2 Nos.	Elevated, Straight
Sector 7	28.200	0.950	85.580	12.04	Side Platforms, 2 Nos.	Elevated, Straight
ST Depot	29.300	1.100	87.000	12.10	Side Platforms, 2 Nos.	Elevated, Straight
Sachivalaya	30.600	1.300	88.200	12.03	Side Platforms, 2 Nos.	Elevated, Straight
Akshardham	31.850	1.250	90.000	12.12	Side Platforms, 2 Nos.	Elevated, Straight

4.18.2 STATION LOCATIONS ON EAST-WEST CORRIDOR

4.18.2.1 AHMEDABAD STATION

Chainage	0.0
Interstation Distance	-
Rail Level	62.80-m
Platform Height from Ground	12.30-m
Location	First station on the corridor, located off the road in front of Ahmedabad station building, Centreline passes through Ahmedabad railway station on north of alignment in front of Railwaypura Telephone Exchange building.
Entry exit stairs	Only southern stairs have been planned within the open space available along the road, in front of Ahmedabad junction.
Catchment area	Mainly passengers interchanging from Ahmedabad Junction to this station. Residential area around station and would extend to Kalupur, Khadia, Sarangpur, Raipur up to Kankaria, Raikhad, Jamalpur part of Dariyapur, Manek Chowk, Ghee Kata Area & Commercial areas of Kapasia Bazar, Dhanlaxmi Market, Hari Om Market, Revdi Bazar & Sakar Bazar, whereas on the eastern side of existing station Gomatipur Village, Saraspur, Shaher Kotda, and Sahjanand Arcade. Major interchange of proposed Regional, (Sub urban), Metro & Long distance passenger trains.



View of available space in front of Railway station at north of alignment

Space for stairs and traffic integration area at south of alignment

4.18.2.2 PREM DARWAJA STATION

Chainage	0.865
Interstation Distance	865-m
Rail Level	61.15-m
Platform Height from Ground	11.05-m
Location	Elevated station along median of the road near Prem Darwaja. Prem Darwaja structures are little further ahead on south of the alignment. Centre line passes through Motilal Teliya Mill compound which is at present abandoned on northern side of alignment.
Entry exit stairs	Located both side of station, northern structures beside the Kalupur Bank old building within the space that may be acquired, whereas southern stairs on Motilal Mill compound area. Depleted Mill building is abandoned at present.
Catchment area	Commercial areas of Chokha Bazar, Sindhi Market, Kabutar Khana, Fruit Market, Kapasia Bazar, Ghee Bazar, Sakar Bazar, & Residential 'Pol' areas Dhariapur, Ashima Plaza, near Manek Chowk Mills compound and would extend to part of Dariapur Darwaza.




Prem darwaja near station location

View at station centreline

Establishments surrounding the station location

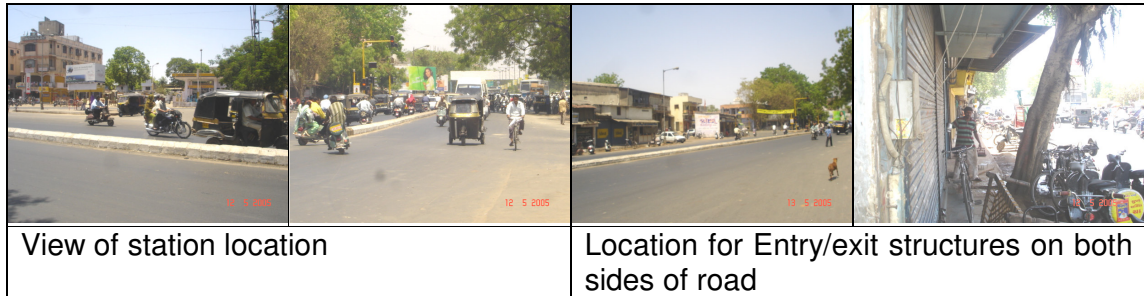
4.18.2.3 DELHI DARWAJA STATION

Chainage	2.040
Interstation Distance	1175-m
Rail Level	60.78-m
Platform Height from Ground	12.38-m

Location	Located along median of the road near Delhi Darwaja intersection, Station centre line lies in front of shops on both sides of alignment. The Station is located on median of road, Delhi Darwaja structures on south of the alignment.		
Entry exit stairs	Entrance stairs and escalators have been provided for which some shops need to be acquired on both sides along the road.		
Catchment area	Mainly to Advani market, Madhupura market, Hasumati estate, Haziapura Garden and areas up to Jehangir Textile mill, Govt. press, Bansidhar Mills. The catchment of station may extend up to Cama commercial centre, Krishna complex, Mirzapur, part of Ghee Kanta, shahibag and Tavidipura area.		
			
Delhi Darwaja in front of station location	View of the Road at station location	Location for Entry/exit structures	

4.18.2.4 SHAHPUR DARWAJA STATION

Chainage	3.080
Interstation Distance	1040-m
Rail Level	61.71-m
Platform Height from Ground	12.29-m
Location	Located in front of Post Office building, along median of road, Centre line passes through the Shahpur Municipal Gujarat School premises on north of alignment. After this station the alignment crosses the Sabarmati River adjacent to Gandhi Bridge.
Entry exit stairs	Located both side of station, northern structures in space available after acquisition of some shops adjacent to Shahpur tutorial girls high school whereas southern stairs located in front of Shahpur Municipal Gujarati school.
Catchment area	Mainly to old dense 'Pol' areas of Shahpur, Shah Colony, Kalal Nagar, Kiran Nagar, Shakti Nagar, & may also cater to various societies & Residential areas along Sabarmati River front on both side of Gandhi Bridge & part of Khanpur Area.



4.18.2.5 AAAYAKAR BHAWAN STATION

Chainage	4.170
Interstation Distance	1090-m
Rail Level	62.46-m
Platform Height from Ground	11.70-m
Location	Located along the median in front of Navdeep House, Centre line of the station on EW corridors passes in front of Bank of Baroda Building on North of the alignment just after the Income Tax intersection.
Entry exit stairs	Southern approaches located on space in front of Navdeep House. Northern stairs to station have been planned within a combine passenger concourse to EW and NS corridors stations
Catchment area	Mainly institutional & Office areas Income Tax Building, RBI, Old High Court, Bharti House, Nirma House, Business Chambers on both sides of Ashram Road & Gandhi Bridge Road. Residential areas of Usmanpura Village and part of Navrangpura Village, Societies & Apartments on Western bank of river Sabarmati. After crossing the river first station within the Western Ahmedabad which is newly built as compared to Eastern part of the city. Two EW&NS corridors intersect at this location resulting in to a combine passenger concourse to both the stations for interchange.



4.18.2.6 SARDAR PATEL STADIUM STATION

Chainage	4.800
Interstation Distance	630-m
Rail Level	60.91-m
Platform Height from Ground	12.31-m
Location	Station located in front of Navnidhi Complex close to the SP Stadium five-road roundabout, Centre line passes through boundary line of Panna building on south of alignment.
Entry exit stairs	One set of entry/exits would be provided on both sides of station. Northern entrances in front of Chotubhai Nayak Residence and southern stairs adjacent to Panna building, land for which will have to be acquired.
Catchment area	Station would cater to newly developed commercial areas & business centres along both sides of CG Road, areas around Sardar Patel Stadium five road intersection, nearby Gujarat Vidyapeeth area and NCERT etc. Major part of Navrangpura residential societies and apartments and part of Navrangpura village as well.



Existing commercial and residential areas close to the SP Stadium five road roundabout

Location for Entry/exit structures on both sides of road

4.18.2.7 COMMERCE CIRCLE STATION

Chainage	5.750
Interstation Distance	950-m
Rail Level	61.00-m
Platform height from Ground	12.31-m
Location	Elevated station located in front of Falgun Society near Commerce Circle, along median of road, Station centre line passes through Raghuvansh building on south of alignment.
Entry exit stairs	Located both side of station along the road, northern structures on space available in front of Raghuvansh building, and southern stairs opposite Falgun Societies.
Catchment area	Part of Navrangpura, residential areas RBI Quarters, various residential societies & apartments up to LD Arts College, may extend up to Nilamber Complex & Lallubhai Park, Pt. Dindayal nagar, Krishna colony,

Soham Square, may extend up to Akshar Arcade area. Passengers from university area consisting of professional colleges, research centres & laboratories would also be using station.



4.18.2.8 GUJARAT UNIVERSITY STATION




Chainage	6.845
Interstation Distance	1095-m
Rail Level	61.38-m
Platform Height from Ground	12.18-m
Location	Elevated station along the median of road in front of Memnagar AMTS Bus Depot near Vastrapur crossing, Station centre line lies in front of Memnagar Bus stop.
Entry exit stairs	Southern approaches located in front of Memnagar AMTS Bus Depot, north stairs to station, located in front of HK Arts & Commerce College grounds.
Catchment area	Various Gujarat University Hostels & Departments, Gujarat State Educational Technology Centre, Long distance passengers from AMTS Bus Depot and may extend up to part of Memnagar Village.



4.18.2.9 GURUKUL STATION

Chainage	7.748
Interstation Distance	903-m
Rail Level	61.51-m
Platform Height from Ground	11.81-m
Location	Elevated station is located near Swami Narayan Gurukul along the median of the road, Station centre line passes through property of Agricultural Office.
Entry exit stairs	Northern entry/exits along the road in front of Rajvi

Towers whereas southern approaches located within the Agricultural Office premises.

Catchment area	Commuters from Swami Narayan Gurukul Area, part of Memnagar Village Residential areas, Gurukul area would be largely using the station. The catchment may extend up to Commercial as well as residential areas of Vastrapur area.		
			
	View of existing development near station location		Available space for locating Stairs and parking area within Agricultural office

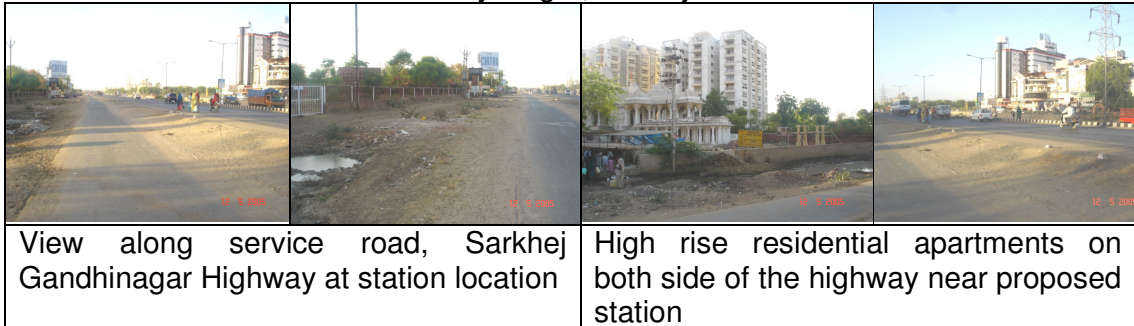
4.18.2.10 DOORDARSHAN KENDRA STATION

Chainage	8.800
Interstation Distance	1052-m
Rail Level	64.70-m
Platform Height from Ground	13.40-m
Location	Elevated station located near Ghatlodiya Crossing near Ahmedabad Education Society, Station centre line passes through the Doordarshan Kendra Building on North of the alignment.
Entry exit stairs	Northern Structures in front of Ahmedabad Education Society along the road, southern stairs within Doordarshan Building premises.
Catchment area	Residential/Commercial areas, Siddhachal Apartments, Drive in Enclave, Sunrise Centre, Eskimo Enclave & areas up to part of Vastrapur, part of Thaltej, and areas up to Manichandra Societies.

			
High rise residential apartments	View of areas proposed for stairs at station location		

4.18.2.11 THALTEJ STATION

Chainage	9.845
Interstation Distance	1045-m
Rail Level	66.57-m
Platform Height from Ground	13.32-m
Location	Last Elevated station is planned off the road, in front of Jain Mandir, along service road. Station centre line passes through Bapu Estate on north of alignment.
Entry exit stairs	Only northern approaches have been planned along service road. A subway is proposed for passengers from other side of Highway in front of New York towers.
Catchment area	Residential & Commercial areas along both sides of Sarkhej – Gandhi Nagar Highway. SPI ESR, Jay Ambey Nagar, Thaltej Residential areas.



View along service road, Sarkhej Gandhinagar Highway at station location

High rise residential apartments on both side of the highway near proposed station

STATION LOCATION ON NORTH-SOUTH CORRIDOR**4.18.2.12 APMC VASNA STATION**

Chainage	0.0
Interstation Distance	-
Rail Level	54.80-m
Platform Height from Ground	12.18-m
Location	First station on the proposed North-South MRTS corridor along median of the road, centre line passes through shop Bharucha motors on east of the alignment. The station is located in front of APMC building compound near AMC Octroi naka.
Entry Exit stairs	Western stairs have been planned in front of Agricultural Produce Market Committee building. On eastern side, the stair structures planned in front of Raini Enterprise.
Catchment area	Residential area around station and would extend to New Vejalpur, Gupta Nagar, APMC area, Juhapura area & Sarkhej, Makarba as corridor starts from this station towards Northern Ahmedabad up to Gandhi Nagar.



View along the Road at station Location

Space for Entry Exit stairs structures

4.18.2.13 VASNA STATION

Chainage	1.015
Interstation Distance	1015-m
Rail Level	54.68-m
Platform Height from Ground	12.22-m
Location	Elevated station located along the median of road, near Vasna Telephone Exchange building. Station centre is in front of P&T Colony quarters on west of alignment.
Entry Exit stairs	Western stairs within open plot adjacent to P&T colony quarters, and eastern structures in front of Vasna Telephone Exchange building.
Catchment area	Vasna Village including Chintan park, Prajapati park area Vasna Colony, P&T Colony, Kundan Tenament, Pratap Kunj Society, Shreyas Society etc. & other societies along both sides of the alignment near Vasna Bus Terminals.



View at station location

Availability of open space for entry /exit stairs at station location

4.18.2.14 NARAYAN NAGAR STATION

Chainage	2.100
Interstation Distance	1085-m
Rail Level	59.60-m
Platform Height from Ground	12.01-m
Location	Station located near Anjali crossing, along the median of road. Station centre is in front of Shri Deepavali Works beside Anand Shopping Complex on west of alignment.
Entry exit stairs	Western entrance stairs & escalators provided in front of Shri Deepavali Works whereas Eastern structures planned adjacent to Zalak complex.
Catchment area	Part of Vasna, Geeta area, Jawahar Nagar, Part of Paldi area including Damubhai Colony, Dungarshi

Nagar, Neelkanth Plaza, Anand Complex, and Narayan Nagar. Further may extend to Hariom Nagar, Padmaruti Nagar, Yogeshwar Nagar, and Manik Nagar up to Fatehpura Village.



View at station location

Space for entry /exit stairs on both sides of road

4.18.2.14 PALDI STATION

Chainage	3.550
Interstation Distance	1450-m
Rail Level	59.23-m
Platform Height from Ground	12.13-m
Location	Elevated station planned close to Paldi Bus Terminal. Station centre line is in front of AMC Zonal office on west of alignment.
Entry exit stairs	Located both side of station, Western structures within AMC office premises nearby Bus Terminal, eastern stairs located in front of Narsi Bhagat Hostel near Patel Chambers.
Catchment area	Areas surrounding Paldi village, Shastri Market area, & may extend up to Raj Nagar Society, Jitendra Park area, part of Kochrab Village, in addition to Institutional areas Sanskar Kendra, Krishi Bhavan, and NID. Major interchange point with Paldi Bus Terminal. Eastern part of the city, through Sardar Bridge, would also use the station.



Paldi Bus Terminal near station location

View of AMC Zonal office and CNG filling station

Location for Entry/exit structures

4.18.2.15 MADALPUR STATION

Chainage	4.350
Interstation Distance	800-m
Rail Level	59.60-m
Platform Height from Ground	12.08-m
Location	Elevated station along the median of road. Station centre line passes through shop Radhika Fashion

	Care on east of alignment.
Entry exit stairs	Western approaches located on the space within AMC plot adjoining Madalpur village road, eastern stairs to station, planned in front of UCO Bank building adjacent to Medical Boys Hostel.
Catchment area	Major interchange with Gandhigram Railway Station mainly cater to Pritam Nagar, Gujarat College staff quarters, Jain Societies up to Netaji Nagar. Town Hall, MJ library, and Sakar Shopping Centre. Eastern part of city using Ellisbridge would also be catered.



4.18.2.16 NAVA GANDHIGRAM STATION

Chainage	5.175
Interstation Distance	825-m
Rail Level	61.48-m
Platform Height from Ground	12.07-m
Location	Station located along the median of Ashram Road, centre line goes by the boundary of Bharat Petroleum Pump on east of alignment.
Entry exit stairs	Western stairs planned within open space opposite BM Institute & Research Centre, whereas eastern structures in front of Bharat Petroleum Pump adjacent to Shalin Multi-storey building.
Catchment area	Mainly residential areas which include Mithakali village, Railway officers colony and up to areas neighbouring Law Garden. May also cater to nearby Gandhigram Railway Station.



4.18.2.17 NAVRANGPURA STATION

Chainage	6.100
Interstation Distance	925-m
Rail Level	62.28-m
Platform Height from Ground	12.23-m
Location	Located along the median of Ashram Road near its intersection with Navrangpura Road. Centre line of station passes through Times of India building on east of alignment.
Entry exit stairs	Western entry/exits planned on the open space within Handicap Society School premises, and eastern structures in front of Sales Tax Bhawan Building.
Catchment area	Largely Mill Owners colony and Societies along Ashram Road, Navrangpura Bus Terminus, Nirman Towers, Nar-narayan Society and may extend to CG Road commercial Institutional area.



View of the development along the Ashram Road near station location

Space for entry /exit stairs along the road

4.18.2.18 AYAKAR BHAVAN STATION

Chainage	6.750
Interstation Distance	650-m
Rail Level	69.78-m
Platform Height from Ground	18.51-m
Location	Along the median of Ashram Road, this station would serve as the interchange between the APMC-Gandhi Nagar corridor and Ahemdabad-Thaltej corridor with the former going over the later. Station centreline goes by Income Tax Office building on east of alignment.
Entry exit stairs	Common concourse for the two lines has been planned and is located in the plot presently used by Ahemdabad All India Radio building complex on the South-West of the intersection opposite Income Tax office building.
Catchment area	Major interchange between NS & EW MRTS corridor. Mainly Institutional areas Aayakar Bhawan, Old High Court, RBI, Bharti House, Nirma House, Embassy Market, Torrent Pharma, Dinesh Hall, HUDCO Niwas, NTC House, and Navrang Colony. may also cater to nearby Sports Club of Gujarat, Haridas Colony, Sakar III, part of Gujarat

Vidyapeeth. Eastern City Traffic coming via Gandhi Bridge would also be served.



Existing market and residential area along Ashram Road near station location

4.18.2.19 USMANPURA STATION

Chainage	7.900
Interstation Distance	1150-m
Rail Level	63.75-m
Platform Height from Ground	12.22-m
Location	Located along median of Ashram Road in front of Satyavadi Society, centre line passes by Meghvarsha Apartments on east of alignment.
Entry exit stairs	Western entry/exits along Ashram Road within the open plot adjacent to Meldi Niwas, whereas Eastern structures provided opposite Bank of India Building close to Bharat Petroleum Pump.
Catchment area	Mainly to Usmanpura Village, Narayan Nagar, Shanti Nagar, Ayodhya Nagar, Sumati Nagar and catchment may extend to Gokul Nagar, Shripal Nagar, Kailash Colony and Chandra Nagar.



Proposed station location along Ashram Road

Available space for locating Stairs for the station

4.18.2.20 VADAJ STATION

Chainage	8.780
Interstation Distance	880-m
Rail Level	62.50-m
Platform Height from Ground	12.45-m
Location	Elevated station located along median of road, in front of Khadi Gram Udyog Bhavan and centre line passes by TVS Showroom on east of the alignment.
Entry exit stairs	Western approaches planned in front of Khadi Gram Udyog Bhawan, and eastern stairs close to TVS Showroom within open space available.
Catchment area	Mainly to Vadaj Village, Juna Vadaj, ST Bus

Terminus, Tilak Nagar, Girdhar Park, Udhav Nagar, Subhash Nagar, Tulsi Nagar, Sindhu Nagar and may extend to part of Chandra Nagar & Riddhishwar Society.



View along Ashram Road at station location

4.18.2.21 GANDHI ASHRAM STATION

Chainage	9.700
Interstation Distance	920-m
Rail Level	63.36-m
Platform Height from Ground	12.13-m
Location	Station located along Ashram Road in front of Gandhi Memorial Museum on east of the alignment. Station centre line passes through Sabarmati Ashram Gaushala.
Entry exit stairs	Western entry/exits planned adjacent to Hotel Toran and eastern stairs close to Sabarmati Ashram Gaushala sheds.
Catchment area	Mainly to Gandhi Ashram, Gramoudyog Khadi Haat, Panchsheel Khadi Nagar, RTO office area, Neelkanth Verni, and Ghanshyam Nagar.



View along Ashram Road at station location

Location for entry /exit stairs on both sides of Ashram Road

4.18.2.22 SUBHASH CIRCLE STATION

Chainage	10.475
Interstation Distance	775-m
Rail Level	63.36-m
Platform Height from Ground	12.26-m
Location	Elevated station located near Subhash Bridge Circle, in front of Jail Staff Training centre. Centre line of station passes by Nandanvan Complex on east of alignment.
Entry exit stairs	Western approaches in front of Central Jail premises and eastern structures opposite Nandanvan Complex adjacent to Parth Apartments.

Catchment area Passengers from Kaveri Complex, RTO, Keshav Nagar, Binda Park, Jail staff Training Centre would use the station. Also likely to cater to Ring Road passengers largely coming from Nava Vadaj area and ST passengers.



4.18.2.23 SABARMATI STATION


Chainage	11.300
Interstation Distance	825-m
Rail Level	64.00-m
Platform Height from Ground	12.15-m
Location	Elevated station planned off the Road within Western Railway vacant land adjacent to Chiman bhai Bridge in front of Ahmedabad Electricity Powerhouse on east of the alignment.
Entry exit stairs	Only eastern stairs have been planned within open space of Ahmedabad Mandal Western Railway Green Belt along the road.
Catchment area	Mainly to Ranip area, P&T Colony, and Sabarmati Central Jail area, may further extend to Sabarmati area including Jai Siddh Nagar, Krishna Nagar, AEC Colony and Dharm Nagar. Passengers may interchange with nearby Sabarmati Railway Station



4.18.2.24 SHANKARPURA STATION

Chainage	12.400
Interstation Distance	1100-m
Rail Level	66.55-m
Platform Height from Ground	13.36-m
Location	Elevated station located along median in front of Power House colony near Tejas Apartments on east of the alignment, centre line passes through

Shankarpura Chawls.

Entry exit stairs	Western entry/exit in front of Shankarpura Chawl within available open space whereas eastern stairs planned opposite Power House Colony.
Catchment area	Mainly passengers from Ram Nagar, Dharam Nagar, AEC Colony, and Shankarpura Chawl area would use the station.
	
View of Station location	View of location for entry /exit stairs along the road

4.18.2.25 ACHER STATION

Chainage	13.250
Interstation Distance	850-m
Rail Level	69.18-m
Platform Height from Ground	12.97-m
Location	Elevated station located along the median near Baronet Complex. Station centre line passes through the shop Bramani Jewellers on west of alignment near Lallubhai Patel Garden.
Entry exit stairs	Western stairs opposite Police Station along road, whereas eastern stair structures planned within open plot close to Ambika Auto Shop.
Catchment area	Residents of Anand Nagar, Baldev Nagar, Shubhlaxmi Society, and part of Shankarpura would use the facility.

	
View of station location	Location for entry /exit stairs

4.18.2.26 MOTERA STADIUM STATION

Chainage	14.200
Interstation Distance	950-m
Rail Level	69.65-m
Platform Height from Ground	12.03-m
Location	Elevated station located along median of the road adjacent to the Sardar Patel Gujarat Stadium. Station centre line lies close to Octroi Cabin on

South of the alignment.

Entry exit stairs	Western entry/exits planned close to Chamunda Park and eastern stairs near Octroi Cabin adjacent to Sardar Patel Stadium Road.
Catchment area	Largely Stadium Plaza Bungalows, Jai Somnath Society, Sangath Society 1,2,3, Sahajanand Society, Madhavbagh Bungalows, Ishwarkripa Society, Indiranagar Toll Naka area, Shri Chamunda park, and may extend to Parvati Nagar and part of Motera Village.



View of nearby Motera Stadium at station location

Available spaces for entry/exit structures near station location

4.18.2.27 MOTERA STATION

Chainage	15.400
Interstation Distance	1200-m
Rail Level	70.65-m
Platform Height from Ground	12.02-m
Location	Elevated station located along median, station centre lies in front of Mahendra Motors Works on west of the alignment.
Entry exit stairs	Western stairs close to Mahendra Motor Works, and eastern stair structures within open space opposite Hari Krishna Complex Bungalows.
Catchment area	Station mainly caters to Devpriya Society, Harihant Society, Shraddha Bagh area and further may extend to areas around Babu Ashram Road, Narayan Apartments, and Sadashiv Ashram.



view along the road at station centre

Location for entry /exit stairs

4.18.2.28 AMIYAPUR STATION

Chainage	16.850
Interstation Distance	1450-m
Rail Level	72.45-m
Platform Height from Ground	12.00-m
Location	Elevated station along median of State Highway-43

near Radha Swami Satsang Vyas Bus Stop, station centre line lies in front of property of Jai Hind Project Limited.

Entry exit stairs	Both the Entry/Exits planned along SH-43 within the greenbelt western structures provided near Jai Hind Project Limited property.
Catchment area	Mainly visitors to Radha Swami Satsang Vyas and surrounding farm areas. Station is planned to be developed on later stages as traffic demand in these areas is yet to be fully build up



Views of existing surroundings and available spaces for entry/exit structures near station location

4.18.2.29 SUGHAD STATION



Chainage	18.200
Interstation Distance	1350-m
Rail Level	73.80-m
Platform Height from Ground	12.38-m
Location	On median of SH-43 near Amiyapur village Road intersection. Station centre line is adjacent to Sughad Bus Stop.
Entry exit stairs	Both the Entry/Exits planned along SH-43 within the greenbelt adjacent to Amiyapur Village road.
Catchment area	Mainly visitors to surrounding farm areas and villages. Catchment would extend subject to development of near by areas.





Views of existing surroundings and available spaces for entry/exit structures near station location

4.18.2.30 NARMADA CANAL STATION

Chainage	19.550
Interstation Distance	1350-m
Rail Level	74.500-m
Platform Height from Ground	13.06-m
Location	Off the road station is located near intersection of SH-43 to Kabir Ashram Road after crossing the Narmada main Canal.

Entry exit stairs	Only western entry/exits planned along the State Highway 43 within the space near Kabir Ashram Road.
Catchment area	Station is planned to be developed on later stages as traffic demand in these areas is yet to be fully build up, may extend to Ambapur village
	
View of the Narmada Main Canal	View at station centre

4.18.2.31 KOBA CIRCLE STATION

Chainage	20.400
Interstation Distance	850-m
Rail Level	75.025-m
Platform Height from Ground	12.05-m
Location	Elevated station located close to intersection of SH-43 with SH-71 i.e. Koba Circle along the median of SH71. Station centre line passes through field adjacent to Avantika Farms.
Entry exit stairs	Both the Entry/exits planned along the SH71 within the greenbelt.
Catchment area	Mainly residents to surrounding farm areas, Nabhoi village and other nearby villages. Catchment would extend subject to development of nearby areas.
	
Koba Circle along the alignment near station location	Station location along State Highway 71 and space available for entry/exit structures

4.18.2.32 KOBA STATION

Chainage	21.600
Interstation Distance	1200-m
Rail Level	75.75-m
Platform Height from Ground	12.23-m
Location	Elevated station located along median of SH-71 near Ambapur village Road.
Entry exit stairs	Both the Entry/Exits planned along SH-71 within the greenbelt.
Catchment area	Mainly residents to surrounding farm areas, Koba and Nabhoi villages and other nearby villages. Catchment would extend depending on

development of neighbouring areas.



Views of existing surroundings and available spaces for entry/exit structures along SH-71

4.18.2.33 POR STATION

Chainage	22.900
Interstation Distance	1300-m
Rail Level	78.28-m
Platform Height from Ground	12.16-m
Location	Elevated station located along median of SH-71
Entry exit stairs	Entry/exits planned on both sides along State Highway 71 within the greenbelt.
Catchment area	Station is planned to be developed on later stages as traffic demand in these areas is yet to be fully build up



Views of existing surroundings near station location Entry/exit locations for station on available space along the road

4.18.2.34 KUDASAN STATION

Chainage	24.200
Interstation Distance	1300-m
Rail Level	79.58-m
Platform Height from Ground	12.31-m
Location	Elevated station located along median of SH-71
Entry exit stairs	Both the entry/exits planned along the SH71 within the ROW.
Catchment area	Station is planned to be developed on later stages as traffic demand in these areas is yet to be fully build up



View at station Location Available space for entry/exit stairs within the greenbelt

4.18.2.35 DHAULA KUVA STATION

Chainage	25.350
Interstation Distance	1150-m
Rail Level	81.50-m
Platform Height from Ground	12.07-m
Location	Elevated station located along median of SH 71 near Swami Narayan Temple Complex. Centre line of the station passes through Sahjanand Farms on west of the alignment.
Entry exit stairs	Western stairs within vacant land in front of Sahjanand Farms, Eastern stairs planned along road side opposite Swami Narayan Temple.
Catchment area	Residents to surrounding farm areas, Swami Narayan Temple, Sargasan village and other nearby villages. Catchment would extend depending on development of neighbouring areas.

		
Swami Narayan Temple near station location	View at station location	Entry/exit locations for station on available space along the SH-71

4.18.2.36 INFOCITY STATION

Chainage	26.300
Interstation Distance	950-m
Rail Level	83.10-m
Platform Height from Ground	12.32-m
Location	Elevated station located along the median of State Highway 71 in front of Fun World.
Entry exit stairs	Western entry/exits in front of Bhaskaracharya Institute within the greenbelt whereas eastern approaches planned in front of Funworld.
Catchment area	Station is planned to be developed on later stages as traffic demand in these areas is yet to be fully build up. Mainly visitors to institutional areas located between NH 8C and SH 71 would use the facility.



View along the SH-71 near station location	Location for exit/entry structures within greenbelt
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4.18.2.37 INDRODA CIRCE STATION

Chainage	27.250
Interstation Distance	950-m
Rail Level	84.26-m
Platform Height from Ground	12.19-m
Location	Located close to Indroda Circle, on the median of the Cha Road. Station centre line passes adjacent to Indroda Circle Nursery.
Entry exit stairs	Both the entry/exits along the Cha Road, Western structures located on the space in front of Indroda Circle Nursery within Sector 2 greenbelt, eastern stairs within the greenbelt of Sector 1.
Catchment area	Largely Sector 1, Sector 2, Sector 3, Sector 4 of Gandhinagar, may extend to villages of Vasna Hadmatia, tarapur and Uwarsad through NH8C



Views of available spaces for entry/exit structures along Cha Road

4.18.2.38 SECTOR 7 STATION

Chainage	28.200
Interstation Distance	950-m
Rail Level	85.58-m
Platform Height from Ground	12.04-m
Location	Located along the median of the Cha Road close to the intersection of Ja Road.
Entry exit stairs	Both the entry/exits along Cha Road, Western structures located on space in front of Sector 7 greenbelt. Eastern stairs within the greenbelt of Sector 8.
Catchment area	Mainly to Sector 5, Sector 6, Sector 7, Sector 8 of Gandhinagar



View of Cha Road at station location

Available space at station location

4.18.2.39 S.T. DEPOT STATION

Chainage	29.300
Interstation Distance	1100-m
Rail Level	87.00-m
Platform Height from Ground	12.21-m
Location	Located along the median of Cha Road near Pathik Ashram Road intersection close to ST Depot. Station centre line passes in front of Krishi Bhawan Sector-10.
Entry exit stairs	Both the entry/exits along Cha Road, Western structures located in front of Vijay Petrol Pump within Sector 11 greenbelt. Eastern stairs planned within the greenbelt in front of Sector 10, Krishi Bhawan.
Catchment area	Mainly to Sector 9, Sector 10, Sector 11, Sector 12 of Gandhinagar



View of existing development at S T Depot near station location

Open space along the road for entry/exit structures

4.18.2.40 SACHIVALAY STATION

Chainage	30.600
Interstation Distance	1300-m
Rail Level	88.20-m
Platform Height from Ground	12.03-m
Location	Adjacent to Gujarat Vidhan Sabha in front of Fire brigade station along median of Cha Road. Station centre line lies in front of Bus Terminal.
Entry exit stairs	Entry/exits planned along Cha Road, Western structures located on the space in front of Gandhi Nagar Fire Brigade within Sector 17 greenbelt. Eastern stairs proposed within the greenbelt in front of Bus Terminal adjacent to Gujarat Vidhan Sabha.
Catchment area	Mainly to institutional and government office areas as Vidhan Sabha, Udyog Bhawan, and residential areas of Sector 10, Sector 11, Sector 12 and may extend to part of sector 8, part of sector 10 of Gandhinagar



4.18.2.41 AKSHARDHAM STATION

Chainage	31.850
Interstation Distance	1250-m
Rail Level	90.00-m
Platform Height from Ground	12.12-m
Location	Along median of the Cha Road, Station centre line passes in front of Primary School on west of the alignment.
Entry exit stairs	Planned on both sides of the Cha Road, Western stairs in front of Primary school Sector 22, Eastern stairs within Sector 21 greenbelt opposite residential areas.
Catchment area	Station largely would cater to Sectors 22,23,24,27,28,29,30. Visitors to Akshardham temple would also use the facility.



4.18.3 STATION PLANNING

4.18.3.1 Planning and Design Criteria for Stations

Salient features of a typical station are as follows:

1. The stations can be divided into public and non-public areas (those areas where access is restricted). The public areas can be further subdivided into paid and unpaid areas.
2. The platform level has adequate assembly space for passengers for both normal operating conditions and a recognised abnormal scenario.
3. The platform level at elevated stations is determined by a critical clearance of 5.50-m under the concourse above the road intersection, allowing 3.00-m for the concourse height, about 1-m for concourse floor and 2.00-m for structure of tracks above the concourse. Further, the platforms are 1.09-m above the tracks. This would make the platforms in an elevated situation at least 12.0-m above ground.

4. The concourse contains automatic fare collection system in a manner that divides the concourse into distinct areas. The 'unpaid area' is where passengers gain access to the system, obtain travel information and purchase tickets. On passing through the ticket gates, the passenger enters the 'paid area', which includes access to the platforms.
5. The arrangement of the concourse is assessed on a station-by-station basis and is determined by site constraints and passenger access requirements. However, it is planned in such a way that maximum surveillance can be achieved by the ticket hall supervisor over ticket machines, automatic fare collection (AFC) gates, stairs and escalators. Ticket machines and AFC gates are positioned to minimise cross flows of passengers and provide adequate circulation space.
6. Sufficient space for queuing and passenger flow has been allowed at the ticketing gates.
7. Station entrances are located with particular reference to passenger catchment points and physical site constraints within the right-of-way allocated to the MRTS.
8. Office accommodation, operational areas and plant room space is required in the non-public areas at each station. The functions of such areas are given below in **Table S 2**

Table S 2
STATION ACCOMMODATION

1. Station Control Room	2. Cleaner's Room
3. Station Master's Office	4. Security Room
5. Information & Enquiries	6. First Aid Room
7. Ticket Office	8. Miscellaneous Operations Room
9. Ticket Hall Supervisor & Excess Fare Collection (Passenger Office)	10. Platform Supervisor's Booth
11. Cash and Ticket Room	12. Traction Substation
13. Staff Area	14. Fire Tank and Pump Room
15. Staff Toilets	16. Commercial Outlets and Kiosks
17. Station Store Room	18. UPS and Battery Room
19. Refuse Store	20. Signaling / Communication Room

10. The DG set, bore well pump houses and ground tank would be located generally in one area on ground.
11. The system is being designed to maximize its attraction to potential passengers and the following criteria have been observed:
 - Minimum distance of travel to and from the platform and between platforms for transfer between lines.
 - Adequate capacity for passenger movements.
 - Convenience, including good signage relating to circulation and orientation.
 - Safety and security, including a high level of protection against accidents.

