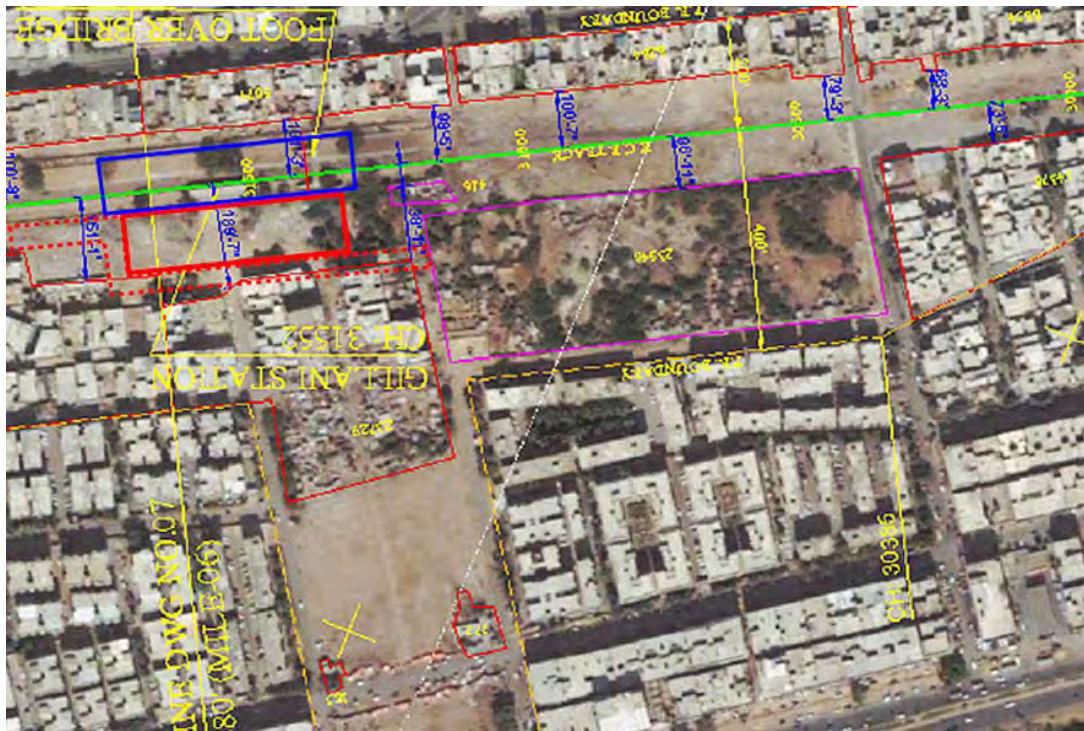
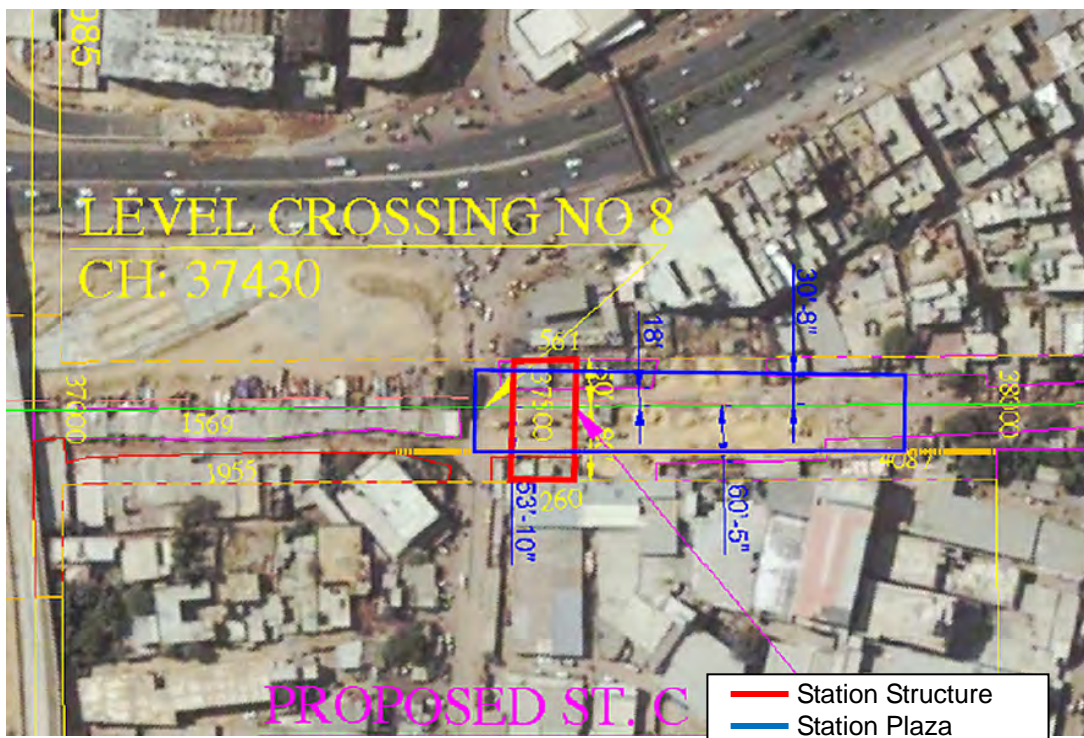


APPENDIX 4-1

Desirable Plan for Station Plaza Proposed in SAPROF-I



(5) Gilani



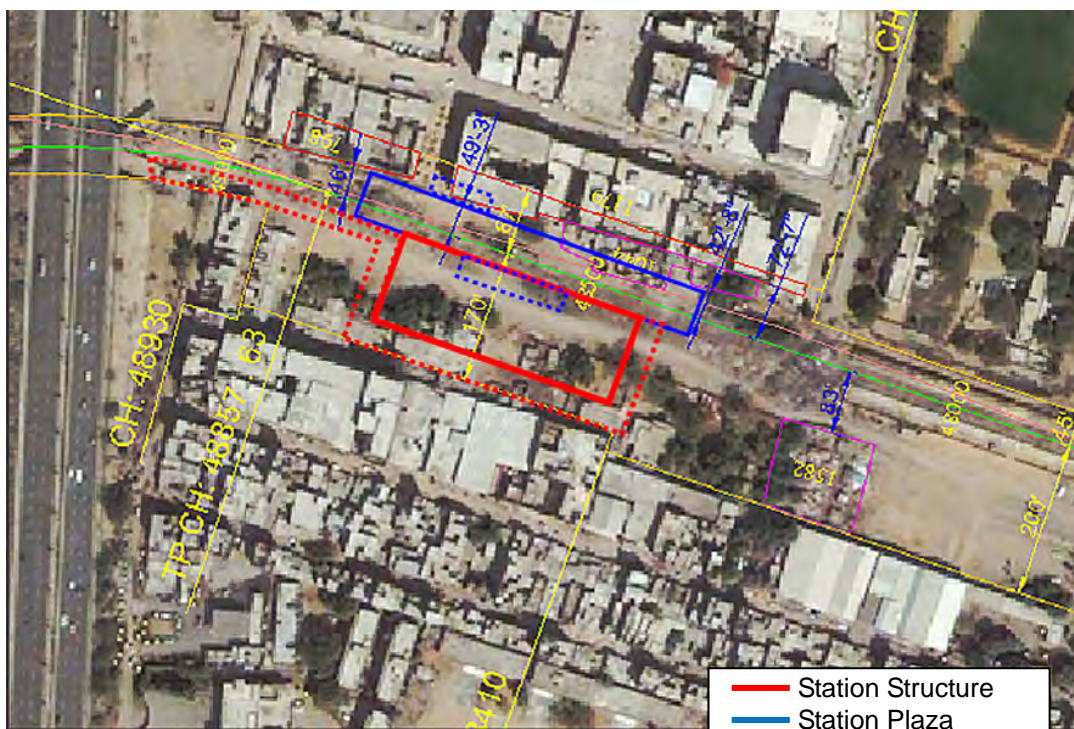
(6) Yasinabad

Source: SAPROF-I

Figure 3 Desirable Station Plaza Plan (3/12)



