

PAKISTAN

Lahore Orange Metro Train

Background

Lahore is the cultural capital of Pakistan. Apart from the World Heritage site of Lahore Fort and Shalimar Gardens there are 62 sites that are protected under the Antiquities (Amendment) Act 2012 and 176 sites that are listed under the Punjab Special Premises (Preservation) Ordinance 1985. Lahore is also proud to have three other major Mughal period monuments on the tentative list, namely Badshahi Mosque, Wazir Khan Mosque and the tombs of Emperor Jahangir and Asif Khan and the Akbari Serai between the two tombs. The walled city of Lahore has a very rich heritage in terms of individual monuments as well as urban fabric comprising residences and commercial establishments.

The colonial legacy is also deeply rooted within the Civil Lines area and areas developed by the British over their century-long rule. The population of Lahore today exceeds 10 million as the second-largest city of Pakistan and is growing at almost three percent per annum, doubling its population every decade, with spatial expansion of the city over its agricultural hinterland. This growth has its impact on the transport of the masses.

Public transport is not very efficient and over the last two decades several transport studies have been carried out in order to improve the transportation systems. The Lahore Rapid Mass Transit System (LRMTS) was an outcome of these studies which recommended four corridors for the city. The study proposed a rail-based mass transit prioritised network of the four lines of about 97 km, with 82 stations. The study also completed the feasibility study of the 1st priority (Green) Line in 2007. In parallel, the Government of Punjab (GoPb) also commissioned consultants to proceed with the reference design of the Green Line, and

also the feasibility of the 2nd priority (Orange) Line. These studies were completed in 2008 and 2007 respectively. The feasibility studies concluded that the mass transit lines are economically viable and should be implemented as planned, i.e. approximately one line after every five years.

- Green Line: 27 km long north-south along Ferozpur Road from Kahna in the south to Shahdara in the north, with 11.6 km long as underground within the city centre and 15.4 km long as overhead;
- Orange Line: 27.1 km long along Multan Road from Dera Gujran to Ali Town on GT Road with 20 km as an elevated viaduct and 7 km underground through the densely populated city where a number of historic sites and precincts are located;
- Blue Line: Jinnah Hall to Green Town – proposed future;
- Purple Line: Data Durbar to Airport – proposed future.

However, in 2012 the Green Line train system was abandoned and converted to a rapid bus transit in collaboration with the Turkish government on the build–operate–transfer basis; it was inaugurated on February 11, 2013. It has been designed as a barrier-controlled line on-grade with an 8.5 km elevated track. The elevated portion of the bus track runs through the heart of the city along Ferozpur Road, Lower Mall and Ravi Road where many historic colonial-period buildings are located. The barriers along the on-grade portion have divided communities and the elevated component is a visual intrusion.

The second priority Orange Metro Line was envisaged to be 27 km long with detailed reference design incorporating tunnel technology (TBM). Tunnel technology is more expensive than the elevated and cut-and-cover technology and also time-consuming. However, the latter also involves disruption of the existing city utility infrastructure and the buildings, community disruption, including land acquisition, and visual intrusion, particularly in the historic part of the city. It also poses a threat to protected/listed



Shalimar Gardens and hydraulic tanks on GT Road



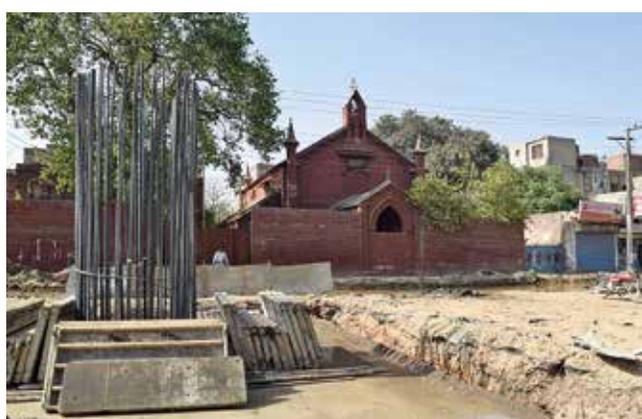
Construction of viaduct piers in front of Shalimar



Construction of viaduct piers in front of Gulabi Bagh



Construction of viaduct piers in front of Buddha Ka Awa



Kinnaird School church on Nicholson Road



Building typology on McLeod Road: Art Deco style

heritage sites. Tunnel technology is currently employed in most parts of the world as it overcomes all the negative aspects of the cut-and-cover technology.

