TAMBARAM MUNICIPALITY

TAMILNADU SUSTAINABLE URBAN DEVELOPMENT PROJECT (TNSUDP) - 2020-21

Environmental Screening Report

1. **Project Town: Tambaram Municipality**
2. **Sub-Project: Improvement of Roads**
3. **Brief Introduction& Background**

Tambaram, a special grade Municipality, is situated at a distance of about 63 km from the district headquarters and 30 km from Chennai, and well connected by good network of roads and railway line. The Grand Southern Trunk Road (National Highway 45) Chennai-Villupuram Railway Line and Tambaram – Beach Sub-Urban Line divide the town into two zones- West Tambaram and East Tambaram. The population of the town as per 2011 census is 1,74,830 and the present population is about 2,05,000. The extent of the municipality is 20.72 sq.km, is divided into 39 wards for administrative purpose. The Villupuram Railway Line and Tambaram –Beach Sub-Urban Line divides the town into two zones- West Tambaram and East Tambaram.

Madras Export Processing zone (MEPZ) is located within the municipal limit which is famous for export processing units, finished leather goods, textile garment factories and factories of electrical goods and ancillary items. The town has renowned educational institutions like Madras Christian College and Bharat Engineering college. The Municipality is maintaining about 178.057 km of road network in which Black Topping 77.867Km, Cement concrete 96.554Km, WBM 1.401Km, Paver Block – 2.235 Km

Tambaram Under Ground Sewerage Scheme is under implementation with the financial assistance under JNNURM for Rs.160.97 Crore and the work is being implemented through CMWSSBoard.

Due to the above project, provision, upgradation and maintenance of the existing roads were stalled for about one year and most of the roads were damaged due to excavation of trenches for laying of sewer main, manholes and provision of House Service Connections under UGS Scheme and also due to natural calamities.

4. The Project Objectives and Need

Tambaram Under Ground Sewerage Scheme is under implementation with the financial assistance under JNNURM for Rs.160.97 Crore for 176 km of road streets and the work is being implemented through CMWSS Board. So far the work has been completed for 172.960km in laying collection system provide House Service Connection and manholes.

Due to the above project, provision, upgradation and maintenance of the existing roads were stalled for about one year and most of the roads were damaged due to excavation of trenches for laying of sewer main and due to wear and tear during vehicular traffic and by the natural calamities. Hence it is necessary to restore the damaged roads and improving the existing status of the road by laying new formation.

The estimates has been prepared based on guidelines issued by the Government for the restoration of roads in Corporations and Municipalities damaged due to natural calamities, implementation of underground sewerage and water supply schemes, etc. which include restoration of damaged roads, improvements, up-gradation and relaying of roads.

Priority has been given to roads damaged in or due to implementation of infrastructure works such as laying of sewer lines or water mains etc. and they have been considered even if they were laid within 3 years. Bus plying roads, roads important from heritage, pilgrimage or tourism point of view, and/or roads leading to educational institutions, market places /industrial clusters, have also been considered only if they were laid before 2 to 3 years.

The Nature of restoration and relaying has been suitably decided based on the traffic volume, purpose of connectivity, and the width of road. Accordingly the roads having 4 m width and has width are proposed as cement concrete pavement, and the roads having more than 4 m width are proposed as paver Bituminous surface. In some case, though the road having more than 4m width considering the existing nature of the road, Cement Concrete pavement are proposed.

Proposed Project

The provisions have been made in this estimate as per the guide lines issued by the Government for the restoration of roads in Corporations and Municipalities damaged due to natural calamities, implementation of underground sewerage and water supply schemes, etc. which include restoration of damaged roads, improvements, up-gradation and relaying of roads.

Due to the non availability of good gritty gravel, instead of WBM, the WetMix Macadam has been proposed as per clause 506 MORTH specifications.