(7) Liaquatabad



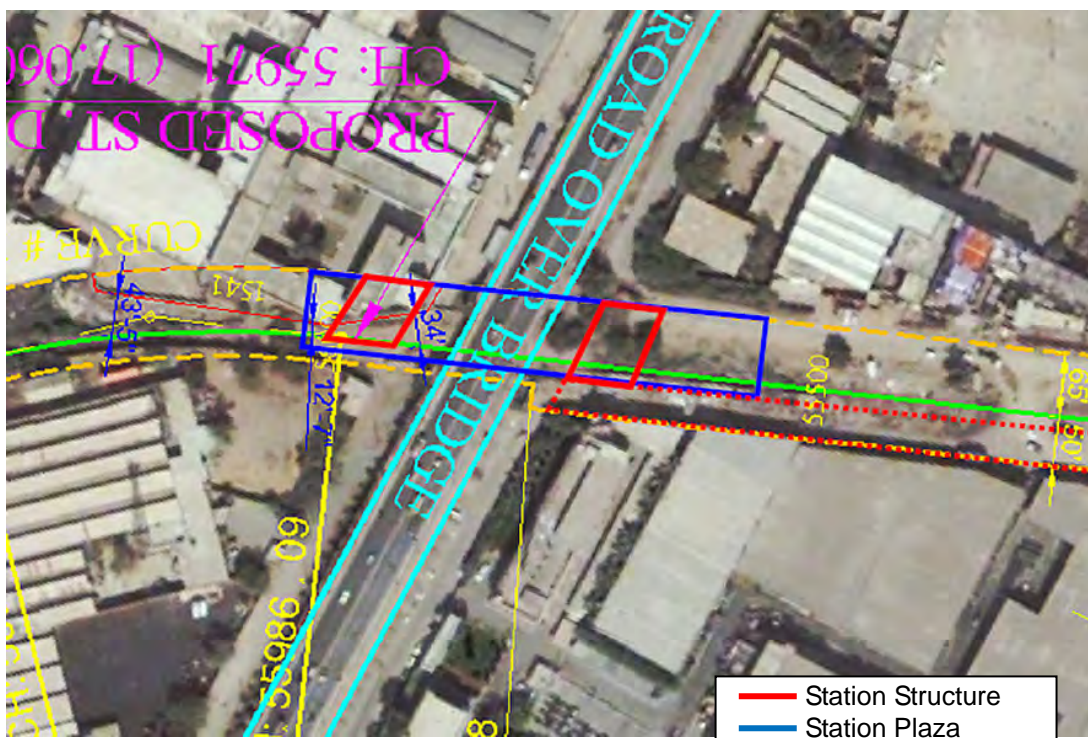
(8) North Nazimabad

Source: SAPROF-I

Figure 4 Desirable Station Plaza Plan (4/12)



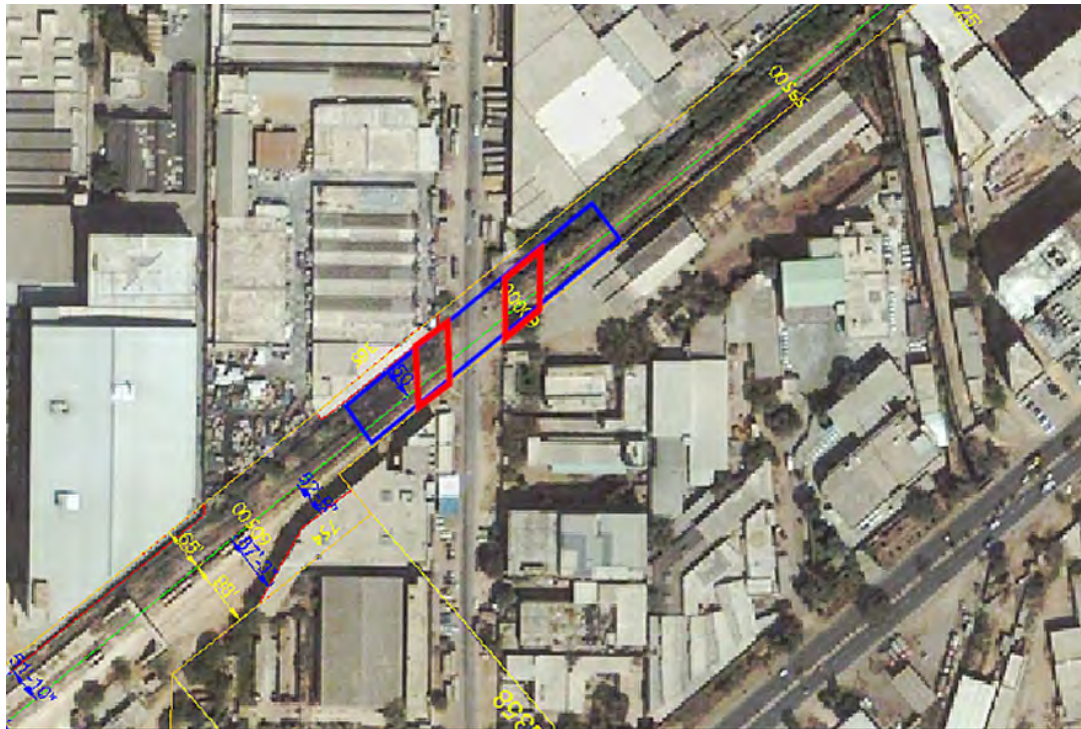
(9) Orangi



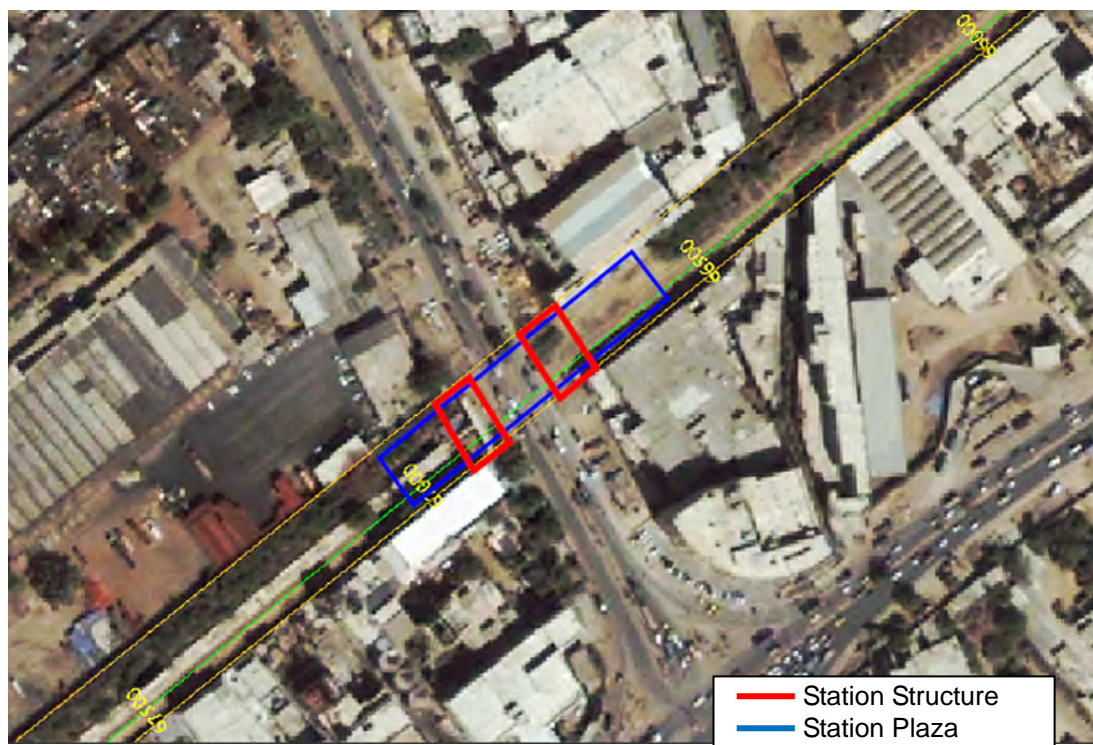
(10) HBL

Source: SAPROF-I

Figure 5 Desirable Station Plaza Plan (5/12)