12. Following requirements have been taken into account:
 - Minimum capital cost is incurred consistent with maximising passenger attraction.
 - Minimum operating costs are incurred consistent with maintaining efficiency and the safety of passengers.
 - Flexibility of operation including the ability to adapt to different traffic conditions changes in fare collection methods and provision for the continuity of operation during any extended maintenance or repair period, etc.
 - Provision of good visibility of platforms, fare collection zones and other areas, thus aiding the supervision of operations and monitoring of efficiency and safety.
 - Provision of display of passenger information and advertising.
13. The numbers and sizes of staircases/escalators are determined by checking the capacity against AM and PM peak flow rates for both normal and emergency conditions.
14. In order to transfer passengers efficiently from street to platforms and vice versa, station planning has been based on established principles of pedestrian flow and arranged to minimise unnecessary walking distances and cross-flows between incoming and outgoing passengers.
15. Passenger handling facilities comprise of stairs/escalators, lifts and ticket gates required to process the peak traffic from street to platform and vice-versa (these facilities must also enable evacuation of the station under emergency conditions, within a set safe time limit).

4.18.3.2 Typical Elevated Station

The station is generally located on the road median. Total length of the station is ~135-m. For mezzanine level concourse type stations, the concourse is concentrated in a length of about 90-m in the middle of the station, with staircases leading from either side of the road. At grade side concourse is located on both side of road with fewer columns of structure to impart lighter look.

Passenger facilities like ticketing, information, etc as well as operational areas are provided at the concourse level. Typically, the concourse is divided into public and non-public zones. The non-public zone or the restricted zone contains station operational areas such as Station Control Room, Station Master's Office, Waiting Room, Meeting Room, UPS & Battery Room, Signalling Room, Train Crew Room & Supervisor's Office, Security Room, Station Store Room, Staff Toilets, etc. The public zone is further divided into paid and unpaid areas.

Since the station is generally in the middle of the road, minimum vertical clearance of 5.5-m has been provided under the concourse. Concourse floor level about 6.5-m above the road. Consequently, platforms are at a level of about 12.0-m from the road. To reduce physical and visual impact of the elevated station, stations have been made narrow towards the ends.

Structures that afford maximum transparency and are light looking have been envisaged. A slim and ultra-modern concrete form is proposed, as they would look both compatible and modern high-rise environment as well as the lesser-built, low-rise developments along some parts of the corridor.

Platform roofs that can invariably make a structure look heavy; have been proposed to be of steel frame with aluminium cladding to achieve a light look. Platforms would be protected from the elements by providing an overhang of the roof and sidewalls would be avoided, thereby enhancing the transparent character of the station building.

In order to allow unhindered traffic movement below the stations, portals across the road have been proposed in the concourse part, over which the station structure would rest. The rest of the station structure is supported on a single column, which lies unobtrusively on the median.

4.18.3.3 Passenger Amenities

Passenger amenities such as ticketing counters/automatic ticket vending machines, ticketing gate, etc. are provided in the concourse. Uniform numbers of these facilities have been provided for system wide uniformity, although the requirement of the facilities actually varies from station to station. The same applies to provision of platform widths and staircase/escalators. Maximum capacity required at any station by the year 2035 for normal operation has been adopted for all stations. For this purpose, *peak minute traffic* is assumed to be 2% of the *peak hour traffic*.

4.18.3.4 Concourse

Concourse forms the interface between street and platforms. In elevated stations, this is contained in a length of about 90-m in the middle of the station whereas at grade concourse is planned in 45-m by 25-m block on both side of road. This is where all the passenger amenities are provided. The concourse contains automatic fare collection system in a manner that divides the concourse into distinct *paid* and *unpaid* areas. The '*unpaid area*' is where passengers gain access to the system, obtain travel information and purchase tickets. On passing through the ticket gates, the passenger enters the '*paid area*', which includes access to the platforms. The concourse is planned in such a way that maximum surveillance can be achieved by the ticket hall supervisor over ticket machines, automatic fare collection (AFC) gates, stairs and escalators. Ticket machines and AFC gates are positioned to minimise cross flows of passengers and provide adequate circulation space. Sufficient space for queuing and passenger flow has been allowed in front of the ticketing gates.

4.18.3.5 Ticketing Gates

Ticketing gates' requirement has been calculated taking the gate capacity as 45 persons per minute per gate. Passenger forecast for the horizon year

2025 has been used to compute the maximum design capacity. At least two ticketing gates shall be provided at any station even if the design requirement is satisfied with only one gate. Uniform space has been provided in all stations where gates can be installed as and when required.

4.18.3.6 Ticket Counters and Ticket Issuing Machines (TIMs)

It is proposed to deploy manual ticket issuing in the beginning of the operation of the line. At a later stage, automatic TIMS would be used for which space provision has been made in the concourse. At present, ticket counters would be provided, which would be replaced with TIMS in future. Capacity of manual ticket vending counters is taken to be 10 passengers per minute and it is assumed that only 40% of the commuters would purchase tickets at the stations while performing the journey. The rest are expected to buy season tickets or prepaid card, etc. Accordingly, the requirement of ticket counters has been calculated and the same provided for in the plans.

4.18.3.6 Platforms

A uniform platform width of 3-m wide excluding staircases and escalators in the central section is proposed for the elevated stations. This platform width has been checked for holding capacity of the platform for worst-case scenario (two missed headways) in the design year i.e.2035.

4.18.3.7 Stairs, Escalators and Lifts for Normal and Emergency Operations

Provision has been made for escalators in the paid area i.e. from concourse to platforms. On each platform, one escalator has been proposed. In addition, two staircases with a combined width of 4.2 m are provided on each side platform connecting to the concourse. In case of underground stations this stair width is 8m to 12 m. These stairs and escalator together provide an escape capacity adequate to evacuate passengers in emergency from platforms to concourse in 5.5 minutes. While calculating the waiting passengers on the platform in emergency, 2 missed headways are assumed and the train arriving is assumed to be carrying peak section load. Lifts have been provided one each on either platform, to provide access for elderly and disabled. Since the rise from road to concourse is about 6.5-m, it is proposed to provide escalators and lifts in addition to stairs for vertical movement of passengers from street to concourse.

4.18.3.8 Passenger Information Kiosks and Commercial Kiosks

Passenger Information Kiosks and Commercial Kiosks are provided in the unpaid and paid areas of the concourse respectively.

4.18.3.9 Summary of passenger amenities required and proposed at stations on both the corridors based on projected traffic for the year 2035 is given in the **Table S 3**

Table S 3
PASSENGER TRAFFIC AND AMENITIES IN STATIONS (Projections for Year 2035)

Station	Daily Traffic	Peak Minute Boarding	Total Peak Minute Traffic Including Alighting	Ticketing Gates required	Ticket Counters Required	Stairs Width (in m) on Each Platform	Lifts Provided At Each Station		Escalators Provided At Each Station		
							G to C	C to P	G to C	C to P	
Ahmedabad – Thaltej (East West) MRTS Corridor											
1. Ahmedabad	83500	167	190	5	7	8.0	1	2	1	2	
2. Prem Darwaja	32800	66	75	4	3	8.0	1	2	1	2	
3. Delhi Darwaja	30800	62	70	4	3	8.0	1	2	1	2	
4. Shahpur Darwaja	42000	84	95	4	4	8.0	1	2	1	2	
5. Aayakar Bhawan	27000	54	61	4	3	8.0	1	2	1	2	
6. Sardar Patel Stadium	39000	78	89	4	4	8.0	1	2	1	2	
7. Commerce Circle	15000	30	34	4	2	8.0	1	2	1	2	
8. Gujarat University	23700	47	54	4	2	8.0	1	2	1	2	
9. Gurukul	43200	86	98	4	4	8.0	1	2	1	2	
10. Doordarshan Kendra	34500	69	78	4	3	8.0	1	2	1	2	
11. Thaltej	153500	307	349	8	13	8.0	1	2	1	2	
APMC – Akshardham (North South) MRTS Corridor											
12. APMC Vasna	31900	64	73	4	3	8.0	1	2	1	2	
13. Vasna	26200	52	60	4	3	8.0	1	2	1	2	
14. Narayan Nagar	18700	37	43	4	2	8.0	1	2	1	2	
15. Paldi	22100	44	50	4	2	8.0	1	2	1	2	
16. Madalpur	14000	28	32	4	2	8.0	1	2	1	2	
17. Nava Gandhigram	33400	67	76	4	3	8.0	1	2	1	2	
18. Navrangpura	60000	120	136	4	5	8.0	1	2	1	2	
19. Aayakar Bhavan	30000	60	68	4	3	8.0	1	2	1	2	
20. Usmanpura	10500	21	24	4	2	8.0	1	2	1	2	
21. Vadaj	45000	90	102	4	4	8.0	1	2	1	2	
22. Gandhi Ashram	21500	43	49	4	2	8.0	1	2	1	2	
23. Subash Circle	29100	58	66	4	3	8.0	1	2	1	2	
24. Sabarmati	15500	31	35	4	2	8.0	1	2	1	2	
25. Shankarpur	9500	19	22	4	2	8.0	1	2	1	2	
26. Acher	34000	68	77	4	3	8.0	1	2	1	2	
27. Motera Stadium	60000	120	136	4	5	8.0	1	2	1	2	
28. Motera	38000	76	86	4	4	8.0	1	2	1	2	
29. Amiyapur	27100	54	62	4	3	8.0	1	2	1	2	
30. Sughad	23000	46	52	4	2	8.0	1	2	1	2	
31. Narmada Main Canal	32700	65	74	4	3	8.0	1	2	1	2	
32. Koba Circle	44500	89	101	4	4	8.0	1	2	1	2	
33. Koba	20800	42	47	4	2	8.0	1	2	1	2	
34. Por	30600	61	70	4	3	8.0	1	2	1	2	
35. Kudasani	24700	49	56	4	2	8.0	1	2	1	2	
36. Dhaula Kuan	40700	81	93	4	4	8.0	1	2	1	2	

37. Infocity	21700	43	49	4	2	8.0	1	2	1	2
38. Indroda Circle	45800	92	104	4	4	8.0	1	2	1	2
39. Sector7	60300	121	137	4	5	8.0	1	2	1	2
40. ST Depot	50000	100	114	4	4	8.0	1	2	1	2
41. Sachivalaya	148000	296	336	8	12	8.0	1	2	1	2
42. Akshardham	125700	251	493	11	11	8.0	1	2	1	2

Note: G- ground/ street level, C- concourse level, P- platform level

- Minimum requirement at each access: 2 entry Gates, 2 Exit Gates, 1 EFO and 2 Ticket Counters.
- At each access, EFO will be in centre, entry Gates on left side of EFO and exit Gates on right side of EFO.
- Maximum Gate throughput: 45 passengers per minute. With passenger behaviour coefficient of 1.5 it becomes 30.
- Maximum TOM throughput: 10 passengers per minute, with 50% of passengers purchasing single ride ticket.
- Sufficient space shall be provided in station concourse area for future expansion of Gates and Ticket counters.

4.18.4 TRAFFIC INTEGRATION

4.18.4.1 Concept of Traffic Integration

The objective of an integrated transport system and traffic movement is to offer maximum advantage to commuters and society from traffic and planning consideration. Various modes of transport need to be integrated in a way that each mode supplements the other. A large proportion of MRTS users will come to and depart from various stations by public, hired and private modes, for which integration facilities need to be provided at stations to ensure quick and convenient transfers.

In order to ensure that entire MRTS function as an integrated network and provides efficient service to the commuter, the following steps have been identified:

- Suitable linkages are proposed so that various corridors of MRTS are integrated within themselves, with existing rail services and with road based modes.
- Parking and circulation area requirements are worked out for each station and are planned on the basis of prevailing norms.
- Facilities needed at various stations are planned in conformity with the type of linkages planned there.

Traffic and transport integration facilities are provided for two different types of linkages:

- Feeder links to provide integration between various MRTS corridors and road based transport modes i.e. public, hired, and private vehicles.
- Walk links to provide access to the pedestrians.

4.18.4.2 Modewise Parking Requirement at Stations

A computer model calculates passenger volumes and modal split at stations. Parking needs for hired as well as personal modes have been calculated in addition to space requirement for drop and ride facilities. The model assumes varying percent of the feeder passenger trips to be walk trips (from 15 to 40) as the influence area of each station is very different. Of the vehicular feeder trips, about 70-80% are assumed to be made by buses and the residual distributed among cycles, two-wheelers and autos/rickshaws. **Table S 4** provides summary of station wise traffic integration pattern.

Table S 4
MODE WISE PARKING/HALTING REQUIREMENT AT STATIONS

Station Name	Number of Parking Bays				Area provided for <i>Park & Ride</i> (in sqm)			
	Bus	Rickshaw/Auto/Taxi	Scooter	Cycle	Scooter	Cycle	Total	
Ahmedabad – Aayakar Bhawan – Thaltej MRTS Corridor								
1. Ahmedabad	3	15	1364	1637	3410	2455	5864	
2. Prem Darwaja	1	5	321	257	804	386	1189	
3. Delhi Darwaja	1	5	302	241	755	362	1117	
4. Shahpur Darwaja	1	6	412	329	1029	494	1523	
5. AAayakar Bhawan	1	2	882	1058	2205	1588	3793	
6. Sardar Patel Stadium	1	5	382	306	956	459	1414	
7. Commerce Circle	1	2	245	294	613	441	1054	
8. Gujarat University	1	3	387	465	968	697	1665	
9. Gurukul	1	5	706	847	1764	1270	3034	
10. Doordarshan Kendra	1	4	564	676	1409	1014	2423	
11. Thaltej	4	24	1504	1203	3761	1805	5566	
APMC – Aayakar Bhawan - Akshardham MRTS Corridor								
12. APMC	1	5	912	1094	1954	1407	3361	
13. Vasna	1	3	872	1046	2140	1541	3680	
14. Narayan Nagar	1	2	663	795	1527	1100	2627	
15. Paldi	1	4	745	447	1805	650	2455	
16. Madalpur	1	2	419	503	1143	823	1967	
17. Nava Gandhigram	2	6	1188	1425	2046	1473	3519	
18. Navrangpura	2	10	991	475	2450	706	3156	
19. AAayakar Bhawan	1	2	1055	1266	2450	1764	4214	
20. Usmanpura	1	1	247	297	858	617	1475	
21. Vadaj	2	6	738	532	1838	794	2631	
22. Gandhi Ashram	1	4	389	467	878	632	1510	
23. Subash Circle	1	5	720	864	1782	1283	3066	

Station Name	Number of Parking Bays				Area provided for <i>Park & Ride</i> (in sqm)		
	Bus	Rickshaw/Auto/ Taxi	Scooter	Cycle	Scooter	Cycle	Total
24. Sabarmati	1	2	504	605	1266	911	2177
25. Shankarpur	1	1	137	165	776	559	1334
26. Acher	1	6	539	646	1388	1000	2388
27. Motera Stadium	2	9	2090	1881	4900	2646	7546
28. Motera	1	5	929	1115	2328	1676	4003
29. Amiyapur	1	3	812	975	2213	1593	3807
30. Sughad	1	3	726	871	1878	1352	3231
31. Narmada Main Canal	1	4	1149	1378	2671	1923	4593
32. Koba Circle	1	5	1433	1720	3634	2617	6251
33. Koba	1	3	694	833	1699	1223	2922
34. Por	1	4	1075	1290	2499	1799	4298
35. Kudasani	1	3	872	1046	2017	1452	3470
36. Dhoola Kuan	1	4	938	1126	3324	2393	5717
37. Infocity	1	4	1029	1235	1772	1276	3048
38. Indroda Circle	1	5	1309	1570	3740	2693	6433
39. Sector7	1	7	1768	2121	4925	3546	8470
40. ST Depot	1	7	874	1049	2042	1470	3512
41. Sachivalaya	6	18	2432	2918	6043	4351	10395
42. Akshardham	5	15	1994	2392	5133	3696	8828

It is seen from the above table that interchange with buses and IPT modes is provided for at all the stations, *Park and Ride* facility has also been made at all stations.

4.18.4.3 Approach Adopted in Planning Traffic Integration Facilities-

Integration facilities at MRTS stations include approach roads to the stations, circulation facilities, pedestrian ways and adequate parking areas for various modes likely to come to important stations including feeder bus/mini-buses. Provisions have been made for peak hour demand. Traffic integration facilities were identified on the basis of location of station and its proximity to other existing/proposed activity generating or attracting landuses. These facilities have been provided directly under the stations/adjacent area in the MRTS corridor. Further, area planning ensures that dispersal of large volumes of pedestrians is adequately provided for.

4.18.4.4 Operational Integration

Integration at operational level will be required to synchronise the timings of the MRTS services and the feeder service. For an efficient interchange, walking and waiting time at these stations will need to be minimised. Introduction of common ticketing and their availability at convenient locations will be necessary to ensure forecast patronage of the system. Last but not the least will be the need for an integrated passenger information system covering all the modes through the publication of common route guides, time tables and information boards at terminals and in the train coaches for providing updated information for users of the system.

4.19 LAND

4.19.1 The N-S alignment is passing through the Vasna, Paldi, ITO, Vadaj, Gandhi Ashram, Motera, Koba circle, Indroda circle via Ashram road, Motera road SH - 43&71 and Ch road up to CH-6 in Gandhi Nagar. All these roads are major roads with right of way is about 25m to 90m.

4.19.2 The E-W alignment is passing along the walled city via Prem Darwaja, Delhi Darwaja, Kastoomba Gandhi Marg, ITO, Manav Mandir Marg and Drive-in-road. All these roads are major roads with right of way is about 22m to 30-m.

4.19.3 As the alignment is planned on the median of the road in elevated position, hence the land acquisition is reduced to the barest minimum. However some land is required for entry, exits & traffic integration purpose at the stations and for alignment is ramp/at-grade for a short stretch while providing entry to depot. In this section the land will be required permanently.

4.19.2 Land is mainly required for

- Metro Rail Structure (including Route Alignment), Station Building, Platforms, Entry/Exit Structures, Traffic Integration Facilities, Parking etc.
- Receiving/Traction Sub-stations.
- Property Development.
- Temporary Construction Depots and work sites.

4.19.3 Land for Elevated Viaduct

The whole alignment is planned in elevated position. For elevated section, only 2.8 m width covering viaduct columns will be occupied in the middle of road but existing number of lanes will remain in use of the road traffic. Accordingly, necessary permission for using such right of way will have to be obtained from concerned authorities.

In stretches, where elevated alignment has to be located away from median, a strip of 22.5-m width, which is beyond the right of way, is proposed for acquisition. For construction of elevated structures, land will, however, be temporarily occupied during construction phase. In at grade ramp portion section the land shall to be acquired permanently.

4.19.4 Land for Traction and Receiving Sub-stations

For North-South and East-West corridor three traction sub-stations have been proposed to be located near Vasna, Sabarmati Metro Station and in Thaltej as these sites are close to 220/66kV AEC sub stations and most suitable for RSS (Receiving sub station).

4.19.5 Traffic Integration

In elevated stations, small pockets of land will be required for locating concourse structure on ground on both sides of the alignment including entry/exit structures and traffic integration facilities. It is also proposed to provide traffic integration facilities at proposed Metro Stations. Land for these facilities has been identified and is given in **Table S 4** (under para 4.18.4.2).

4.19.6 Government and Private Land

In order to keep acquisition of private land to the barest minimum, the alignment has been so chosen, that it remains mostly within the government land. The Prasar Bharti and its adjacent custom house building at ITO crossing will have to be acquired to provide the rake transferring facilities from one line to another.

The details of land permanently required for the project are given in **Table L 2 & L 3**. The station entry /exit and parking are being proposed beyond the Right of Way wherever required. Hence, the land required for this purpose will have to be acquired permanently. The locations of the proposed plots for permanent & temporary acquisitions so indicated will be submitted separately as annexure to DPR.

Table L 2
LAND PERMANENTLY REQUIRED ALONG THE ALIGNMENT FOR THE PROJECT

S.NO	PLOT NO.	CH.	LOCATION	AREA (Sq.m)	LAND OWNERSHIP	PROPOSED LAND USE
NORTH – SOUTH CORRIDOR						
1.	TSS-1	-300	Near APMC	3600	Private	For TSS/ RSS
2.	N-S ALP-1	9100	Near Vadaj	1239	Private	For Elevated Alignment
3.	N-S – ALP-2	9250	Near Chandra Bhaga Bridge	300	Private	For Elevated Alignment
4.	N-S ALP-3	10700	Near Chiman Bhai Bridge	381	Private	For Elevated Alignment
5.	N-S ALP-4*	10800	Near Chiman Bhai Bridge	2981	Govt	For Elevated Alignment
6.	N-S ALP-5	10850	Ambedkar Nagar	1512	Private	For Elevated Alignment
7.	N-S ALP-6A*	11500	Near Sabarmati Station	8906	Govt (Rly & State Govt ROW)	For Elevated Alignment
8.	TSS-2	11500	Near Sabarmati Station	3600	Govt (Railway)	For TSS/ RSS

S.NO	PLOT NO.	CH.	LOCATION	AREA (Sq.m)	LAND OWNERSHIP	PROPOSED LAND USE
9.	N-S ALP- 7*	19200	Near Nmc Bridge	28200	Govt	For Elevated Alignment
EAST – WEST CORRIDOR						
1.	E-W ALP-1	3400	Near Gandhi Bridge	458	Private	For Elevated Alignment
2.	E-W ALP-2 *	3400	Near Gandhi Bridge	397	Govt (ROW)	For Elevated Alignment
3.	E-W ALP-3 *	3425	Near Gandhi Bridge	708	Govt (River Bank)	For Elevated Alignment
4.	E-W ALP-4*	3850	Near Gandhi Bridge	917	Govt (River Bank & ROW)	For Elevated Alignment
5.	E-W ALP –5	3850	Near Gandhi Bridge	207	Private	For Elevated Alignment
6.	E-W ALP-6	3875	Near Gandhi Bridge	171	Private	For Elevated Alignment
7.	E-W ALP-7*	9300	Near Sardar Patel Institute	4627	Govt (In ROW)	For Elevated Alignment
8.	E-W ALP-8	9500	Near Vasant Nature Care Hospital	2050	Private	For Elevated Alignment
9	TSS-3 *	10550	In Thaltej Depot	3600	Included in depot area	For TSS/ RSS
				13518 Sqm	GOVT = 3600 m² or 0.36 ha PVT = 9918 m² or 0.99 ha	

Note: 1. * Need not be acquired permanently. Only Permissions are to be obtained from concerned agencies. Hence not included.

**Table L 3
LAND PERMANENTLY REQUIRED AT STATION LOCATION FOR THE PROJECT**

S.no	Plot No.	Station	Location	Area	Land Ownership	Proposed land use
North – South Corridor						
1.	N-S 1L	APMC Vasna	APMC Location	3363	Govt (AMC)	Station Entry/Exit & Traffic Integration
2.	N-S 1.1L*	APMC Vasna	AMC Octroi Naka	787	Govt (ROW) Permission	Traffic Integration
3.	N-S 1.2L*	APMC Vasna	AMC Octroi Naka	213	Govt (ROW) Permission	Traffic Integration
4.	N-S 1.3R	APMC Vasna	Shops	1125	Private	Station Entry Exit
5.	N-S	APMC	Shops	192	Govt (ROW)	Station Entry

S.no	Plot No.	Station	Location	Area	Land Ownership	Proposed land use
	1.4R*	Vasna			Permission	Exit
				4488	Govt = 3363 Pvt = 1125	
6.	N-S 2L	Vasana	Open Plot	1424	Private	Station Entry/Exit
7.	N-S 2.1L	Vasana	Open Plot	1524	Private	Traffic Integration
8.	N-S 2.2R	Vasana	G.B.Shah College	1240	Private	Station Entry/Exit
9.	N-S 2.3R	Vasana	Open Plot	1623	Private	Traffic Integration
				5811	Govt = - Pvt = 5811	
10.	N-S 3L	Narayan Nagar	Shop & open area	1919	Private	Traffic Integration
11.	N-S 3.1L	Narayan Nagar	Shop & open area	1095	Private	Station Entry/Exit
12.	N-S 3.2R	Narayan Nagar	Shop	1184	Private	Traffic Integration
13.	N-S 3.3R	Narayan Nagar	Shop	1125	Private	Station Entry/Exit
				5323	Pvt = 5323	
14.	N-S 4L	Paldi	Bus Terminal	5583	Govt (AMC)	Traffic Integration & Station Entry/Exit
15.	N-S 4.1L	Paldi	Narshi Hostel	1125	Private	-Do-
				6708	Govt = 6708 Pvt. = 1125	
16.	N-S 5L	Madalpur	Open Plot	2022	Govt (AMC)	Traffic Integration & Station Entry/Exit
17.	N-S 5.1R	Madalpur	Medical Boys Hostel	1155	Govt (AMC)	Traffic Integration
18.	N-S 5.2R	Madalpur	Open Plot	1102	Private	Station Entry/Exit
				4279	Govt = 3177 Pvt = 1102	
19.	N-S 6L	Nava Gandhi Gram	Open Plot	2452	Govt (Health Deptt.)	Traffic Integration
20.	N-S 6.1L	Nava Gandhigram	Open Plot	1807	Govt (Health Deptt.)	Station Entry/Exit
21.	N-S	Nava Gandhi	Open Plot	890	Private	Traffic

S.no	Plot No.	Station	Location	Area	Land Ownership	Proposed land use
	6.2L	Gram				Integration
22.	N-S 6.3R	Nava Gandhi Gram	Bharat Petroleum	1125	Govt	Station Entry/Exit
				6274	Govt = 5384 Pvt = 890	
23.	N-S 7L	Navarangpura	Handicap Society	2557	Private	Traffic Integration
24.	N-S 7.1L	Navarangpura	Handicap Society office	685	Govt (Health Deptt.)	Station Entry/Exit
25.	N-S 7.2R	Navrangpura	Near Times Of India	1046	Govt	Station Entry/Exit
				4288	Govt = 1731 Pvt. = 2557	
26.	N-S 8L	Aayakar Bhawan	Prasar Bharti All India Radio	6852	Govt (Central Govt.)	Traffic Integration & Station Entry/Exit & link line
27.	N-S 8.1L	Aayakar Bhawan	Custom House	978	Govt (Central Govt.)	Traffic Integration & link line
				7830	Govt = 7830	
28.	N-S 9.1L	Usamanpura	Bank Of Baroda	859	Govt	Station Entry/Exit
29.	N-S 9.2L	Usamanpura	Pvt. building	329	Private	Station Entry/Exit
30.	N-S 9.1L	Usamanpura	Shops & Houses	1200	Private	Traffic Integration
31.	N-S 9.2R	Usamanpura	Shops & Houses	1125	Private	Station Entry/Exit
				3513	Govt = 859 Pvt = 2654	
32.	N-S 10L	Vadaj	Gujrat Khadi Gramoudhyog	1186	Private	Station Entry/Exit
33.	N-S 10.1L	Vadaj	Shops	1458	Private	Traffic Integration
34.	N-S 10.2R	Vadaj	Open Plot	1010	Private	Traffic Integration
35.	N-S 10.3R	Vadaj	Shops	1125	Private	Station Entry/Exit
				4779	Pvt = 4779	
36.	N-S 11L	Gandhi Ashram	Khadi Gramo Udhayog	1193	Private (Trust land)	Station Entry/Exit
37.	N-S 11.1L	Gandhi Ashram	Khadi Gramo Udhayog	1426	Private (Trust land)	Traffic Integration
38.	N-S	Gandhi	Open Plot	1492	Private	Traffic

S.no	Plot No.	Station	Location	Area	Land Ownership	Proposed land use
	11.2R	Ashram			(Trust land)	Integration
39.	N-S 11.3R	Gandhi Ashram	Gaushala	960	Private (Trust land)	Station Entry/Exit
				5071	Pvt. = 5071	
40.	N-S 12L	Subhash Circle	Central Jail	2508	Govt	Traffic Integration
41.	N-S 12.1L	Subhash Circle	Central Jail	1125	Govt	Station Entry/Exit
42.	N-S 12.2R	Subhash Circle	Near Siddhi Complex	1125	Private	Station Entry/Exit
43.	N-S 12.3R	Subhash Circle	Near Siddhi Complex	877	Private	Traffic Integration
				5635	Govt = 3633 Pvt = 2002	
44.	N-S 13L	Sabarmati	Open Plot	4420	Govt (Railway)	Traffic Integration & Station Entry/Exit
45.	N-S 14L	Shankar pura	Shankarpura Chali	3042	Private (AEC land)	Traffic Integration & Station Entry/Exit
46.	N-S 14.1R	Shankar pura	Near Power House	1125	Private (AEC land)	Station Entry/Exit
				8587	Govt = 4420 Pvt = 4167	
47.	N-S 15L	Acher	Shops	1125	Private	Station Entry/Exit
48.	N-S 15.1R	Acher	Open Plot	2204	Private	Traffic Integration
49.	N-S 15.2R	Acher	Shops	1025	Private	Station Entry/Exit
				4354	Pvt = 4354	
50.	N-S 16L	Motera Stadium	Chamunda Park	3500	Private	Traffic Integration
51.	N-S 16.1R	Motera Stadium	Chamunda Park	1125	Private	Station Entry/Exit
52.	N-S 16.2R	Motera Stadium	Open Plot	4800	Private	Traffic Integration
				9425	Govt = - Pvt = 9425	
53.	N-S 17 L	Motera Village	Gayatri Timber	1125	Private	Traffic Integration
54.	N-S 17.1L	Motera Village	Open Plot	1500	Private	Station Entry/Exit
55.	N-S 17.2R	Motera Village	Open Plot	2250	Private	Traffic Integration

S.no	Plot No.	Station	Location	Area	Land Ownership	Proposed land use
56.	N-S 17.3R	Motera Village	Open Plot	1125	Private	Traffic Integration
57.	N-S 17.4R	Motera Village	Complex	1000	Private	Station Entry/Exit
				7000	Govt = - Pvt= 7000	
58.	N-S 18L	Amiyapur	Open Plot	1875	Govt (In R&B ROW)	Traffic Integration
59.	N-S 18.1L	Amiyapur	Open Plot	1170	Govt (In R&B ROW)	Station Entry/Exit
60.	N-S 18.2R	Amiyapur	Open Plot	2878	Govt (In R&B ROW)	Traffic Integration
61.	N-S 18.3R	Amiyapur	Open Plot	1170	Govt (In R&B ROW)	Station Entry/Exit
				7093	Govt = 7093	
62.	N-S 19L	Sughad	Open Plot	1328	Govt (In R&B ROW)	Station Entry/Exit
63.	N-S 19.1 L	Sughad	Open Plot	1442	Govt (In R&B ROW)	Traffic Integration
64.	N-S 19.2R	Sughad	Open Plot	782	Govt (In R&B ROW)	Traffic Integration
65.	N-S 19.3R	Sughad	Open Plot	1018	Govt (In R&B ROW)	Station Entry/Exit
66.	N-S 19.4R	Sughad	Open Plot	1664	Govt (In R&B ROW)	Traffic Integration
				6234	Govt = 6234	
67.	N-S 20R	Narmada Canal	Open Plot	2955	Private	Traffic Integration
68.	N-S 20.1R	Narmada Canal	Open Plot	1125	Private	Station Entry/Exit
69.	N-S 20.2R	Narmada Canal	Open Plot	4612	Private	Traffic Integration
				8692	Pvt = 8692	
70.	N-S 21L	Koba Circle	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
71.	N-S 21.1L	Koba Circle	Open Plot	3155	Govt (In R&B ROW)	Traffic Integration
72.	N-S 21.2R	Koba Circle	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
73.	N-S 21.3R	Koba Circle	Open Plot	3000	Govt (In R&B ROW)	Traffic Integration
				8405	Govt = 8405	
74.	N-S 22L	Koba	Open Plot	3000	Govt (In R&B ROW)	Traffic Integration
75.	N-S 22.1L	Koba	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
76.	N-S	Koba	Open Plot	2760	Govt (In	Traffic

S.no	Plot No.	Station	Location	Area	Land Ownership	Proposed land use
	22.2R				R&B ROW)	Integration
77.	N-S 22.3R	Koba	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
				8010	Govt = 8010	
78.	N-S 23L	Pore	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
79.	N-S 23.1L	Pore	Open Plot	2500	Govt (In R&B ROW)	Traffic Integration
80.	N-S 23.2R	Pore	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
81.	N-S 23.3R	Pore	Open Plot	2500	Govt (In R&B ROW)	Traffic Integration
				7250	Govt = 7250	
82.	N-S 24L	Kudasan	Open Plot	2250	Govt (In R&B ROW)	Traffic Integration
83.	N-S 24.1L	Kudasan	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
84.	N-S 24.2R	Kudasan	Open Plot	2250	Govt (In R&B ROW)	Traffic Integration
85.	N-S 24.3R	Kudasan	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
				6750	Govt = 6750	
86.	N-S 25L	Dhaura Kuva	Farm	2500	Govt (In R&B ROW)	Traffic Integration
87.	N-S 25.1L	Dhaura Kuva	Farm	1125	Govt (In R&B ROW)	Station Entry/Exit
88.	N-S 25.2R	Dhaura Kuva	Swami Narayan Temple	1125	Govt (In R&B ROW)	Station Entry/Exit
89.	N-S 25.3R	Dhaura Kuva	Swami Narayan Temple	2500	Govt (In R&B ROW)	Traffic Integration
				7250	Govt = 7250	
90.	N-S 26L	Infocity	Open Plot	2500	Govt (In R&B ROW)	Traffic Integration
91.	N-S 26.1L	Infocity	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
92.	N-S 26.2R	Infocity	Funworld	2500	Govt (In R&B ROW)	Traffic Integration
93.	N-S 26.3R	Infocity	Funworld	1125	Govt (In R&B ROW)	Station Entry/Exit
				7250	Govt = 7250	
94.	N-S 27L	Indroda Circle	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
95.	N-S 27.1L	Indroda Circle	Open Plot	2250	Govt (In R&B ROW)	Traffic Integration
96.	N-S 27.2R	Indroda Circle	Open Plot	1250	Govt (In R&B ROW)	Traffic Integration
97.	N-S	Indroda	Open Plot	1125	Govt (In	Station

S.no	Plot No.	Station	Location	Area	Land Ownership	Proposed land use
	27.3R	Circle			R&B ROW)	Entry/Exit
98.	N-S 27.4R	Indroda Circle	Open Plot	2250	Govt (In R&B ROW)	Traffic Integration
				8000	Govt = 8000	
99.	N-S 28L	Sector-7	Open Plot	2500	Govt (In R&B ROW)	Traffic Integration
100.	N-S 28.1L	Sector -7	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
101.	N-S 28.2R	Sector -7	Open Plot	2500	Govt (In R&B ROW)	Traffic Integration
102.	N-S 28.3R	Sector -7	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
103.	N-S 28.4R	Sector-7	Open Plot	2500	Govt (In R&B ROW)	Traffic Integration
				9750	Govt = 9750	
104.	N-S 29L	ST Depot	Open Plot	3740	Govt (In R&B ROW)	Traffic Integration
105.	N-S 29.1L	ST Depot	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
106.	N-S 29.2R	ST Depot	Open Plot	3914	Govt (In R&B ROW)	Traffic Integration
107.	N-S 29.3R	ST Depot	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
				9904	Govt = 9904	
108.	N-S 30L	Sachivalaya	Gandhi Nagar Fire Brigade Station	2250	Govt (In R&B ROW)	Traffic Integration
109.	N-S 30.1L	Sachivalaya	Gandhi Nagar Fire Brigade Station	1125	Govt (In R&B ROW)	Station Entry/Exit
110.	N-S 30.2R	Sachivalaya	Open Plot	2250	Govt (In R&B ROW)	Traffic Integration
111.	N-S 30.3R	Sachivalaya	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit
112.	N-S 30.4R	Sachivalaya	Open Plot	2120	Govt (In R&B ROW)	Traffic Integration
				8870	Govt = 8870	
113.	N-S 31L	Akshardham	Primary School	1120	Govt (In R&B ROW)	Traffic Integration
114.	N-S 31.1L	Akshardham	Primary School	1125	Govt (In R&B ROW)	Station Entry/Exit
115.	N-S 31.2L	Akshardham	Open Plot	3125	Govt (In R&B ROW)	Traffic Integration
116.	N-S 31.3R	Akshardham	Open Plot	2860	Govt (In R&B ROW)	Traffic Integration
117.	N-S 31.4R	Akshardham	Open Plot	1125	Govt (In R&B ROW)	Station Entry/Exit

S.no	Plot No.	Station	Location	Area	Land Ownership	Proposed land use
118	N-S 31.5R	Akshardham	Open Plot	3125	Govt (In R&B ROW)	Traffic Integration
				12480	Govt = 12480	
East – West Corridor						
S.No	Plot No.	Station	Location	Area	Land Ownership	Proposed land use
1	E-W 1L	Ahmedabad	Open Land	4110	Private	Traffic Integration
2	E-W 1R	Ahmedabad	Rly parking	3526	Govt (Railway)	Station Entry/Exit
				7636	Govt = 3536 Pvt = 4110	
3	E-W 2L	Prem Darwaja	Shop	1125	Private	Station Entry/Exit
4	E-W 2.1R	Prem Darwaja	Parking Area	1665	Private	Station Entry/Exit
5	E-W 2.2R	Prem Darwaja	Parking Area	1458	Private	Traffic Integration
				4248	Pvt = 4248	
6	E-W 3L	Delhi Darwaja	Shop	1125	Private	Station Entry/Exit
7	E-W 3.1R	Delhi Darwaja	Shop	1125	Private	Station Entry/Exit
8	E-W 3.2R	Delhi Darwaja	Shop	1200	Private	Traffic Integration
				3450	Pvt = 3450	
9	E-W 4L	Shahpur Darwaja	Municipal School	795	Govt (AMC)	Station Entry/Exit
10	E-W 4.1L	Shahpur Darwaja	Municipal School	2027	Govt (AMC)	Traffic Integration
11	E-W 4.2R	Shahpur Darwaja	Shop	608	Private	Station Entry/Exit
12	E-W 4.3R	Shahpur Darwaja	Municipal School	312	Govt (AMC)	Traffic Integration
				3742	Govt = 3134 Pvt = 608	
13.	E-W 6L	S.P.Stadium	Open Plot	623	Private	Traffic Integration
14.	E-W 6.1L	S.P.Stadium	Chandralaya	304	Private	Station Entry/Exit
15.	E-W 6.2R	S.P.Stadium	Residence	1634	Private	Station Entry/Exit
				2561	Pvt = 2561	
16.	E-W 7L	Commerce Circle	Open plot	700	Private	Station Entry/Exit
17.	E-W	Commerce	Teacher School	541	Govt	Traffic

S.no	Plot No.	Station	Location	Area	Land Ownership	Proposed land use
	7.1L	Circle				Integration
				1241	Govt = 541 Pvt = 700	
18.	E-W 8L	Gujarat University	Ground	775	Govt	Station Entry/Exit
19.	E-W 8.1R	Gujarat University	Ground	1698	Govt	Traffic Integration
				2473	Govt = 2473	
20.	E-W 9L	Gurukul	Office	3000	Govt	Traffic Integration & Station Entry/Exit
				3000	Govt = 3000	
21.	E-W 10L	Doordarshan	Doordarshan	2370	Govt	Station Entry/Exit
22.	E-W 10.1R	Doordarshan	Ahmedabad Education Society	2100	Private	Traffic Integration & Station Entry/Exit
				4470	Govt = 2370 Pvt = 2100	
23.	E-W 11L	Thaltej	Shops	2718	Private	Traffic Integration & Station Entry/Exit
				2718	Pvt= 2718	

Total Government Land = 158270 m² or 15.83 ha

Total Private Land = 86572 m² or 8.66 ha

Note: 1. * Need not be acquired permanently. Only Permissions are to be obtained from concerned agencies. Hence not included.