The total road has been damaged due to the excavation of trench for collection system and due to the trench excavation for house service connection. This entire cut open portion has been restored with adequate Provision to avoid settlement after relaying the road. In the case of Black Toping road, Granular sub base of 15 cm thick have been provided to improve the CBR value

It is proposed to take up the 5 Packages, and the estimate cost works out to **Rs. 1000.00** Lakhs under Tamilnadu Sustainable Urban Development Project (TNSUDP) 2020-21. The nature of restoration and relaying has been suitably decided based on the traffic volume, purpose of connectivity, and the width of road.

Sl.No	Name of the Road	Available RoW (m)	Proposed road width (m)	Length of the Road (Km)	Impacts to utilities/ others	Remarks on Social Impacts
1	Providing BT surface to Periyalwar street Ward-11,MGR street, Ward-13, Valmigi street W-13&14, Nagammai street Muthuramalingam street Ward-16,Chakkaravarthi street Salamon street, Salamon street Extn, Rajarao street W-17 Thangal karai street, VGN avenue Periyar street , Rajaji Street, Eswari Nagar, Eswari Nagar extn, Kannan street , School street,Raja Iyer street ,Kulakkarai street , Vengadasamy street,Kannappar street Extn,Veerabathran street and Ranganathan street ward-19 East Tambaram in Tambaram Municipality (Package No.1)	4 to 10	4 to 10	4.696	-	-
	Providing BT surface to Dhanalakshmi street , Ista sithi vinayagar koil street, Ganesh Nagar Pillaiyar	4 to 15	4 to 15	4.110	-	-

Sl.No	Name of the Road	Available RoW (m)	Proposed road width (m)	Length of the Road (Km)	Impacts to utilities/ others	Remarks on Social Impacts
2	koil street ,Silapthigaram street, 100 Feet Road, Abirami street, Kannan Nagar,Gangai Amman Koil street, Sri Ram Nagar 3rd street, Sri Ram Nagar 4th street Ganabathy Colony , Vallalar street Ward -19 Jegajeevanram Nagar, Ponniamman Koil street, Ambedhkar Burial Ground Road Ricky Garden Main road , Ricky Garden 1st ,2nd,street ,1st cross street,2nd cross street 3rd cross street, 4th cross street Ward -21 MES road Ward -25 East Tambaram area in Tambaram Municipality (Package No.2)					
3	Providing BT surface to Maruthi Avenue, Srinivasa Nagar, Vignesh Avenue 1st cross street,2nd cross street, 3rd cross street, 4th cross street, Ward - 21, Jegajeevanram street Ward-22, SOS street IAF road Ward-23 Ashok Nagar North street Ward -24 MES second street, Thiruvalluvar street ,Kamatchi amman koil street Ward -25, Ashok Nagar Main road ,Suthanantha Barathi street (MSP Lane) Sengeniamman koil 1st street 2nd street Ward -26 Roja Thottam, Gothavati street, Thilagavathi Nagar Pillaiyar koil street and Arul Nagar Ward -27 East Tambaram area in Tambaram Municipality (Package No.3)	3 to 12	3 to 12	4.505	-	-

Sl.No	Name of the Road	Available RoW (m)	Proposed road width (m)	Length of the Road (Km)	Impacts to utilities/ others	Remarks on Social Impacts
4	Providing BT surface and Retaining wall cross drainage works to Pulikoradu extn, Pulikoradu mainroad, Pulikoradu gangai amman kovil street Middile street, Durga Nagar W-38 Amman koil back side street W-01 and BT surface to Ranganathapuram 6h street and 6th cross street W-7 Kadaperi East Street, School street, Kalangal street, Kadaperi pillaiyar kovil street, Middile street Arputham Nagar Kulakkarai street, Thangalkarai street, Ward -01, Ranganathapuram 4th street Ward -05 Singaravelan street w-09 Nethaji street W-39 West Tambaram area in Tambaram Municipality (Package No.4)	4.50 to 10.00	4.50 to 10.00	3.250	-	-
5	Providing WMM with BT surface, Retaining wall and cross drainage works to Vasantham Nagar Durga Nagar W-38 West Tambaram in Tambaram Municipality (Package No.5)	5.00 to 6.00	5.00 to 6.00	1.444	-	-