(11) Manghopir



(12) SITE

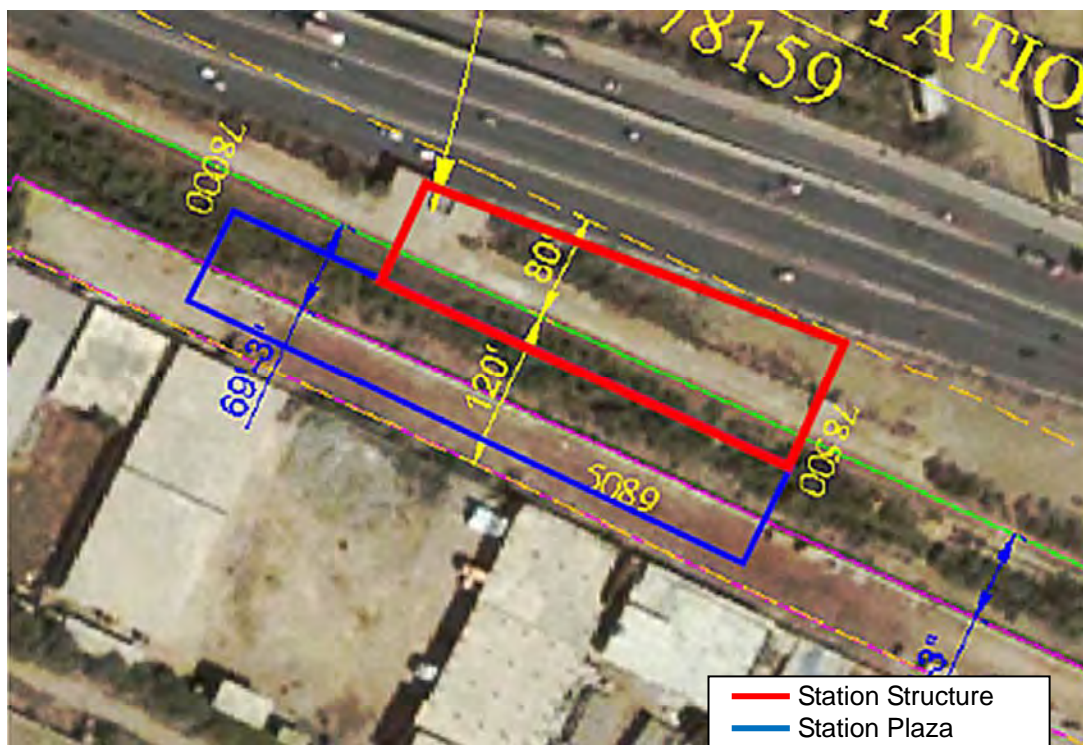
— Station Structure
— Station Plaza

Source: SAPROF-I

Figure 6 Desirable Station Plaza Plan (6/12)



(13) Shah Abdul Latif



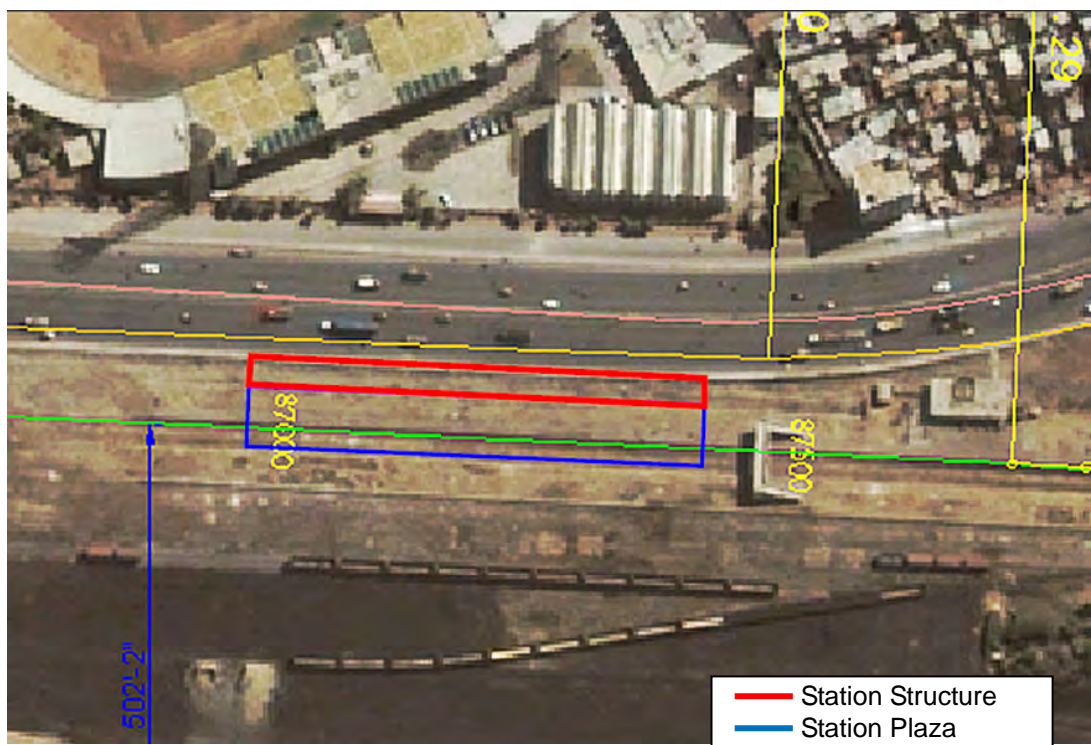
(14) Baldia

Source: SAPROF-I

Figure 7 Desirable Station Plaza Plan (7/12)



(15) Liyari



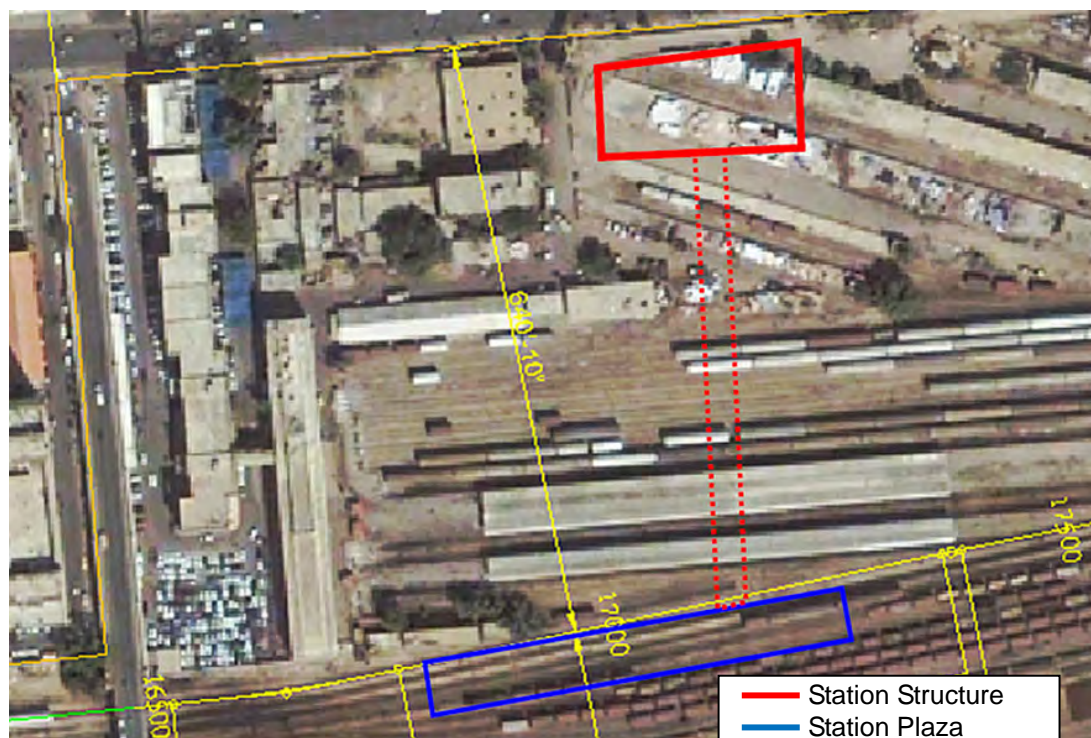
(16) Wazir Mansion

Source: SAPROF-I

Figure 8 Desirable Station Plaza Plan (8/12)