4.19.7 Land for Property Development

To supplement financial resources for construction and operation of the system, it is proposed to develop the area along SH-71 from Koba circle to Indroda circle and Motera along the alignment for residential and commercial exploitation. The details for property development are being discussed in subsequent chapter.

4.19.8 Temporary Construction Depots

During construction period, huge quantities of construction materials like reinforcing bars, cement, steel sections, shutters, pre-cast segments etc. are to be stored. Sufficient land is required for storage of these materials. Vacant sites are identified along the corridor, which can be utilised for

temporary storage of construction materials. These sites will be acquired temporarily for the construction period.

Segment Casting Yard

Large numbers of pre-cast segments are required for construction of elevated structures section for which a large open area is required for setting up of casting yard. As far as possible, this area should be close to the site, easily accessible and away from habitation. Considering the various factors, it is proposed to setup the segment-casting yard at the land identified for depot at Indroda circle & Thaltej and open land near APMC/Vishala with good access. After completion of construction, these will be handed over back to the land owning agencies. Approximately, **23.54** ha. of Government land and **0.87** ha. of private land will be temporarily taken for this purpose. The proposed construction depot sites are given in **Table L 4**. Presently these sites are vacant. The areas identified are slightly on higher side. At the time of construction, depending up on the need the requirements can be reassessed and temporary land acquisitions can be made accordingly.

Table L 4
PROPOSED CONSTRUCTION DEPOT SITES

S.No	Plot No.	Location	Area (Sqm)	Land Utilization During Construction	Owner
1.	CD-1	Open Plot Near Vishala Highway	11128	For Construction Depot @ Vishala Highway	Private
2.	CD-2	Highway Hanuman Mandir	2430	For Construction Depot @ Vishala Highway	Private
3.	CD-3	Open Plot & Pond	18532	For Construction Depot @ Vishala Highway	Govt
4.	CD-4	Open Plot	105171	For Construction Depot @ Gujrat Stadium	Govt
5.	CD-5	Open Plot	70573	For Construction Depot @ Highway	Govt
6.	CD-6	Play Ground	21607	For Construction Depot @ Income Tax Junction To University	Govt
7.	CD-7	Open Plot	9740	For Construction Depot @ Thaltej	Govt
8.	CD-8	Open Plot	9740	For Construction Depot @ Thaltej	Govt
			244061	GOVT = 235363 PVT = 8698	

4.19.9 Railway Land for which Permission to be obtained

The N-S alignment is crossing the Western railway track at Sabarmati near Chimmanbhai Bridge in elevated position. During construction of viaduct, the permission from railway will be required for storage and launching the girders.

4.19.10 Summary of Land Requirements

Abstract of land requirements for different components of this corridor is given in Table L-2 & L-3 and are summarized below:

A Government Land

• Government land to be acquired	
i) At stations	15.83 Ha
ii) At other location	0.36 Ha
• Land for Depot	
Indroda Circle Depot	25.34 Ha
Thaltej Depot	18.71 Ha
Total Govt. Land	60.24 Ha

B Private Land

i) At stations	8.66 Ha.
ii) At other location	0.99 Ha

Total Private Land 9.65 Ha.

Total Land to be acquired permanently (A+B) 69.89 Ha

C Total Land to be taken Temporarily for Construction Depots

i) Private Land	0.87 ha.
ii) Govt. Land	23.54 ha.
Total	24.41 ha.

4.20 GEOTECHNICAL INVESTIGATIONS

4.20.1 GENERAL GEOLOGY AND RELATED CHARACTERISTICS

LOCATION

The City of Ahmedabad a leading Industrial and commercial City of Gujarat lies on 23°1' N Latitude and 72°37' East Longitude on the Bank of River Sabarmati. It is the Seventh Largest City of the Country with an area of 220.84 Sq.km and a population of 45 lakhs according to 2001 censuses including the areas under Ahmedabad Urban Development Authority. Sabarmati River runs from North to South across the City separating the Old City from recent formation.

The proposed metro Project has two corridors and two Depots one at Indroda Circle and another at Thaltej. The **Corridor I** lies between APMC

Vasna to Akshardham via Vasna, Paldi, Nava Gandhigram, Aayakar Bhawan, Vadaj, Gandhi Ashram, Sabarmati, Acher, Motera, Motera Village, Amiyapur, Koba Circle, Indroda Circle, Sachivalaya and Akshardham and the **Corridor II** lies between Ahmedabad to Thaltej via Delhi Darwaja, Aayakar Bhawan, Commerce Circle, Gurukul, Doordarshan Kendra and Thaltej, which are accessible by all mode of surface transport for all seasons.

PHYSIOGRAPHY AND CLIMATE

Ahmedabad city is located in the state of Gujarat, in the western part of India. Ahmedabad lies along the Sabarmati River. Ahmedabad is 440 km north of Mumbai. The climate of Ahmedabad is hot and moist. Winters are cool and pleasant (November-February) but summers (April-June) are extremely dry, hot in Ahmedabad and the temperature can be as high as 46°C at times. The city of Ahmedabad experiences good rainfall during the monsoon season during the months from July to September. Rainfall during the year was 93cm. The city of Ahmedabad experiences a harsh summer season, and is lashed by the southwestern monsoons.

GENERAL GEOLOGY

Primarily the city and the surrounding areas situated in River borne alluvium. No other Geological out crops exists in the surrounding Vicinity Around the river the soil is silty sand and sandy silt deposits to about 30m deep. The alluvium belongs to Pleistocene to Holocene Geological age.

SEISMICITY

The City of Ahmedabad is located in Zone - III, of the Indian Earthquake Zonal Map according to IS – 1893 (2002) and the corresponding design acceleration coefficient of 0.05. Despite at 250 km east from the epicentre of the Bhuj Earth Quake during 26th Jan 2001. The Ahmedabad City received unexpected high damage. More than 100 buildings of 4 to 10 stories on Western side of the city were completely collapsed. There is a strong possibility that the recently deposited Sediments could be a factor contributing to the damage pattern in the city. The High level degree of damage may be consequences of large amplification of shear waves by thick Sandy soil beneath the town. During the Bhuj Earth quake the seismographs located at Passport Office in Ahmedabad recorded the ground acceleration and accelerations at higher storeys that include the components namely N-S, E-W, and vertical Motions. The Strong Motions was from about 35 to 60 seconds and total duration of recording was for about 135 seconds. The digitized data had recording time interval of 0.0945 Seconds. And the recorded peak acceleration was found to be 54.3 cm/s², 49.50 cm/s² and 27.50 cm/s² Respectively along N-S, E-W and vertical directions. The predominant frequency of the earthquake recorded at Ahmedabad City was around 1.19HZ and 1.4HZ in N-S and E- W directions. Gujarat State Disaster Management Authority have recommended additional precautional norms over Zone III requirements.

4.20.2 FIELD INVESTIGATIONS

Detailed field investigations were carried out along the considered alignment. Total 56 boreholes were drilled upto a maximum depth of 30.0 m below existing ground level. The details of boreholes so drilled are shown in **Table GT 1**.

Standard Penetration Tests (SPT) was conducted at different depths in these boreholes. SPT split spoon sampler of standard dimensions was driven into the soil from the borehole bottom using 63.5 kg Hammer falling from 75 cm height. Blow counts for the penetration of every 15 cm was recorded and the N is reported as the blow counts for 30 cm penetration of the sampler leaving the first 15 cm penetration as seating drive. Undisturbed samples were collected in 100 mm dia thin walled steel tubes of 50 cm length. These disturbed and undisturbed samples so collected were subjected to standard tests to arrive at the geo-technical parameters, which are given in subsequent paragraphs.

**TABLE GT 1
DETAILS OF BOREHOLES**

S.No	BH No	Chainage	Reduced Level	Depth of BH	Water Table Depth
Indroda Circle to Vishala					
1	BH 1	26920	71.454	30.00m	Not Met
2	BH 2	26170	70.486	30.00m	Not Met
3	BH 3	25120	69.135	30.00m	Not Met
4	BH 4	24670	68.412	30.00m	Not Met
5	BH 5	23932	67.344	30.00m	Not Met
6	BH 6	23170	66.4	30.00m	Not Met
7	BH 7	22420	65.5	30.00m	Not Met
8	BH 8	21660	62.688	30.00m	Not Met
9	BH 9	20940	62.65	30.00m	Not Met
10	BH 10	20667	62.2	30.00m	14.00m
11	BH 11	19330	65.229	30.00m	10.00m
12	BH 12	18575	61.180	30.00m	Not Met
13	BH 13	17823	61.643	30.00m	Not Met
14	BH 14	16830	60.017	30.00m	Not Met
15	BH 15	16100	59.20	30.00m	Not Met
16	BH 16	15092.35	58.566	30.00m	Not Met

S.No	BH No	Chainage	Reduced Level	Depth of BH	Water Table Depth
17	BH 17	14223.382	56.6	30.00m	9.50m
18	BH 18	13469.70	56.9	30.00m	Not Met
19	BH 19	12706.095	57.037	30.00m	Not Met
20	BH 20	11938.171	53.316	30.00m	Not Met
21	BH 21	11077.50	51.605	30.00m	9.50m
22	BH 22	11224	50.01	30.00m	13.00m
23	BH 23	11080	54.00	30.00m	3.00m
24	BH 24	10232	52.32	30.00m	Not Met
25	BH 25	9632	51.05	30.00m	Not Met
26	BH 26	9160	47.23	30.00m	Not Met
27	BH 27	8005	52.052	30.00m	18.00m
28	BH 28	7034.60	51.231	30.00m	Not Met
29	BH 29	6145.728	49.938	30.00m	23.00m
30	BH 30	5434.424	48.920	30.00m	20.00m
31	BH 31	4711.35	47.100	30.00m	17.50m
32	BH 32	3915.257	47.223	30.00m	21.50m
33	BH 33	3302.281	46.80	30.00m	22.00m
34	BH 34	2523.76	49.897	30.00m	21.00m
35	BH 35	1739.38	47.711	30.00m	17.00m
36	BH 36	925.781	42.48	30.00m	7.00m
37	BH 37	180.0	42.661	30.00m	10.00m
Ahmedabad Station to Thaltej Depot					
38	BH 38	134.243	50.78	30.00m	Not Met
39	BH 39	857.538	50.20	30.00m	Not Met
40	BH 40	1410.812	48.905	30.00m	10.00m
41	BH 41	2463.112	48.60	30.00m	20.00m
42	BH 42	3375.46	50.547	37.00m	10.00m
43	BH 43	3858.625	50.670	36.50m	12.00m
44	BH 44	4506.634	49.75	30.00m	Not Met
45	BH 45	5252.44	49.84	30.00m	Not Met

S.No	BH No	Chainage	Reduced Level	Depth of BH	Water Table Depth
46	BH 46	6026.871	48.55	30.00m	Not Met
47	BH 47	6908.345	48.40	30.00m	Not Met
48	BH 48	7002.244	49.5	30.00m	20.00m
49	BH 49	8391.62	50.2	30.00m	19.25m
50	BH 50	9210	56.8	30.00m	Not Met
51	BH 51	9964	51.875	30.00m	Not Met
Indroda Circle to CH 6 Circle (Gandhinagar)					
52	BH 52	27906.477	73.151	30.00m	Not Met
53	BH 53	28917.042	74.036	30.00m	Not Met
54	BH 54	29915.908	75.681	30.00m	Not Met
55	BH 55	30920.00	76.231	30.00m	Not Met
56	BH 56	31989.463	78.400	30.00m	Not Met

4.20.3 LITHOLOGY OF STRATA ALONG THE ALIGNMENT

The terrain of the area is generally flat and the area / corridor under study / investigation consists mainly, newer alluvium made-up of non plastic sandy silt with gravel with thin lenses of silty sand at few bore holes upto the depth of investigation. Soils are mainly Sandy Silt with gravel (SM -ML) non-plastic in nature. Rock is not encountered upto the maximum depth of investigation. Chemical analysis of soil and water were conducted and the Chlorides, sulphates and Organic matter are within limits prescribed and are fit for construction. The details of litho-logy met along the alignment are described as below.

Elevated Corridor

Both the corridors, Corridor I & Corridor II has been explored by drilling of fifty six boreholes to a depth of 30m below ground level. The field investigations and laboratory test results indicate that the strata encountered are predominantly Sandy Silt with gravel (SM –ML) with thin lenses of silty sand (SM) in few boreholes. Bored Cast in situ piles of 100cm and 120cm dia with pile lengths of 18m and 22m are analysed. The safe load carrying capacity of Pile, dia of pile and length of the pile are given in **Table GT 2**.

The design parameters for different stretches are as given below.

Strata	SPT Values (Corrected)	ϕ Value	Recommended Value for Side friction
Indroda Circle to Koba Circle			
I (Upto 8.0m) Sandy Silt with gravel (SM –ML)	10 to 30	30 ⁰	29 ⁰
II (8m to 30m) Sandy Silt with gravel (SM –ML)	50 to 100	32 ⁰	30 ⁰
Narmada Canal to AEC Circle			
I (Upto 8.0m) Sandy Silt with gravel (SM –ML)	10 to 20	30 ⁰	29 ⁰
II (8m to 30m) Sandy Silt with gravel (SM –ML)	20 to 70	32 ⁰	30 ⁰
AEC Circle to Ellis Bridge			
I (upto 10.0m) Sandy Silt with gravel (SM –ML)	10 to 30	28 ⁰	26 ⁰
II (10m to 20m) Sandy Silt with gravel (SM –ML)	30 to 60	32 ⁰	30 ⁰
Ellis Bridge to APMC/Vasna			
I (Upto 12.0m) Sandy Silt with gravel (SM –ML)	10 to 30	29 ⁰	27 ⁰
II (12m to 30m) Sandy Silt with gravel (SM –ML)	20 to 40	31 ⁰	29 ⁰
Ahmedabad Station to Thaltej Depot			
I (Upto 9.0m) Sandy Silt with gravel (SM –ML)	10 to 20	28 ⁰	24 ⁰
II 9.0m to 30m) Sandy Silt with gravel (SM –ML)	20 to 40	31 ⁰	29 ⁰
Indroda Circle to CH 6 Circle (Gandhinagar)			
I (Upto 12.0m) Sandy Silt with gravel (SM –ML)	15 to 30	30 ⁰	27 ⁰
II (12.0m to 30.0m) Sandy Silt with gravel (SM –ML)	30 to 40	31 ⁰	28 ⁰

Indroda Circle and Thatlej Depot

Four boreholes were drilled upto 10.0m depth for the proposed depot buildings. The strata predominantly consist of non-plastic sandy silt with gravel (SM-ML) with corrected SPT values varying from 15 to 30 upto the

depth explored. Water table was not met in the boreholes. The design parameters are as given below

Strata	SPT value (Corrected)	ϕ Value
I Sandy Silt with gravel (SM –ML)	15 to 30	30 ⁰

4.20.4 RECOMMENDATIONS

Piers of the elevated corridor

Bored cast-in-situ piles of 1.0 m and 1.20 m dia with a cutoff level of 2.0m below the ground level are recommended. The recommended safe load carrying capacity of the piles, dia of piles and length of piles are given in **table GT-2**

TABLE GT- 2
Elevated Corridor

Dia. of Pile	Length of the pile	Safe vertical load carrying capacity of pile
BH 1 to 20		
100cm	18m	210t
100cm	22m	250t
120cm	18m	300t
120cm	22m	350t
BH 21 to 30		
100cm	18m	210t
100cm	22m	250t
120cm	18m	325t
120cm	22m	360t
BH 31 to 57		
100cm	18m	200t
100cm	22m	240t
120cm	18m	280 t
120cm	22m	340t

Indroda circle and Thaltej Depot

Footing foundation is recommended at a depth of 2.0 m below Ground surface. A net Safe Bearing Pressure of 11.0 t/sq.m and 13 t/sq.m can be taken for the design of 2m & 4.0m wide footings respectively.

4.21 UTILITY AND SERVICES

The details of various utilities have been collected from concerned organisations directly along the alignment.

Large number of sub-surface, surface and over head utility services viz. sewers, water mains, storm water drains, gas pipe lines, telephone cables, O.H electrical transmission lines, electric poles, traffic signals, etc. are existing along the proposed alignment. These utility services are essential and have to be maintained in working order during different stages of construction, by temporary/permanent diversions or by supporting in position. Since these may affect construction and project implementation time schedule/costs, for which necessary planning/action needs to be initiated in advance.

4.21.1 Organisations/Departments with concerned utility services are mentioned in **Table U 1**.

Table U 1
UTILITY RESPONSIBILITY DEPARTMENTS

Sr. No.	ORGANIZATION/ DEPARTMENT	UTILITY SERVICES
1.	Ahmedabad Municipal Corporation. (AMC)	Roads, surface water drains, nallahs, Sewerage and drainage conduits, sewerage treatment plants, pumping stations, Water mains and their service lines, including hydrants, water treatment plants, pumping stations, Gardens etc. and Land development & Housing etc. in respective areas.
2.	Ahmedabad Urban Development Authority (AUDA)	Sewerage and drainage conduits, sewerage treatment plants, pumping stations, Water mains and their service lines, including hydrants, water treatment plants, pumping stations, Gardens etc. and Land development & Housing etc. in respective areas.
3.	Gandhi Nagar Urban Development Authority (GUDA)	Roads, surface water drains, nallahs, Sewerage and drainage conduits, sewerage treatment plants, pumping stations, Water mains and their service lines, including hydrants, water treatment plants, pumping stations, Gardens etc. and Land development & Housing etc. in respective areas.
4.	Sabarmati River Front Development Corporation	For works related to development of Sabarmati River front
7.	Road & Building Deptt. (R&B)	Road construction & maintenance.

Sr. No.	ORGANIZATION/ DEPARTMENT	UTILITY SERVICES
9.	M/s Torrent Power AEC Ltd	Power cables and their appurtenances H.T. and L.T. lines, their pylons, electric light posts, pole mounted transformers, etc.
10.	Gujarat Vij Vikas Nigam (GEB)	Power cables and their appurtenances H.T. and L.T. lines, their pylons, electric light posts, pole mounted transformers, etc.
11.	Ahmedabad & Gandhi Nagar Traffic Police.	Traffic signal posts, junction boxes and cable connections, etc.
12.	Gujarat Adani Energy Ltd and GSPCL.	Gas pipe lines
13.	Gujarat state Petroleum Corporation Ltd. (GSPCL).	Gas pipe lines
14.	Gujarat Infrastructure Development Board (GIDB)	Project coordinator
15.	BSNL (Bharat Sanchar Nigam Ltd.)	Telecommunication cables, junction boxes, telephone posts, O.H. lines, etc.
16.	TATA Tele Services	Telecommunication cables, junction boxes, telephone posts, O.H. lines, etc.
17.	Reliance Info. Ltd	Telecommunication cables, junction boxes, telephone posts, O.H. lines, etc.
18.	Hutch and Airtel	Telecommunication cables, junction boxes, telephone posts, O.H. lines, etc.
19.	Western Railway	Railway crossings, signals, railway bridges, etc.

Assessment of the type and location of underground utilities running along and across the proposed route alignment for N-W and E-W corridor has been undertaken with the help of data available with concerned authorities, who generally maintain plans and data of such utility services. Particulars of main utilities i.e. trunk and main sewers/drainage conduits, water mains, OH & UG Electric cable, Telecom cable etc. have been marked on alignment plans.

4.21.2 Diversion of Underground Utilities

While planning for diversion of underground utility services viz. sewer lines, water pipelines, cables, etc., during construction of Metro alignment, following guidelines have been adopted:

- Utility services have to be kept operational during the entire construction period and after completion of project. All proposals should therefore, ensure their uninterrupted functioning.
- Sewer lines and water supply lines are mainly affected in underground cut and cover construction. These services are proposed to be maintained by temporarily replacing them with CI/Steel pipelines and supporting them during construction, these will be encased in reinforced cement concrete after completion of construction and retained as permanent lines.
- Where permanent diversion of the affected utility is not found feasible, temporary diversion with CI/Steel pipes without manholes is proposed during construction. After completion of construction, these will be replaced with conventional pipes and manholes.
- The elevated viaduct does not pose much of a difficulty in negotiating the underground utility services, especially those running across the alignment. The utilities infringing at pier location can be easily diverted away from the pile cap location.
- In case a major utility is running along/across the alignment which cannot be diverted or the diversion of which is difficult, time consuming and uneconomical; the spanning arrangement of the viaduct and layout of piles in the foundation may be suitably adjusted to ensure that no foundation needs be constructed at the location, where utility is crossing the proposed alignment.

4.21.3 Elevated Stretch

In the elevated stretch, the alignment is running mostly along the median of the road except at a few locations. The sewer/drainage lines generally exist in the service lanes i.e. away from main carriageway. However, in certain stretches, these have been laid near the median or under main carriageway.

The major sewer/drainage lines and water mains running across the alignment and likely to be affected due to location of pier foundations, which are proposed to be taken care of by relocating column supports of viaduct by change in span or by suitably adjusting the layout of pile foundations. Where, this is not feasible, lines will be suitably diverted. Provision has been made in the project cost estimate towards diversion of utility service lines. Details of sewer lines affected in elevated stretch along with their diversion proposals are indicated in **Table U 2**. Similarly, details of affected storm water drains are indicated in **Table U 3** and water pipe lines are indicated in **Table U 4**.

Table U 2
DETAILS OF SEWER LINES

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Locations
a) E-W corridor (Ahmedabad to Thaltej)							
1	100L-190L	90	D-3.0	1400	Along	B	DRM Office
2	192	30	D-2.0	1400	Across	A	DRM Office
3	190(L)-	37	D-2.0	1400	Across	A	DRM Office

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Locations
	227(R)						
4	227(R) to 765 (R)	538	D-2.0	1400	Along	B	DRM Office to Octroi Building
5	765(R) to 965 (R)	200	D-3.0	1400	Along	A	Station Prem Darwaja
6	965(R) to 1110(R)	145	D-3.0	1400	Along	B	Motillal Mill to Jamnagar Transport
7	1110(R) to 1347 (R)	237		900	Along	B	Jamnagar TPT to Near AMC Garden Purohit
8	1347	24	D-2.0	900	Across	A	Near AMC Garden Purohit
9	1347(R) to 1626 (R)	279	D-1.50	450	Along	B	AMC Garden to Kataria Circle
10	1347(L) to 1737 (L)	390	D-2.0	900	Along	B	AMC Garden to Municipal School
11	1737(L) to 1790(L)	53	D-2.0	900	Along	A	Near Municipal School
12	1790(L) to 1940 (L)	150	D-2.0	900	Along	B	Municipal School to Bismillah Manjil
13	1940(L) to 2140(L)	200	D-2.0	900	Along	A	Station Delhi Darwaja
14	2140(L) to 2378(L)	238	D-2.0	900	Along	B	Municipal School to Bismillah Manjil
15	2378	30	D-1.30	230	Across	A	Bismillah Manjil
16	2378(L) to 2980(L)	602	D-3.50	600	Along	B	Bismillah Manjil to Shahpur Tutorial Girls High School
17	2980(L) to 3110(L)	130	D-3.50	600	Along	A	Station Shahpur Darwaja
18	2310(L) to 2980(L)	670	D-1.30	230 & 300	Along	B	Bismillah Manjil to Shahpur Tutorial Girls High School
19	2980(L) to 3010(L)	30	D-1.30	230&300	Along	A	Station Shahpur Darwaja
20	3224	24	D-2.0	230	Across	A	Ministry of Agriculture
21	4070	30	D-3.0	450	Across	A	Station AAayakar Bhawan
22	4069(L) to 4210 (L)	141	D-3.0	450	Along	A	Station AAayakar Bhawan
23	4069(R) to 4110 (R)	41	D-3.0	300	Along	A	Station AAayakar Bhawan
24	4110(R) to	160	D-2.0	300	Along	A	Station AAayakar

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Locations
	4270 (R)						Bhawan
25	4270(R) to 4345(R)	75	D-2.0	300	Along	B	ITO Crossing to SP Stadium Five Road Crossing
26	4220(L) to 4270(L)	50	D-2.25	300	Along	A	Station AAayakar Bhawan
27	4270(L) to 4350(L)	80	D-2.25	300	Along	B	ITO Crossing to SP Stadium Five Road Crossing
28	4382(L) to 4640 (L)	258	D-2.25	300	Along	B	-Do-
29	4382(R) to 4616 (R)	234	D-2.0	300	Along	B	-Do-
30	4636	30	D-2.0	300	Across	A	SP Stadium Five Road Crossing
31	4636(L) to 4700 (L)	64	D-2.0	300	Along	B	SP Stadium Five Road Crossing to Commerce Six Road
32	4700(L) to 4900(L)	200	D-2.0	300	Along	A	Station Sardar Patel Stadium
33	4900(L) to 5110 (L)	210	D-2.0	300	Along	B	SP Stadium Five Road Crossing to Commerce Six Road
34	5110(L) to 5650 (L)	540	D-2.0	300	Along	B	-Do-
35	5650(L) to 5850(L)	200	D-2.0	300	Along	A	Station Commerce Six Road
36	5850(L) to 6212(L)	362	D-2.0	300	Along	B	SP Stadium Five Road Crossing to Vijay Crossing
37	6212	30	D-2.0	300	Across	A	Vijay Crossing
38	6212(L) to 6273(R)	61	D-2.0	300	Across	A	-Do-
39	6273(R) to 6708 (R)	435	D-2.0	300	Along	B	Vijay Crossing to Saurabh Apartment
40	7020	30	D-4.5	AMC Duct Line	Across	A	University Ground
41	7020L-7050R	30	D-4.5	900	Across	A	University Ground
42	7050(R) to 7140(R)	90	D-4.5	900	Along	B	University Ground
43	7140(R) to 7200(L)	60	D-4.5	900	Across	A	Children Park Manav Mandir
44	7020R-7500R	480	D-4.5	30	Along	B	Children Park Manav Mandir

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Locations
45	7500R-7685R	185	D-4.0	300	Along	B	Opp Swaminarayan Gurukul
46	7685R-7885R	200	D-4.0	300	Along	A	Station Gurukul
47	7885R-8000R	115	D-4.0	300	Along	B	Opp Swaminarayan Gurukul
48	8000R-8110R	110	D-4.0	300	Along	B	Opp Govt Quarter Vastrapur
49	7200(L) to 7515(L)	315	D-4.5	900	Along	A	Children Park Manav Mandir to Mahatma Gandhi Labour Institute
50	7515L-7600L	85	D-4.0	900	Along	A	Near Swaminarayan Gurukul
51	7600L-8100L	500	D-4.0	900	Along	B	Swaminarayan Gurukul
52	8100L-8600L	500	D-3.75	900	Along	B	Opp Indraprastha Tower
53	8600L-8725L	125	D-2.5	450	Along	B	Near Doordarshan
54	8725L-8925L	200	D-2.5	450	Along	B	Station Doordarshan Kendra
55	8220	30	D-3.0	300	Across	A	Indraprastha Tower
56	8520(R) to 8620 (R)	100	D-1.25	450	Along	B	Drive in Cinema
57	8620	30	D-2.8	1200	Across	A	Yogi Complex
58	8620(R) to 8690(R)	70	D-2.8	900	Along	B	Yogi Complex
59	8690	30	D-2.0	300	Across	A	Yogi Complex
60	8690R-8725R	35	D-2.0	300	Along	B	Ahmedabad Education Society
61	8725(R) to 8925(R)	200	D-2.0	300	Along	A	Station Doordarshan Kendra
62	8925(R) to 9300	375	D-2.0	300	Along	B	Saumil Society to Sardar Patel Institute
63	9290	30	D-2.0	300	Across	A	Sardar Patel Institute
64	9290L-9500L	210	D-2.0	300	Along	B	Sardar Patel Institute

b) N-S corridor (APMC Vasna to Gandhi Nagar)

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Locations
1	52-L to 100L	48	D-4.0	1600	Along	B	Station Vishala
2	100L to 1016L	916	D-4.0	1600	Along	B	AMC Octroi Naka to Vasna Police Chowki
3	123	30	D-6.0	RCC Duct Line	Across	A	AMC Octroi Naka
4	123R to 1016	893	D-4.0	1600	Along	A	AMC Octroi Naka to Vasna Police Chowki
5	52	12	D-4.0	1600	Across	A	Station Vishala
6	1016-R to 1075R	59	D-4.0	1600	Along	A	Station Vasna
7	1075R-1166R	91	D-4.0	1600	Along	A	Vasna Telephone Exchange
8	1016-L to 1075L	59	D-4.0	1600	Along	A	Station Vasna
9	1075L-1166L	91	D-4.0	1600	Along	B	Opp. Vasna Telephone Exchange
10	1166	19	D-4.0	1600	Across	A	Opp Vasna Telephone Exchange
11	1166-L to 1338 L	172	D-4.0	1600	Along	B	Vasna Telephone Exchange to Vasna AMTS Bus Stand
12	1338 L to 1427 L	89	D-4.0	1600	Along	A	ND Sharf Market
13	1427 L to 1661 L	234	D-4.0	1600	Along	B	ND Sharf Market to AMC Pumping Station
14	1661 L to 2000L	339	D-8.0	1400	Along	B	AMC Pumping Station to Anjali Vasna Crossing
15	2000L to 2054 L	54	D-8.0	1200	Along	A	Station Narayan Nagar
16	2054 to 2138 L	84	D-8.0	1200	Along	A	Station Narayan Nagar
17	2138 L to 2200L	62	D-8.0	1200	Along	A	Station Narayan Nagar
18	2200L to 2342L	142	D-8.0	1200	Along	B	Anand Shopping Complex to Neelkanth Plaza
19	2342 L to 2625 L	283	D-8.0	1200	Along	B	Neelkanth Plaza to Ellisbridge Municipal School
20	2625 L to 2654R	29	D-8.0	1200	Across	A	Ellisbridge Municipal School

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Locations
21	2654 R to 3450 R	796	D-8.0	1200	Along	B	Ellisbridge School to Paldi Circle
22	3450R-3650R	200	D-8.0	1200	Along	A	Station Paldi
23	3650 R to 3698 L	48	D-8.0	1200	Across	A	Paldi Circle
24	3698 L to 3971 L	273	D-6.1	1200	Along	B	Paldi Circle to Satyaguru Ashram
25	4960 L to 5075 L	115	D-1.5	600	Along	B	Gujarat Bhawan to Pelicon Complex
26	5075L to 5275L	200	D-1.5	600	Along	A	Station Nava Gandhigram
27	5275L to 5720L	445	D-1.5	600	Along	B	Gujarat Bhawan to Pelicon Complex
28	5582 L	32	D-1.5	600	Across	A	Pelicon Complex
29	5720 L to 5750 R	30	D-1.5	600	Across	A	Pelicon Complex
30	5730	2X30	D-1.5	600	Across	A	Pelicon Complex
31	5750 R to 5826 R	76	D-1.5	600	Along	B	Shree Theatre
32	5826 R	30	D-1.5	150	Across	A	Shree Theatre
33	5826 R to 6000 R	174	D-1.5	225	Along	B	Shiv Theatre to Times of India
34	6000R to 6150R	150	D-1.5	225	Along	A	Station Navrangpura
35	5897 R	30	D-1.5	150	Across	A	Mangal Murthi Complex
36	5897 L to 6000 L	103	D-2.5	300	Along	B	Opp Mangal Murthi Complex to Handicapp Society School
37	6000L to 6190L	190	D-2.5	300	Along	A	Station Navrangpura
38	6493 R	30	D-6.5	300	Across	A	Punjab National Bank
39	6493 R – 6650 R	157	D-6.5	300	Along	B	Punjab National Bank to Akaswani Kendra
40	6650R to 6730R	80	D-6.5	300	Along	A	Station Aayakar Bhawan
41	6566 R	30	D-3.0	150	Across	A	Neelkamal Complex
42	6730 R to 6815 L	85	D-6.5	300	Across	A	Station Aayakar Bhawan
43	6750 L to	55	D-3.0	450	Along	A	Station Aayakar

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Locations
	6805 L						Bhawan
44	6815 L to 6850 L	35	D-6.10	300	Along	A	Station Aayakar Bhawan
45	6850L to 6955L	105	D-6.10	300	Along	B	Near ITO Crossing
46	7774 R	30	D-4.5	300	Across	A	Sukh Sagar Complex
47	7774 R to 7800 R	26	D-4.5	300	Along	B	Sukh Sagar Complex to Vadaj Crossing
48	7800R to 8000R	200	D-4.5	300	Along	A	Station Ushmanpura
49	8000R to 8520R	520	D-4.5	300	Along	B	Sukh Sagar Complex to Vadaj Crossing
50	8520 R- 8650 R	130	D-3.0	300	Along	B	Near Vadaj Crossing
51	8650 R – 8850 R	200	D-2.0	300	Along	A	Station Vadaj
52	8850R to 8995R	140	D-2.0	300	Along	B	Opp Gujarat Khadi Gramoudhyog
53	8848 L	20	D-3.0	300	Across	A	Opp Gujarat Khadi Gramoudhyog
54	9310R- 9600 R	290	D-4.0	300	Along	B	Chandra Bhaga Bridge to Subhash Bridge Circle
55	9600R to 9800R	200	D-4.0	300	Along	A	Station Gandhi Ashram
56	9800R to 10300R	500	D-4.0	300	Along	B	Chandra Bhaga Bridge to Subhash Bridge Circle
57	9346 L – 9470 L	124	D-4.0	300	Along	B	Chandra Bhagar Bridge
58	9470 L	19	D-4.00	300	Across	A	Near Chander Bhaga Bridge
59	10091 L	23	D-3.5	300	Across	A	Ministry of Home Affairs
60	10360 R- 10410 R	50	D-1.8	300	Along	A	Station Subhash Circle
61	10410 R	30	D-1.8	300	Across	A	Station Subhash Circle
62	11440 R – 11615 R	175	D-6.0	900	Along	B	Near AEC Circle
63	11615 R – 12153 R	538	D-6.0	600	Along	B	AEC Circle to AEC Colony

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Locations
64	11899 R	30	D-6.0	600	Across	A	Near Shakti Nagar Society
65	12153 R	27	D-6.0	600	Across	A	Near AEC Colony
66	12153 L-12300 L	147	D-6.0	600	Along	B	Shankarpura Chali to Motera Village
67	12300L to 12500L	200	D-6.0	600	Along	A	Station Shankarpura
68	12500L to 13150L	650	D-6.0	600	Along	B	Shankarpura Chali to Motera Village
69	13150L to 13350L	200	D-6.0	600	Along	A	Station Acher
70	13350L to 13450L	100	D-6.0	600	Along	B	Near Motera Village
71	12560 L	30	D-6.0	600	Across	A	Telephone Exchange
72	13390L-14100L	610	D-4.0	600	Along	B	Motera Road
73	14100L-14300L	200	D-4.0	600	Along	A	Station Sardar Patel Gujarat Stadium
74	14300L-14490L	190	D-4.0	600	Along	B	Motera Road
75	14490L-15256L-	766	D-4.0	600	Along	B	Motera Road
76	14885	30	D-4.0	600	Along	B	Motera Road
77	26377L to 26400 (L)	23	NP 3 D-9.10	1600	Along	A	Station Infocity
78	26400L to 27065L	665	NP 2 D-9.10	1600	Along	B	Near Indroda Circle
79	27065 to 27150 (L)	182	NP 3 D-9.10	1600	Along	B	Indroda Circle
80	27150(L) to 27229(L)	79	NP 3 D-9.10	1600	Along	A	Station Indroda Circle
81	27229(L) to 27250 (L)	21	NP 3 D-9.10	1600	Along	A	Station Indroda Circle
82	27250(L) to 29140(L)	1890	NP 3 D-9.10	1600	Along	B	Indroda Circle to CH-3
83	27250L to 27450 L	200	NP 3 D-9.10	1600	Along	B	Station Indroda Circle
84	27450(L) to 28100(L)	650	NP 3 D-9.10	1600	Along	B	Indroda Circle to CH-3
85	28100(L) to 28300(L)	200	NP 3 D-9.10	1600	Along	A	Station Sector-7
86	28300(L) to 29140(L)	840	NP 3 D-9.10	1600	Along	B	Indroda Circle to CH-3
87	29140	140	D-10.0M A.V	1200	Across	A	CH-3

Note:

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” Sewer lines are parallel/across the alignment, hence diversion not proposed.