The Orange Metro Line

The system adopted by the Punjab Government in 2014 for the Orange Line has changed the originally proposed elevated and TBM system with an elevated train for 25.4 km and cut-and-cover technology for 1.7 km in the central area from Lake Road to Lakshmi Chowk on McLeod Road, imposing danger to heritage sites such as visual intrusions and displacing thousands of communities/people. The proposal puts the overall cost of the project at \$ 1.6 billion but does not take into account the cost of shifting the infrastructure, land acquisition and reconstruction of disrupted buildings and roads. The cost of the visual intrusion of Lahore as a cultural site and its historic monuments is completely ignored, which is priceless. On average, the height of the elevated portion is 41 feet, cutting through 12 km of the heart of the historic and cultural centre of Lahore where the population density is also extremely high. Twelve listed and protected heritage sites are along the route within a few metres of the train line.

Civil society has protested against the technology that is being employed, i. e. an elevated viaduct and cut-and-cover through the historic precincts of Lahore. It has held demonstrations for the work to stop which the Government of Punjab (GoP) has

ignored. Thus, civil society was left with no option but to file a case in the Lahore High Court in December 2015. The case is ongoing and in January 2016 the court put a stay on the construction within 200 feet of the 12 heritage sites that fall on the route. In response the GoP has accelerated the speed of its works just beyond the 200 feet limit and 40 feet piers now stand as visual intrusions to these heritage sites. Civil society has also drawn the attention of UNESCO to the damage to the World Heritage site of Shalimar Gardens, including the hydraulic tanks which were damaged in 1999 due to the widening of GT Road. The property was put on the World Heritage in Danger List until 2012 when after much effort it was reinstated back on the World Heritage List. UNESCO Pakistan and UNESCO Paris have both instructed the Government to halt all construction work in the vicinity of Shalimar. The latest update from UNESCO as per their website is the following:

The World Heritage Committee at its 38th session (Doha, 2014) requested the State Party of Pakistan to submit to the World Heritage Centre, by 1st December 2015, an updated report on the state of conservation of the Fort and Shalimar Gardens in Lahore property and the implementation of the decision of the World Heritage Committee.

In this context, the current UNESCO mission to Lahore (21 February 2016) will focus on information issues pertaining to the on-going Orange Metro Line project. In addition, it should be crucial that the Government of Punjab provides the World Heritage Centre, through the Federal Government, with the technical details on the Orange Metro Line project, such as draw-



Lakshmi Building

ings, maps, technical data, etc. In particular the Heritage Impact Assessment is required on the basis of which a final report and working documents as well as a set of recommendations on this matter will be prepared and submitted to the World Heritage Committee at its 40th session for examination.

The state of conservation of this property will be reviewed by the World Heritage Committee at its 40th session to take place from 10 to 20 July 2016 in Istanbul, Turkey.

The process of initiating the construction of the Orange Line is beset with anomalies and the violation of the law of the land.

I. Violation of Laws

a. Pakistani law states that no new construction can be undertaken within 200 feet of the perimeter wall of a heritage site or listed building, see Antiquities Act 1975 Article 22, and The Punjab Special Premises Preservation Ordinance 1985, Section 11. The current situation is outlined below:

Buildings Protected under Antiquities Act 1975

1. Shalimar Bagh (1641): perimeter wall, elevated viaduct, distance 95 feet
2. Hydraulic tanks of Shalimar Gardens (1641): elevated viaduct, distance 7 feet
3. Gulabi Bagh Gateway (1655): elevated viaduct, distance 69 feet
4. Buddha ka Awa (mid-17th century): elevated viaduct, distance 59 feet

5. Zaib-un-Nisa's Tomb (17th century): elevated viaduct, distance 110 feet
6. Chauburji (1646): elevated viaduct, distance 53 feet

Buildings Listed under Punjab Special Premises Ordinance 1985

1. Mauj Darya Darbar (1591): excavation distance for cut-and-cover tunnel, 16 feet
2. Mauj Darya Mosque (associated with Mauj Darya Darbar): demolition
3. The General Post Office (1902): excavation distance for cut-and-cover tunnel, 42 feet
4. Lahore Cathedral (1898): sewage treatment pump within the compound of the church
5. Shah Chiragh Garden (19th century): excavation distance for cut-and-cover tunnel, 66 feet
6. St Andrews Church (1860): excavation distance for cut-and-cover tunnel, 6 feet
7. The Supreme Court Registry: excavation distance for cut-and-cover tunnel, 58 feet
8. Shah Chiragh Din Building: excavation distance for cut-and-cover tunnel, 66 feet
9. Lakshmi Building (1935): elevated viaduct, distance 34 feet
10. Number of unlisted buildings dating back to the colonial era along the route.

b. The Director General (DG) of Archaeology Punjab who was in charge at the time of the beginning of the construction did not issue the No Objection Certificate (NOC) which is a prerequisite if any activity is to take place within 200 feet of a protected monument. The government ignored this and began construc-

tion. After various public protests the government tried to pressurise the DG to issue an NOC where the Orange Line violates heritage laws. On 12 November 2015, the DG was removed from his post and a new DG provided an NOC within 48 hours.