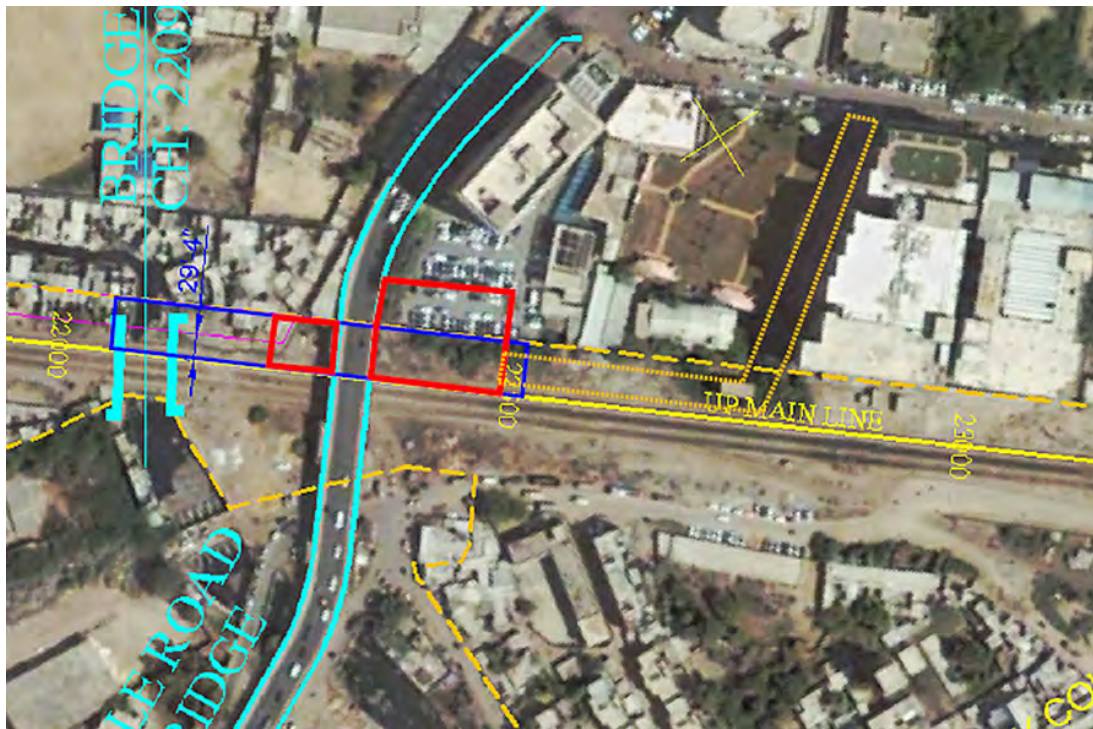
(17) Tower



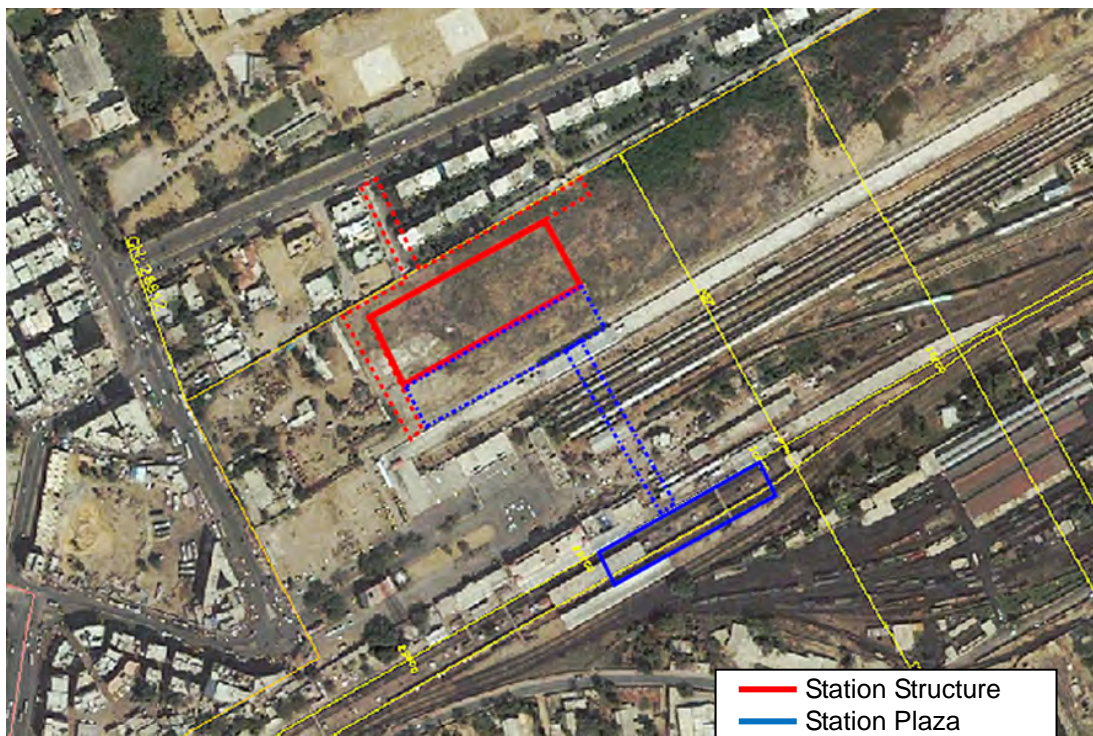
(18) Karachi City

Source: SAPROF-I

Figure 9 Desirable Station Plaza Plan (9/12)