**Table U 3
DETAILS OF STORM WATER DRAINS**

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Location
a) E-W corridor (Ahmedabad to Thaltej)							
1	257	30	1.5	450	Across	A	DRM Office
2	257(R) to 573 (R)	326	D-1.5	450	Along	A	DRM Manager Office to Octroi Building
3	816(R) to 965 (R)	149	D-2.5	1000	Along	A	Station Prem Darwaja
4	965(R) to 1030(R)	65	D-2.5	1000	Along	A	Prem Darwaja
5	1030	30	D-2.5	1000	Across	A	Prem Darwaja
6	1030(L) to 1515 (L)	485	D-4.5	1000	Along	B	Prem Darwaja to Kataria Circle
7	1515(L) to 1572(R)	57	D-4.5	1000	Across	A	Kataria Circle
8	1567	30	D-3.5	1000	Across	A	Kataria Circle
9	1572(R) to 1700(R)	128	D-4.5	1000	Along	A	Kataria Circle
10	1700(R) to 1853(L)	153	D-4.5	1000	Across	A	Kataria Circle to Opp Anand Bhawan Residence
11	1853(L) to 1940(L)	87	D-4.5	1000	Along	B	Anand Bhawan to Delhi Darwaja
12	1940(L) to 2110(L)	170	D-4.5	1000	Along	A	Station Delhi Darwaja
13	2036	30	D-4.5	1000	Across	A	Near Delhi Darwaja
14	3000 to 3108 (R)	108	D-1.5	300	Along	B	Station Shahpur Darwaja
15	4618(L) to 4665(R)	47	D-2.5	450	Across	A	S.P.Stadium Five Road
16	4646	30	D-2.5	450	Across	A	S.P.Stadium Five Road
17	4665(R) to 4981 (R)	316	D-2.5	450	Along	A	Between S.P.Stadium Five Road to Commerce Six Road Crossing
18	4981(R) to 5576 (R)	595	D-2.5	450	Along	B	Between S.P.Stadium Five Road to Commerce Six Road Crossing

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Location
19	5576(R) to 5606 (R)	30	D-2.5	450	Along	A	Commerce Six Road Crossing
20	5606(R) to 5650 (R)	44	D-2.5	450	Along	B	Commerce Six Road to Vijay Crossing
21	5650(R) to 5850(R)	200	D-2.5	450	Along	A	Station Commerce Six Road
22	5850(R) to 6192(R)	342	D-2.5	450	Along	B	Commerce Six Road to Vijay Crossing
23	6192(R) to 6211(L)	19	D-2.5	450	Across	A	Vijay Crossing
24	6211 to 6530 (L)	319	D-2.5	450	Along	B	Vijay Crossing to Saurabh Apartment
25	6234	30	D-2.5	900	Across	A	Vijay Crossing
26	6530(L) to 6710 (L)	180	D-2.5	450	Along	B	Vijay Crossing to Saurabh Apartment
27	6710(L) to 6760(L)	50	D-2.5	450	Along	B	Saurabh Apartment
28	6760(L) to 6960(L)	200	D-2.5	450	Along	A	Station Mem Nagar
29	6960(L) to 7198(L)	238	D-2.5	450	Along	B	Memnagar Bus Depot to Children Park Manav Mandir
30	8100 to 8290 (R)	190	Not mentioned	Not mentioned	Along	B	Saumil Society to Indraprastha Tower
b) N-S corridor (APMC Vasna to Gandhi Nagar)							
1	1016R-1075L	115	D- 4.0	1250	Across	A	Station Vasna
2	1075L-1131L	56	D-4.0	1250	Across	A	G.B.Shah College
3	1131L-1300L	169	D- 4.0	1250	Along	A	G.B.Shah College to Vasna Crossing
4	1300L	30	D-4.0	1300	Along	B	Vasna Crossing
5	1166R-1300R	134	D-4.0	1500	Across	A	Vasna Crossing
6	3083	30	D- 4.0	1000	Across	A	Near Shiekh Adam Abuwala Road
7	3275	30	D- 4.0	1500	Across	A	Mahalaxmi Crossing
8	3480R to 3530R	50	D-3.0	600	Along	A	Station Paldi
9	3530	30	D-3.0	600	Across	A	Station Paldi
10	3659	30	D-8.0	1200	Across	A	Paldi Circle
11	4781	30	D-8.0	2X1200	Across	A	Ellisbridge Circle

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Location
12	4850(R) to 4998 (R)	148	D-3.0	600	Along	B	Ellisbridge Police Chowki to Opp Gujarat Bhawan
13	4998(R) to 5075 (R)	77	D-3.0	600	Along	B	Opp Gujarat Bhawan to Opp Pelicon Complex
14	5075(R) to 5275(R)	200	D-3.0	600	Along	A	Station Nava Gandhigram
15	5275(R) to 5730(R)	455	D-3.0	600	Along	B	Opp Gujarat Bhawan to Opp Pelicon Complex
16	6228	30	D-2.0	300	Across	A	Mount Carmel School
17	6228(L) to 6650 (L)	422	D-2.0	300	Along	B	Mount Kermal School to Akaswani Kendra
18	6650(L) to 6746(L)	96	D-2.0	300	Along	A	Station Aayakar Bhawan
19	6828R-6850R	22	D-2.0	300	Along	A	Station Income Tax
20	6850R-7700R	950	D-2.0	300	Along	B	Income Tax Crossing to Usmanpura Crossing
21	7575	2X30	B.M.S.W W-2.0	Not mentioned	Across	A	Usmanpura Crossing
22	8355	2X34	Not mentioned	Not mentioned	Across	A	AMTS Control Room
23	8995 R-9030L	35	D-2.0	300	Across	A	Chandra Bhaga Bridge
24	9030L-9260L	230	D-2.0	300	Along	B	Chandra Bhaga Bridge
25	9260L-9310R	50	D-2.0	300	Across	A	Chandra Bhaga Bridge
26	10410R-10420L	10	D-2.0	300	Across	A	Subhash Circle
27	10420L-10475L	55	D-2.0	300	Along	B	Subhash Circle
28	10475L-10557L	82	D-2.0	300	Along	A	Station Subhash Circle
29	10900L-11040R	140	D-3.0	900	Across	A	Chimanbhai Bridge
30	11040R-11200R	160	D-3.0	900	Along	B	Chimanbhai Bridge
31	11200R-11400R	200	D-3.0	900	Along	A	Station Sabarmati
32	11400R-11650R	150	D-3.0	900	Along	B	Chimanbhai Bridge
33	11650R-12212R	562	D-3.0	900	Along	A	Chimanbhai Bridge to Near Power

S. No.	Location @ km	Affected Length (m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Location
							House
34	12164	30	D-3.0	600	Across	A	Near Power House
35	12164L-13400L	1236	D-3.0	600	Along	B	Power House to J-1 Motera
36	13400L-14175L	775	D-3.0	450&300	Along	A	J-1 Motera
37	13146	30	Not mentioned	600	Across	A	Near Panchsheel Hospital
38	14182L to 14300L	118	D-3.6	600	Along	B	Sardar Patel Gujarat Stadium
39	14300L to 14500L	200	D-3.6	600	Along	A	Motera Village
40	14500L to 15000L	500	D-3.6	600	Along	B	Motera Village
41	15000L to 15160L	160	D-3.6	600	Along	B	Motera Village
42	15160L to 15253L	93	D-3.6	600	Along	A	Motera Village
43	27092	30	NP-3, D-6.10	1800	Across	A	Indroda Circle
44	28065	30	Np-3, D-6.0	1800	Across	A	CH-2
45	29673	30	NP-3, D-6.10	1800	Across	A	Gujarat Vidhan Sabha
46	29673(L) to 30226 (L)	553	NP-3, D-6.0	1800	Along	B	Gujarat Vidhan Sabha
47	31257	30	NP-3, D-8.65	1400	Across	A	CH-5
48	32294	30	NP-3, D-8.85	1800	Across	A	CH-6

Note:

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” SW drains are parallel/across the alignment, hence diversion not proposed.

**Table U 4
DETAILS OF WATER SUPPLY**

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
a) E-W Corridor (Ahmedad to Thaltej)							
1	136L-245L	1.9	1.2	150	Along	B	DRM Office
2	136L-245R	109	1.2	150	Across	A	DRM Office
3	274	30	1.2	100	Across	A	AMC Control Office
4	245L-579L	334	1.2	150	Along	B	DRM Office to Octroi Office
5	245R-575R	330	1.2	150	Along	A	DRM Office to Octroi Building
6	579	30	1.2	150	Across	A	Octroi Building
7	579L-600L	21	1.5	400	Along	B	Octroi Building
8	600C-717C	117	1.5	400	Along	A	Octroi Building to Kabutar Khana

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
9	600R-702R	102	1.5	500	Along	A	Octroi Building to Kabutar Khana
10	702R-717L	15	1.5	500	Across	A	Kabutar Khana
11	717L-740R	23	1.5	500	Across	A	Kabutar Khana
12	717C-765R	48	1.5	400	Along	A	Kabutar Khana
13	765C-965R	200	1.5	400	Along	A	Station Prem Darwaja
14	965R-980R	15	1.5	400	Along	A	Kabutar Khana
15	740R-765C	25	1.5	500	Along	A	Motilal Mill
16	765R-890C	125	1.5	500	Along	A	Station Prem Darwaja
17	890C-965R	75	1.5	500	Along	A	Station Prem Darwaja
18	965R-980R	15	1.5	500	Along	A	Prem Darwaja
19	980R-1110R	130	2X1.5	2X500	Along	A	Prem Darwaja
20	1110R-1625R	515	2X1.5	2X500	Along	B	Prem Darwaja to Kataria Circle
21	1625R-1873R	248	1.5	500	Along	A	Between Kataria Circle to Delhi Darwaja
22	1634R-1940R	306	1.1	100	Along	B	Kataria Circle to Delhi Darwaja
23	1940R-1945R	5	1.1	100	Along	A	Station Delhi Darwaja
24	1873R-1940R	67	1.5	500	Along	A	Kataria Circle to Delhi Darwaja
25	1940R-2108R	168	1.5	500	Along	A	Station Delhi Darwaja
26	1980L-2108L	128	1.5	100	Along	A	Station Delhi Darwaja
27	2108R-2140R	32	1.2	100	Along	A	Station Delhi Darwaja
28	2140R-2976R	836	1.2	100	Along	B	Delhi Darwaja to Shahpur Police Chowki
29	2697L-2980L	283	1.5	300	Along	B	BV High School to Shahpur Police Chowki
30	2980L-2991L	11	1.5	300	Along	A	Station Shahpur Darwaja
31	2991	30	1.5	450	Across	A	Station Shahpur Darwaja
32	2978	30	1.75	700	Across	A	Shahpur Police Chowki
33	3110R-3180R	70	1.2	230	Along	A	Station Shahpur Darwaja
34	3180R-3220R	40	1.2	230	Along	B	Office of Agriculture
35	3110R-3180R	70	1.2	450	Along	A	Station Shahpur Darwaja

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
36	3180R-3252R	72	1.2	450	Along	B	Office of Agriculture
37	3220	30	1.2	230	Across	A	Office of Agriculture
38	3232L-3404R	172	1.5	450	Across	A	Near Sabarmati River
39	3404R	30	1.5	450	Across	A	Near Sabarmati River
40	3990R-4070R	80	1.5	450	Along	B	ITO Crossing
41	4070R-4100R	30	1.5	450	Along	A	Station AAayakar Bhawan
42	4081L	30	1.5	450	Across	A	Station AAayakar Bhawan
43	4081L-4270L	189	1.5	450	Along	A	Station AAayakar Bhawan
44	4270L-4350L	80	1.5	450	Along	B	ITO Crossing
45	4100R-4270R	170	1.5	450	Along	A	Station AAayakar Bhawan
46	4270R-4378R	108	1.5	450	Along	B	ITO Crossing
47	4378	30	1.5	450	Across	A	Railway Crossing
48	4378R-4612R	234	1.5	450	Along	B	Railway Crossing to SP Stadium Five Road
49	4378L-4605L	227	1.5	450	Along	B	Railway Crossing to SP Stadium Five Road
50	4620	30	1.5	450	Across	A	SP Stadium Five Road
51	4630L-4700L	70	0.75	200	Along	B	SP Stadium Five Road to Commerce Crossing
52	4700L-4900L	200	0.75	200	Along	A	Station Sardar Patel Stadium
53	4900L-5300L	400	0.75	200	Along	B	SP Stadium Five Road to Commerce Crossing
54	4692L	30	0.75	200	Across	A	SP Stadium Five Road to Commerce Crossing
55	4799	30	0.75	200	Across	A	Station Sardar Patel Stadium
56	4928L	30	0.75	200	Across	A	SP Stadium Five Road to Commerce

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
							Crossing
57	4976L	30	0.75	200	Across	A	SP Stadium Five Road to Commerce Crossing
58	5300L-5539L	239	0.75	200	Along	A	Commerce Six Road Crossing
59	5539L	30	0.75	200	Across	A	Commerce Six Road Crossing
60	5539R-5600L	61	0.75	200	Across	A	Commerce Six Road Crossing
61	5600L-5615R	15	0.75	200	Across	A	Commerce Six Road Crossing
62	5615R-5691R	76	0.75	200	Along	A	Commerce Six Road Crossing to Vijay Crossing
63	5691R-5720L	29	0.75	200	Across	A	Station Commerce Six Road
64	5720L-5850L	130	0.75	200	Along	A	Station Commerce Six Road
65	5850L-6208L	358	0.75	200	Along	B	Commerce Six Road Crossing to Vijay Crossing
66	6208L	30	0.75	200	Across	A	Vijay Crossing
67	6231L	30	1.2	400	Across	A	Vijay Crossing
68	6231R-6435R	204	1.2	150	Along	B	Vijay Crossing
69	6231L-6760L	529	1.2	400	Along	B	Vijay Crossing to Memnagar Bus Depot
70	6760L-6960L	200	1.2	400	Along	A	Station Memnagar
71	6960L-6971L	11	1.2	400	Along	B	Vijay Crossing to Memnagar Bus Depot
72	6971L	30	1.2	300	Across	A	Memnagar Bus Depot
73	6971R-7496R	525	1.2	150	Along	B	Memnagar Bus Depot to Mahatma Gandhi Labour Institute
74	7030R-7414R	384	1.2	80	Along	A	Memnagar Bus Depot to Mahatma Gandhi Labour Institute
75	7414R	30	1.2	80	Across	A	Mahatma Gandhi Labour Institute
76	7505R-7635R	130	1.2	110	Along	B	Mahatma Gandhi Labour Institute
77	7735R-	150	1.2	150	Along	A	Station Gurukul

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
	7885R						
78	7905R-8225R	320	1.2	150	Along	B	Swaminarayan Gurukul to Indraprastha Tower
79	8325R-8695R	370	1.2	133	Along	B	Drive In Theatre
80	8728R-8925R	197	1.2	104	Along	A	Station Doordarshan Kendra
81	8925R-8995R	70	1.2	104	Along	B	Near Doordarshan Kendra
82	9005	30	3.5	700	Across	A	Near Doordarshan
83	9007	30	2.0	225	Across	A	Near Doordarshan
84	9010	30	3.0	300	Across	A	Near Doordarshan
85	9290R-9600R	310	1.2	104	Along	B	Sardar Patel Institute to AEC Sub Station
86	9600L-9700L	100	1.5	1500	Along	B	NH-8 Vinay Vidhya Mandir
87	9700L-9735L	35	1.5	1500	Along	A	Station Thaltej
88	9735L-9900L	165	1.5	1350	Along	A	Station Thaltej
89	9900L-10472L	572	1.5	1350	Along	A	NH-8 Near Thaltej Depot
90	10472	30	1.5	1500	Across	A	NH-8 Near Thaltej Depot
91	9700R-9900R	200	1.0	160	Along	A	Station Thaltej
92	9900-10180R	280	1.0	160	Along	B	NH-8 Near Thaltej Depot
93	10390R-10472R	82	1.5	900	Along	B	NH-8 Near Thaltej Depot
94	10472R-10544R	72	1.5	1600	Along	B	NH-8 Near Thaltej Depot
a) N-S Corridor (APMC Vasna to Gandhi Nagar)							
1.	140R to 800R	660	1.2	80&300	Along	B	Octroi Naka to TVS Service Station
2.	500L-800L	300	1.2	150	Along	A	Shri Hari Fabricators to Opp TVS Service Station
3.	800 L to 875L	75	1.2	300	Along	B	Near P&T Quarters
4.	875L to 930L	55	1.2	300	Along	A	Station Vasna

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
5.	800R to 875R	75	1.2	300	Along	B	Opp P&T Quarters
6.	875R to 938R	63	1.2	300	Along	A	Station Vasna
7.	930 L	30	1.5	100	Along	A	Station Vasna
8.	938R	30	1.5	400	Across	A	Station Vasna
9.	930L to 1020 L	90	1.2	300	Along	A	Station Vasna
10.	1020	30	1.2	200	Across	A	Station Vasna
11.	938R to 1016 R	78	1.2	100	Along	A	Station Vasna
12.	1020L to 1075L	55	1.2	300	Along	A	Station Vasna
13.	1075L to 1164L	89	1.2	300	Along	B	Vasna Telephone Exchange
14.	1164	30	1.2	100	Across	A	Vasna Telephone Exchange
15.	1016 R to 1164 R	148	1.5	450	Along	B	Vasna Telephone Exchange
16.	1164 L to 1245 L	81	1.2	300	Along	B	Jain Gyan Mandir
17.	1164 R to 1306 R	142	1.5	450	Along	B	Jain Gyan Mandir
18.	1245 L to 1277 L	32	1.2	300	Along	B	Opp Jain Gyan Mandir
19.	1277L to 1298 L	21	1.2	300	Along	B	Vasna AMTS Bus Stand
20.	1306 R	30	1.2	250	Across	A	Vasna AMTS Bus Stand
21.	1298 L to 1372R	74	1.2	300	Across	A	Near Vasna Bus Stand
22.	1372 R	5	1.2	100	Along	A	Near Vasna AMTS Bus Stand
23.	1382 R	5	1.2	250	Along	A	Near AMTS Bus Stand
24.	1306 R to 1424 R	118	1.5	450	Along	B	Near Vasna Crossing
25.	1372 R to 1424 R	52	1.2	300	Along	A	Near Vasna Crossing
26.	1420	30	1.2	150	Across	A	Vasna Crossing
27.	1424	30	1.5	450	Across	A	Vasna Crossing
28.	1424R to 1470L	46	1.2	300	Across	A	Vishwa Darshan SBI Bank
29.	1424R to 1661R	237	1.5	450	Along	B	Vishwa Darshan SBI Bank to AMC Pumping Station
30.	1470L to 1661L	191	1.2	300	Along	A	Vishwa Darshan SBI Bank to AMC Pumping Station
31.	1649	30	1.5	300	Across	A	Near AMC

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
							Pumping Station
32.	1661L to 1778L	117	1.2	300	Along	A	Near AMC Pumping Station
33.	1661R to 1706R	45	1.5	450	Along	B	Near AMC Pumping Station
34.	1706R	30	1.5	600	Across	A	Near AMC Pumping Station
35.	1706R to 1778R	72	1.5	450	Along	B	Near AMC Pumping Station
36.	1778	30	1.5	450	Across	A	Near AMC Pumping Station
37.	1778R to 1992R	214	1.5	450	Along	B	Near Anjali Vasna Crossing
38.	1778L to 1949L	171	1.2	300	Along	A	Near Anjali Vasna Crossing
39.	1949	5	1.2	250	Along	A	Near Anjali Vasna Crossing
40.	1949L to 1967L	18	1.2	300	Along	A	Anjali Vasna Crossing
41.	1967L	5	1.5	300	Along	A	Anjali Vasna Crossing
42.	1967L to 2000L	33	1.2	300	Along	A	Anjali Vasna Crossing
43.	2000L-2050	50	1.2	300	Along	A	Station Narayan Nagar
44.	2050L to 2100R	50	1.2	300	Across	A	Station Narayan Nagar
45.	2100R to 2175R	75	1.2	300	Along	A	Station Narayan Nagar
46.	2175R to 2200L	25	1.2	300	Across	A	Station Narayan Nagar
47.	2200L to 2207	7	1.2	300	Across	A	Near Anand Shopping Complex
48.	2207L to 2339L	132	1.2	300	Along	A	Near Neelkanth Plaza
49.	2339L to 2507L	168	1.2	300	Along	A	Post Office
50.	2507L to 2569L	62	1.2	300	Along	B	Post Office
51.	2569L	30	1.2	300	Across	A	Post Office
52.	2569L to 2600L	31	1.2	300	Along	A	Near Post Office
53.	2569R to 2800R	231	1.2	300	Along	B	Opp Ellisbridge Municipal School
54.	2800L to 3024L	224	1.2	300	Along	A	Ankur School to Shiekh Adam Abuwala Road
55.	2800R to 3040R	240	1.2	300	Along	B	Opp Ankur School to Shiekh Adam

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
							Abuwala Road
56.	3024L to 3062R	38	1.2	300	Across	A	Shiekh Abuwala Road
57.	3040R to 3048R	8	1.2	300	Along	B	Shiekh Abuwala Road
58.	3048R to 3061R	13	1.2	300	Along	B	Shiekh Abuwala Road
59.	3061R to 3084R	23	1.2	300	Along	B	Shiekh Abuwala Road
60.	3084R	5	1.0	150	Along	A	Shiekh Abuwala Road
61.	3084R to 3108R	24	1.2	300	Along	A	Near Shiekh Abuwala Road
62.	3108R	30	1.5	450	Across	A	Near Shiekh Abuwala Road
63.	3108R to 3261R	153	1.2	300	Along	A	Mahalaxmi Crossing
64.	3261R	30	1.2	300	Across	A	Mahalaxmi Crossing
65.	3263R	5	1.2	150	Along	A	Mahalaxmi Crossing
66.	3261R to 3278R	17	1.2	300	Along	B	Mahalaxmi Crossing
67.	3278R	30	1.2	250	Across	A	Mahalaxmi Crossing
68.	3261L to 3440L	179	1.2	150	Along	A	Near Mahalaxmi Crossing
69.	3278R to 3450R	172	1.2	300	Along	B	Near Mahalaxmi Crossing
70.	3450R-3516R	66	1.2	300	Along	A	Station Paldi
71.	3516R	30	1.0	150	Along	A	Station Paldi
72.	3440L to 3450L	10	1.5	150	Along	A	Mahalaxmi Crossing to Paldi Circle
73.	3450L to 3534	84	1.5	150	Along	A	Station Paldi
74.	3534	30	1.0	100	Along	A	Station Paldi
75.	3516R to 3637R	121	1.2	300	Along	A	Station Paldi
76.	3637R	30	1.0	150	Along	A	Station Paldi
77.	3534L to 3650L	116	1.0	150	Along	A	Station Paldi
78.	3650L-3660L	10	1.0	150	Along	A	Paldi Circle
79.	3660L	30	1.5	450	Across	A	Paldi Circle
80.	3637R to 3650R	13	1.2	300	Along	A	Station Paldi
81.	3650R to 3675R	25	1.2	300	Along	B	Paldi Circle

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
82.	3660L to 3837L	177	1.0	150	Along	A	Near Paldi Circle
83.	3675R-3941R	266	1.5	300	Along	B	Near Paldi Circle
84.	4150	30	1.5	600	Across	A	Sharda Complex
85.	4150R-4250R	100	1.5	600	Along	B	Sharda Complex to Ellis Bridge Circle
86.	4150R-4250R	100	1.5	600	Along	B	Sharda Complex
87.	4250R-4450R	200	1.5	600	Along	A	Station VS Hospital
88.	4450R-4775R	325	1.5	600	Along	B	Ellisbridge Circle
89.	3837L-4250L	413	1.0	150	Along	A	Ellisbridge Municipal Saraswati School
90.	4250L-4346L	96	1.0	150	Along	A	Station VS Hospital
91.	3941R-4250R	309	1.5	300	Along	B	Satyaguru Ashram to UKO Bank
92.	4250R-4435R	185	1.5	300	Along	A	Station VS Hospital
93.	4435R	30	1.5	450	Along	A	Station VS Hospital
94.	4346L-4405L	59	1.0	150	Along	A	Station VS Hospital
95.	4405L-4450R	45	1.0	150	Across	A	Station VS Hospital
96.	4450R-4489R	39	1.0	150	Across	A	Opp State Bank of India
97.	4435R-4450R	15	1.5	450	Along	A	Station VS Hospital
98.	4450R-4584R	134	1.5	450	Along	A	VS Hospital
99.	4489R-4566R	77	1.0	150	Along	A	VS Hospital
100.	4566R-4623L	57	1.0	150	Across	A	VS Hospital
101.	4584R-4646R	62	1.5	450	Along	A	VS Hospital
102.	4623L-4693L	70	1.0	150	Along	A	Near VS Hospital
103.	4646R-4690L	44	1.5	450	Across	A	Near VS Hospital
104.	4693L-4770L	77	1.0	150	Along	A	Ellisbridge Circle
105.	4690L-4770L	80	1.5	450	Along	A	Ellisbridge Circle
106.	4770	5	1.5	400	Along	A	Ellisbridge Circle

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
107.	4770L-4952L	182	1.0	150	Along	A	Ellisbridge Circle
108.	4770L-4843L	73	1.0	150	Along	A	Ellisbridge Circle
109.	4843L-4900R	57	1.5	300	Across	A	Gujarat Bhawan
110.	4900R-4952R	52	1.5	300	Along	A	Gujarat Bhawan
111.	4952	30	1.2	125	Across	A	Gujarat Bhawan
112.	4952L-5075L	123	1.5	200	Along	B	Gujarat Bhawan
113.	5075L-5110L	35	1.5	200	Along	A	Station Nava Gandhigram
114.	4952R-5075R	123	1.5	300	Along	A	Opp Nehru Bridge Circle
115.	5075R-5217R	142	1.5	300	Along	A	Station Nava Gandhigram
116.	5110L-5268L	158	1.5	200	Along	A	Station Nava Gandhigram
117.	5217L	5	1.5	80	Along	A	Station Nava Gandhigram
118.	5217L-5274L	57	1.5	450	Along	A	Station Nava Gandhigram
119.	5274R	30	1.5	450	Along	A	Station Nava Gandhigram
120.	5274R-5286R	12	1.5	450	Along	A	Nehru Bridge Circle
121.	5286R	30	1.5	100	Along	A	Nehru Bridge Circle
122.	5268L-5585L	317	1.5	200	Along	B	Nehru Bridge Circle to Natraj Theatre
123.	5300L-5585L	285	1.2	200	Along	B	Nehru Bridge Circle to Natraj Theatre
124.	5286R-5590R	304	1.5	450	Along	A	Nehru Bridge Circle to Natraj Theatre
125.	5585L-5941L	356	1.5	200	Along	B	Natraj Theatre to City Gold Multiplex
126.	5585L-5814L	229	1.5	200	Along	B	Natraj Theatre to Dena Bank
127.	5590R-5830R	240	1.5	450	Along	B	Natraj Theatre to Shiv Theatre
128.	5688	30	1.5	80	Across	A	Pelicon Complex
129.	5814L-6000L	186	1.5	450	Along	A	Dena Bank to Mount Kermal School
130.	6000L-	200	1.5	450	Along	A	Station

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
	6200L						Navrangpura
131.	6200L-6208L	8	1.5	450	Along	A	Mount Kermal School
132.	5892L	5	1.0	80	Along	A	City Gold Multiplex
133.	5830R-6000R	170	1.5	200	Along	B	Dena Bank to Opp Mount Carmal School
134.	6000R-6200R	200	1.5	200	Along	A	Station Navrangpura
135.	6200R-6208R	8	1.5	200	Along	B	Mount Carmal School
136.	5941L-6000L	59	1.5	100	Along	B	Dena bank to Mount Carmal School
137.	6000L-6200L	200	1.5	100	Along	A	Station Navrangpura
138.	6200L-6208L	8	1.5	200	Along	B	Mount Kermal School
139.	6208R	30	1.2	300	Across	A	Near Mount Kermal School
140.	6208L-6650L	442	1.5	450	Along	B	Mount Carmal School to ITO Crossing
141.	6650L-6828L	178	1.5	450	Along	A	Station Aayakar Bhawan
142.	6208R-6650R	442	1.5	150	Along	B	Mount Kermal School to ITO Crossing
143.	6650R-6828R	178	1.5	150	Along	A	Station Aayakar Bhawan
144.	6268L	30	1.0	100	Across	A	Mount Kermal School
145.	6500L	30	1.0	150	Across	A	Punjab National bank
146.	6750R-6825R	75	1.2	300	Along	A	Station Aayakar Bhawan
147.	6825R-6850R	25	1.2	300	Along	A	Station Aayakar Bhawan
148.	6850R-6885R	35	1.2	300	Along	A	ITO Crossing
149.	6828	30	1.5	450	Across	A	Station Aayakar Bhawan
150.	6828L-6850L	22	1.5	300	Along	A	Station Aayakar Bhawan
151.	6850L-6985L	135	1.5	300	Along	B	Near ITO Crossing
152.	6828R-6850R	22	1.2	300	Along	A	Station Aayakar Bhawan
153.	6850R-	135	1.2	300	Along	B	ITO Crossing

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
	6985R						
154.	6985L-7577L	592	1.5	300	Along	B	ITO Crossing to Usmanpura Crossing
155.	7249	30	1.2	300	Across	A	Gujarat Vidhyapeeth Campus
156.	6985R-7577R	592	1.2	300	Along	B	ITO Crossing to Usmanpura Crossing
157.	7577L	30	1.2	300	Across	A	Usmanpura Crossing
158.	7577L-7673L	96	1.5	300	Along	A	Near Usmanpura Crossing
159.	7673L-8127L	454	1.2	300	Along	B	Fortune Hotel to Laxmi Niwas
160.	8127	30	1.2	150	Across	A	Laxmi Niwas
161.	8127R-8363R	236	12	150	Along	B	Laxmi Niwas to Bunglow Satguru
162.	7575	30	1.5	300	Along	A	Near Usmanpura Crossing
163.	7580	30	1.2	100	Across	A	Near Usmanpura Crossing
164.	7585	30	1.2	300	Along	A	Near Usmanpura Crossing
165.	8363L	30	1.5	150	Across	A	Near Vadaj Crossing
166.	8360R-8650R	290	1.5	200	Along	B	Near Vadaj Crossing to Chander Bhaga Bridge
167.	8650R-8850R	200	1.5	200	Along	A	Station Vadaj
168.	8850R-9270R	420	15	200	Along	B	Near Vadaj Crossing to Chander Bhaga Bridge
169.	8850R-8958R	108	15	200	Along	B	Near Vadaj Crossing to Chander Bhaga Bridge
170.	8958R-9020L	62	15	200	Across	A	Near Vadaj Crossing to Chander Bhaga Bridge
171.	9020L-9280L	260	15	200	Along	B	Near Vadaj Crossing to Chander Bhaga Bridge
172.	9280L-9330R	50	15	200	Across	A	Near Chander Bhaga Bridge