Details		
1. No. of Roads proposed	93 nos	
2.Total Length of Roads	18.005Km	
3. Type of Road	Nos	Total Length
a.BT Road	93	18.005Km
b.WMM road	0	0
c.CC Road	0	0
d. Paver block	0	0

3. New road (proposed)	0	0
4.Construction of drain		
New Drain	0	0
Rehabilitation	2	0.540Km
	Yes/No	Extent
4. Land Acquisition	-	-
5. Land Alienation	-	-
	Yes/No	Nos
6. Any social impacts Encroachment/Squatting/Hawkers	-	-
6. Impacts to Community & Religious Structures	-	-
7. Impacts to Utilities (EB Post, Stand post etc)	-	-

No widening roads proposed Improvements to roads are proposed only within existing width . The drains are connected to Amman kovil street and Pillaiyar kovil street in ward No.01.

5. Environmental Screening

Description of the nearby features of the identified roads (schools, hospitals, religious features, presence of trees, waterbodies – lakes, rivers)

All roads connected with school, hospitals, religious features and no one trees affected to executed the project, Waste from construction will be used for filling the low level areas without affecting water bodies.

6. Permissions/ *Clearances*

Details of the permissions required from other departments (PWD, Forest, TNPCB, CRZ, ASI, etc)

All the roads are under maintenance of the Tambaram Municipality and are ready for laying of roads. No need get permission from the other departments. The proposed roads are free from encroachment/squatting/hawkers and doesn't involve acquisition of private land. If any impacts identified /encountered during the implementation of the project will be mitigated as per Social Safeguards – Entitlement Matrix of Environmental and Social Management Framework (ESMF) of TNSUDP

Commissioner
Tambaram Municipality

31/12/2018

TAMBARAM MUNICIPALITY

TAMILNADU SUSTAINABLE URBAN DEVELOPMENT PROJECT (TNSUDP) - 2020-21

TNSUDP

ENVIRONMENTAL SCREENING FORM

Name of the Borrower: Commissioner, Tambaram Municipality

Project location : Tambaram East & West areas

Project : Providing Improvements to Road and Drain

Project Components		
Sl.no	**Components**	**Details**
1	Brief description of the project proposal	The estimates has been prepared based on guidelines issued by the Government for the restoration of roads in Corporations and Municipalities damaged due to natural calamities, implementation of underground sewerage and water supply schemes, etc. which include restoration of damaged roads, improvements, up-gradation and relaying of roads. Priority has been given to roads damaged in or due to implementation of infrastructure works such as laying of sewer lines or water mains etc. and they have been considered even if they were laid within 3 years. Bus plying roads, roads important from heritage, pilgrimage or tourism point of view, and/or roads leading to educational institutions, market places /industrial clusters, have also been considered only if they were laid before 2 to 3 years. The Nature of restoration and relaying has been suitably decided based on the traffic volume, purpose of connectivity, and the width of road. Accordingly the roads having 4 m width and has width are proposed as cement concrete pavement, and the roads having more than 4 m width are proposed as Bituminous surface. In some case, though the road having more than 4m width considering the existing nature of the road, Cement Concrete pavement are proposed.
2	Number of project sites and Project components	5 nos of packages. Total street - 93; Total length (BT Road Improvements) – 18.005 km SWD - 0.540km, Retaining wall 2.134 Km 1. Advance patches work 13.20 mm Advance patch work using 50mm consolidated thickness. 2. Dismantling the Bitumen surface 50mm by miller machine etc. 3. Provision of tack coat thick 2.0Kgs/10sqm over the primer surface