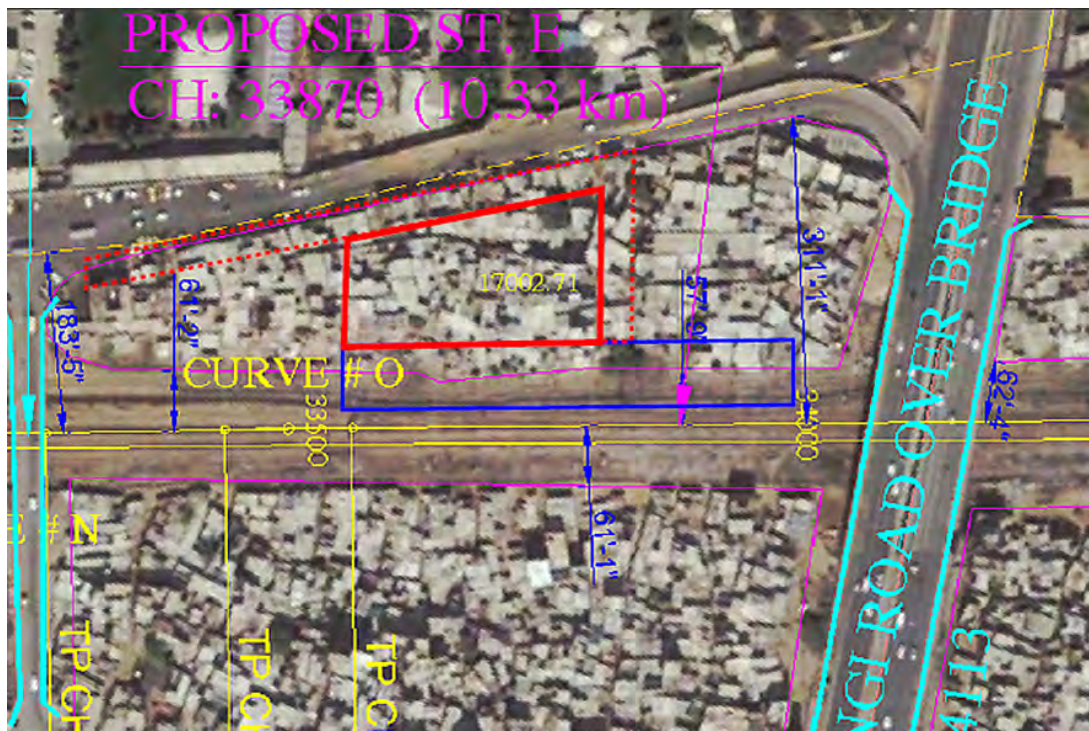
(19) DCOS



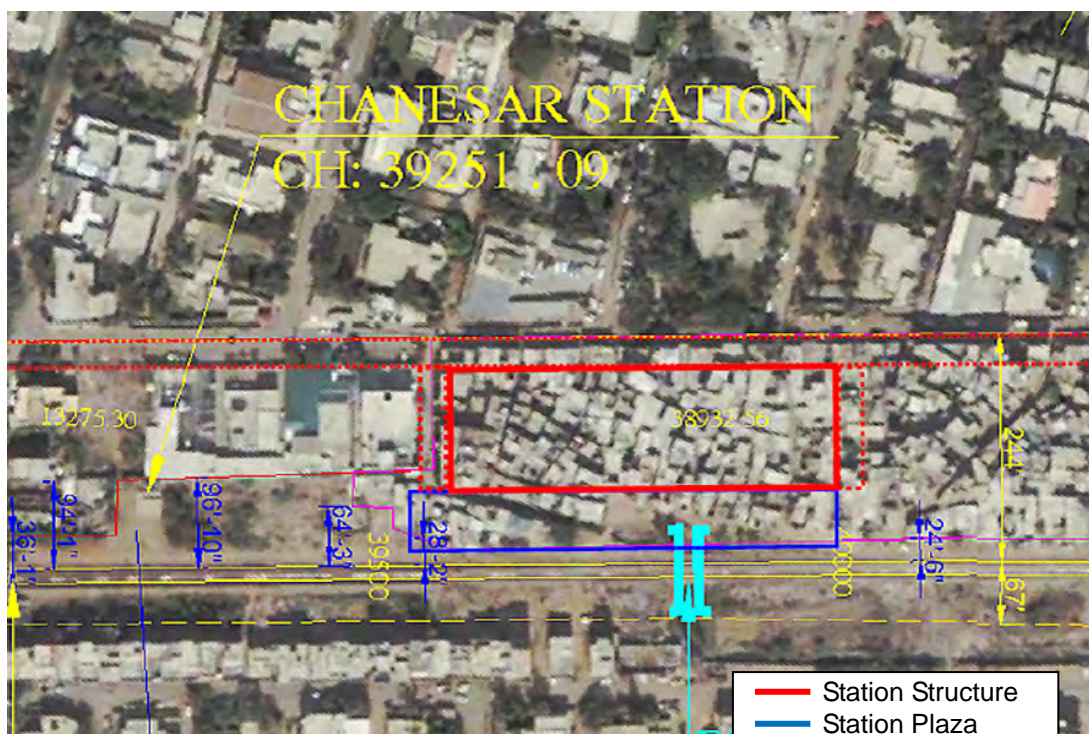
(20) Karachi Cantt.

Source: SAPROF-I

Figure 10 Desirable Station Plaza Plan (10/12)



(21) Naval



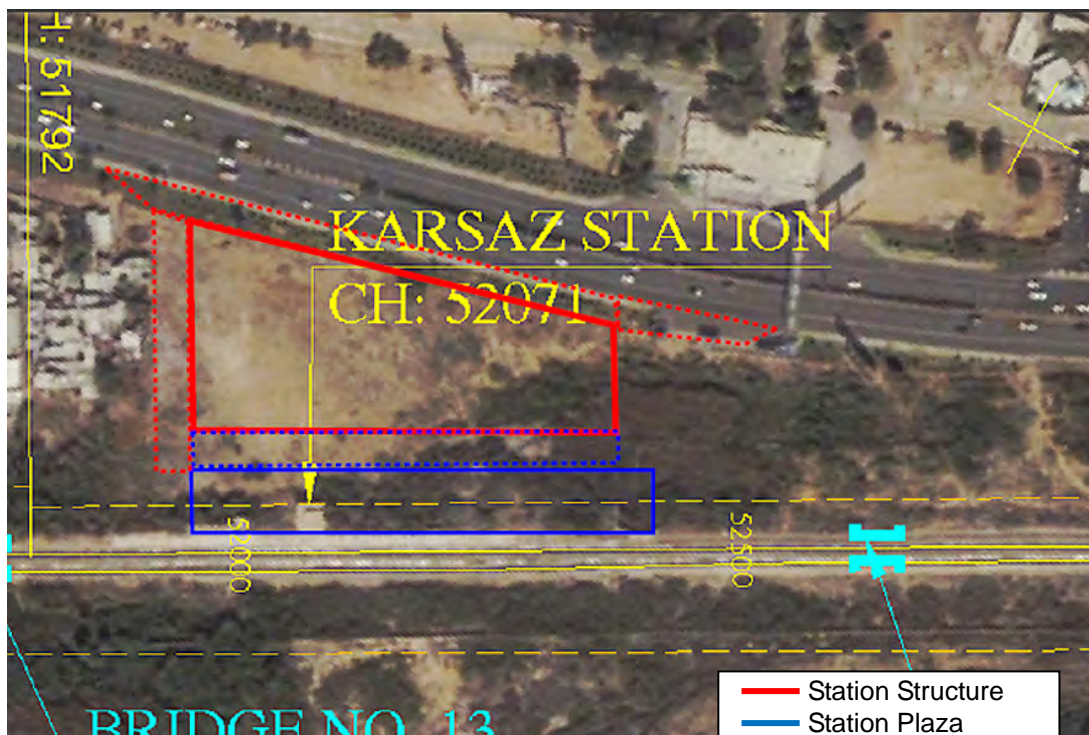
(22) Chanesar

Source: SAPROF-I

Figure 11 Desirable Station Plaza Plan (11/12)



(23) Shaheed-e-Millat



(24) Karsaz Halt

Source: SAPROF-I

Figure 12 Desirable Station Plaza Plan (12/12)

APPENDIX 4-2

Reconnaissance of Available Land for KCR and KUTC Alignment Option

Appendix 4-2 Reconnaissance of Available Land for KCR and KUTC Alignment Option

(1) Karachi City Station

KUTC had planned Karachi City Station of KCR so that shifting of PR main lines may not be required. For this reason the proposed platform width by KUTC was significantly narrow. However, when an island type platform is adopted to economize the space for KCR Karachi City Station, the width of at least 7.5 m is required to accommodate up and down escalators besides walking staircase. The location of the station is also required to move a little to the direction of DCOS station to expand the distance between track centers to accommodate the platform after the road bridge between former Karachi City KCR station and PR station. KUTC agreed on the width of platform and its location proposed by JICA Study Team through exchange of opinions. Both parties agreed to examine obstacles to arrange properly the KCR station with PR main lines and necessary measures based on the results of topographic survey.