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
173.	9330R-9520R	190	15	200	Along	B	Near Chander Bhaga Bridge
174.	7673L-8438L	765	1.5	300	Along	B	Near Usmanpura Crossing to Vadaj Crossing
175.	8438L-8510L	72	1.5	300	Along	B	Near Vadaj Crossing
176.	8510L-8560L	50	1.5	300	Along	B	Near Vadaj Crossing
177.	8560L-8650L	50	1.5	300	Along	A	Vadaj Crossing
178.	8650L-8826L	176	1.5	300	Along	A	Station Vadaj
179.	8620	30	1.5	300	Along	A	Vadaj Crossing
180.	8650L-8850L	200	1.5	300	Along	A	Station Vadaj
181.	8629R	30	1.5	150	Along	B	Near Vadaj Crossing
182.	8641R	30	1.2	150	Along	B	Vadaj Crossing
183.	8826L-8850L	24	1.5	300	Along	A	Station Vadaj
184.	8850L-9251L	401	1.5	300	Along	B	Gujarat Khadi Gramoudhyog to Chander Bhaga Bridge
185.	9251L-9272L	21	1.5	500	Along	A	Chander Bhaga Bridge
186.	9272L-9500L	228	1.2&1.5	300&500	Along	A	Chander Bhaga Bridge
187.	9500L-9600L	100	1.2&1.5	300&500	Along	B	Gandhi Ashram to Subhash Circle
188.	9600L-9800L	200	1.2&1.5	300&500	Along	A	Station Gandhi Ashram
189.	9800L-10305L	505	1.2&1.5	300&500	Along	B	Subhash Circle
190.	9812	30	1.2	300	Across	A	Gandhi Ashram
191.	10305L-10335L	20	1.2&1.2	300&400	Along	A	Gandhi Ashram to Subhash Circle
192.	9812R-10300R	488	1.0	300	Along	B	Gandhi Ashram to Subhash Circle
193.	10305L	30	1.0	350	Across	A	Subhash Circle
194.	10335	30	1.2&1.2	150&400	Across	A	Subhash Circle
195.	10335R-10444L	109	1.0	200	Across	A	Station Subhash Circle
196.	11434R-11577L	133	1.2	1200	Across	A	AEC Circle
197.	11577L-11612L	35	1.2	1200	Along	B	AEC Circle
198.	11612	30	1.0	230	Across	A	AEC Circle
199.	11612L-	293	1.2	2X1200	Along	B	Near AEC Circle

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
	11905L						
200.	11612R-12063R	451	1.0	150&1500	Along	B	Near AEC Circle
201.	12063R-12143R	80	1.0	150&1500	Along	A	Near AEC Circle
202.	12143R-12188R	45	1.0	150&1500	Along	B	Near AEC Circle
203.	11905R	30	1.0	200	Across	A	Shivam Traders
204.	11905L-12213L	308	1.2	1200	Along	B	Near AEC Colony
205.	11905L-12234L	329	1.2	1200	Along	B	Near AEC Colony
206.	12188R-12300R	112	1.2	150,250&1500	Along	B	AEC Colony to Motera J-1
207.	12300R-12500R	200	1.2	150,250&1500	Along	A	Station Shankarpura
208.	12500R-13100R	600	1.2	150,250&1500	Along	B	AEC Colony to Motera J-1
209.	12234L-12300L	66	1.2	1200	Along	B	AEC Colony to Telephone Exchange
210.	12300L-12500L	200	1.2	1200	Along	A	Station Shankarpura
211.	12500L-12533L	33	1.2	1200	Along	B	AEC Colony to Telephone Exchange
212.	12491R	30	1.0	150	Across	A	Station Shankarpura
213.	12533L-13100L	567	1.2	1200	Along	B	Telephone Exchange to Police Station
214.	13100R-13150R	50	1.5	450&1500	Along	B	Police Station to J-1 Motera
215.	13150R-13350R	200	1.5	450&1500	Along	A	Station Acher
216.	13350R-13410R	60	1.5	450&1500	Along	B	Police Station to J-1 Motera
217.	13166R	30	1.5	600	Across	A	Station Acher
218.	13166L-13350L	184	1.2	150	Along	A	Station Acher
219.	13350L-13410L	60	1.2	150	Along	B	Police Station
220.	13410R	30	1.0	300	Across	A	J-1 Motera Village
221.	13410R	30	1.5	1500	Along	B	J-1 Motera Village
222.	13436L	30	1.0	300	Across	A	J-1 Motera Village
223.	13440L-13495L	30	1.0	100	Along	B	J-1 Motera Village
224.	13495L-13985L	490	1.0	100	Along	B	J-1 Motera Village
225.	13500R-	720	1.5	300&1500	Along	A	J-1 Motera Village

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
	14220R						
226.	13500R-13980R	480	1.5	1500&300	Along	B	J-1 Motera Village
227.	14005R-14200R	195	1.2	63	Along	B	Motera Village
228.	14200R-14300R	100	1.2	90	Along	A	Station Sardar Patel Gujarat Statdium
229.	14300R-14520R	220	1.2	90	Along	B	Motera Village
230.	14520R	30	1.2	300	Across	A	Motera Village
231.	14520R-14890R	370	1.2	300	Along	B	Motera Village
232.	14890R	30	1.2	152	Across	A	Motera Village
233.	14890R-15265R	375	1.2	450	Along	A	Motera Village
234.	15000	30	1.0	100	Across	A	Motera Village
235.	15183	30	1.0	63	Across	A	Motera Village
236.	15265	30	1.0	450	Across	A	Motera Village
237.	15265R-15300R	35	1.2	600	Along	B	Motera Village
238.	15300R-15433R	133	1.2	600	Along	A	Station Motera Village
239.	15433	30	1.2	600	Across	A	Station Motera Village
240.	15433L-15500L	67	1.2	600	Along	A	Station Motera Village
241.	15500L-15509L	9	1.2	600	Along	B	Motera Village
242.	15509	30	1.2	600	Across	A	Motera Village
243.	15433R-15500R	67	1.2	190	Along	A	Station Motera Village
244.	15500R-15640R	140	1.2	190	Along	B	Motera Village
245.	15640	30	1.2	190	Across	A	Motera Village
246.	15645L-15700L	55	1.0	133	Along	A	Motera Village
247.	15700L-16000R	300	1.0	133	Along	A	Motera Village
248.	16000R-16105R	105	1.0	133	Along	B	Motera Village
249.	16105	30	1.0	152	Across	A	Motera Village
250.	16105R-16350R	245	1.0	190	Along	B	Motera Village
251.	16381	30	1.0	133	Across	A	Motera Village
252.	16555R-16700R	145	1.0	63	Along	B	Motera Village
253.	16700L-16750L	50	1.0	71	Along	B	Motera Village
254.	16750L-	200	1.0	71	Along	A	Station

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
	16950L						Radhaswamy Satsang Vyas
255.	16950L-16980L	30	1.0	71	Along	B	Motera Village
256.	16700R-16750R	50	1.0	104	Along	B	Motera Village
257.	16750R-16950R	200	1.0	104	Along	A	Station Radhaswamy Satsang Vyas
258.	16950R-17040R	90	1.0	104	Along	B	Motera Village
259.	16700	30	1.0	133	Across	A	Motera Village
260.	20100R-20300R	200	1.5	1800	Along	B	Between Koba Circle to Indroda Circle
261.	20300R-20500R	200	1.5	1800	Along	A	Station Koba Circle
262.	20500R-21100R	600	1.5	1800	Along	B	Between Koba Circle to Indroda Circle
263.	21100R-21500R	400	1.5	1800	Along	B	Between Koba Circle to Indroda Circle
264.	21500R-21700R	200	1.5	1800	Along	A	Station Ambapur
265.	21700R-22100R	400	1.5	1800	Along	B	Between Koba Circle to Indroda Circle
266.	22100R-22800R	700	1.5	1800	Along	B	Between Koba Circle to Indroda Circle
267.	22800R-23000R	200	1.5	1800	Along	A	Station Pore
268.	23000R-23100R	100	1.5	1800	Along	B	Between Koba Circle to Indroda Circle
269.	23100R-24100R	1000	1.5	1800	Along	B	Between Koba Circle to Indroda Circle
270.	24100R-24300R	200	1.5	1800	Along	A	Station Kudasani
271.	24300R-25100R	800	1.5	1800	Along	B	Between Koba Circle to Indroda Circle
272.	25100R-25250R	150	1.5	1800	Along	B	Between Koba Circle to Indroda Circle
273.	25250R-25450R	200	1.5	1800	Along	A	Station Dhaula Kuan
274.	25450R-	650	1.5	1800	Along	B	Between Koba

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
	26100R						Circle to Indroda Circle
275.	26100R-26200R	100	1.5	1800	Along	B	Between Koba Circle to Indroda Circle
276.	26200R-26400R	200	1.5	1800	Along	A	Station Infocity
277.	26400R-27090R	690	1.5	1800	Along	B	Between Koba Circle to Indroda Circle
278.	27095	30	1.0	300	Across	A	Indroda Circle
279.	27095R-27150R	55	1.0	300	Along	B	Indroda Circle to CH-6
280.	27150R-27350R	200	1.0	300	Along	A	Station Indroda Circle
281.	27350R-28095R	745	1.0	300	Along	B	Indroda Circle to CH-6
282.	27550R-	30	1.0	275	Across	A	Sector -2
283.	27680R	30	1.0	200	Along	B	Sector-1
284.	27770R-28100R	330	1.0	750	Along	B	Indroda Circle to CH-6
285.	28100R-28300R	200	1.0	750	Along	A	Station Sector-7
286.	28300R-28770R	470	1.0	750	Along	B	Indroda Circle to CH-6
287.	28065	30	1.0	600	Across	A	CH-2
288.	28085	30	1.0	225	Across	A	CH-2
289.	28095R-28600R	605	1.0	300	Along	B	Indroda Circle to CH-6
290.	28600R	30	1.0	200	Across	A	Sector-7
291.	28600R-29200R	600	1.0	375	Along	B	Indroda Circle to CH-6
292.	29200R-29400R	200	1.0	375	Along	A	Station S.T. Depot
293.	29400R-29600R	200	1.0	375	Along	B	Indroda Circle to CH-6
294.	28660	30	1.0	300	Across	A	Sector-8
295.	29100	30	1.0	600	Across	A	CH-3
296.	28770R-29200R	430	1.5	750	Along	B	Indroda Circle to CH-6
297.	29200R-29400R	200	1.5	750	Along	A	Station S.T. Depot
298.	29400R-29770R	370	1.5	750	Along	B	Indroda Circle to CH-6
299.	29120	30	1.5	1200	Along	B	CH-3
300.	29130	30	1.0	150	Across	A	CH-3
301.	29175	30	1.0	250	Across	A	Near CH-3
302.	29130L-29200L	70	1.0	300	Along	B	CH-3 to Ch-5
303.	29200L-	200	1.0	300	Along	A	Station S.T. Depot

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position wrt Alignment	Diversion Proposals	Locations
	29400L						
304.	29400L-29430	30	1.0	300	Along	B	CH-3 to CH-5
305.	29430L-30240L	810	1.0	400	Along	B	CH-3 to Ch-5
306.	29525	30	1.0	200	Along	B	Sector-11
307.	29530	30	1.0	250	Across	A	Sector-11
308.	29675	30	1.0	100	Along	B	Gujarat Vidhan Sabha
309.	29770R-30240R	470	1.5	750	Along	B	Gujarat Vidhan Sabha
310.	29600R-30500R	900	1.0	375	Along	B	Indroda Circle to CH-6
311.	30500R-30700R	200	1.0	375	Along	A	Station Sachivalaya
312.	30700R-30785R	85	1.0	375	Along	B	Indroda Circle to CH-6
313.	30070	30	1.0	150	Along	B	Gujarat Vidhan Sabha
314.	30148	30	1.5	600	Across	A	Gujarat Vidhan Sabha
315.	30235	30	1.0	225	Across	A	Gujarat Vidhan Sabha
316.	30240	30	1.5	600	Across	A	Gujarat Vidhan Sabha
317.	30329	30	1.0	150	Along	B	Gujarat Vidhan Sabha
318.	30785	30	1.0	225	Across	A	Old Sachivalaya
319.	30785R-31750R	965	1.0	450	Along	B	Indroda Circle to CH-6
320.	31750R-31785R	35	1.0	450	Along	A	Station Akshardham
321.	31277	30	1.0	225	Across	A	CH-5
322.	31440	30	1.0	350	Along	B	Sector-21
323.	31498	30	1.0	350	Across	A	Sector-22
324.	31700	30	1.0	250	Along	B	Sector-21
325.	31795	30	1.0	250	Across	A	Station Akshardham
326.	31785R-31950R	165	1.0	450	Along	A	Station Akshardham
327.	31950R-32330R	380	1.0	450	Along	B	CH-6
328.	31978	30	1.0	100	Along	B	Sector-21
329.	32135	30	1.0	100	Along	B	Sector-21
330.	32227	30	1.0	150	Across	A	CH-6
331.	32330	30	1.0	150	Across	A	CH-6
332.	32330R-	30	1.0	225	Along	B	CH-6
333.	32330R-32400R	70	1.5	600	Along	B	Near CH-6

Note:

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” Water supply lines parallel/across the alignment, hence diversion not proposed.

4.21.5 Gas Pipe Line

The gas pipeline running parallel/across the alignment is shown in **Table U 5**. These gas pipe lines carrying highly inflammable CNG gas, which is supplied by Gujarat Adani Energy Ltd and Gujarat State Petroleum Corporation. Hence special care to be taken during construction specially while doing the piling works. These gas pipe lines are exist in under ground section only.

Table U 5**DETAILS OF AFFECTED GAS PIPELINE**

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Locations
a) N-S Corridor (APMC Vasna to Gandhi Nagar)							
1	1949R-2000R	51	1.2	300	Along	B	Anjali Vasna Crossing
2	2000R-2047R	47	1.2	300	Along	A	Station Narayan Nagar
3	2047R-2200R	143	1.2	300	Along	B	Anjali Vasna Crossing
4	2200R-2247R	47	1.2	300	Along	B	Anjali Vasna Crossing
5	2247R-2360R	113	1.2	300	Along	A	Opp Nilkanth Plaza
6	2360R-3100R	740	1.2	300	Along	B	Opp Nilkanth Plaza to Shiekh Adam Abu Wala Road
7	18980	30	5.0	323	Across	A	Near Narmada Main Canal
8	21467	30	1.35	323	Across	A	Near Koba Circle
9	21467R-21500R	33	1.35	323	Along	B	SH-71, Koba Circle to Indroda Circle
10	21500R-21700R	200	1.35	323	Along	A	Station Ambapur
11	21700R-22000R	300	1.35	323	Along	B	SH-71, Koba Circle to Indroda Circle
12	22000R-22800R	800	1.35	323	Along	B	SH-71, Koba Circle to Indroda Circle
13	22800R-23000R	200	1.35	323	Along	A	Station Pore
14	23000R-24000R	1000	1.35	323	Along	B	SH-71, Koba Circle to Indroda Circle
15	24000R-24100R	100	1.35	323	Along	B	SH-71, Koba Circle to Indroda Circle
16	24100R-	200	1.35	323	Along	A	Station Kudasani

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Locations
17	24300R-25000R	700	1.35	323	Along	B	SH-71, Koba Circle to Indroda Circle
18	25000R-25250R	250	1.35	323	Along	B	SH-71, Koba Circle to Indroda Circle
19	25250R-25450R	200	1.35	323	Along	A	Station Dhaula Kuan
20	25450R-26000R	550	1.35	323	Along	B	SH-71, Koba Circle to Indroda Circle
21	26000R-26200R	200	1.35	323	Along	B	SH-71, Koba Circle to Indroda Circle
22	26200R-26400R	200	1.35	323	Along	A	Station Infocity
23	26400R-27000R	600	1.35	323	Along	B	SH-71, Koba Circle to Indroda Circle
24	27000R-27150R	500	1.35	323	Along	B	Sector1&2
25	27150R-27350R	200	1.35	323	Along	A	Station Indroda Circle
26	27350R-27500R	150	1.35	323	Along	B	Sector 1&
27	27500R-28000R	500	1.35	323	Along	B	Sector1&2
28	28000R-28100R	500	1.35	323	Along	B	Circle-2, Sector7&8
29	28100R-28300R	200	1.35	323	Along	A	Station Sector-7
30	28300R-28500R	200	1.35	323	Along	B	Circle-2, Sector7&8
31	28500R-29000R	500	1.35	323	Along	B	Circle-2, Sector7&8
32	29000R-29200R	200	1.35	323	Along	B	Circle-3, Sector 10&11
33	29200R-29400R	200	1.35	323	Along	A	Station S.T. Depot
34	29400R-29500R	100	1.35	323	Along	B	Circle-3, Sector10&11
35	29500R-30000R	500	1.35	323	Along	B	Sector 10&11 Gujarat Vidhan Sabha
36	30000R-30500R	500	1.35	323	Along	B	Gujarat Vidhan Sabha
37	30500R-30700R	200	1.35	323	Along	A	Station Sachivalaya
38	30700R-31000R	300	1.35	323	Along	B	Old Sachivalaya
39	31000R-31500R	500	1.35	323	Along	B	Circle 5, Sector 22
40	31500R-31750R	250	1.35	323	Along	B	Sector 21&22

S. No.	Location @ km	Affected Length (in m)	Approximate Depth Below Ground (in m)	Type & Diameter (in mm)	Position w.r.t. Alignment	Diversion Proposals	Locations
41	31750R-31950R	200	1.35	323	Along	A	Station Akshardham
42	31950R-32000R	50	1.35	323	Along	B	Sector-21&22
43	32000R-32300R	300	1.35	323	Along	B	Sector 21&22

Note:

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” Gas pipelines are parallel/across the alignment, hence diversion not proposed.

4.21.6 Above ground Utilities

The above ground utilities namely street light poles, traffic signal posts, telecommunication posts, junction boxes, etc. are also required to be shifted and relocated suitably during construction, since these will be interfering with the proposed alignment. Approximate numbers of affected posts and boxes are indicated in **Table U 6**.

Table U 6
AFFECTED ABOVEGROUND SERVICES

Section	Lp	EP	Tsp	Tp	JBe	Tr	Tm	Tj
a) North-South corridor (APMC/Vishala To Gandhinagar)								
APMC-ITO	200	269	48	119	3	-	-	5
ITO-Motera	194	105	26	27	91	2	-	31
Motera-GNC	232	146	-	59	53	1	4	37
b) East-West corridor (Ahmedabad to Thaltej)								
ADI-Thaltej	344	204	64	48	105	3	1	45
Lp	Light Post	EP	Electric Post	Tsp Traffic Signal Post				
Tp	Telephone Post	Jbe	Electrical Junction Box					
Tr	Transformer	Tm	Traction mast	Tj Telephone Jn box				

Shifting of above ground services become unavoidable.

4.21.7 HT-Electric Lines/cables Along the Corridor

At several places, 6 kV, 11kV, 33kV and 132kV O/H lines crossing and running along the alignment both below ground and above ground. The list of such HT/EHT lines along with their locations is indicated in **Table U 7 and U 8**. These lines need to be modified/shifted or cabled well in advance of construction along this route specially at under ground station and switch over ramp location. These lines will need to be modified in such a way as to conform to the regulations of “Power Lines Crossing the Railway Track” issued by Ministry of Railways.

Table U 7
Details of Affected Electric cables in Below Ground Position

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
a) E-W Corridor (Ahmedabad to Thaltej)						
1.	3926	11KV	30	Across	A	Near ITO Crossing
2	3926R-3942R	11KV	16	Along	B	Near ITO Crossing
3	3942	11KV	30	Across	A	Near ITO Crossing
4	3943	11KV	30	Across	A	Near ITO Crossing
5	3943R-4038R	11KV	95	Along	B	Near ITO Crossing
6	3940L-4038L	400V	98	Along	A	Near ITO Crossing
7	4032R	400V	30	Across	A	Near ITO Crossing
8	4043	11KV	30	Across	A	Near ITO Crossing
9	4043L-4070L	2X11KV	27	Along	A	Near ITO Crossing
10	4070L-4100L	2X11KV	30	Along	A	Station AAayakar Bhawan
11	4100L-4200L	2X11KV	100	Along	A	Station AAayakar Bhawan
12	4081	400V	30	Across	A	Station AAayakar Bhawan
13	4085R-4152R	11KV	67	Along	A	Station AAayakar Bhawan
14	4152	11KV	30	Across	A	Station AAayakar Bhawan
15	4155	11KV	30	Across	A	Station AAayakar Bhawan
16	4155L-4210L	11KV	55	Along	A	Station AAayakar Bhawan
17	4155R-4205R	11KV	50	Along	A	Station AAayakar Bhawan
18	4155L-4270L	11KV	115	Along	A	Station AAayakar Bhawan
19	4270L-4555L	11KV	285	Along	B	ITO Crossing to SP Stadium Five Road Crossing
20	4180	400V	30	Across	A	Station AAayakar Bhawan
21	4350	2X400V	30	Across	A	Near Railway Crossing
22	4470L-4555L	3X11KV	85	Along	B	Municipal Swimming Pool
23	4555	11KV	30	Across	A	Municipal Swimming Pool
24	4557	400V	30	Across	A	Municipal Swimming Pool
25	4555L-	11KV	35	Along	B	Municipal

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
	4590L					Swimming Pool
26	4590	11KV	30	Across	A	Municipal Swimming Pool
27	4555L-4630L	11KV	75	Along	B	SP Stadium Crossing
28	4640	3X400V	30	Across	A	SP Stadium Crossing
29	4640	11KV	30	Across	A	SP Stadium Crossing
30	4650	400V	30	Across	A	SP Stadium Crossing
31	4640L-4663L	2X11KV	23	Along	A	SP Stadium Crossing
32	4663	2X11KV	30	Across	A	SP Stadium Crossing
33	4690	400	30	Across	A	Police Quarters
34	4613R-4700R	2X11KV	87	Along	A	SP Stadium to Commerce Crossing
35	4700R-4900R	2X11KV	200	Along	A	Station Sardar Patel Stadium
36	4900R-4950R	2X11KV	50	Along	A	SP Stadium to Commerce Crossing
37	4715	400V	30	Across	A	Police Quarters
38	4733	400V	30	Across	A	Police Quarters
39	4744	400V	30	Across	A	Police Quarters
40	4710R-4750R	400V	40	Along	A	Station Sardar Patel Stadium
41	4790	400	30	Across	A	Police Quarters
42	4750L-4900L	11KV	150	Along	A	Station Sardar Patel Stadium
43	4900L-4927L	11KV	27	Along	B	SP Stadium Crossing to Commerce Crossing
44	4927	11KV	30	Across	A	Near Silver Point
45	4927R-5070R	11KV	143	Along	A	SP Stadium Crossing to Commerce Crossing
46	4955	2X400V	30	Across	A	Saraspur bank
47	4980	400V	30	Across	A	Near Saraspur Bank
48	5006	400V	30	Across	A	Near Saraspur Bank
49	5020	400V	30	Across	A	Near Saraspur Bank
50	5022	400V	30	Across	A	Near Saraspur

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
						Bank
51	5036	400V	30	Across	A	Near Sarapsur Bank
52	5060	400V	30	Across	A	Near Sarapsur Bank
53	5070	2X11KV	30	Across	A	Pragma Society
54	5070R-5098R	11KV	28	Along	A	Pragma Society
55	5123	400V	30	Across	A	Pragma Society
56	5120R-5152R	400V	32	Along	B	Kamal Colony
57	5180	400V	30	Across	A	Kamal Colony
58	5175R-5205R	400V	30	Along	B	Kamal Colony
59	5199R	400V	30	Across	A	Kamal Colony
60	5205	400V	30	Across	A	Kamal Colony
61	5245	11KV	30	Across	A	Commerce Hostel Compound
62	5250	400V	30	Across	A	Commerce Hostel Compound
63	5250R-5292R	11KV	42	Along	B	Commerce hostel Compound
64	5292	2X400V	30	Across	A	Commerce Hostel Compound
65	5440	400V	30	Across	A	Commerce Hostel Compound
66	5445	400V	30	Across	A	Commerce hostel Compound
67	5534	400V	30	Across	A	Commerce Crossing
68	5600L-5645L	11KV	45	Along	B	Commerce Crossing
69	5645	11KV	30	Across	A	Commerce Crossing
70	5645L-5650L	2X11KV	5	Along	B	Commerce Crossing to Vijay Crossing
71	5650L-5783L	2X11KV	133	Along	A	Station Commerce Six Road
72	5711	400V	30	Across	A	Commerce Crossing
73	5645R-5850R	11KV	205	Along	A	Station Commerce Six Road
74	5850R-5970R	11KV	120	Along	B	Commerce Crossing to Vijay Crossing
75	5783L-5850L	11KV	67	Along	A	Station Commerce Six Road
76	5850L-	11KV	120	Along	B	Commerce

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
	5970L					Crossing to Vijay Crossing
77	5884	400V	30	Across	A	Near Vijay Crossing
78	5920	400V	30	Across	A	Near Vijay Crossing
79	5978	400V	30	Across	A	Near Vijay Crossing
80	6030	400V	30	Across	A	Near Vijay Crossing
81	6100R-6235R	2X11KV	135	Along	B	Near Vijay Crossing
82	6141	400V	30	Across	A	Near Vijay Crossing
83	6187	2X400V	30	Across	A	Near Vijay Crossing
84	6195	2X11KV	30	Across	A	Near Vijay Crossing
85	6235	2X11KV	30	Across	A	Vijay Crossing
86	6235R-6423R	3X11KV	188	Along	B	Near Vijay Crossing
87	6341	400V	30	Across	A	Near Vijay Crossing
88	6423	3X11KV	30	Across	A	Near Vijay Crossing
89	6438	11KV	30	Across	A	Near Vijay Crossing
90	6450	3X11KV	30	Across	A	Near Vijay Crossing
91	6433L-6450L	3X11KV	17	Along	B	Near Vijay Crossing
92	6433R-6450R	3X11KV	17	Along	B	Near Vijay Crossing
93	6430R-6470R	5X11KV	40	Along	B	Near Vijay Crossing
94	6485	2X11KV	30	Across	A	Near Vijay Crossing
95	6485L-6760L	2X11KV	285	Along	B	Memnagar bus depot
96	6760L-6960L	2X11KV	200	Along	A	Gujarat University
97	6960L-6981L	2X11KV	21	Along	B	Memnagar bus depot
98	6487R-6760R	4X11KV	273	Along	B	Memnagar Bus depot
99	6760R-6960R	4X11KV	200	Along	A	Gujarat University
100	6960R-7019R	4X11KV	59	Along	B	Memnagar Bus depot

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
101	6662	400V	30	Across	A	Saurabh Apartment
102	6721	400V	30	Across	A	Saurabh Apartment
103	6723	400V	30	Across	A	Saurabh Apartment
104	6982	2X11KV	30	Across	A	Memnagar bus depot
105	7017	11KV	30	Across	A	Memnagar Bus Depot
106	7017R-7110R	11KV	93	Along	B	Opp University Ground
107	7120R-7482R	11KV	262	Along	B	Manav Mandir
108	7516	2X11KV	30	Across	A	Manav Mandir
109	7482R-7685R	2X11KV	203	Along	B	Swaminarayan Gurukul
110	7685R-7885R	2X11KV	200	Along	A	Station Gurukul
111	7885R-7920R	2X11KV	35	Along	B	Swaminarayan Gurukul
112	7516L-7685L	11KV	169	Along	B	Swaminarayan Gurukul
113	7685L-7885L	11KV	200	Along	A	Station Gurukul
114	7885L-7920L	11KV	35	Along	B	Swaminarayan Gurukul
115	7650	2X400	30	Across	A	Agriculture Office
116	7877	400V	30	Across	A	Agriculture Office
117	7920L	2X11KV	30	Across	A	Swaminarayan Gurukul
118	7920L-8290L	11KV	370	Along	A	Swaminarayan Gurukul to Indraprastha Tower
119	7920L-8232L	2X11KV	312	Along	B	Swaminarayan Gurukul to Indraprastha Tower
120	7920R-8710R	11KV	790	Along	B	Gurukul to Doordarshan
121	7995	2X11KV	30	Across	A	Swaminarayan Gurukul
122	8070	2X400V	30	Across	A	Vastrapur Govt. Quarter
123	8068L-8116L	11KV	48	Along	B	Vastrapur Govt. Quarter
124	8180	2X11KV	30	Across	A	Vastrapur Govt. Quarter

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
125	8180R-8200R	2X11KV	20	Along	B	Indraprastha Tower
126	8310	4X400V	30	Across	A	Indraprastha Tower
127	8232L-8290L	11KV	58	Along	B	Indraprastha Tower
128	8290L-8710L	2X11KV	420	Along	B	Indraprastha Tower to Doordarshan
129	8416	400V	30	Across	A	Drive in theatre
130	8580	400V	30	Across	A	Drive in Cinema
131	8690L-8698L	2X400V	8	Along	A	Doordarshan
132	8690	2X400V	30	Across	A	Doordarshan
133	8710	11KV	30	Across	A	Doordarshan
134	8710L-8725L	3X11KV	15	Along	B	Doordarshan
135	8725L-8838L	3X11KV	113	Along	A	Station Doordarshan Kendra
136	8710R-8725R	2X11KV	15	Along	B	Doordarshan
137	8725R-8838R	2X11KV	113	Along	A	Station Doordarshan Kendra
138	8838	11KV	30	Across	A	Doordarshan
139	8845R	2X400V	30	Across	A	Doordarshan
140	8838L-8912L	2X11KV	74	Along	A	Station Doordarshan Kendra
141	8838R-8912R	11KV	74	Along	A	Station Doordarshan Kendra
142	8912	11KV	30	Across	A	Doordarshan
143	8912R-8925R	2X11KV	13	Along	A	Station Doordarshan Kendra
144	8925R-9020R	2X11KV	95	Along	B	Doordarshan
145	8912L-8925L	11KV	13	Along	A	Station Doordarshan Kendra
146	8925L-9025L	11KV	100	Along	B	Doordarshan
147	9020R-9310R	4X11KV	290	Along	B	Sardar Patel Institute
148	9025L-9144L	2X11KV	119	Along	B	Sardar Patel Institute
149	9310	11KV	30	Across	A	Sardar Patel

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
						Institute
150	9310R-9480L	5X11KV	170	Across	A	Sardar Patel Institute to AEC Sub Station
151	9310L-9520L	3X11KV	210	Along	B	Sardar Patel Institute
b) N-S Corridor (APMC Vasna to Gandhi Nagar)						
1.	127	400V	18	Across	A	AMC Octroi Naka
2.	128	11 KV	22	Across	A	AMC Octroi Naka
3.	132	11 KV	15	Across	A	AMC Octroi Naka
4.	270	11 KV	30	Across	A	AMC Octroi Naka
5.	303	2X 400V	12	Across	A	AMC Octroi Naka
6.	405	400V	18	Across	A	AMC Octroi Naka
7.	509	400V	21	Across	A	Near Cancer Hospital
8.	664R-735R	400V	71	Along	B	Near P& T Colony
9.	684	2X400V	14	Across	A	Near AMC water pump
10.	692	400V	30	Along	B	Near AMC water pump
11.	692	400V	9	Across	A	Near Someshwar Nagar
12.	700	2X400V	12	Across	A	Near Someshwar Nagar
13.	828	400V	17	Across	A	Near TVS Service Station
14.	910	2X400 V	22	Across	A	Near Aagam Palace
15.	994	400V	13	Across	A	Near Vasna Police Chowki
16.	994L-1015L	400V	21	Along	A	Station Vasana
17.	1014	2X11KV	29	Across	A	Near Vasna Police Chowki
18.	1022	2X11KV	29	Across	A	Near Vasna Police Chowki
19.	1071	2X11KV	22	Across	A	Near G.B.Shah College
20.	1062R-1165R	400V	103	Across	A	Near G.B.Shah College
21.	1086	400V	5	Along	A	Near Vasna Telephone Exchange
22.	1155	2X11KV	30	Across	A	Near Vasna Telephone Exchange
23.	1172	400V	16	Across	A	Near Dena Bank

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
24.	1419	400V	18	Across	A	Near N.D.Sharaf Market
25.	1428	400V	18	Across	A	Near Vishwa Darshan SBI Bank
26.	1455	2X400V	12	Across	A	Near Highway Garage
27.	1662	400V	19	Across	A	Near Mehta Chavna Store
28.	1792	2X400V	13	Across	A	Near Pumping Station
29.	1803	11KV	23	Across	A	Near Ganesh Plaza
30.	1834	5X400V	13	Across	A	Near Damubhai Colony
31.	1929L-1990L	11KV	61	Along	B	Anjali Vasna Crossing
32.	2032	400V	14	Across	A	Anjali Vasna Crossing
33.	2037	400V	15	Across	A	Anjali Vasna Crossing
34.	2022R-2037R	400V	15	Along	A	Station Narayan Nagar
35.	2047	2X400V	24	Across	A	Anjali Vasna Crossing
36.	2049	400V	13	Across	A	Anjali Vasna Crossing
37.	2065	400V	15	Across	A	Anjali Vasna Crossing
38.	2118	400V	13	Across	A	Near Deepawali Engineering Works
39.	2156	400V	14	Across	A	Near Anand Shopping Complex
40.	2185	400V	13	Across	A	Near Anand Shopping Complex
41.	2199	2X400V	18	Across	A	Near Zalak Complex
42.	2200	2X400V	18	Across	A	Near Zalak Complex
43.	2201	2X11KV	19	Across	A	Near Zalak Complex
44.	2201L-2215L	2X11KV	14	Along	A	Station Narayan Nagar
45.	2277	400V	15	Across	A	Near Sahjanand Plaza
46.	2390L-2410L	400V	20	Across	A	Near Sardar Bhawan
47.	2382	400V	6	Along	B	Near Abhishek Complex
48.	2390	400V	17	Across	A	Near Sardar

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
						Bhawan
49.	2465	400V	21	Across	A	Near Chandanbela Complex
50.	2534	400V	11	Across	A	Near Bhavik Society
51.	2558	2X400V	15	Across	A	Near Shirraj Apartment
52.	2581	400V	13	Across	A	Near Shalin Complex
53.	2575L-2595L	400V	20	Along	B	Near Jasmin Hotel
54.	2600	400V	24	Across	A	Near Aswin Society
55.	2626	400V	13	Across	A	Near Aswin Society
56.	2687	400V	16	Across	A	Near Tejpal Society
57.	2701	400V	20	Across	A	Near Khodiyar Corporation
58.	2805	2X400V	27	Across	A	Near Purnima Park
59.	2795L-2805L	2X400V	10	Along	B	Near Ankur School
60.	2877	400V	26	Across	A	Near Pankajvilla
61.	2855L-2900L	400V	45	Along	B	Near Sukita Apartment
62.	2921	400V	22	Across	A	Near Vasant Bags
63.	2921L-2990L	400V	69	Along	B	Near Vasant Bags
64.	2930	400V	23	Across	A	Near Vardhman Flats
65.	2960	400V	26	Across	A	Near Sevakunj
66.	3009	400V	28	Across	A	Near Badshah Dairy Product
67.	3000L-3015L	400V	15	Along	B	Near Rajkamal
68.	3033	400V	21	Across	A	Near Panchtirath Apartment
69.	3033L-3045R	400V	18	Across	A	Near Panchtirath Apartment
70.	3045R-3060L	400V	15	Across	A	Near Vivekanand Society
71.	3146	400V	9	Across	A	Near Shalimar Complex
72.	3141L-3170L	400V	29	Along	B	Near Shalimar Complex
73.	3187	400V	23	Across	A	Near Azad Hair Art
74.	3222	400V	22	Across	A	Mahalaxmi Crossing
75.	3230	400V	16	Across	A	Mahalaxmi