		4. Provision of Dense Bituminous macadam (DBM) 50mm thick. 5. Provision of Bituminous Concrete (BC) 30mm thick. 6. Provision of Road Marking signs using 2.5mm thick. Supply and fixing of reflective road studs as per IRC standards		
3	Details of Alignment and Component	Existing roads correctly in use.		
4	Location of the Project Sites & Current Use (Provide information for all sites involved in the project)	Map attached		
	Biological Environment			
Sl.no	**Components**	**Yes**	**No**	**Details**
5	Is the project adjacent to any of the following (Provide information for all sites and alignment of the project)			
(i).	Cultural Heritage site		No	
(ii).	Protected Area		No	
(iii).	Wet Land/ Mangrove/ Estuarine Region		No	
(iv).	Natural Forests		No	
(v).	Other Sensitive Environmental Components as listed in ESMF		No	
(vi).	Residences, schools, hospitals etc	Yes		
(vii).	Drinking water source, upstream and downstream uses of rivers etc		No	
(viii).	Lowlying areas prone to flooding / areas of Tidal Influence (CRZ)		No	
6.	Does the proposed project could cause the following			
(i).	Impact on Surrounding Environmental Conditions		No	
(ii).	Degradation of land / eco-systems		No	
(iii).	Loss or impacts on Cultural / heritage		No	

	properties			
(iv).	Water Resource Problems		No	
(v).	Pollution of Water bodies / ground water		No	
(vi).	Cutting of Trees / Loss of Vegetation		No	
(vii).	Health & Safety Risks in the neighbourhood		No	
(viii).	Potential risk of habitat fragmentation due to the clearing activities? (eg. Hindrance to the local bio diversity like disturbing the migratory path of animals/ birds etc.)		No	
	Physical Environment			
	Components	**Yes**	**No**	**Details**
7	Will the project affects the River flow pattern, stream pattern or any other irrigation canal?		No	
8	Water quantity? Estimated usage of water quantity for the project	Yes		Approximately 54000 Lit to be arranged by the contractor
9	Estimated energy consumption for the project activities		No	
10	Any other resources proposed to be utilized for project activity? (eg., ground water)		No	
	Geology / Soils			
	Components	**Yes**	**No**	**Details**
11	Does the project activity involve cutting and filling/ blasting etc...?	Yes		Earth work excavation cutting for culvert for cross drainage and retaining wall. Excavated excess earth will be used for filling.
12	Will the project cause physical changes in the project area (e.g.,		No	

	changes to the topography) due to excavation, earthwork etc...?			
13	Will the project involve any quarrying/ mining etc?		No	
	Pollution			
	Components	**Yes**	**No**	**Details**
14	Will the project use or store dangerous substances (e.g., large quantities of hazardous chemicals/ materials like Chlorine, Diesel, Petroleum products etc...)?		No	
15	Will the project produce solid or liquid wastes?		No	
16	Will the project cause air pollution or increase in emission of pollutants?		No	
17	Will the project generate or increase noise?		No	
18	Will the project generate water pollution (water bodies/ groundwater)?		No	
19	Will the project cause construction Hazard to workers/ residents		No	
20	Is there a potential for release of toxic gases or accident risks		No	
	Environmental Enhancement Measures			
	Components	**Yes**	**No**	**Details**
21	Has the Project design considered the following?		No	
(i).	Is the project design considering energy conservation measures/ energy recovery options?		No	

(ii).	Is the project considering waste minimisation or waste reuse/recycle options?		No	
(iii).	Has the project design considered RWH or any other environmental enhancement measure?		No	
(iv).	Has the project design considered extreme events, drought, flood, natural disasters?	Yes		Design considered for natural calamities
	General			
22	Please indicate whether any other features of the project that could influence ambient environment	Yes		Less dust pollution , rain water free flow to reach the water bodies.
23	Has any consultation with the public or stakeholders been conducted?	Yes		Public requested to restoration of damaged roads to free flow of traffic and public.

Commissioner
Tambaram Spl. Grade Municipality

Date: _____

_____
Signature and name of the Borrower

Enclosures: (Provide maps with the geographical location of the project; and an appropriately-scaled map clearly showing the project area and project sites with land use, existing buildings, infrastructure, vegetation, adjacent land use, utility lines, access roads and any planned construction, as required).