(2) Land between Karachi City and Tower

The available land is generated by abolishing former KCR track and other track in the north side of PR main track.

(3) Tower Station

The both locations of KUTC option and JICA Study Team option are almost same, but since required technical matters are not sufficiently taken into consideration in KUTC option, JICA Study Team examines these matters and proposes Tower Station plan in this report.



Location of Karachi City Station



Location of Tower Station

Source; Resettlement Action Plan: Revival of KCR Final Report July 2011, Annex- II

Figure 1 KUTC Option on Station Planning (1)

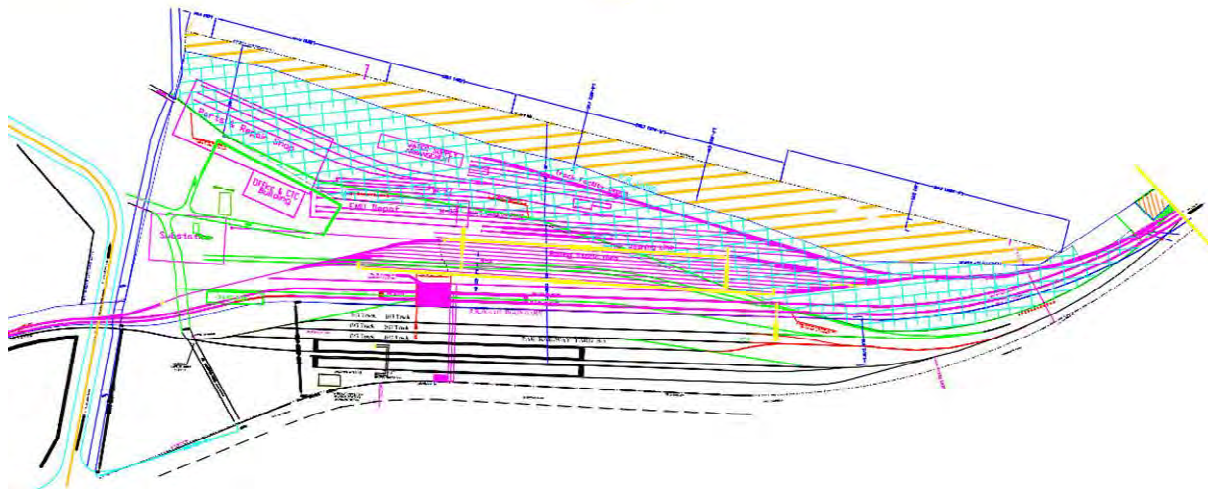
(4) Land between Tower and Wazir Mansion

Since the available PR land between Tower and Wazir Mansion is not enough for KCR double track, Karachi Port Trust Company (KPT) will provide the land required for the new KCR plan. In addition, a special consideration for KCR track alignment in the section of Jinnah Bridge is required.

(5) Wazir Mansion Station

PR maintains the land relating to the existing freight transportation and KCR facilities including KCR main line are forced to be planned at a location far from the main roads outside the land for PR freight transportation facilities in Wazir Mansion premise. Taking into consideration such conditions, JICA Study Team proposes Wazir Mansion railway facilities plan of KCR in this report.

In addition, KUTC proposed to change a viaduct station to on-ground station. As the results of exchange of opinions, the station is planned as an on-ground station.



Source; KUTC

Figure 2 KUTC Option; KCR Wazir Mansion Station

(6) Land between Wazir Mansion and Liyari

There are tremendous encroachments, where the current settlers are to be resettled, from Wazir Mansion to the Liyari River such as Muhammadi Colony (Liyari) Encroachment and Wazir Mansion Premise Encroachment.

(7) Liyari Station

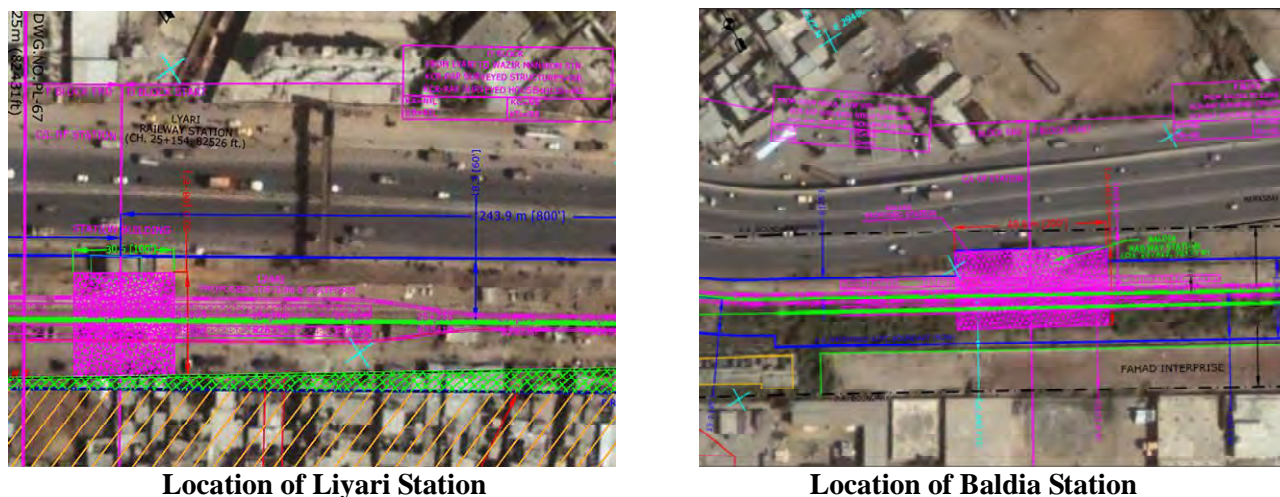
The locations of KUTC option and JICA Study Team option are almost same. JICA Study Team examines KUTC option from the viewpoint of technical requirements such as track layout for functions as a connecting station with Wazir Mansion Depot and at the same time a turnaround station for KCR Extension, and shows the revised plan in this report.

(8) Land between Liyari and Baldia

There is a long encroachment called Muhammadi Colony Encroachment continuing beyond Liyari Station to be resettled (length of around 1.11 km).

(9) Baldia Station

The locations of KUTC option and JICA Study Team option are almost same. JICA Study Team reviews KUTC option from the technical viewpoint such as platform width, and shows a proposed plan in this report.



Source; Resettlement Action Plan: Revival of KCR Final Report July 2011, Annex-II
Figure 3 KUTC Option on Station Planning (2)

(10) Land between Baldia and Shah Abdul Latif

There are two little encroachments to be resettled between Baldia and Shah Abdul Latif.

(11) Shah Abdul Latif Station

Shah Abdul Latif Station of KUTC option is located around 300m away from the location in JICA Study Team option toward SITE Station. The platform center of JICA Study Team option is placed at the center of the existing level crossing at KM-22/4-5 to avoid traversing the road by passengers taking into account passengers’ convenience because of a three-story viaduct station. As the results of discussion, KUTC accepted JICA Study Team option.

(12) Land between Shah Abdul Latif and SITE Station

There is only one little encroachment to be resettled between Shah Abdul Latif and SITE Station.

(13) SITE Station

For SITE Station, JICA Study Team option locates its center of platform at the center of Central Avenue to avoid traversing the road by KCR passengers. On the other hand, the station in KUTC option is situated at the place rather far from the Central Avenue. After the discussion on both options between KUTC and JICA Study Team, KUTC accepted JICA Study Team option, and the station is also planned using the same structure design as Shah Abdul Latif.



Location of Shah Abdul Latif Station



Location of SITE Station

Source; Resettlement Action Plan: Revival of KCR Final Report July 2011, Annex- II

Figure 4 KUTC Option on Station Planning (3)

(14) Land between SITE and Manghopir

There is no issue on the land for KCR between SITE and Manghopir.