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
						Crossing
76.	3215L-3230L	400V	15	Along	B	Mahalaxmi Crossing
77.	3260	400V	26	Across	A	Near Bhupati Vibhuti
78.	3281	11KV	30	Across	A	Near Parimal Garden
79.	3281L-3300L	11KV	19	Along	B	Mahalaxmi Crossing
80.	3340	400V	15	Across	A	Near Akhil Hind Mahila Parisad Sakha
81.	3416	400V	22	Across	A	Near Mahaftlal Family Shop
82.	3405L-3419L	400V	14	Along	B	Near Mafatlal Family Shop
83.	3473	400V	20	Across	A	Near Ambika Complex
84.	3466L-3478L	400V	12	Along	A	Station Paldi
85.	3521	400V	10	Across	A	Near Gujrawala Flat
86.	3518L-3526L	400V	8	Along	A	Station Paldi
87.	3527	400V	19	Across	A	Near Gujarwala Flat
88.	3520L-3535L	400V	15	Along	A	Station Paldi
89.	3641	11KV	30	Across	A	Paldi Circle
90.	3648	2X11KV	30	Across	A	Paldi Circle
91.	3651	400V	20	Across	A	Paldi Circle
92.	3651	400V	27	Across	A	Paldi Circle
93.	3652	400V	30	Across	A	Paldi Circle
94.	3652	400V	30	Across	A	Paldi Circle
95.	3635L-3651L	400V	16	Along	A	Station Paldi
96.	3652L-3668L	400V	16	Along	B	Paldi Circle
97.	3652L-3667L	400V	15	Along	B	Paldi Circle
98.	3657	2X11KV	30	Across	A	Paldi Circle
99.	3659	400V	30	Across	A	Paldi Circle
100.	3659L-3668L	400V	9	Along	B	Paldi Circle
101.	3684	400V	30	Across	A	Paldi Circle
102.	3648R-3709R	11KV	61	Along	B	Paldi Circle
103.	3735	400V	17	Across	A	Near Vidyalay Chambers

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
104.	3731R-3739R	400V	8	Along	B	Paldi Circle
105.	3755	400V	20	Across	A	Near Himavan
106.	3790	400V	21	Across	A	Near Ashish Flat
107.	3838	400V	19	Across	A	Near Gujarat Travels
108.	3846	2X400V	20	Across	A	Near Bonny Travels
109.	3846	2X11KV	17	Across	A	Near Bonny Travels
110.	3837R-3858R	11KV	21	Along	B	Near Gopal Bhuvan Aswamegh Office Maruti Tours & Travels
111.	3846	2X400V	8	Along	B	Near Gopal Bhuvan Aswamegh Office Maruti Tours & Travels
112.	3933	400V	19	Across	A	Near Satyagruh Ashram Smarak
113.	3933L-3979L	400V	46	Along	B	Near Span Trade Centre
114.	3978	400V	17	Across	A	Near Span Trade Centre
115.	4075	400V	17	Across	A	Near Iscone Square
116.	4064R-4088R	2X400V	24	Along	B	Near Dena Bank Ellisbridge Branch
117.	4104	2X11KV	18	Across	A	Near Sahjanad Park
118.	4097R-4010R	11KV	13	Along	B	Near Narayan Palace
119.	4109	400V	19	Across	A	Near Sahjanand Flat
120.	4126	2X400V	19	Across	A	Near Sahjanand Flat
121.	4140	400V	30	Across	A	Near Vejalpur Road
122.	4152	11KV	22	Across	A	Near Sharda Complex
123.	4136R-4152R	11KV	15	Along	B	Near Siddhigiri
124.	4163	400V	20	Across	A	Near Sharda Complex
125.	4275	400V	17	Across	A	Near Hotel Sicago
126.	4265L-4213L	2X400V	18	Along	A	Near Janshanti Coop Housing

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
						Societys
127.	4297	2X11KV	27	Across	A	Hotel Sicago
128.	4310	400V	21	Across	A	Hotel Sicago
129.	4295L-4320L	400V	25	Along	A	Station V.S.Hospital
130.	4304	400V	23	Across	A	Near Madalpur Gam
131.	4369	400V	17	Across	A	Near Priti Travels
132.	4362L-4366L	400V	14	Along	A	Station V.S.Hospital
133.	4411	2X11KV	26	Across	A	Near Sutaria Xerox
134.	4411L-4448L	2X11KV	37	Along	A	Station V.S.Hospital
135.	4400R-4440R	11KV	40	Along	A	Station V.S.Hospital
136.	4424	400V	25	Across	A	Near Parah Siddhi
137.	4417L-4450L	400V	33	Along	A	V.S.Hospital
138.	4450L-4468L	400V	18	Along	A	V.S.Hospital
139.	4417L-4424L	400V	7	Along	A	Station V.S.Hospital
140.	4453	4X11KV	30	Across	A	Near Mahakant
141.	4481	400V	18	Across	A	Near Rangoli Complex
142.	4562	400V	10	Across	A	Near Pakvan Complex
143.	4650	400V	18	Across	A	Near Purnima Lodge
144.	4618L-4697L	400V	79	Along	B	Near Maheta Restaurant
145.	4618L-4689L	400V	71	Along	B	Near Maheta Restaurant
146.	4620R-4684R	400V	62	Along	B	Near V.S.Hospital
147.	4694	400V	19	Across	A	Near Chetan Medical Store
148.	4697	400V	15	Across	A	Near V.S.Sanaraty Stores
149.	4719	3X400V	30	Across	A	Near Hotel Ellis
150.	4719L-4765L	400V	46	Along	B	Near Hotel Ellis
151.	4719L-4735L	400V	36	Along	B	Near Hotel Ellis
152.	4719L-4817L	400V	198	Along	B	Near Hotel Ellis
153.	4760	11KV	21	Across	A	Near Hotel Ellis
154.	4769	400V	16	Across	A	Near Hotel Pinacle

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
155.	4797	400V	20	Across	A	Near Town Hall
156.	4859	400V	13	Across	A	Near Town Hall
157.	4885	400V	30	Across	A	Near Ahmedabad Municipal Co Maneklal jethbhai Library
158.	4888R-4903R	11KV	15	Along	B	Near Bank of India
159.	4915R-4927R	11KV	12	Along	B	Near Sakar-IV
160.	4926	11KV	25	Across	A	Near Sakar-IV
161.	5010	2X400V	22	Across	A	Near Shree Sadhana
162.	5060	400V	25	Across	A	Near Capital Commercial Centre
163.	5083	400V	19	Across	A	Near LIC of India
164.	5084	400V	30	Across	A	Near LIC of India
165.	5090	400V	17	Across	A	Near LIC of India
166.	5085	400V	5	Along	B	Near LIC of India
167.	5145	400V	20	Across	A	Near B.M.Institute of Mental Health
168.	5137L-5153L	400V	16	Along	A	Station Nava Gandhigram
169.	5145	400V	13	Across	A	Near Bharat Petroleum
170.	5180	400V	17	Across	A	Near Bharat Petroleum
171.	5176L-5191L	400V	15	Along	A	Station Nava Gandhigram
172.	5235	400V	12	Across	A	Near Chinubhai Centre
173.	5219R-5257R	400V	38	Along	A	Station Nava Gandhigram
174.	5247	400V	14	Across	A	Near Ram Sales Corporation
175.	5325	400V	22	Across	A	Near HPCL Petrol Pump
176.	5334	2X11KV	27	Across	A	Near Neptune Syndicate Bank
177.	5375	400V	23	Across	A	Near Neptune Syndicate Bank
178.	5439	2X400V	23	Across	A	Near Bank of India
179.	5563	400V	26	Across	A	Near Family Shop
180.	5604	400V	30	Across	A	Near Nataraj Theater
181.	5602L-5629L	400V	27	Along	B	Near Nataraj Theater
182.	5647	3X11KV	30	Across	A	Near Natraj

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
						Theatre
183.	5639R-5654R	3X11KV	17	Along	B	Near Jaldarshan Coop Housing Society
184.	5648	2X400V	29	Across	A	Near Natraj Theater
185.	5683	400V	21	Across	A	Near Pelicon Complex
186.	5748	400V	22	Across	A	Near Godrej Showroom
187.	5848	400V	30	Across	A	Near Dena Bank
188.	5890	2X11KV	23	Across	A	Near Hotel Poonam Palace
189.	5877R-5905R	11KV	28	Along	B	Near Mangal Murti Complex
190.	5939	400V	27	Across	A	Near Motor Sales & Service
191.	6043	400V	15	Across	A	Near Gurjari
192.	6032L-6053L	4X400V	21	Along	A	Near RBI Bank
193.	6054	400V	27	Across	A	Near Sales Tax Bhavan
194.	6054	400V	10	Across	A	Near Nanalal Chambers
195.	6054L-6146L	400V	92	Along	A	Near Nanalal Chambers
196.	6100	400V	10	Across	A	Near Handicap Society School
197.	6106	400V	11	Across	A	Near Handicap Society School
198.	6147	400V	26	Across	A	Near Road to Complex
199.	6185	2X400V	30	Across	A	Near Handicap Society School
200.	6194	11KV	30	Across	A	Near Navranga Crossing
201.	6194L-6249L	11KV	55	Along	B	Near Navranga Crossing
202.	6250	2X400V	31	Across	A	Near Bata Showroom
203.	6244L-6360L	400V	116	Along	A	Near Bata Showroom
204.	6287	5X400V	28	Across	A	Near Hudco Niwas
205.	6283L-6386L	5X400V	23	Along	B	Near Hudco Niwas
206.	6333	400V	8	Across	A	Near Hudco Niwas
207.	6360	400V	7	Across	A	Near Sant Kutir
208.	6380	400V	27	Across	A	Near National

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
						Textile Corporation (NTC House)
209.	6475	2X400V	26	Across	A	Near Punjab National Bank
210.	6482	400V	27	Across	A	Near Punjab National Bank
211.	6490	400V	27	Across	A	Near Navrangpura
212.	6513	400V	26	Across	A	Near UKO Bank
213.	6548	2X400V	26	Across	A	Near New Complex
214.	6635	400V	28	Across	A	Near Mahila Milan Mandir
215.	6605R-6635R	400V	30	Along	B	Near Vikram Complex
216.	6676	400V	30	Across	A	Near Indian Post Durwani Kendra
217.	6709	400V	30	Across	A	Near Akaswani Kendra
218.	6803	2X11KV	30	Across	A	Near Parasar Bharti
219.	6779R-6824R	2X11KV	45	Along	A	Station Aayakar Bhawan
220.	6824R-6850R	11KV	26	Along	A	Station Aayakar Bhawan
221.	6850R-6867R	11KV	17	Along	B	Aayakar Bhawan
222.	6807	400V	46	Across	A	Near Parasar Bharti
223.	6934	400V	30	Across	A	Near United India Insurance Co Ltd
224.	6972	400V	30	Across	A	Near Ajanta Commercial Centre
225.	7061	4X400V	28	Across	A	Near State Bank of India
226.	7069	2X11KV	16	Across	A	Near State Bank of India
227.	7035R-7102R	11KV	67	Along	B	Near Ajanta Commercial Centre
228.	7122	400V	20	Across	A	Near Gujarat Vidhyapith Campus
229.	7179	400V	26	Across	A	Near Vidhyapith Campus
230.	7257	400V	11	Across	A	Near Gujarat Vidhyapith Campus
231.	7359	400V	23	Across	A	Near Visanagar

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
						Nagarik Sahakari Bank Ltd
232.	7381	400V	23	Across	A	Near Visanagar nagrik Sahakari bank Ltd
233.	7477	400V	23	Across	A	Near Karnavti Society
234.	7514	400V	22	Across	A	Near Central Bank of India
235.	7527	400V	24	Across	A	Near Vardhman Jain Murti Pujak Sangh
236.	7555	400V	17	Across	A	Near Jain Derasar
237.	7561	400V	30	Across	A	Near Jain Derasar
238.	7560L-7590L	400V	30	Along	B	Near Jain Derasar
239.	7590L-7650L	400V	60	Along	A	Usmanpura Crossing
240.	7650L-7800L	400V	150	Along	B	Usmanpura Crossing
241.	7800L-7860L	400V	60	Along	A	Station Ushmanpura
242.	7860L-7900L	400V	40	Along	A	Station Ushmanpura
243.	7586	2X400V	30	Across	A	Near Karuna Trust Medical Centre
244.	7603	400V	17	Across	A	Near Karuna Trust Medical Centre
245.	7647	400V	28	Across	A	Near Sheth Shreee Chimanbhai Girdherilal Munciple School
246.	7667	400V	28	Across	A	Near Aswarath Complex
247.	7697	400V	20	Across	A	Near PM Jewellers
248.	7706	400V	5	Across	A	Near Gujarat Auto Centre
249.	7738	400V	20	Across	A	Near Sukha Nagar Complex
250.	7787	400V	21	Across	A	Near Sardar Patel Colony
251.	7797	400V	31	Across	A	Near Shree Pal Nagar
252.	7859	400V	29	Across	A	Near Satyawadi Society Otta
253.	7874	400V	5	Across	A	Near Satyawadi Society Otta
254.	7910	400V	14	Across	A	Near Eshwer Bunglowedge

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
255.	7940	400V	22	Across	A	Near Bank of Baroda
256.	7924L-7948L	11KV	24	Along	A	Station Ushmanpura
257.	7943	400V	23	Across	A	Near Group Securtas
258.	7947	400V	19	Across	A	Near Group Securtas
259.	7949	11KV	21	Across	A	Near Group Securtas
260.	7983	400V	19	Across	A	Near Grace House
261.	8022	400V	22	Across	A	Near Prakash House
262.	8000R-8022R	400V	22	Along	B	Near Ridhi Sidhi Electricals
263.	8042	400V	25	Across	A	Near Bharat Petroleum
264.	8023L-8041L	400V	18	Along	B	Near Prakash House
265.	8085	400V	25	Across	A	Near Urmi Niwas
266.	8139	2X400V	30	Across	A	Near Dwarkesa
267.	8142	400V	26	Across	A	Near Laxmi Niwas
268.	8123L-8154L	400V	28	Along	B	Near Dwarkesa
269.	8178	400V	25	Across	A	Near Laxmi Niwas
270.	8226	400V	21	Across	A	Near Coaching absolute classes
271.	8277	400V	21	Across	A	Near Shanti Nagar
272.	8251L-8415L	400V	164	Along	B	Near Shanti Nagar
273.	8375	400V	19	Across	A	Near Bunglow Satguru
274.	8435	11KV	21	Across	A	Near Naya Vadaj
275.	8480	400V	29	Across	A	Near AMTS Bus Stand
276.	8581	2X400V	30	Across	A	Near AMTS Control Room
277.	8584	2X400V	30	Across	A	Near Travels Tirupati Hotel
278.	8639	400V	30	Across	A	Near Haresh Store
279.	8647	400V	30	Across	A	Near Ram Colour Lab
280.	8669	400V	22	Across	A	Near AMTS Control Room
281.	8741	2X400V	21	Across	A	Near Udyhog Bhavan Khadi Gram
282.	8830L-8900L	2X400V	70	Along	A	Station Vadaj

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
283.	8830L-8900L	11KV	70	Along	A	Station Vadaj
284.	8900L-8974R	2X400V	74	Across	A	Station Vadaj
285.	8900L-8974R	11KV	74	Across	A	Station Vadaj
286.	8974R-9010L	2X400V	36	Across	A	Near Station Vadaj
287.	8974R-9010L	11KV	36	Across	A	Near Station Vadaj
288.	8859	400V	22	Across	A	Near Gujarat Khadi Gramoudhyog Board
289.	8869	400V	18	Across	A	Near Khadi Udhhyog Bharti
290.	8995	400V	30	Across	A	Near Otta Huts
291.	9076R-9165R	400V	89	Along	B	Near Juggi Clusters
292.	9076	11KV	89	Along	B	Near Juggi Clusters
293.	9172	11KV	10	Across	A	Near Chandra Bhaga Bridge
294.	9172	400V	10	Across	A	Near Chandra Bhaga Bridge
295.	9172R-9238R	400V	66	Along	A	Near Chandra Bhaga Bridge
296.	9172R-9238R	11KV	66	along	A	Near Chandra Bhaga Bridge
297.	9240	400V	9	Across	A	Near Chandra Bhaga Bridge
298.	9240	11KV	9	Across	A	Near Chandra Bhaga Bridge
299.	9245L-9266L	400V	21	Along	B	Near Chandra Bhaga Bridge
300.	9245L-9266L	11KV	21	Along	B	Near Chandra Bhaga Bridge
301.	9355	400V	16	Across	A	Near RCC House
302.	9355L-9371L	400V	16	Along	B	Near RCC House
303.	9382	400V	18	Across	A	Near Cargo House Tata Engineering
304.	9381L-9410L	400V	29	Along	B	Near Cargo House Tata Engineering
305.	9381L-9437L	11KV	56	Along	B	Near Cargo House Tata Engineering
306.	9410	400V	12	Across	A	Near Gujarat Khet Bhavan
307.	9410L-9444L	400V	34	Along	A	Near Parking Plot

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
308.	9456	400V	20	Across	A	Near Auto Service Jay Chamunmda
309.	9516	400V	27	Across	A	Near Parkishit Lal Ashram
310.	9543	400V	26	Across	A	Near Central Bank of India
311.	9590	400V	24	Across	A	Near Gandhi Haat
312.	9714	400V	25	Across	A	Near Imam Manjil
313.	9784	400V	29	Across	A	Near Khadi Gramoudhyog AEC Room
314.	9778L-9814L	11KV	36	Along	A	Station Gandhi Ashram
315.	9795	2X400V	22	Across	A	Near Khadi Gramoudhyog AEC ROOM
316.	9939	400V	20	Across	A	Near Ashram Cooperation
317.	9950L-10171L	400V	221	Along	B	Near Shree Santosh Tea Stall
318.	9990	400V	21	Across	A	Near Panchsheel Khadi Gramo Udhog
319.	10092	400V	18	Across	A	Near Hraday Kunj Society
320.	10116	400V	30	Across	A	Near Hraday Kunj Society
321.	10186	2X400V	30	Across	A	Near Mamlatdar Kacheri
322.	10396	400V	22	Across	A	Near Subhash Bridge Circle
323.	10375L-10397L	400V	22	Along	A	Station Subhash Circle
324.	10400	11KV	22	Across	A	Subhash Bridge Circle
325.	10381R-10405R	11 KV	26	Along	A	Station Subhash Circle
326.	11575	400V	30	Across	A	AEC Circle
327.	11575L-11610L	400V	35	Along	A	AEC Circle
328.	11610	400V	30	Across	A	AEC Circle
329.	11615	2X400	2X30	Across	A	AEC Circle
330.	24700R-25250R	11KV	550	Along	B	Koba Circle to Indroda Circle
331.	25250R-25450R	11KV	200	Along	A	Station Dhaula Kuan
332.	25450R-26198R	11KV	748	Along	B	Koba Circle to Indroda Circle
333.	26198	11KV	30	Across	A	Near Koba Circle

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
334.	26198L-26200L	11KV	2	Along	B	Koba Circle to Indroda Circle
335.	26200L-26400L	11KV	200	Along	A	Station Infocity
336.	26400L-27000L	11KV	600	Along	B	Koba Circle to Indroda Circle
337.	26198R-26400R	11KV	202	Along	A	Station Infocity
338.	26400R-26880R	11KV	480	Along	B	Koba Circle to Indroda Circle
339.	26880R	11KV	30	Across	A	Near Indroda Circle
340.	27570L-27660L	11KV	90	Along	B	Sector- 2
341.	27660	11KV	30	Across	A	Sector-2
342.	29154	11KV	30	Across	A	CH-3
343.	29660	11KV	30	Across	A	Gujarat Vidhan Sabha
344.	29660L-30140L	11KV	480	Along	B	Gujarat Vidhan Sabha
345.	29900L-30270L	11KV	370	Along	B	Gujarat Vidhan Sabha
346.	30140	11KV	30	Across	A	Gujarat Vidhan Sabha
347.	30140R-30270R	11KV	130	Along	B	Gujarat Vidhan Sabha
348.	30280	11KV	30	Across	A	Gujarat Vidhan Sabha
349.	30282	11KV	30	Across	A	Gujarat Vidhan Sabha
350.	30282L-30430L	11KV	148	Along	B	Gujarat Vidhan Sabha
351.	30460L-30500L	11KV	40	Along	B	Gandhi Nagar Fire Brigade Station
352.	30500L-30660L	11KV	160	Along	A	Station Sachivalaya
353.	30660L	11KV	30	Across	A	Gandhi Nagar Fire Brigade Station
354.	30460L-30500L	11KV	40	Along	B	Gandhi Nagar Fire Brigade Station
355.	30500L-30700L	11KV	200	Along	A	Station Sachivalaya
356.	30700L-30750L	11KV	50	Along	B	Gandhi Nagar Fire Brigade Station
357.	30660R-30700R	11KV	40	Along	A	Station Sachivalaya
358.	30700R-30750R	11KV	50	Along	B	Gandhi Nagar Fire Brigade Station
359.	30750	11KV	30	Across	A	Gandhi Nagar Fire

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
						Brigade Station
360.	30813	11KV	30	Across	A	Old Sachivalaya
361.	31720	11KV	30	Across	A	Sector-22
362.	31720L- 31750L	11KV	30	Along	A	Station Akshardham
363.	31750L- 31780L	11KV	30	Along	B	Sector-22
364.	32271	11KV	30	Across	A	Near CH-6

Notes -:

400V Under Ground Cable - Depth from ground /road level = 1.00 M.

11 KV Under Ground Cable - Depth from ground /road level = 1.00 M.

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” HT/LT cables below ground position are parallel/across the alignment, hence diversion not proposed.

Table U 8
Details of Affected Electric HT/LT lines above Ground Position

S. No.	Chainage	Description HT/LT	Description of cable	Affected Length (in m)	Height from Ground Level	Position w.r.t. Alignment	Diversion Proposals	Locations
a) E- W Corridor (Ahmedabad to Thaltej)								
1	9620	HT	132 KV	30	13	Across	A	Opp AEC Sub Station
2	9630R- 10630R	HT	132 KV	1000	13	Along	B	NH-8
b) N-S Corridor (APMC Vasna to Gandhi Nagar)								
1	10520	HT	132KV	30	13	Across	A	Between Subhash Circle to Chimanbhai Bridge
2	10557	HT	66KV	30	13	Across	A	-DO-
3	10705	HT	132KV	30	13	Across	A	-DO-
4	13478	HT	11KV	30	10.50	Across	A	Motera J1
5	14175	HT	132 KV	30	11	Across	A	Near SP Stadium
6	14223	HT	132KV	30	11	Across	A	Near Octroi Cabin AMC
7	14965	HT	11 KV	30	9	Across	A	Near Sanghath II
8	16837	HT	132 KV	65	11	Across	A	Near Jay Hind w/shop Motera Village

S. No.	Chainage	Description HT/LT	Description of cable	Affected Length (in m)	Height from Ground Level	Position w.r.t. Alignment	Diversion Proposals	Locations
9	18239	HT	11 KV	30	11	Across	A	Near Amiyapur bus stand
10	18415	HT	11KV	30	11	Across	A	Dhaneshwar Mahadev
11	18910	Telephone lines						
12	19033 19054	2 nos. HT	11KV	2X30	11	Across	A	NMC Main Canal
13	19139	HT	11KV	30	11	Across	A	NMC Bridge
14	19445	HT	11KV	30	11	Across	A	Near NMC Bridge
15	19792	HT	11KV	30	10	Across	A	Near Satdvra temple
16	20170	HT	11KV	30	10	Across	A	Koba Circle
17	22839	HT	11KV	30	11	Across	A	After Koba Circle
18	23200	HT	11KV	30	9.5	Across	A	Hotel Management institute
19	25420	LT	440V	30	9	Across	A	Kudasan Rd crossing
20	24554	HT	11KV	30	11	Across	A	Nr. KMST Km 6 GNC
21	25495	HT	11KV	30	10	Across	A	Dholeswar X-road
22	25660	HT	11KV	30	10	Across	A	Nr. Avadh farm house
23	19620L- 20200L	HT	66KV	580	14	Along	B	Koba Circle to Koba Patia
24	20200L- 22200L	HT	66KV	2000	14	Along	B	Koba Patia to Indroda Circle
25	22200L- 25750L	HT	66KV	3550	14	Along	B	-DO-

Note:

- ‘A’ HT/LT lines are above ground and crossing the alignment, hence modification / shifting is required.
- ‘B’ HT/LT lines are above ground and parallel to the alignment, hence, modification / shifting may not be required.

All the above overhead lines need modifications, Raising, shifting or converting into underground cables. Detailed proposals for tackling these lines needs to be prepared in consultation with the concerned agencies. However, Tentative provision has been made in cost estimates.

4.21.8 Telecom Lines

At several places, telecom cables of BSNL, Reliance, Tata, Hutch and Airtel are also crossing the alignment & running along the alignment. The identified and likely affected such cables are indicated in **Tables U 9, U 10, U 11 & U 12.**

**Table U 9
Details of BSNL CABLES**

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposal	Location
a) E-W Corridor (Ahmedabad to Thaltej)						
1	100L-221L	Pipe ducting line	121	Along	B	DRM Office
2	221L-438R	Pipe ducting line	217	Across	A	DRM Office to Vara Bazar
3	438R-614R	Pipe ducting line	176	Along	B	Opp Octroi Building
4	614R-715R	Pipe ducting line	101	Along	B	Kabutar Khana
5	715R-765R	Pipe ducting line	50	Along	B	Kabutar Khana
6	765R-768R	Pipe ducting line	3	Along	A	Station Prem Darwaja
7	768R-825R	Pipe ducting line	57	Along	A	Station Prem Darwaja
8	825R-935R	Pipe ducting line	110	Along	A	Station Prem Darwaja
9	935R-965R	Pipe ducting line	30	Along	A	Station Prem Darwaja
10	965R-1030R	Pipe ducting line	65	Along	B	Prem Darwaja
11	5567(L) to 5650 (L)	Pipe ducting line	83	Along	A	Commerce Six Road Crossing
12	5650(L) to 5707(L)	Pipe ducting line	57	Along	A	Station Commerce Six Road
13	5707(L) to 5835 (L)	Pipe ducting line	124	Along	B	Station Commerce Six Road
14	5835(L) to 5850 (L)	Pipe ducting line	15	Along	A	Station Commerce Six Road
15	5850(L) to 5873(L)	Pipe ducting line	23	Along	B	Vijay Crossing
16	5873(L) to 6061 (L)	Pipe ducting line	185	Along	B	Vijay Crossing
17	6061(L) to 6178 (L)	Pipe ducting line	113	Along	B	Vijay Crossing
18	6178(L) to 6210 (L)	Pipe ducting line	28	Along	B	Vijay Crossing
19	6210(L) to 6236 (L)	Pipe ducting line	21	Along	B	Vijay Crossing
20	6236(L) to 6415 (L)	Pipe ducting line	178	Along	B	Near Vijay Crossing
21	6415(L) to	Pipe ducting line	33	Along	A	University Grounds

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposal	Location
	6452 (L)					
22	6441 (R)	Pipe ducting line	20	Across	A	University Ground
23	6452(L) to 6588 (L)	Pipe ducting line	130	Along	B	University Ground
24	6588(L) to 6760 (L)	Pipe ducting line	172	Along	B	University Ground
25	6760(I) to 6827(L)	Pipe ducting line	67	Along	A	Station Mem Nagar
26	6827(L) to 6960 (L)	Pipe ducting line	133	Along	A	Station Mem Nagar
27	6960(L) to 6988(L)	Pipe ducting line	28	Along	B	University Ground
28	6988 (L)to 7124 (L)	Pipe ducting line	133	Along	B	University Ground
29	7124(L) to 7200 (L)	Pipe ducting line	71	Along	B	Manav Mandir
30	7200(L) to 7517 (L)	Pipe ducting line	312	Along	A	Mahatma Gandhi Labour Institute
31	7517(L)to 7685 (L)	Pipe ducting line	168	Along	B	Agricultural Office
32	7685(L) to 7727(L)	Pipe ducting line	42	Along	A	Station Gurukul
33	7727(L) to 7885 (L)	Pipe ducting line	158	Along	A	Station Gurukul
34	7885(L) to 7908(L)	Pipe ducting line	23	Along	A	Swaminarayan Gurukul
35	7908(L) to 8109 (L)	Pipe ducting line	197	Along	A	Government Quarter Vastarpur
36	8109(L) to 8284 (L)	Pipe ducting line	173	Along	B	Sun Rise Park
37	8284(L) to 8469 (L)	Pipe ducting line	183	Along	B	Opp Drive In Theatre
38	8469(L) to 8666 (L)	Pipe ducting line	189	Along	B	Opp Drive in Cinema
39	8666(L) to 8725 (L)	Pipe ducting line	59	Along	B	Doordarshan
40	8725(L) to 8849(L)	Pipe ducting line	124	Along	A	Station Doordarshan Kendra
41	8849(L) to 8925 (L)	Pipe ducting line	76	Along	A	Station Doordarshan Kendra
42	8925(L) to 8989(L)	Pipe ducting line	64	Along	B	Doordarshan
43	8989(L) to 9175 (L)	Pipe ducting line	181	Along	B	Sardar Patel Institute
44	9175(L) to 9368 (L)	Pipe ducting line	187	Along	B	Sardar Patel Institute
45	9368(L) to	Pipe ducting line	85	Along	B	Sardar Patel

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposal	Location
	9453 (L)					Institute
46	9453(L) to 9590(L)	Pipe ducting line	105	Along	B	AEC 132KV Sub Station
b) N-S Corridor (APMC to Gandhi Nagar)						
1	135(L) to 875(L)	Pipe ducting line	740	Along	B	Opp Vasna Police Chowki
2	875L-929L	Pipe ducting line	54	Along	A	Station Vasna
3	929	Pipe ducting line	19	Across	A	Opp Vasna Police Chowki
4	929 (R) to 1075 (R)	Pipe ducting line	146	Along	A	Station Vasna
5	1075R-1154R	Pipe ducting line	79	Along	B	Vasna Telephone Exchange
6	1154(R) to 1206(L)	Pipe ducting line	57	Across	A	Vasna Telephone Exchange
7	1206(L) to 1317 (L)	Pipe ducting line	120	Along	B	Vasna AMT Bus Depot
8	1154 (R) to 1324 (R)	Pipe ducting line	160	Along	B	Jain Gyan Mandir
9	1317(L) to 1630 (L)	Pipe ducting line	316	Along	B	Opp SBI Bank
10	1324 (R) to 1661 (R)	Pipe ducting line	324	Along	B	Near SBI Bank
11	1630 (L) to 1794 (L)	Pipe ducting line	153	Along	B	AMC Pumping Station
12	1661(R) to 2321 (R)	Pipe ducting line	650	Along	B	Anjali Vasna Crossing
13	1794(L) to 1981 (L)	Pipe ducting line	185	Along	A	Near Anjali Vasna Crossing
14	1981(L) to 2000 (L)	Pipe ducting line	19	Along	A	Near Anjali Vasna Crossing
15	2000L-2186L	Pipe ducting line	186	Along	A	Station Narayan Nagar
16	2321(R) to 2461 (R)	Pipe ducting line	141	Along	A	Old Post Office
17	2461(R) to 2571(R)	Pipe ducting line	102	Along	B	Old Post Office
18	2571(R) to 2783 (R)	Pipe ducting line	205	Along	B	Opp Ellisbridge Municipality School
19	2783(R) to 3008 (R)	Pipe ducting line	222	Along	B	Near Sekh Adam Abuwala Road
20	3008(R) to 3107 (L)	Pipe ducting line	99	Across	A	Near Sekh Adam Abuwala Road
21	3107(L) to 3294 (L)	Pipe ducting line	182	Along	B	Mahalaxmi Crossing
22	3294(L) to 3450 (L)	Pipe ducting line	156	Along	A	Near Mahalaxmi Crossing

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposal	Location
23	3450(L) to 3475 (L)	Pipe ducting line	25	Along	A	Station Paldi
24	3475(L) to 3627 (L)	Pipe ducting line	152	Along	A	Station Paldi
25	3627(L) to 3648(R)	Pipe ducting line	21	Across	A	Station Paldi
26	3648(R) to 3650(R)	Pipe ducting line	2	Along	A	Station Paldi
27	3650(R) to 3839(R)	Pipe ducting line	189	Along	B	Near Paldi Circle
28	3839(R) to 4216 (R)	Pipe ducting line	373	Along	B	Paldi Circle to Bank of Baroda
29	4216(R) to 4250 (R)	Pipe ducting line	34	Along	B	VS Hospital
30	4250(R) to 4550(R)	Pipe ducting line	200	Along	A	Station V.S.Hospital
31	4550(R) to 4596(R)	Pipe ducting line	46	Along	B	V.S.Hospital
32	4596(R) to 4715 (R)	Pipe ducting line	119	Along	B	VS Hospital
33	4715(R) to 4953 (R)	Pipe ducting line	238	Along	B	Ellisbridge Circle
34	4953	Pipe ducting line	20	Across	A	Gujarat Bhawan
35	4953(L) to 5075 (L)	Pipe ducting line	122	Along	B	Nehru Bridge Circle
36	5075(L) to 5273(L)	Pipe ducting line	198	Along	A	Station Nava Gandhigram
37	5273	Pipe ducting line	54	Across	A	Nehru Bridge Circle
38	5273(L) to 5596 (L)	Pipe ducting line	320	Along	B	Near Nehru Bridge Circle
39	5596(L) to 5750 (L)	Pipe ducting line	150	Along	B	Natraj Theatre
40	5750(L) to 5830 (L)	Pipe ducting line	73	Along	B	Dena Bank
41	5830(L) to 6000 (L)	Pipe ducting line	170	Along	B	Dena Bank to Handicap Society School
42	6000(L) to 6200(L)	Pipe ducting line	200	Along	A	Station Navrangpura
43	6200(L) to 6261(L)	Pipe ducting line	61	Along	B	Dena Bank to Handicap Society School
44	6261(L) to 6650 (L)	Pipe ducting line	389	Along	B	ITO Crossing
45	6650(L) to 6850(L)	Pipe ducting line	200	Along	A	Station Aayakar Bhawan

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposal	Location
46	6850(L) to 6956(L)	Pipe ducting line	106	Along	B	ITO Crossing
47	6956(L) to 7506 (L)	Pipe ducting line	548	Along	B	ITO Crossing to Usmanpura Crossing
48	7506(L) to 7591 (L)	Pipe ducting line	83	Along	B	Usmanpura Crossing
49	7591(L) to 7651 (L)	Pipe ducting line	55	Along	B	Usmanpura Crossing
50	7651(L)to 7795 (L)	Pipe ducting line	135	Along	B	Near Usmanpura Crossing
51	7795(L) to 7800 (L)	Pipe ducting line	5	Along	B	Bank of Baroda
52	7800(L) to 7983(L)	Pipe ducting line	183	Along	A	Station Ushamanpura
53	7983(L) to 8000 (L)	Pipe ducting line	17	Along	A	Station Ushamanpura
54	8000(L) to 8417 (L)	Pipe ducting line	417	Along	B	Near Vadaj Crossing
55	8417(L) to 8489 (L)	Pipe ducting line	69	Along	B	Vadaj Crossing
56	8489(L) to 8559(R)	Pipe ducting line	70	Across	A	Vadaj Crossing
57	8559(R) to 8626(L)	Pipe ducting line	67	Across	A	Vadaj Crossing

Note:

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” BSNL Cables are parallel/across the alignment, hence diversion not proposed

Table U 10
Details of BSNL CABLES 12 & 24 FIBRE Cables
(ELEVATED STRETCH)

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposal	Location
a) N-S Corridor (Vasna to Gandhi Nagar) 12 Fibre (BSNL)						
1	8627R-8650R	OFC	23	Along	B	Vadaj Crossing to Subhash Circle
2	8650R-8850R	OFC	200	Along	A	Station Vadaj
3	8850R-9127R	OFC	177	Along	B	Vadaj Crossing to Subhash Circle
4	9127R-9600R	OFC	473	Along	B	Vadaj Crossing to Subhash Circle