- c. The Heritage Impact Assessment Report (HIA) was initiated in February 2016 at the request of the UNESCO mission that finally prompted the government to prepare the HIA. This was five months after the construction had been initiated and submitted to the High Court in April 2016. This document is an essential component of any project prior to its implementation process to ensure adequate mitigation and monitoring systems are in place for the protection of heritage sites. The HIA Report points out permanent impact on all 12 heritage sites along the route and has recommended a series of mitigation measures which are yet to be implemented as construction work continues.
- d. Multiple green spaces are being absorbed by the metro construction and a large number of mature trees are being cut. There is no information provided regarding international climate agreements or environmental protocols in the construction process. Temperatures within the city are likely to rise as a result of these development initiatives and of the urban heat island effect.

II. Cultural Heritage and Community Dispersal/Splintering

- a. Many affected communities are close knit, interdependent and unique cultural entities resident in their areas for a century or more. Many more have been resident since 1947. Kapurthala House is one such area which has already been demolished. Some communities whose land was being forcibly acquired also filed a case against the GoPb. However, the government immediately set about paying compensation to the residents and buying them off. Large numbers of people living in the inner city areas have no property documents, and extended families living in one room with joint ownership are a very easy bait to accept the compensation and move out to purchase/rent legally.
- b. Viability of public and private space. The Orange Line track is elevated at a height of 41' for 25.9 km of its 27.1 km route. It passes within metres of densely occupied private and public space, effectively compromising both privacy and security.
- c. The 250,000 projected passenger strength will be able to see into thousands of homes. Culturally this is not acceptable. It will threaten the security of churches and other places of worship, as well as of schools, colleges, etc and open up the most vulnerable of these to terrorist attacks. Current security measures in response to terrorism will become totally ineffective. High walls, barbed wire fences, security guards will all be overlooked by the train.

III. Violation of Human Rights and Due Process

The Orange Line train route has changed four times. Since the public hearings announcing the project in June 2015, the public has been given no definite information as to the final route, while construction is underway and large parts of Lahore have been dug up and pylons inserted. For example, Kapurthala House residents, many of whom live below the poverty line, have had their homes,

shops and places of worship demolished, including an unregistered Imam Barga (congregation hall for Shia commemoration ceremonies), aside from the shrine and mosque of Baba Mauj Darya, without having received adequate official notification.

As a general rule other Lahore residents have also been forcibly told to vacate their homes under the following conditions:

- i. They have received only 0.25 of the value of the vacated property as compensation. Full compensation will only be paid at a later date if residents can produce complete property ownership papers.
- ii. All other residents will receive nothing and their land is marked as public/government-owned. A large number of citizens do not have property papers, because acquiring these is an arduous process requiring time and money for bribes. Most residents belong to the lower income strata, as e.g. the residents of Kapurthala House who do not have the financial buffer to either find alternative housing or to get property ownership papers.
- iii. Residents of Kapurthala House have been living here for almost 70 years or more. This is a community with a unique and ancient cultural imprint.
- iv. Kapurthala House residents, Jain Mandir residents, Shalamar business owners, citizen groups have been holding protests consistently against the Orange Line route since construction has begun.
- v. The Orange Line train and similar completed or planned transport network projects provide no foot or bicycle access across; they also remove spaces where informal stalls provide goods and services. They also divide the city and create exclusion zones by this fact.

IV. Transparency

Pakistan paid Rs. 92 million for a transport network feasibility study in 2006. This included the Orange and Green Line train lines and had stringent measures protecting heritage, community and the environment. The JICA plan would have used tunnel technology which would not have impacted the surface. Most issues pertaining to heritage and community destruction, forcible land acquisition etc would have been resolved by this. The interchange station currently positioned on the Kapurthala House community and threatening the protected heritage sites (Shrine of Baba Mauj Darya and Mauj Darya Mosque) would have been positioned on the current customs house which is a government building. The current government rejected this study and paid the NORINCO Technical Proposal for a second study. The current Orange Line tenders have been issued on the basis of the NORINCO Technical Proposal which proposes elevated viaducts and only a short 1.2 kilometre distance using cut-and-cover. The HIA study according to which the impact of the construction of the metro using this technology after completion will be permanent has so far been ignored and no mitigation measures are in place.

The Punjab Government wants to complete this project before the 2018 elections. Considering the speed at which the Orange Line is being built the government will probably be able to achieve this goal. However, it will be at the cost of losing the soul of the city of Lahore.

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