(15) Manghopir Station

The location of KUTC option has a problem in terms of access with a connecting road as it locates a little far away from the connecting road. JICA Study Team suggested the location should be moved by 150 m to the direction of SITE to make an easy access to the road. As the results of exchange of opinions between KUTC and JICA Study Team, KUTC accepted JICA Study Team option. In addition, since the freight operation of PR will be abolished, two stabling lines will be installed using the land for the freight operation.

(16) Land between Manghopir and HBL

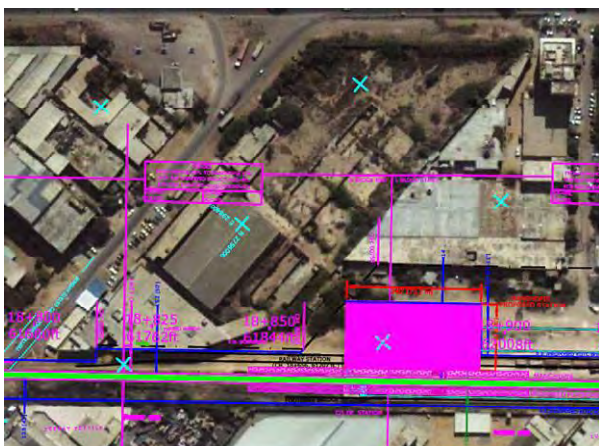
There is no issue on the land for KCR between Manghopir and HBL.

(17) HBL Station

KCR Manghopir Station of KUTC option locates at Manghopir side of Manghopir Road. However, since the planned alignment for the platform is not appropriate, JICA Study Team suggested that it should be moved to Orangi side of Manghopir Road. As the results of discussion KUTC accepted JICA Study Team option.

(18) Land between HBL and Orangi

There are no resettlement to be planned and no issues of land.



Location of Manghopir Station



Location of HBL Station

Source; Resettlement Action Plan: Revival of KCR Final Report July 2011, Annex- II

Figure 5 KUTC Option on Station Planning (4)

(19) Orangi Station

The location of KUTC option is a little far from the existing level crossing KM-16/1-2. Since Orangi Station is a viaduct, JICA Study Team suggested that it should be moved to cross over the existing level crossing so that the passengers can easily access to the both sides of the road without crosswalk, and the option proposed by JICA Study Team was accepted.

(20) Land between Orangi and North Nazimabad

Nazimabad-7 (Abeasi Level Crossing) Encroachment and North Nazimabad Station Area Encroachment are planned to be resettled.

(21) North Nazimabad Station

The location of KUTC option is a little far from Nawab Siddiq Ali Khan Road. Furthermore, the width of platform was not planned in due consideration of projected demand and station facilities such as escalators. Therefore, JICA Study Team examines KUTC option and shows the revised station plan in this report.

(22) Land between Liaquatabad and North Nazimabad

There are many encroachments such as Moosa Colony (F.B. Area) Encroachment (length of around 320 m), Christian Colony Encroachment, Wahid Colony Encroachment (length of around 590 m), Mujahid Colony Encroachment (length of around 210 m) to be resettled.

(23) Liaquatabad Station

The location of KUTC option is almost same as JICA Study Team option, but the width required for platforms and over-track station structure are not supposed to be enough due to the restriction of the land for PR housing project. Therefore, JICA Study Team examines KUTC option and shows the revised station plan in this report.



Location of Orangi Station



Location of North Nazimabad

Source; Resettlement Action Plan: Revival of KCR Final Report July 2011, Annex-II

Figure 6 KUTC Option on Station Planning (5)

(24) Land between Yasinabad and Liaquatbad

Gharibabad Encroachment (length of around 1.4 km), Quaid-e-Azam Encroachment (length of around 1.3 km) are planned to be resettled.

(25) Yasinabad Station

The platform of Yasinabad Station proposed by KUTC is planned to be just in contact with the river bed of the Liyari River, which will increase the construction cost due to influence of bridge structures. Therefore, JICA Study Team suggested that it should be slightly moved to the direction of North Nazimabad and be placed over Level Crossing KM-11/3-4. KUTC accepted the suggestion of JICA Study Team. It is also noted that the KCR structures are high viaduct due to Liyari Expressway Lamp structures.



Location of Liaquatbad Station



Location of Yasinabad Station

Source; Resettlement Action Plan: Revival of KCR Final Report July 2011, Annex-II

Figure 7 KUTC Option on Station Planning (6)

(26) Land between Yasinabad and Gilani

Gulshan-e-Iqbal 13/D (length of around 280 m) and 13/A, and Baloch Gulshan-e-Iqbal 13/E are planned to be resettled.

(27) Gilani Station

Generally a station plaza should have width of 50 m or more and its depth of 40 m or more. However, the station plaza proposed by KUTC has only 31.1m in spite of extensive land in the premise of Former Gilani Station, as PR and KUTC give the first priority to PR Housing Project in consideration that their housing projects go up in value thanks to KCR.

Although Gilani Station is planned as a viaduct station by SAPROF (I), some stabling lines of viaduct structures are also proposed by JICA Study Team to accommodate 8 train sets.

(28) Land between Gilani and Nipa

Gulshan-e-Iqbal-13/C (length of around 300 m) and Gulshan-e-Iqbal 5 (length of around 540 m) are planned to be resettled.

(29) Nipa Station

Nipa Station is situated between Rashid Minas Road and University Road. SAPROF (I) plans Nipa Station near Rashid Minas Road which is used as most of existing busy bus routes. In addition MRT Brown Line is proposed under Rashid Minas Road in the Interim Report June 2011 of the Study for Karachi Transport Improvement Project by JICA.

On the other hand BRT Line-3 is proposed on University Road in the Megacity Project by ADB. Therefore, it is an issue whether KCR Nipa Station locates near Rashid Minas Road or University Road.

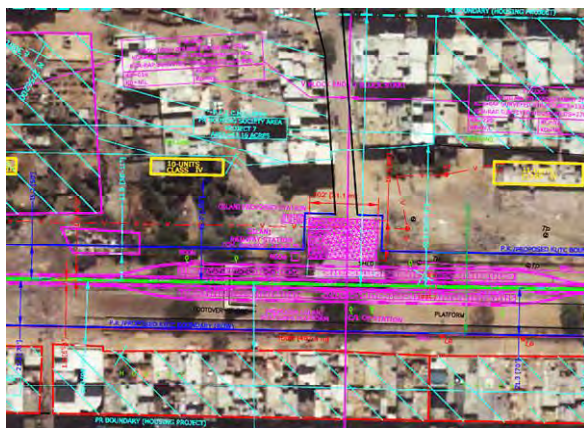
As the results of discussion between KUTC and JICA Study Team, the location of Nipa Station was decided to maintain the SAPROF (I) plan near Rashid Minas Road.

(30) Land between Nipa and Alladin Park

Most of the land between Nipa and Alladin Park is currently clogged with stagnant water and moreover, the both sides of the stagnant water are partially encroached. Therefore besides the evacuation of stagnant water, the encroachment (Jumma Goth (Nipa) Encroachment and Benazeer Basti (Nipa) Encroachment) are also planned to be resettled to be install KCR tracks.

(31) Alladin Park Station

Alladin Park Station is planned to be located at the place between Alladin Park and Safari Park. There are two main roads, that is; Gilistan-e-Johar Road which is about 1 km away and Rashid Minhas Road which is about 600 m away. Furthermore, the width of the connecting roads with the arterial roads concerned is narrow. Therefore, the issue is how the connecting roads can be developed to have enough width using the nearby vacant land. A joint venture development project between PR and the land owner of the vacant land is suggested as one solution of this issue.



Location of Gilani Station



Location of Nipa Station

Source; Resettlement Action Plan: Revival of KCR Final Report July 2011, Annex- II

Figure 8 KUTC Option on Station Planning (7)

(32) Land between Alladin Park and Johar

There is no problem on the land for KCR.