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposal	Location
5	9600R-9627R	OFC	27	Along	A	Station Gandhi Ashram
6	9627R-9800R	OFC	173	Along	A	Station Gandhi Ashram
7	9800R-10267R	OFC	467	Along	B	Vadaj Crossing to Subhash Circle
8	10267R-10250R	OFC	383	Along	B	Subhash Circle to AEC Circles
9	10650R-10675L	OFC	25	Across	A	Subhash Circle to AEC Circle
10	10675L-10720R	OFC	45	Across	A	Subhash Circle to AEC Circle
11	10720R-11200R	OFC	480	Along	B	Subhash Circle to AEC Circle
12	11200R-11220R	OFC	20	Along	A	Station Sabarmati
13	11220R-11400R	OFC	180	Along	A	Station Sabarmati
14	11400R-11613R	OFC	213	Along	B	Subhash Circle to AEC Circle
15	11613R-12000R	OFC	383	Along	B	AEC Circle
16	12000R-12300R	OFC	300	Along	B	AEC Power House
17	12300R-12500R	OFC	200	Along	A	Station Shankarpura
18	12500R-13000	OFC	500	Along	B	Satyam Park to Panchsheel Hospital
19	13000R-13150R	OFC	150	Along	B	Motera J-1 junction
20	13150R-13350R	OFC	200	Along	A	Station Acher
21	13350R-13500R	OFC	150	Along	B	Motera J-1 Junction
22	13500R-14000R	OFC	500	Along	B	Motera Village
23	14000-14100R	OFC	100	Along	B	Motera Village
24	14100R-14300R	OFC	200	Along	A	Station Sardar Patel Gujarat Stadium
25	14300R-14500R	OFC	200	Along	B	Motera Village
26	14500R-15000R	OFC	500	Along	B	Motera Village
27	15000R-15300R	OFC	300	Along	B	Motera Village
28	15300R-15500R	OFC	200	Along	A	Station Motera Village

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposal	Location
29	15500R-16600R	OFC	1100	Along	B	Motera Village
30	16600R-16633R	OFC	33	Along	A	Motera Village
31	16633R-16750R	OFC	117	Along	B	Motera Village
32	16750R-16950R	OFC	200	Along	A	Station Amiyapur
33	16950R-17000R	OFC	50	Along	B	Motera Village
34	17000R-17500R	OFC	500	Along	B	Radha Swami Satsang Vyas
35	17500R-18000R	OFC	500	Along	B	Radha Swami Satsang Vyas
36	18000R-18100R	OFC	100	Along	B	Crossing Road goes to Sughadh Village and Motera Village
37	18100R-18300R	OFC	200	Along	B	Station Sughad
38	18300R-18500R	OFC	200	Along	B	Crossing Road goes to Sughadh village and Motera Village
39	18500R-19000R	OFC	500	Along	B	Narmada main canal
40	19000R-19450R	OFC	450	Along	B	NMC Bridge
41	19450R-19500R	OFC	50	Along	B	Station Narmada Main Canal
42	19500R-19650R	OFC	150	Along	B	Station Narmada Main Canal
43	19650R-20000R	OFC	350	Along	B	Near Koba Circle
44	20000R-20300R	OFC	300	Along	B	Koba Circle
45	20300R-20500R	OFC	200	Along	B	Station Koba Circle
46	20500R-21000R	OFC	500	Along	B	SH-71 Sadhna Ashram
47	21000R-21500R	OFC	500	Along	B	SH-71
48	21500R-21700R	OFC	200	Along	B	Station Ambapur
49	21700R-22000R	OFC	300	Along	B	SH-71
50	22000R-22500R	OFC	500	Along	B	SH-71
51	22500R-	OFC	300	Along	B	SH-71

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposal	Location
	22800R					
52	22800R-23000R	OFC	200	Along	B	Station Pore
53	23000R-24100R	OFC	1100	Along	B	SH-71
54	24100R-24300R	OFC	200	Along	B	Station Kudasan
55	24300R-24500R	OFC	200	Along	B	SH-71
56	24500R-25000R	OFC	500	Along	B	SH-71
57	25000R-25250R	OFC	250	Along	B	Swaminarayan Temple
58	25250R-25450R	OFC	200	Along	B	Station Dhaula Kuan
59	25450R-25500R	OFC	50	Along	B	Swaminarayan Temple
60	25500R-26000R	OFC	500	Along	B	SH-71 Crossing Road goes to Shahpur & AD Institute
61	26000R-26200R	OFC	200	Along	B	National Institute of Cooperative Management
62	26200R-26400R	OFC	200	Along	B	Station Infocity
63	26400R-26500R	OFC	100	Along	B	National Institute of Cooperative Management
64	26500R-27000R	OFC	500	Along	B	Near Indroda Circle
65	27500R-28000R	OFC	500	Along	B	Sector-1&2
66	28000R-28100R	OFC	100	Along	B	CH-2&Sector7&8
67	28100R-28300R	OFC	200	Along	B	Station Sector-7
68	28300R-28500R	OFC	200	Along	B	CH-2, Sector 7&8
69	28500R-29000R	OFC	500	Along	B	Sector7&8
70	29000R-29200R	OFC	200	Along	B	CH-3, Sector10&11
71	29200R-29400R	OFC	200	Along	B	Station S.T. Depot
72	29400R-29627R	OFC	227	Along	B	CH-3, Sector 10&11
73	29627	OFC	30	Across	A	Near Hotel Haveli

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposal	Location
b) N-S Corridor (APMC Vasna to Gandhi Nagar) BSNL OFC CABLE 24 FIBRE						
1	27125L-27150L	OFC	25	Along	B	Indroda Circle
2	27150L-27350L	OFC	200	Along	B	Station Indroda Circle
3	27350L-27500L	OFC	150	Along	B	Indroda Circle
4	27500L-28000L	OFC	500	Along	B	Near Circle-2, Sector1&2
5	28000L-28060L	OFC	60	Along	B	Near Circle-2
6	29925L-30400L	OFC	475	Along	B	Bharat Sanchar Nigam
7	30400L-30500L	OFC	100	Along	B	Gujarat Vidhan Sabha to Old Sachivalaya
8	30500L-30700L	OFC	200	Along	A	Station Sachivalaya
9	30700L-30900L	OFC	200	Along	B	Gujarat Vidhan Sabha to Old Sachivalaya
10	30900L-31400L	OFC	500	Along	B	Gujarat Vidhan Sabha to Old Sachivalaya
11	31400L-31750L	OFC	350	Along	B	Sector 21&22
12	31750L-31900L	OFC	150	Along	B	Station Akshardham
13	31900L-31950L	OFC	50	Along	B	Station Akshardham
14	31950L-32400	OFC	450	Along	B	CH-6

Note:

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” BSNL Cables are parallel/across the alignment, hence diversion not proposed

**Table U 11
DETAILS OF AFFECTED RELIANCE JUNCTION CABLES & N.E.CABLES**

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposals	Location
a) E – W Corridor (Ahmedabad to Thaltej)						
1	(-) 67L-158L	RTL	91	Along	A	Ahemdabad station
2	100L-158L	RTL	58	Along	B	Near Kalupur

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposals	Location
						Railway Station
3	158L-196R	RTL	38	Across	A	Near Kalupur Railway Station
4	196R-205R	RTL	9	Across	A	Divisional Railway Manager Office
5	180	RTL	5	Along	A	Divisional Railway Manager Office
6	205L-700L	RTL	495	Along	B	Kalupur Railway Station to Octroi Office
7	609	RTL	30	Across	A	AMC Octroi Office
8	700L-765L	RTL	65	Along	B	Between Prem Darwaja to Dariyapur Darwaja
9	765L-965L	RTL	200		A	Prem Darwaja station
10	965L1200L	RTL	235		B	Between Prem Darwaja to Dariyapur Darwaja
11	1200L-1700L	RTL	500	Along	B	Between Prem Darwaja to Dariyapur Darwaja
12	1700L-1940L	RTL	240	Along	B	Between Prem Darwaja to Delhi Darwaja Crossing
13	1940L-2140L	RTL	200	Along	A	Delhi Darwaja station
14	2140L-2200L	RTL	60	Along	B	Between Prem Darwaja to Delhi Darwaja Crossing
15	2106L	RTL	30	Across	A	Delhi Darwaja
16	2200L-2700L	RTL	500	Along	B	Between Delhi Darwaja to Shahpur Darwaja
17	2625	RTL	30	Across	A	Near B.V.High School
18	2700L-2980L	RTL	280	Along	B	Between Delhi Darwaja to Shahpur Darwaja
19	2980L-3180L	RTL	200	Along	A	Station Shahpur Darwaja
20	3180L-3200L	RTL	20	Along	B	Between Delhi Darwaja to Shahpur Darwaja
21	3003	RTL	30	Across	A	Shahpur Police Chowki
22	3200L-3330L	RTL	130	Along	B	Near Sabarmati River
23	3330L-	RTL	60	Across	A	Near Sabarmati

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposals	Location
	3590R					River
24	3390R-3943R	RTL	553	Along	B	Near Sabarmati River
25	3943	RTL	30	Across	A	Near ITO Crossing
26	4146R-4270R	RTL	124	Along	A	Between ITO Crossing to Railway Crossing (Station Aayakar Bhawan)
27	4270R-4344R	RTL	74	Along	B	Between ITO Crossing to Railway Crossing
28	4598	RTL	30	Across	A	S.P.Stadium Five Road Crossing
29	4640	RTL	30	Across	A	S.P.Stadium Five Road Crossing
30	4640R-4700R	RTL	60	Along	B	S.P.Stadium Five Road Crossing
31	4700R-4815R	RTL	115	Along	A	Station Sardar Patel Stadium
32	5056L-5113L	RTL	57	Along	B	S.P.Stadium Five Road Crossing to Commerce Crossing
33	5564R-5650R	RTL	86	Along	B	Commerce Crossing to Vijay Crossing
34	5650R-5850R	RTL	200	Along	A	Station Commerce Six Roads
35	5850R-5900R	RTL	50	Along	B	Commerce Crossing to Vijay Crossing
36	5900R-6200R	RTL	300	Along	B	Commerce Crossing to Vijay Crossing
37	5564L-5650L	RTL	336	Along	B	Commerce Crossing to Vijay Crossing
38	5650L-5850L	RTL	200	Along	A	Station Commerce Six Roads
39	5850L-5900L	RTL	50	Along	B	Commerce Crossing to Vijay Crossing
40	5900L-6195L	RTL	295	Along	B	Commerce Crossing to Vijay Crossing
41	5815L-5895R	RTL	80	Across	A	Commerce Crossing to Vijay Crossing
42	6183L	RTL	30	Across	A	Vijay Crossing
43	6235L-6418L	RTL	183	Along	A	Vijay Crossing
44	6433R-6760R	RTL	327	Along	B	Vijay Crossing to Bus Depot Mem Nagar
45	6760R-6960R	RTL	200	Along	A	Station Mem Nagar

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposals	Location
46	6960R-7000R	RTL	40	Along	B	Vijay Crossing to Bus Depot Mem Nagar
47	7000R-7500R	RTL	500	Along	B	Mem Nagar Bus Depot
48	7500R-7685R	RTL	185	Along	B	Swaminarayan Gurukul
49	7685R-7885R	RTL	200	Along	A	Station Gurukul
50	7885R-8000R	RTL	115	Along	B	Swaminarayan Gurukul
51	8000R-8500R	RTL	500	Along	B	Swaminarayan Gurukul to Drive in Cinema
52	8500R-8725R	RTL	225	Along	B	Drive in Cinema to Doordarshan
53	8725R-8925R	RTL	200	Along	A	Station Doordarshan Kendra
54	8925R-9000R	RTL	75	Along	B	Drive In Cinema to Doordarshan
55	9000R-9470R	RTL	470	Along	B	Sardar Patel Institute
56	9470R-9500L	RTL	30	Across	A	Opp Sardar Patel Institute
57	9605L-9635R	RTL	30	Across	A	NH-8 Crossing
58	9635R-9700R	RTL	65	Along	B	NH-8
59	9700R-9900R	RTL	200	Along	B	Station Thaltej
60	9900R-10000R	RTL	100	Along	B	NH-8
61	10000R-10500R	RTL	500	Along	B	NH-8
62	10500R-10690R	RTL	190	Along	B	NH-8
b) N-S Corridor (APMC Vasna to Gandhi Nagar)						
1	(-)157 L - (-)100 L	RTL	57	Along	B	AMC Octroi NAKA
2	(-)100L-100L	RTL	200	Along	A	AMC Octroi NAKA (Vishala Station)
3	100L-400L	RTL	400	Along	B	AMC Octroi NAKA
4	500L – 875L	RTL	375	Along	B	Opp Vasna Police Chowki
5	875L-1075L	RTL	200	Along	A	Opp Vasna Police Chowki (Vasna Station)
6	1075L-	RTL	425	Along	B	Opp. Vasna

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposals	Location
	1500L					Telephone Exchange
7	1500L-2000L	RTL	500	Along	B	Anjali Vasna Crossing
8	2000L-2200L	RTL	200	Along	A	Anjali Crossing Station Narayan Nagar)
9	2200L-3000L	RTL	800	Along	A	Elisbridge Municipality School
10	3000L-3032L	RTL	32	Along	B	Near Sekh Adam Abuwala Road
11	3032L-3050L	RTL	18	Along	A	Near Sekh Adam Abuwala Road
12	3050L-3256L	RTL	206	Along	B	Mahalaxmi Crossing
13	3108R-3256R	RTL	156	Along	B	Mahalaxmi Crossing
14	3256	RTL	30	Across	A	Mahalaxmi Crossing
15	3526R-3650R	RTL	124	Along	A	Narsi Bhagat Hostel to Paldi Circle
16	3685L-4250L	RTL	565	Along	B	Paldi Circle
17	4250L-4300	RTL	50	Along	A	Paldi Circle (Station V.S.Hospital)
18	3685R-4250R	RTL	565	Along	B	Paldi Circle
19	4250R-4450R	RTL	200	Along	A	Paldi Circle (Station V.S.Hospital)
20	4450R-4577R	RTL	127	Along	B	Vadilal Sarabhai Hospital
21	4577R	RTL	30	Across	A	Vadilal Sarabhai Hospital
22	4577R-4756R	RTL	179	Along	B	V.S. Hospital
23	4756R	RTL	30	Across	A	V.S. Hospital
24	4756R-5075R	RTL	219	Along	B	Nehru Bridge Circle
25	5075R-5275R	RTL	200	Along	A	Nehru Bridge Circle (Nava Gandhi Gram Station)
26	5256R-	RTL	30	Across	A	Nehru Bridge Circle
27	4876L-5075L	RTL	199	Along	B	LIC of India
28	5075L-5112L	RTL	37	Along	A	LIC of India (Nava Gandhi Gram Station)
29	5275R-5572R	RTL	297	Along	B	Nehru Circle
30	5292R	RTL	30	Across	A	Nehru Circle
31	5292L-	RTL	280	Along	B	Nehru Circle

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposals	Location
	5572L					
32	5572R-	RTL	30	Across	A	H.K. Commerce College
33	5582	RTL	30	Across	A	H.K.Commerce College
34	5572R-5938R	RTL	356	Along	B	Near Atma Auditorium
35	5728	RTL	30	Across	A	Sh. Vallabh Udhyan
36	5921	RTL	30	Across	A	Atma Auditorium
37	5938R-6000R	RTL	62	Along	B	Opp Mount Kermal School
38	6000R-6200R	RTL	200	Along	A	Opp Mount Kermal School (Station Navrangpura)
39	6200R-6238R	RTL	38	Along	B	Opp Mount Kermal School
41	6054L-6185L	RTL	121	Along	A	Near Handicap Society School (Station Navrangapura)
42	6207	RTL	30	Across	A	Near Handicap Society School
43	6238	RTL	30	Across	A	Near Crossing Mount Kermal School
44	6238R-6258R	RTL	48	Along	B	Near Crossing Mount Kermal School
45	6424L-6560L	RTL	146	Along	B	Punjab National Bank
46	6492	RTL	30	Across	A	Punjab National Bank
47	7047	RTL	30	Across	A	Ajanta Commercial Centre
48	7047R-7116R	RTL	69	Along	B	Ajanta Commercial Centre
49	7290R-7575R	RTL	285	Along	B	Golden Park, Co.op Housing Society
50	7353	RTL	30	Across	A	Golden Park, Co.op Housing Society
51	7253L-7443L	RTL	190	Along	B	Visa Nagar Nagrik Bank
52	7637	RTL	30	Across	A	Near Usmanpur Crossing
53	7637L-7773L	RTL	136	Along	B	Near Fortune Hotel
54	7637R-7800R	RTL	163	Along	B	Opp Fortune Hotel
55	7800R-7870R	RTL	70	Along	A	Opp Fortune Hotel (Station Usmanpura)
56	7945R-	RTL	55	Along	A	Near Bank of India

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposals	Location
	8000R					(Station Usmanpura)
57	8000R-8078R	RTL	78	Along	B	Near Bank of India
58	8271	RTL	30	Across	A	Supath=2
59	8271R-8650R	RTL	379	Along	B	Vadaj Crossing
60	8650R-8850R	RTL	200	Along	A	Vadaj Crossing (Station Vadaj)
61	8380	RTL	30	Across	A	AMTS Bus Stand
62	8635	RTL	30	Across	A	Vadaj Crossing
63	8850R-9600R	RTL	750	Along	B	Near Gandhi Ashram
64	9600R-9800R	RTL	200	Along	A	Near Subhash Bridge Circle (Station Gandhi Ashram)
65	9800R-10256R	RTL	456	Along	B	Near Subhash Bridge
66	10289	RTL	30	Across	A	Near Subhash Bridge Circle
67	10340L-10415L	RTL	75	Along	A	Near Subhash Bridge Circle (Station Subhash Circle)
68	10733	RTL	30	Across	A	Ambedkar Nagar
69	10733R-11200R	RTL	467	Along	B	Ambedkar Nagar to AEC Circle
70	11200R-11400R	RTL	200	Along	A	Ambedkar Nagar to AEC Circle (Station Sabarmati)
71	11400R-11596R	RTL	196	Along	B	Ambedkar Nagar to AEC Circle
72	11606	RTL	30	Across	A	AEC Circle
73	11627L-12300L	RTL	673	Along	B	AEC Circle To Shankarpura Chali
74	12300L-12500L	RTL	200	Along	A	Station Shankarpura
75	12500L-12627L	RTL	127	Along	B	AEC Circle to Shankarpura Chali
76	12627L-13150L	RTL	523	Along	B	J-1 Motera Village
77	13150L-13350L	RTL	200	Along	A	Station Acher
78	13350L-13727L	RTL	377	Along	B	J-1 Motera Village
79	16600L-16750L	RTL	150	Along	B	Near Reliance Gas Company
80	16750L-16950L	RTL	200	Along	B	Station Radhaswamy Satsang Vyas
81	16950L-17600L	RTL	650	Along	B	Near Reliance Gas Company

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposals	Location
82	17600L-18100L	RTL	500	Along	B	Near Reliance Gas Company
83	18100L-18300L	RTL	200	Along	A	Station Sughad
84	18300L-18900L	RTL	600	Along	B	Near Reliance Gas Company
85	18934	RTL	30	Across	A	Near Narmada Main Canal
86	18934R-19357R	RTL	423	Along	B	Near NMC Bridge
87	19373	RTL	30	Across	A	Near NMC Bridge
88	19400L-19450L	RTL	50	Along	B	Koba Circle
89	19450L-19650L	RTL	200	Along	A	Station Narmada Main Canal
90	19650L-20100L	RTL	450	Along	B	Koba Circle
91	20100L-20300L	RTL	200	Along	B	Koba Circle to Indroda Circle
92	20300L-20500L	RTL	200	Along	A	Station Koba Circle
93	20500L-21100L	RTL	600	Along	B	Koba Circle to Indroda Circle
94	21100L-21500L	RTL	400	Along	B	Koba Circle to Indroda Circle
95	21500L-21700L	RTL	200	Along	A	Station Ambapur
96	21700L-22100L	RTL	400	Along	B	Koba Circle to Indroda
97	22100L-22800L	RTL	700	Along	B	Koba Circle to Indroda Circle
98	22800L-23000L	RTL	200	Along	A	Pore station
99	23000L-23100L	RTL	100	Along	B	Koba Circle to Indroda Circle
100	23100L-24100L	RTL	1000	Along	B	Koba Circle to Indroda Circle
101	24100L-24300L	RTL	200	Along	A	Kudasan station
102	24300L-25100L	RTL	800	Along	B	Koba Circle to Indroda Circle
103	25100L-25250L	RTL	150	Along	B	Koba Circle to Indroda Circle
104	25250L-25450L	RTL	200	Along	A	Dhaulta Kuan station
105	25450L-25900L	RTL	450	Along	B	Koba Circle to Indroda Circle
106	27108	RTL	30	Across	A	Indroda Circle
107	27166L-	RTL	184	Along	B	Near Sector 2

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position wrt Alignment	Diversion Proposals	Location
	27350L					Introda Circle station
108	27350L-27700L	RTL	350	Along	B	Near Sector 2
109	27700L-28100L	RTL	400	Along	B	Near Sector 2&7
110	28100L-28300L	RTL	200	Along	A	Sector 7 Station
111	28300L-28700L	RTL	400	Along	B	Near Sector 2
112	28700L-29100L	RTL	400	Along	B	CH-3
113	29189	RTL	30	Across	A	Near CH-3
114	29667	RTL	30	Across	A	Sector- 11
115	29667L-30500L	RTL	833	Along	B	Near Gandhi Nagar Fire Brigade Station
116	30500L-30700L	RTL	200	Along	A	Sachivalaya station
117	30700L-30744L	RTL	44	Along	B	Near Gandhi Nagar Fire Brigade Station
118	31227	RTL	30	Across	A	Near Sector 17
119	31227L-31750L	RTL	523	Along	B	Sector-17 to CH-6
120	31750L-31950L	RTL	200	Along	A	Akshardham station
121	31950L-32227L	RTL	277	Along	B	Sector-17 to CH-6
122	32227L-32415L	RTL	188	Along	B	CH-6
123	32281	RTL	30	Across	A	CH-6

Note:

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” Reliance Cables are parallel/across the alignment, hence diversion not proposed

**Table U 12
DETAILS OF AFFECTED TATA JUNCTION CABLES & N.E.CABLES**

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t Alignment	Diversion Proposals	Location
a) E – W Corridor (Ahmedabad to Thaltej)						
1	3847L-4018L	Tata Cable Duct	171	Along	B	Near Income Tax Crossing
2	4018L-4500L	Tata Cable Duct	482	Along	B	Income Tax Crossing to Opp Municipal Swimming Pool
3	4070L-4270L	Tata Cable Duct	200	Along	A	Station AAayakar Bhawan

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t Alignment	Diversion Proposals	Location
4	4270L-4500L	Tata Cable Duct		Along	B	Income Tax Crossing to Opp Municipal Swimming pool
5	4500L-4634L	Tata Cable Duct	134	Along	B	S.P.Stadium Five Road Crossing
6	4634	Tata Cable Duct	30	Across	A	S.P.Stadium Five Road Crossing
7	4400R-4660R	Tata Cable Duct	260	Along	B	S.P.Stadium Five Road Crossing
8	4660R-4700R	Tata Cable Duct	40	Along	A	S.P.Stadium Five Road Crossing
9	4700R-4900R	Tata Cable Duct	200	Along	A	Station Sardar Patel Stadium
10	4900R-4978R	Tata Cable Duct	78	Along	A	SP Stadium Five Road Crossing
11	4700L-4910L	Tata Cable Duct	210	Along	A	Station Sardar Patel Stadium
12	4994L-5523L	Tata Cable Duct	529	Along	B	Commerce Six Road Crossing
13	5300R-5468R	Tata Cable Duct	168	Along	B	Subh Ashish Apartment Prakash Park
14	5562R-5650R	Tata Cable Duct	88	Along	B	Commerce Six Road Crossing
15	5650R-5685R	Tata Cable Duct	35	Along	A	Station Commerce Six Road
16	5725R-5780R	Tata Cable Duct	55	Along	A	Station Commerce Six Roads
17	5653L-5850L	Tata Cable Duct	197	Along	A	Station Commerce Six Road
18	5850L-6200L	Tata Cable Duct	350	Along	B	Commerce Six Road Crossing
19	6200L-6420L	Tata Cable Duct	220	Along	B	Vijay Crossing
b) N-S Corridor (APMC Vasna to Gandhi Nagar)						
1	1142	Tata Cable Duct	30	Across	A	Vasna telephone exchange
2	1142R-1542R	Tata Cable Duct	400	Along	B	Vasna telephone exchange to Anjali Vasna Crossing
3	1542R-2000R	Tata Cable Duct	458	Along	B	Vasna telephone exchange to Anjali Vasna Crossing
4	2000R-2042	Tata Cable Duct	42	Along	A	Station Narayan Nagar
5	2042R-2200R	Tata Cable Duct	158	Along	A	Station Narayan Nagar
6	2200R-2542R	Tata Cable Duct	342	Along	B	Anjali Vasna Crossing to Paldi

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t Alignment	Diversion Proposals	Location
						circle
7	2542R-3042R	Tata Cable Duct	500	Along	B	Anjali Vasna Crossing to Paldi circle
8	3042R-3255R	Tata Cable Duct	213	Along	B	Anjali Vasna Crossing to Paldi circle
9	3255	Tata Cable Duct	30	Across	A	Central bank of india
10	3255R-3450R	Tata Cable Duct	195	Along	B	Anjali Vasna Crossing to Paldi circle
11	3450R-3650R	Tata Cable Duct	200	Along	A	Station Paldi
12	3650R-3755R	Tata Cable Duct	105	Along	B	Anjali Vasna Crossing to Paldi circle
13	3755R-3855R	Tata Cable Duct	100	Along	B	Paldi circle to Ellis bridge circle
14	3855	Tata Cable Duct	30	Across	A	State Bank of india
15	3855R-4250R	Tata Cable Duct	395	Along	B	Paldi circle to Ellis bridge circle
16	4250R-4314R	Tata Cable Duct	74	Along	A	Station V S Hospital
17	4314R	Tata Cable Duct	30	Across	A	Near UKO Bank
18	4314L-4450L	Tata Cable Duct	136	Along	A	Station V S Hospital
19	4450L-4957L	Tata Cable Duct	507	Along	B	Paldi circle to Ellis bridge circle
20	4876R-5075R	Tata Cable Duct	199	Along	B	Bank of India to Bharat Petroleum
21	5075R-5217R	Tata Cable Duct	142	Along	A	Station Nava Gandhi gram
22	4957L-5075L	Tata Cable Duct	118	Along	B	Gujarat Bhawan to Crossing Road goes to Gandhi Nagar Railway Station
23	5075L-5267L	Tata Cable Duct	192	Along	A	Station Nava Gandhi gram
24	5094	Tata Cable Duct	30	Across	A	LIC of India
25	5288L-5713L	Tata Cable Duct	425	Along	B	Crossing Road goes to Lal Darwaja to Pelecon Complex
26	5330R-5750R	Tata Cable Duct	420	Along	B	Vasahat Agakhan Estate to Federal Bank

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t Alignment	Diversion Proposals	Location
27	5740L-6000L	Tata Cable Duct	260	Along	B	Mithakhali Six Road to Opp Sales Tax Bhawan
28	6000L-6080L	Tata Cable Duct	80	Along	A	Station Navrangpura
29	6200R-6265R	Tata Cable Duct	65	Along	B	Custom Road to Tourism Market Road
30	6250L-6493L	Tata Cable Duct	243	Along	B	Opp Tourism Market to Punjab National Bank
31	6310R-6493R	Tata Cable Duct	183	Along	B	Tourism Market to Terapanth Road
32	6506L-6650L	Tata Cable Duct	144	Along	B	Navrangpura Road to Income Tax Circle
33	6650L-6815L	Tata Cable Duct	165	Along	A	Station Income tax Office
34	6795	Tata Cable Duct	30	Across	A	Income Tax Crossing
35	7050	Tata Cable Duct	30	Across	A	Income Tax Crossing
36	7065R-7120R	Tata Cable Duct	55	Along	B	Near Income Tax Crossing
37	7180R-7290R	Tata Cable Duct	110	Along	B	Opp Gujarat Vidhayaph

Note:

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” Tata Cables are parallel/across the alignment, hence diversion not proposed.

**Table U 13
DETAILS OF AFFECTED DBC (RELIANCE) CABLES & N.E.CABLES**

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
a) E – W Corridor (Ahmedabad to Thaltej)						
1.	(-) 205L-(-) 100L	DBC	105	Along	B	Near Kalupur Railway Station
2.	(-100) L-100L	DBC	200	Along	A	Station Ahmedabad
3.	100L-174L	DBC	74	Along	B	Near Kalupur Railway Station
4.	174L-210L	DBC	36	Across	A	Divisional Railway Manager Office
5.	210R-568R	DBC	358	Along	A	Near Crossing AMC Octroi Office

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
6.	568R-600L	DBC	32	Across	A	Near Crossing AMC Octroi Office
7.	600L-700L	DBC	100	Along	A	Near Crossing AMC Octroi Office
8.	700L-760L	DBC	60	Along	B	Kalupur Cooperative Bank
9.	760L-765L	DBC	5	Along	A	Near Prem Darwaja
10.	765L-965L	DBC	200	Along	A	Station Prem Darwaja
11.	965L-1027L	DBC	62	Along	A	Near Prem Darwaja
12.	1027L-1080L	DBC	53	Along	B	Prem Darwaja Crossing
13.	(-)65L-100L	DBC	165	Along	A	Near Ahmedabad Railway Station
14.	100L-300L	DBC	200	Along	B	Near Ahmedabad Railway Station
15.	300L-470L	DBC	170	Along	A	Near Crossing AMC Octroi Office
16.	470L-736L	DBC	266	Along	B	Near Crossing AMC Octroi Office
17.	54L-82L	DBC	28	Along	A	Ahmedabad Railway Station
18.	54L-100L	DBC	46	Along	A	Ahmedabad Railway Station
19.	100L-190L	DBC	90	Along	B	Kalupur Railway Station
20.	200	DBC	15	Across	A	DRM Office
21.	180L-280L	DBC	20	Along	A	DRM Office
22.	185L-280L	DBC	95	Along	B	DRM Office
23.	200L-280L	DBC	80	Along	B	DRM Office
24.	573	DBC	30	Across	A	AMC Octroi Building
25.	595L-737L	DBC	142	Along	B	Kalupur Cooperative Bank
26.	612R-683R	DBC	71	Along	B	Opp Kalupur Cooperative Bank
27.	683R-736R	DBC	53	Along	A	Opp Kalupur Cooperative Bank
28.	736R-765R	DBC	29	Along	B	Kabutar Khana Building
29.	765R-815R	DBC	50	Along	A	Station Prem Darwaja
30.	822R-880R	DBC	58	Along	A	Motilal Mill (Station Prem Darwaja)
31.	880R-965R	DBC	85	Along	A	Near Prem Darwaja (Station Prem Darwaja)
32.	965R-1060R	DBC	95	Along	B	Near Prem Darwaja
33.	1060R-1080R	DBC	20	Along	A	Near Prem Darwaja

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
34.	1080	DBC	30	Across	A	Near Prem Darwaja
35.	1613	DBC	30	Across	A	Dariyapur Darwaja Crossing
36.	1638	DBC	30	Across	A	Dariyapur Darwaja Crossing
37.	1638R-1665R	DBC	27	Along	A	Dariyapur Darwaja Crossing
38.	1665R-1850R	DBC	185	Along	B	Between Dariyapur Darwaja Crossing to Delhi Darwaja
39.	1850R-1910R	DBC	60	Along	A	Between Dariyapur Darwaja Crossing to Delhi Darwaja
40.	1910R-1940R	DBC	30	Along	B	Between Dariyapur Darwaja Crossing to Delhi Darwaja
41.	1940-2090R	DBC	150	Along	A	Station Delhi Darwaja
42.	2090R-2138L	DBC	48	Across	A	Delhi Darwaja (Station Delhi Darwaja)
43.	2138	DBC	30	Across	A	Delhi Darwaja
44.	3087L-3116L	DBC	29	Along	A	Shahpur High School (Station Shahpur Darwaja)
45.	3087	DBC	30	Across	A	Shahpur High School
46.	3087R-3116R	DBC	29	Along	A	Shahpur High School (Station Shahpur Darwaja)
47.	3116R-3165R	DBC	49	Along	A	Shahpur High School (Station Shahpur Darwaja)
48.	3847	DBC	30	Across	A	Between Sabarmati River & ITO Office
49.	3851	DBC	30	Across	A	Between Sabarmati River and ITO Office
50.	3878	DBC	30	Across	A	Between Sabarmati River and ITO Office
51.	3881	DBC	30	Across	A	Between Sabarmati River and ITO Office
52.	3848R-3878R	DBC	30	Along	B	Between Sabarmati River and ITO Office
53.	3881R-3930L	DBC	49	Across	A	Between Sabarmati River and ITO Office
54.	3847R-3878R	DBC	29	Along	B	Between Sabarmati River and ITO Office
55.	3878R-3930L	DBC	52	Across	A	Between Sabarmati River and ITO Office
56.	3847R-3935R	DBC	2X88	Along	B	Between Sabarmati River and ITO Office

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
57.	4065	DBC	2X30	Across	A	ITO Crossing
58.	4065R-4070R	DBC	5	Along	A	ITO Crossing to Rail Crossing
59.	4070R-4270R	DBC	200	Along	A	Station AAayakar Bhawan
60.	4270R-4345R	DBC	75	Along	A	ITO Crossing to Rail Crossing
61.	4350	DBC	30	Across	A	ITO Crossing to Rail Crossing
62.	4208L-4270L	DBC	62	Along	A	ITO Crossing to Rail Crossing (Station AAayakar Bhawan)
63.	4270R-4350R	DBC	80	Along	B	ITO Crossing to Rail Crossing
64.	4406R-4600R	DBC	194	Along	B	Rail Crossing to SP Stadium Five Road Crossing
65.	4600R-4620L	DBC	20	Across	A	SP Stadium Five Road Crossing
66.	4387L-4600L	DBC	213	Along	B	Railway Crossing to SP Stadium Five Road Crossing
67.	4640R-4700R	DBC	60	Along	B	SP Stadium Five Road Crossing
68.	4700R-4727R	DBC	27	Along	A	Station Sardar Patel Stadium
69.	4651L-4700L	DBC	49	Along	B	SP Stadium Five Road Crossing
70.	4700L-4727L	DBC	27	Along	A	Station Sardar Patel Stadium
71.	4727	DBC	30	Across	A	Near SP Stadium Five Road Crossing
72.	4795R-4900R	DBC	105	Along	A	SP Stadium Five Road Crossing to Commerce Crossing (Station Sardar Patel Stadium)
73.	4900R-5270R	DBC	370	Along	A	SP Stadium Five Road Crossing to Commerce Crossing
74.	5270R-5295R	DBC	25	Along	B	SP Stadium Five Road Crossing to Commerce Crossing
75.	4885	DBC	30	Across	A	SP Stadium Five Road Crossing to Commerce Crossing
76.	4885L-4900L	DBC	15	Along	A	SP Stadium Five Road Crossing to Commerce Crossing (Station Sardar Patel Stadium)

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
77.	4900L-5058L	DBC	158	Along	B	SP Stadium Five Road Crossing to Commerce Crossing
78.	5051L-5436L	DBC	412	Along	B	SP Stadium Five Road Crossing to Commerce Crossing
79.	5436L	DBC	30	Across	A	SP Stadium Five Road Crossing to Commerce Crossing
80.	5436R-5600R	DBC	137	Along	B	Commerce Six Road Crossing
81.	5600R-5620R	DBC	20	Along	A	Commerce Six Road Crossing
82.	5620R-5650R	DBC	30	Along	B	Commerce Six Road Crossing to Vijay Nagar Crossing
83.	5650R-5815R	DBC	165	Along	A	Station Commerce Six Road
84.	5815	DBC	30	Across	A	Commerce Six Road Crossing to Vijay Nagar Crossing
85.	5818	DBC	30	Across	A	Commerce Six Road Crossing to Vijay Nagar Crossing
86.	5818R-5850R	DBC	32	Along	A	Commerce Six Road Crossing to Vijay Nagar Crossing (Station Commerce Six Road)
87.	5850R-6091R	DBC	241	Along	B	Commerce Six Road Crossing to Vijay Nagar Crossing
88.	5817L-5850L	DBC	33	Along	A	Commerce Six Road Crossing to Vijay Nagar Crossing (Station Commerce Six Road)
89.	5850L-6167L	DBC	317	Along	B	Commerce Six Road Crossing to Vijay Nagar Crossing
90.	6167	DBC	30	Across	A	Near Vijay Crossing
91.	6151R-6167R	DBC	16	Along	B	Vijay Crossing to AMTS Depot
92.	6152R-6200R	DBC	48	Along	B	Vijay Crossing to AMTS Depot
93.	6200	DBC	2X30	Across	A	Vijay Crossing to AMTS Depot
94.	6205R-6450R	DBC	245	Along	B	Vijay Crossing to AMTS Depot
95.	6234L-6351L	DBC	117	Along	B	Vijay Crossing to AMTS Depot

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
96.	6351	DBC	30	Across	A	Vijay Crossing to AMTS Depot
97.	6351R-6450R	DBC	99	Along	A	Vijay Crossing to AMTS Depot
98.	7218	DBC	30	Across	A	Children Park
99.	7218L-7551L	DBC	333	Along	B	Manav Mandir Crossing to Swaminarayan Gurukul Ashram
100.	7551L-7625L	DBC	74	Along	A	-Do-
101.	7625L-7685L	DBC	60	Along	B	-Do-
102.	7885L-8045L	DBC	160	Along	B	-Do-
103.	7834	DBC	30	Across	A	-Do-
104.	8045	DBC	30	Across	A	-Do-
105.	7235R-7685R	DBC	450	Along	B	-Do-
106.	7685R-7850R	DBC	165	Along	A	Station Gurukul
107.	7685L-7885L	DBC	200	Along	A	Station Gurukul
108.	7834R-7885R	DBC	51	Along	A	Manav Mandir Crossing to Swaminarayan Gurukul Ashram
109.	7885R-8045R	DBC	160	Along	B	-Do-
110.	7834L-7885L	DBC	51	Along	A	-Do-
111.	7885L-8430L	DBC	545	Along	B	Swaminarayan Gurukul to Drive in Theatre
112.	8220R-8300R	DBC	80	Along	B	Indraprastha Tower
113.	8307R-8497R	DBC	190	Along	B	Drive in Cinema
114.	8435L-8725L	DBC	290	Along	B	Opp Drive in Cinema to Doordarshan
115.	8725L-8900L	DBC	175	Along	A	Station Doordarshan Kendra
116.	8900L-9009L	DBC	109	Along	A	Crossing Near Doordarshan
117.	9009	DBC	2X30	Across	A	Crossing Near Doordarshan
118.	8622	DBC	30	Across	A	Near Drive in Cinema
119.	8634L-8725L	DBC	91	Along	B	Crossing Near Doordarshan
120.	8725L-8925L	DBC	200	Along	A	Station Doordarshan Kendra
121.	8925L-9009L	DBC	84	Along	B	Crossing Near Doordarshan
122.	8947R-8988R	DBC	41	Along	B	Opp Doordarshan
123.	9070R-9300R	DBC	230	Along	B	Near Doordarshan
124.	10200R-10315R	DBC	115	Along	B	NH-8

b) N-S Corridor (APMC Vasna to Gandhi Nagar)

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
1.	1159	DBC	30	Across	A	Vasna Telephone Exchange
2.	1142L-1159L	DBC	27	Along	A	Vasna Telephone Exchange
3.	1164R-1215R	DBC	51	Along	B	Jain Gyan Mandir
4.	1215R-1332R	DBC	117	Along	A	Jain Gyan Mandir
5.	1248L-1346L	DBC	98	Along	B	Vasna Crossing
6.	1332R-1480R	DBC	148	Along	B	Vasna Crossing
7.	1346L-1479L	DBC	133	Along	A	Vasna Crossing
8.	1480	DBC	30	Across	A	Vijay Complex
9.	1839	DBC	30	Across	A	Damubhai Colony
10.	1839R-1931R	DBC	92	Along	B	Damubhai Colony
11.	1985L-2000L	DBC	15	Along	B	Anjali Vasna Crossing
12.	2000L-2063L	DBC	63	Along	B	Station Narayan Nagar
13.	2063L-2200L	DBC	137	Along	A	Station Narayan Nagar
14.	2200L-2403L	DBC	203	Along	B	Neelkanth Plaza
15.	2403	DBC	30	Across	A	Neelkanth Plaza
16.	2559L	DBC	30	Across	A	Near Post Office
17.	2559L-2626L	DBC	67	Along	B	Near Post Office
18.	2560R-2816R	DBC	256	Along	B	Near Ankur School
19.	2816	DBC	30	Across	A	Near Ankur School
20.	2816R-3250R	DBC	434	Along	B	Shiekh Adam Abuwala Road
21.	2816L-3024L	DBC	208	Along	B	Sekh Adam Abuwala Road
22.	3024L-3060L	DBC	36	Along	B	Near Panchtirth Apartment
23.	3060L-3250L	DBC	190	Along	B	Central Bank of India
24.	3515L-3580L	DBC	65	Along	A	Station Paldi
25.	3580L-3650L	DBC	70	Along	A	Station Paldi
26.	3650L-3812L	DBC	232	Along	B	Paldi Circle
27.	3990L-4250L	DBC	260	Along	B	Dena Bank
28.	4250L-4296L	DBC	46	Along	A	Station V.S.Hospital
29.	4136L-4250L	DBC	114	Along	B	Saraswati School
30.	4250L-4296L	DBC	46	Along	A	Station V.S.Hospital
31.	4205L	DBC	10	Across	A	Saraswati School
32.	4205L-4250L	DBC	45	Along	B	Saraswati School
33.	4250L-4300L	DBC	50	Along	A	Station V.S.Hospital
34.	4205R-4250R	DBC	45	Along	A	Bank of Baroda
35.	4250R-4312R	DBC	62	Along	A	Station V.S.Hospital
36.	4296	DBC	18	Across	A	Bank of Baroda
37.	4310L-4450L	DBC	140	Along	A	Station V.S.Hospital

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
38.	4450L-4587L	DBC	137	Along	A	Opp Vadilal Sarabhai Hospital
39.	4310L-4450L	DBC	140	Along	B	Opp Vadilal Sarabhai Hospital
40.	4450L-4587L	DBC	137	Along	A	Opp Vadilal Sarabhai Hospital
41.	4361R-4440R	DBC	79	Along	B	Near UKO Bank (Station V.S.Hospital)
42.	4591	DBC	30	Across	A	Opp Vadilal Sarabhai Hospital
43.	4591L-4770L	DBC	179	Along	B	Ellisbridge Circle
44.	4595L-4622L	DBC	27	Along	B	Opp V.S.Hospital
45.	4622	DBC	30	Across	A	Opp V.S.Hospital
46.	4568R-4622R	DBC	54	Along	B	Opp V.S.Hospital
47.	4595R-4700R	DBC	105	Along	B	V.S.Hospital
48.	4700R-4832R	DBC	132	Along	A	Bhartiya Sangeet Vidhayalaya
49.	4777R-4800R	DBC	23	Along	A	Bhartiya Sangeet Vidhayalaya
50.	4780L-4816L	DBC	2X36	Along	B	Ellisbridge Circle
51.	4816L-4924L	DBC	3X108	Along	B	Town Hall
52.	4816R-4832R	DBC	16	Along	A	Ellisbridge Circle
53.	4940R-5075R	DBC	135	Along	B	Nehru Bridge Circle
54.	5075R-5275R	DBC	200	Along	A	Station Nava Gandhigram
55.	5275R-5289R	DBC	14	Along	B	Nehru Bridge Circle
56.	4950L -5026L	DBC	76	Along	B	Near Gujarat Bhawan
57.	5289	DBC	30	Across	A	Kala Niketan Nobles
58.	5289R-5588R	DBC	2X299	Along	B	H.K.Commerce College
59.	5299L-5715L	DBC	2X416	Along	B	Natraj Theatre
60.	5715L-5742L	DBC	27	Along	A	Near Godrej Showroom
61.	5742L	DBC	30	Across	A	Near Godrej Showroom
62.	5742L-5900L	DBC	3X158	Along	B	Near Dena Bank
63.	5742R-6000R	DBC	258	Along	B	Times of India
64.	6000R-6200R	DBC	200	Along	A	Station Navrangpura
65.	6200R-6205R	DBC	5	Along	B	Times of India
66.	5900L-6000L	DBC	2X100	Along	B	Near Handicap Society
67.	6000L-6200L	DBC	2X200	Along	A	Station Navrangpura
68.	6215R-6230R	DBC	15	Along	A	Mount Kermal School
69.	6245L-6490L	DBC	245	Along	A	Punjab National Bank

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
70.	6500R-6629R	DBC	129	Along	B	Vaishya Bank
71.	6629	DBC	30	Across	A	Cooperative Bank
72.	6500L-6650L	DBC	150	Along	B	Akaswani Kendra
73.	6650L-6740L	DBC	90	Along	A	Station Aayakar Bhawan
74.	6740L-6750L	DBC	10	Along	A	Station Aayakar Bhawan
75.	6750L-6772	DBC	22	Along	A	Akaswani Kendra
76.	6772L-6887L	DBC	115	Along	B	ITO Circle
77.	6887L-7048L	DBC	161	Along	B	Union Bank of India
78.	7048L-7570L	DBC	522	Along	B	Usmanpura Crossing
79.	7086	DBC	2X16	Across	A	SBI Bank
80.	7086R-7113R	DBC	2X23	Along	B	Opp SBI Bank
81.	7113R-7350R	DBC	237	Along	B	Near Gujarat College
82.	7510R-7670R	DBC	160	Along	B	Usmanpura Crossing
83.	7570L-7761L	DBC	191	Along	B	Near Fortune Hotel
84.	7761	DBC	15	Across	A	Sukh Sagar Complex
85.	7761R-7855R	DBC	194	Along	A	Opp Sabarmati Bank (Station Usmanpura)
86.	7923R	DBC	30	Across	A	Bank of Baroda
87.	7923R-8000R	DBC	77	Along	A	Post Office (Station Usmanpura)
88.	8000R-8380R	DBC	380	Along	B	Post Office
89.	8282	DBC	17	Across	A	Supath=2
90.	8431L-8555L	DBC	124	Along	B	Near Vadaj Crossing
91.	8580	DBC	30	Across	A	Near Vadaj Crossing
92.	8580L-8650L	DBC	70	Along	B	Near Vadaj Crossing
93.	8650L-8850L	DBC	200	Along	A	Station Vadaj
94.	8850L-8952L	DBC	102	Along	B	Near Vadaj Crossing
95.	8580R-8620R	DBC	40	Along	B	Near Vadaj Crossing
96.	8648R-8650R	DBC	2	Along	B	Opp Gujarat Khadi Gramoudhyog
97.	8650R-8850R	DBC	200	Along	A	Station Vadaj
98.	8850R-8952R	DBC	102	Along	B	Opp Gujarat Khadi Gramoudhyog
99.	8952	DBC	30	Across	A	Opp Gujarat Khadi Gramoudhyog
100.	11540R-11600R	DBC	60	Along	B	AEC Circle
101.	11610R-12035R	DBC	425	Along	B	AEC Circle

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
102	12035R-12150R	DBC	115	Along	A	AEC Colony
103.	12150R-12285R	DBC	135	Along	B	Near AEC Colony
104.	12285R-12300R	DBC	15	Along	A	Opp Bharat Sanchar Nigam
105.	12300R-12500R	DBC	200	Along	A	Station Shankarpura
106.	12500R-12650R	DBC	150	Along	A	Opp Bharat Sanchar Nigam
107.	12650R-13040R	DBC	390	Along	B	Opp Panchsheel Hostel
108.	12870L-12900L	DBC	130	Along	A	Near Kanara bank
109.	12900L-12967L	DBC	67	Along	B	Near Kanara bank
110	13040R-13150R	DBC	110	Along	A	Near Kanara Bank
111.	13150R-13350R	DBC	200	Along	A	Station Acher
112.	13165L-13350L	DBC	185	Along	A	J-1 Motera Village (Station Acher)
113.	13350L-13435L	DBC	85	Along	B	J-1 Motera Village
114.	13350R-13448R	DBC	98	Along	B	J-1 Motera Village
115.	13457R	DBC	30	Across	A	J-1 Motera Village
116.	13472L-14097L	DBC	625	Along	A	J-1 Motera Village
117.	14097L	DBC	8	Across	A	J-1 Motera Village
118.	14097R-14100R	DBC	3	Along	A	J-1 Motera Village Near Stadium Plaza
119.	14100R-14300R	DBC	200	Along	A	Station Sardar Patel Gujarat Statidum
120.	14300R-14890R	DBC	590	Along	A	J-1 Motera Village Near Stadium Plaza
121.	14919	DBC	30	Across	A	Motera Village Near Stadium Plaza
122.	14919L-15196L	DBC	277	Along	A	Motera Village
123.	15196L-15215R	DBC	19	Across	A	Motera Village
124.	15215R-15220L	DBC	5	Across	A	Motera Village
125.	15220L-15300L	DBC	80	Along	A	Motera Village
126.	15300L-15323L	DBC	23	Along	A	Motera Village (Station Motera Village)

S. No.	Chainage	Description of Cable	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
127.	15323	DBC	7	Across	A	Motera Village
128.	15323R-15434R	DBC	111	Along	A	Motera Village (Station Motera Village)
129.	15434R-15500R	DBC	66	Along	A	Motera Village (Station Motera Village)
130.	15500R-15512R	DBC	12	Along	A	Motera Village
131.	15512	DBC	9	Across	A	Motera Village
132.	15512L-15640L	DBC	128	Along	A	Motera Village
133.	29354L-29400L	DBC	2X56	Along	A	Near Sector-11 (Station S.T. Depot)
134.	29400L-29671L	DBC	2X271	Along	A	Near Sector 11
135.	29671L-29950L	DBC	279	Along	B	Bharat Sanchar Nigam
136.	29955L-30154L	DBC	199	Along	B	Opp Gujarat Vidhan Sabha

Note:

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” Reliance (DBC) Cables are parallel/across the alignment, hence diversion not proposed

**Table U 14
DETAILS OF HUTCH CABLE
(ELEVATED STRETCH)**

S. No.	Chainage	Description of cables	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
a) N-S Corridor (APMC Vasna to Gandhi Nagar)						
1	(-) 400R-00	Hutch Cable	2X400	Along	B	Vishala Highway
2	(-) 100R-00R	Hutch Cable	2X100	Along	A	Station Vishala
3	00R-100R	Hutch Cable	2X100	Along	A	Station Vishala
4	100R-875R	Hutch Cable	2X775	Along	B	Vishala Highway to Vasna Police Chowki
5	875R-1000R	Hutch Cable	2X125	Along	A	Station Vasana
6	1000R-1075R	Hutch Cable	2X75	Along	A	Station Vasna
7	1075R-2000R	Hutch Cable	2X925	Along	B	Vasna Police Chowki to Anjali Vasna Crossing
8	2000R-2200R	Hutch Cable	2X200	Along	A	Station Narayan Nagar

S. No.	Chainage	Description of cables	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
9	2200R-3000R	Hutch Cable	2X800	Along	B	Anjali Crossing to Shiekh Adam Abu Wala Road
10	3000R-3450R	Hutch Cable	2X450	Along	B	Shiekh Adam Abuwala Road to Gandhi Kunj Co-op Housing Society
11	3450R-3650R	Hutch Cable	2X200	Along	A	Station Paldi
12	3650R-4000R	Hutch Cable	2X350	Along	B	Station Shiekh Adam Abuwala Road to Gandhi Kunj Co-op Housing Society
13	4000R-4250R	Hutch Cable	2X250	Along	B	Gandhi Kunj Co-op Housing Society to Ellisbridge Police Chowki
14	4250R-4450R	Hutch Cable	2X200	Along	A	Station V.S Hospital
15	4450R-4862R	Hutch Cable	2X412	Along	B	Gandhi Kunj Co-op Housing Soceity to Ellisbridge Police Chowki

Note:

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” Hutch Cables are parallel/across the alignment, hence diversion not proposed.

**Table U 15
DETAILS OF AIRTEL CABLES
(ELEVATED STRETCH)**

S. No.	Chainage	Description of cables	Affected Length (in m)	Position w.r.t. Alignment	Diversion Proposals	Location
a) N-S Corridor (APMC Vasnato Gandhi Nagar)						
1	4322	Airtel	30	Across	A	Hotel Sicago
2	4414	Airtel	30	Across	A	Near VS Hospital
3	4890	Airtel	30	Across	A	MG Library
4	6510	Airtel	30	Across	A	Sales India
5	6515	Airtel	30	Across	A	Sales India

Note:

“A” Suitably locate the pier/change the pile layout to avoid diversion.

“B” Airtel Cables are parallel/across the alignment, hence diversion not proposed.

4.22 CONSTRUCTION METHODOLOGY FOR VIADUCT STRUCTURE

4.22.1 Choice of Superstructure

The choice of superstructure for the elevated section has to be made keeping in view the ease of construct ability and the maximum standardization of the formwork for wide span ranges.

4.22.2 The following type of superstructures have been considered.

- (i) Pre-cast segmental box girder using external unbonded tendon.
- (ii) Pre-cast segmental U-Channel superstructure with internal pre-stressing.

The segmental construction has been chosen mainly due to the following advantages.

- Segmental construction is an efficient and economical method for a large range of span lengths and types of structures. Structures with sharp curves and variable super elevation can be easily accommodated.
- Segmental construction permits a reduction of construction time as segments may be manufactured while substructure work proceeds, and assembled rapidly thereafter.
- Segmental construction protects the environment, as only space required for foundation and sub-station is required at site. The superstructure is manufactured at a place away from busy areas and placement of superstructure is done with the system erected from piers at heights.
- Segments are easy to stack in the casting yard/stacking yard in more than one layer, thereby saving in requirement of space.
- It is easier to transport smaller segments by road trailers on city roads.
- It is easy to incorporate last minute changes in span configuration if the site situation so warrants.
- Interference to the traffic during construction is significantly reduced.
- Segmental construction contributes toward aesthetically pleasing structures and good finishes.
- The overall labour requirement is less than that for conventional methods.
- Better quality control is possible in the casting yard.
- During construction, the technique shows an exceptionally high record of safety.

4.22.3 Comparative advantages/disadvantages of the above two types of superstructures examined are given below:

i. Precast Segmental Box Girder using External Unbonded Tendon (Option- I).

This essentially consists of precast segmental construction with external prestressing and dry joints and is by far most preferred technique in fast track projects. In such construction the prestressing is placed outside the structural concrete (inside the box section) and protected with high-density polyethylene tubes, which are grouted with special wax or cement. The match cast joints at the interface of two segments are provided with shear keys as in traditional segmental construction. However, epoxy is dispensed

with because watertight seal at the segment joints is not required in association with external tendons. The schematic arrangement is shown at **Fig. VC-1**.

The main advantages of dry-jointed externally prestressed precast segmental construction can be summarized as follows:-

- Simplification of all post-tensioning operations, especially installation of tendons.
- Reduction in structural concrete thickness as no space is occupied by the tendons inside the concrete.
- Good corrosion protection due to tendons in polyethylene ducts; the grout inspection is easier and leaks, if any, can be identified during the grouting process.
- Simplified segment casting. There is no concern about alignment of tendons with increased speed of construction.
- The elimination of the epoxy from the match-cast joints reduces costs and increases speed of construction further.
- Replacement of tendons in case of distress is possible and can be done in a safe and convenient manner.
- Facility for inspection and monitoring of tendons during the entire service life of the structure.

ii. Precast Segmental U-Channel Superstructure with Internal Prestressing (Option- II).

The single U type of viaduct structure is also a precast segmental construction with internal prestressing and requires gluing and temporary prestressing of segments. The match cast joints at the interface of two segments are also provided with shear keys. The details are given in **Fig. VC-2**.

The main advantages for this type of structural configuration of superstructure are:-

1. Built in sound barrier.
2. Built in cable support and system function.
3. Possibility to lower the longitudinal profile by approximately 1m compared to conventional design.
4. Built in structural elements capable to maintain the trains on the bridge in case of derailment (a standard barrier design allow this)
5. Built in maintenance and evacuation path on either side of the track.

Although, there may be a saving in the construction time for Option 1 by almost one day but the option 2 is recommended for Ahmedabad Metro Project considering the advantages as highlighted above, particularly, considering the fact that option 2 has inbuilt features such as top flange of 'U' Channel acts as an evacuation path on either side of the tracks and also possibility to lower the longitudinal profile of the elevated viaduct

4.22.4 Construction Methodology

i. **Pre-Cast Construction**

For the elevated sections it is recommended to have pre-cast segmental construction for super structure for the viaduct. For stations also the superstructure is generally of pre-cast members. The pre-cast construction will have following advantages:-

- Reduction in construction period due to concurrent working for substructure and superstructure.
- For segmental, pre-cast element (of generally 3.0m length), transportation from construction depot to site is easy and economical.
- Minimum inconvenience is caused to the public utilising the road as the superstructure launching is carried out through launching girder requiring narrow width of the road.
- As the pre-cast elements are cast on production line in a construction depot, very good quality can be ensured.
- The method is environment friendly as no concreting work is carried at site for the superstructure.

ii. **Casting of Segments**

For viaducts segmental pre-cast construction requires a casting yard. The construction depot will have facilities for casting beds, curing and stacking area, batching plant with storage facilities for aggregates and cement, site testing laboratories, reinforcement steel yard and fabrication yard etc. An area of about 2.5 Hact. to 3 Hact is required for each construction depot. For casting of segments both long line and short line method can be adopted. However the long line method is more suitable for spans curved in plan while short line method is good for straight spans. A high degree of accuracy is required for setting out the curves on long line method for which pre calculation of offsets is necessary. Match casting of segments is required in either method. The cast segments are cured on the bed as well as in stacking yard. Ends of the segments are to be made rough through sand blasting so that gluing of segments can be effective.

The cast segment will be transported on trailers and launched in position through launching girders.

iii. **Launching Scheme**

Launching girder is specially designed for launching of segments. The suggested launching scheme is designed in such a way that initially the launching girder is erected on pier head at one end of the work. The segments are lifted in sequence and when the lifting is over; they are dry matched while hanging from the launching girder. After dry matching, the segments are glued with epoxy and pre-stressed from one end. The girder is lowered on the temporary / permanent bearings after pre-stressing. The launching girder then moves over the launched span to next span and the sequences continue.

4.22.5 Structural System of Viaduct

i. Superstructure

The superstructure of a large part of the viaduct comprises of simply supported spans. However at major crossing/over or along existing bridge, special steel or continuous unit will be provided.

Normally the U-Channel girder having a soffit width of 9.0 m (approx) accommodates the two tracks situated at 3.7m c/c on straight and 4.0m on curve up to radius of 200m. The U-Channel superstructure for almost all the simply supported standard spans will be constructed by precast prestressed segmental construction with epoxy bonded joints.

The standard span c/c of piers of standard simply supported spans constructed by precast segmental construction technique has been proposed as 25.0m. The usual segments shall be 3.0m in length except the Diaphragm segments, which shall be 2.0m each. The other standard spans (c/c of pier) comprises of 31.0m, 28.0m, 22.0m, 19.0m & 16.0m, which shall be made by removing/adding usual segments of 3.0m each from the centre of the span. Depth of the superstructure is so chosen that top of flange of U-Channel will be used as an evacuation walkway in an emergency.

The dimensions of end diaphragm will be finalized based on simply supported span of 28.0m and the same will be also kept for all simply supported standard span. The top level of both the end diaphragms of adjoining spans on the same piers is kept same so that expansion joint can be installed at top and continuity of profile of end diaphragm on the same pier can be maintained. The arrangement has been selected from aesthetic considerations.

For major crossing having spans greater than 40.0m, special units normally of 3 –span construction or steel girders have been envisaged.

All these continuous units (in case provided at obligatory location) will be constructed by cast-in-situ balanced cantilever construction technique. The top profile of superstructure of continuous unit (for the full length) will be retained the same as for standard spans so that evacuation walkway will be available even in continuous units. The increase in depth of U-channel will be accomplished by thickening the soffit slab (towards downside). At the end of continuous unit, the profile and thickness of soffit slab will be done to the extent that it will match with the profile and depth of end diaphragm of adjoining simply supported spans. The thickness of soffit slab will be increased smoothly toward penultimate support. In order to reduce the dead weight of the girder, voids will be also provided in the thickened soffit slab at bottom. These will be circular near the end of continuous unit and oblong near the penultimate support.

The deck slab is required to support an evacuation walkway, parapet and duct load. The deck is additionally required to support concentrated overhead electrical mast loads which can occur anywhere along the span.

The precast parapets are designed on a module of 2.7m. Two diaphragms are provided at 1.35m centers. The OHE mast connection load gets distributed between two diaphragms thus providing a better dispersion of concentrated loads on the deck slab.

The substructure consists of open foundations comprising conventional isolated footing restings on medium sand. Corbels are provided for individual circular pier so that precast girders could directly rest on the corbels without any additional temporary supports.

ii. **Substructure**

The viaduct superstructure will be supported on single cast-in-place RC pier. The shape of the pier follows the flow of forces. For the standard spans, the pier gradually widens at the top to support the bearing under the box webs.

At this preliminary design stage, the size of pier is found to be limited to 2.0 m diameter of circular shape for most of its height so that it occupies the minimum space at ground level where the alignment often follows the median of existing roads.

To prevent the direct collision of vehicle to pier, a Jersey Shaped crash barrier of 1.0m height above existing road level has been provided all around the pier. A gap of 25mm has been also provided in between the crash barrier and outer face of pier. The shape of upper part of pier has been so dimensioned that a required clearance of 5.5m is always available on road side beyond vertical plane drawn on outer face of crash barrier. In such a situation, the minimum height of rail above the existing road is 8.4m.

The longitudinal centre to centre spacing of elastomeric/pot bearing over a pier would be about 1.8m. The space between the elastomeric bearings will be utilized for placing the lifting jack required for the replacement of elastomeric bearing. An outward slope of 1:200 will be provided at pier top for the drainage due to spilling of rainwater, if any.

The transverse spacing between bearings would be 3.2m (to be studied in more details).

The orientation and dimensions of the piers for the continuous units or steel girder (simply supported span) have to be carefully selected to ensure minimum occupation at ground level traffic. Since the vertical and horizontal loads will vary from pier to pier, this will be catered to by selecting the appropriate structural dimensions.

As the median width between Koba Circle to Akshardham, about 12 Km are sufficient to provide two piers instead of single pier without pile foundation. This will provide economy in cost and speed in construction. The deck cross section consists of two 1.2m deep voided girders with a span arrangement of 13.5m +16.5m+13.5m. The deck frames monolithically into the circular piers of 750mm for end spans 900 mm for intermediate supports. The girders are per-stressed simply supported when placed on piers. Diaphragms at pier locations are cast-in-situ providing frame action both in transverse and longitudinal directions. The continuity of the structure over intermediate supports in the longitudinal direction is achieved by introducing prestressing cap cables at these locations. In transverse direction the individual deck slab get connected by overlapping reinforcement and a cast in situ connection (Refer fig No. VC-9).

4.22.6 Foundations Recommendations

From Geo-investigations discussed in subsequent paras it is apparent that substrata comprises of sandy silt with gravels (SM-ML) and silty sand with gravels (SM) to a depth of 30m. Hence, pile foundations up a depth of 20 to 25 m or as per design requirement may have to be provided.

4.22.7 Construction Methods

i. Deck – Simple Spans U Girder

Salient features of the precast segmental construction method technique as envisaged for the project under consideration are indicated below:

The superstructure shall be constructed “span by span” sequentially, starting at one end of a continuous stretch and finishing at the other end. Nos. of launching girders may be required so as to work on different stretches simultaneously to enable completion of the project in time.

The number of “breaks” in the stretch can be identified by nos of continuous units.

The suggested method of erection will be detailed in drawings to be prepared. The governing weight of the segments will be of the order of 70 t (to be finalised). The launching girder envisaged will be slightly greater than two span lengths. It must be able to negotiate curves in conjunction with temporary brackets.

Transportation of segments from casting yard to the point of erection will be effected by appropriately designed low-bedded trailers (tyre-mounted). The segments can be lifted and erected using erection portal gantry moving on launching girder.

U-girder segments shall be match cast at the casting yard before being transported to location and erected in position. Post-tensioned cables shall be threaded in-situ and tensioned from one end. It is emphasised that for precast segmental construction only one-end prestressing shall be used.

The prestressing steel and prestressing system steel accessories shall be subjected to an acceptance test prior to their actual use on the works. The tests for the system shall be as per FIP Recommendations as stipulated in the special specifications. Only multi-strand jacks shall be used for tensioning of cables. Direct and indirect force measurement device (e.g. Pressure Gauge) shall be attached in consultation with system manufacturer.

The Contractor shall be responsible for the proper handling, lifting, storing, transporting and erection of all segments so that they may be placed in the structure without damage. Segments shall be maintained in an upright position at all times and shall be stored, lifted and/or moved in a manner to prevent torsion and other undue stress. Members shall be lifted, hoisted or stored with lifting devices approved on the shop drawings.

ii. Epoxy Bonded Joints and Shear Keys.

A minimum compressive stress of 3 kg/sqcm shall be provided uniformly over the cross-section for the closure stress on the epoxied joint until the epoxy has set. The curing period for application of the compressive stress, method of mixing and application of epoxy and all related aspects including surface preparation shall be as per approved manufacturer's specifications.

The purpose of the epoxy joint, which is about 1mm on each mating surface, shall be to serve as lubricant during segment positioning, to provide waterproofing of the joints for durability in service conditions and to provide a seal to avoid cross-over of grout during grouting of one cable into other ducts.

The epoxy shall be special purpose and meet requirements of relevant provision of FIP (International Federation of Prestressed Concrete)

The temporary compressive stress during the curing period shall be applied by approved external temporary bar prestressing (such as Macalloy or Diwidag bar systems or approved equivalent).

4.22.8 Construction of the Stations

It is proposed to construct the elevated stations with elevated concourse over the road at most of the locations to minimise land acquisition. To keep the rail level low, it is proposed not to take viaduct through the stations. Thus a separate structural configuration is required (although this may necessitate the break in the launching operations at each station locations)

Sub-structure for the station portion will also be similar to that of viaduct and will be carried out in the same manner. However, there will be single viaduct column in the station area, which will be located on the median and support the concourse girders by a cantilever arm so as to eliminate the columns on the right-of-way.

Super-structure will consist of precast U Girders for supporting the track structure and I Girder / Double T Girders for supporting the platform and concourse areas. A pre-cast or cast in situ prestressed cross girder will be required over the middle piers for supporting platform structure. Box shaped in situ prestressed cantilever cross girders are planned for supporting the concourse girders and escalators at mezzanine level. All the members will be pre-cast in a construction depot and launched at site through cranes.

Grade of Concrete

It is proposed to carry out construction work with design mix concrete through computerised automatic Batching Plants with following grade of concrete for various members as per design requirement/durability considerations.

- | | | |
|--|---|----------------|
| i) Pile cap and open foundation | - | M -30 |
| ii) Piers | - | M -45 / M -60. |
| iii) All precast element for viaduct and station | - | M -45 |
| iv) Cantilever piers and portals | - | M -45 |
| | - | M -60 |
| v) Other miscellaneous structure | - | M -30 |

For all the main structures, permeability test on concrete sample is recommended to ensure impermeable concrete.

Reinforcement and prestressed Steel

It is proposed to use TMT- HYSD 415 or TMT - HYSD 500 steel as reinforcement bars.

For pre-stressing work, low relaxation high tensile steel strands with the configuration 12 T 13 and or 19 K 15 are recommended (confirming to IS: 14268).

4.22.9 Road width required During Construction

As most of the construction is to be carried out on the middle of the road, central two lanes including median will be required for construction activities. During piling, pilecap and open foundation work, a width of about 9 to 10 m will be required for construction and the same will be barricaded. It is proposed that two lanes are provided for traffic on either side during construction by widening of roads, if necessary. In certain cases, one way traffic may be resorted to.

All these actions will require a minimum period of about 4 to 6 months. During this period, the implementing agency can go ahead with the following preliminary works:

- i) Preliminary action for diversion of utility and preparation of estimates there of.
- ii) Reservation of land along the corridor, identification and survey for acquisition.

Once the Corporation is formed, the Corporation has to take action for appointment of consultant for Project Management and proof checking

including preparation of tender documents. Simultaneously, action is also to be taken for detailed design for structures for elevated corridors.

4.23 TRAFFIC DIVERSION PLAN

Classified traffic volume surveys have been carried out at important locations along the proposed Metro Corridors and its influence area. The influence area of the metro alignment supports fairly good road network in Ahmedabad and Gandhinagar. However, alternative road network is limited in Walled City Area.

Table T-1 presents the traffic characteristics on various road sections along the proposed Metro alignment. It is observed that the average daily traffic volume varies from 1,00,634 vehicles near Akashwani Kendra to 41,048 Vehicles near Usman Pura along the proposed Metro Corridors. Peak hour factor ranges from 9% to 11% of the daily traffic. Existing carriageway width along these corridors varies from 14m to 21m. The ROW details obtained from AMC indicate that it varies from 30m to 120m along Vishala to Akshardham Temple corridor. The higher ROW (60m and above) is available after Subhash Circle to Akshardham Temple. For Kalupur – Thaltej corridor ROW varies from 24m to 35m.

Table T-1 Intensity of Traffic Along Proposed Metro Corridors – 2003

Sl. No.	Location	Daily Traffic		Peak Hour Traffic		Peak Hour Factor (%)	Existing Carriageway Width (m)	Right of Way (m)
		Veh.	PCUs	Veh.	PCUs			
LINE – 1 (APMC Vasna – Akshardham)								
1	Near Fathepur	45281	35896	5261	3893	11	14	36.5
2	Near V.S. Hospital	88343	62760	8533	6012	10	21	30.5
3	Near Sanyas Ashram	57528	42391	4907	3680	9	21	39.65
4	Near Usman Pura	41048	31990	4603	3268	10	14	39.65
LINE – 2 (Ahmedabad – Thaltej)								
1	Near Dariyapur Darwaja	78917	56218	8066	5454	10	14	30.5
2	Near Delhi Darwaja	96115	64045	8351	5458	9	14	34.7
3	Near Akashwani Kendra	100634	63586	9065	5768	9	14	30.5
4	Manav Mandir Marg	52830	36388	5289	3623	10	14	30.5

Proposed Metro alignment is completely elevated in both the corridors and the alignment is proposed mostly along the existing median. During construction of Metro a land strip of 10m wide (including median) would be

required. It is assumed that the Metro would be constructed by year 2010. To carryout the level of service analysis along the different road sections with and without Metro construction situation, it is assumed that the vehicular traffic would grow at the rate of 3% per annum. Based on this assumption V/C ratio for the year 2010 without Metro construction are calculated and presented in **Table T-2**. From the table it can be seen that the V/C value for different road sections varies from 0.63 to 1.48. As sufficient ROW is available along both the corridors, carriageway can be widened to the existing width by removing the footpath / service lanes and temporary structures, so that the traffic can enjoy good level of service along the Metro Corridors. Restrictions shall be placed on slow moving traffic in road sections where the level of service is above or the traffic can be diverted to alternative routes like by making oneway from Akashwani Kendra to Kalupur Station. The traffic in the other direction be diverted on to the Vivekanad Road and then on SP Road and Ashram Road.

Table T –2 V/C Ratios on Affected Road Sections

Sl. No.	Location	Peak Hr PCUs (2003)	Existing Carriageway Width (m)	Right of Way (m)	Projecte d Peak Hr PCUs (2010)	V/C Ratio		
						Without Metro Const.		With Metro Construction
						2003	2010	Widening Carriageway by removing foot path and temporary structures within ROW
LINE – 1 (APMC Vasna – Akshardham)								
1	Near Fathepur	3893	14	36.5	4788	0.81	1.00	1.00
2	Near V.S. Hospital	6012	21	30.5	7394	0.84	1.03	1.03
3	Near Sanyas Ashram	3680	21	39.65	4526	0.51	0.63	0.63
4	Near Usman Pura	3268	14	39.65	4019	0.68	0.84	0.84
LINE – 2 (Ahmedabad – Thaltej)								
1	Near Dariyapur Darwaja	5454	14	30.5	6708	1.14	1.40	1.40
2	Near Delhi Darwaja	5458	14	34.7	6713	1.14	1.40	1.40
3	Near Akashwani Kendra	5768	14	30.5	7094	1.20	1.48	1.48
4	Manav	3623	14	30.5	4456	0.75	0.93	0.93

Mandir Marg							
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