(33) Johar Station

Although the location of JICA Study Team option is Drigh Road side of Gulistan-e-Johar Road taking into account the distance between Johar and Alladin Park, KUTC Option plans the station at the Alladin Park side of the road in consideration of PR Housing projects. As the results of exchange of opinions, JICA Study Team accepted KUTC Option in terms of its location. JICA Study Team examines the technical requirements of KUTC Option and intermodal facilities between buses and KCR, and shows the revised plan in this report.



Location of Alladin Park Station



Location of Johar Station

Source; Resettlement Action Plan: Revival of KCR Final Report July 2011, Annex-II

Figure 9 KUTC Option on Station Planning (8)

(34) Land between Johar and Drigh Road

Gulistan-e-Johar Encroachment is planned to be resettled. Most of the land between Drigh Road and Johar is reserved for the housing projects of Pakistan Railway Housing Society. KUTC proposed a stabling yard for KCR train sets in a narrow gap land between KCR double track and the housing projects land. JICA Study Team examines the available land and how to connect the KCR track, and plans Depot Hill stabling yard using the area between Up Line and Down Line by expanding both track centers.

(35) Drigh Road Station

Although KUTC Option of Drigh Road Station is not shown in RAP Final Report June 2011, JICA Study Team plans KCR Drigh Road Station as a viaduct station with two island platforms at the place between PR station building and PR island platform. In addition, two stabling lines are planned if KUTC agrees the proposal.

(36) Land between Drigh Road and Karsaz Halt

In this section the available land is very narrow and KCR structure is planned as viaducts.

(37) Karsaz Halt Station

The PR land for Karsaz Halt and station plaza is not enough. Therefore, some land of the Air Force and Karachi Water & Sewage Board (KWSB) is required to be provided for KCR station facility, especially for intermodal facility with Sharah-e-Faisal Road.

(38) Land between Karsaz Halt and Shaheed-e-Millat

Darwaish Colony Encroachment (length of about 540 m) is planned to be resettled.

(39) Shaheed-e-Millat Station

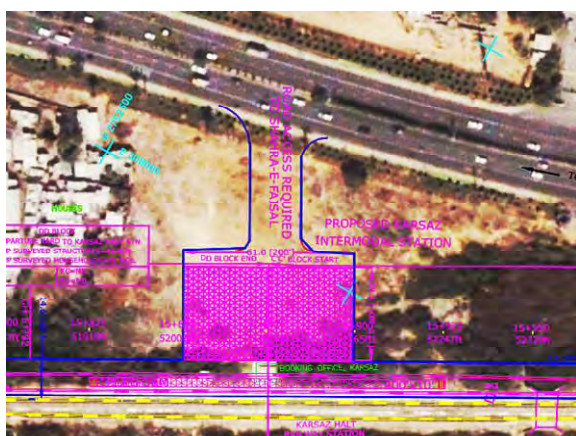
The land for Shaheed-e Millat Station is generated by shifting PR lines and resettlement of Umer Colony Encroachment. The location of KUTC Option is a little far from Shaheed-e-Millat Flyover Bridge. Therefore, JICA Study Team suggested moving the station to enable direct access to the flyover bridge for easy transfer between buses and KCR by installation of intermodal facilities. KUTC accepted the suggestion of JICA Study Team.

(40) Land between Shaheed-e-Millat and Chanesar

New Sindh Muslim Colony Encroachment (length of about 900 m) and Umer Colony Encroachment (length of about 1 km) are planned to be resettled.

(41) Chanesar Station

The land for KCR Chanesar Station is difficult to be secured and it is generated by shifting PR main lines according to KUTC Option. In addition New Sindh Muslim Colony Encroachment is planned to be resettled.



Location of Karsaz Halt Station



Location of Shaheed-e-Millat Station

Source; Resettlement Action Plan: Revival of KCR Final Report July 2011, Annex- II

Figure 10 KUTC Option on Station Planning (9)

(42) Land between Chanesar and Naval

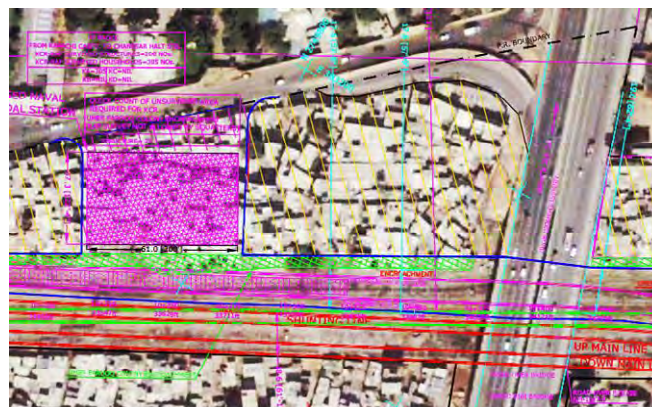
As the land for KCR is not enough, the space accommodating KCR double track is generated by shifting PR main lines according to KUTC Option. Swat Char Bagh Encroachment (length of about 300 m) and Chanesar Halt Station Encroachment (length of about 100 m) are planned to be resettled.

(43) Naval Station

The location of KUTC option is a little far from Abbassi Shaheed Road. JICA Study Team suggested that it should have direct access to the road bridge to facilitate transfer between buses and KCR by installation of intermodal facilities. As the result of exchange of opinions, KUTC and JICA Study Team agreed that the platform should be situated between the station plaza proposed by KUTC and the road bridge and both station entrances should be installed.



Location of Chanesar Station



Location of Naval Station

Source; Resettlement Action Plan: Revival of KCR Final Report July 2011, Annex- II

Figure 11 KUTC Option on Station Planning (10)

(44) Land between Naval and Karachi Cantt

Since PR plans a new freight line connecting Cantonment to Karachi Cantt, the land for KCR double track is not enough. The lack of land for KCR relates to the place near Shaheed-e-Millat Station. Therefore, KUTC plans shifting PR main lines to southward to generate the land for KCR.

JICA Study Team explained shifting PR main lines requires new installation of signaling system including CTC which may cause serious cost and time impacts on the project implementation. JICA Study Team once proposed a viaduct above PR lines.

As the result of discussion, PR line shifting option was taken **on the condition that KUTC and PR take responsibilities for the cost estimates and implementation of shifting works.**

(45) Karachi Cantt Station

The location of KUTC option is near Railway Engine Monument in the premise of PR Karachi Cantt Station, but the distance from Lilly Bridge of Fatima Jinnah Road is too short to climb up to the necessary height. KUTC agreed on the location proposed by JICA Study Team which moves a little to Naval Station **on the condition that JICA Study Team makes best efforts to shorten the distance between both options.**

(46) Land between Karachi Cantt and DCOS

In this section Kashmir Mujahid Colony encroachment (length of about 300 m) is planned to be resettled.

(47) DCOS Station

SAPROF (I) plans DCOS Station just near M.T.Khan Road, but KUTC moved its location about 200m to the direction of Karachi Cantt because of the available land constraint. In the location of KUTC Option, an over-track station structure can be constructed by placing the staircase connecting the station to the service road in a part of the road land. JICA Study Team accepted the KUTC option.

(48) Land between DCOS and Karachi City

As PC coach depot is located in the premise of PR Karachi City Station, a connecting line is installed between the depot and PR Karachi Cantt Station. Therefore, the connecting track, KCR double track and PR double track line up from the north side between DCOS and Karachi City.

In addition on the way to DCOS station, the resettlement of Gharibabad Colony Encroachment is planned to expand the available land for accommodating KCR double track.



Location of Karachi Cantt Station



Location of DCOS Station

Source; Resettlement Action Plan: Revival of KCR Final Report July 2011, Annex- II

Figure 12 KUTC Option on Station Planning (11)