National Highways Authority of India

(Ministry of Road Transport & Highways)

PATEL CHOLOPURAM-THANJAVUR HIGHWAY PRIVATE LIMITED

Four laning of Cholopuram - Thanjavur from Km 116.440 to Km.164.275 section of NH-45C in the state of Tamilnadu under NHDP Phase-IV on Hybrid Annuity Mode.

INDEPENDENT ENGINEER

M/s. Theme Engineering Services Pvt. Ltd

MONTHLY PROGRESS REPORT

JULY 2019

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Executive Summary

The old National Highway (NH -36) runs through the state of Tamil Nadu. The project road is part of the 168 km long Vikravandi to Thanjavur section of the existing National Highway 36 (NH-36). Recently MORTH has amended the number and Length of the National Highways. The old NH 12 in the state of Tamil Nadu has become the part of the New National Highway 45C. It links Chennai with Thanjavur and is 418 km long.

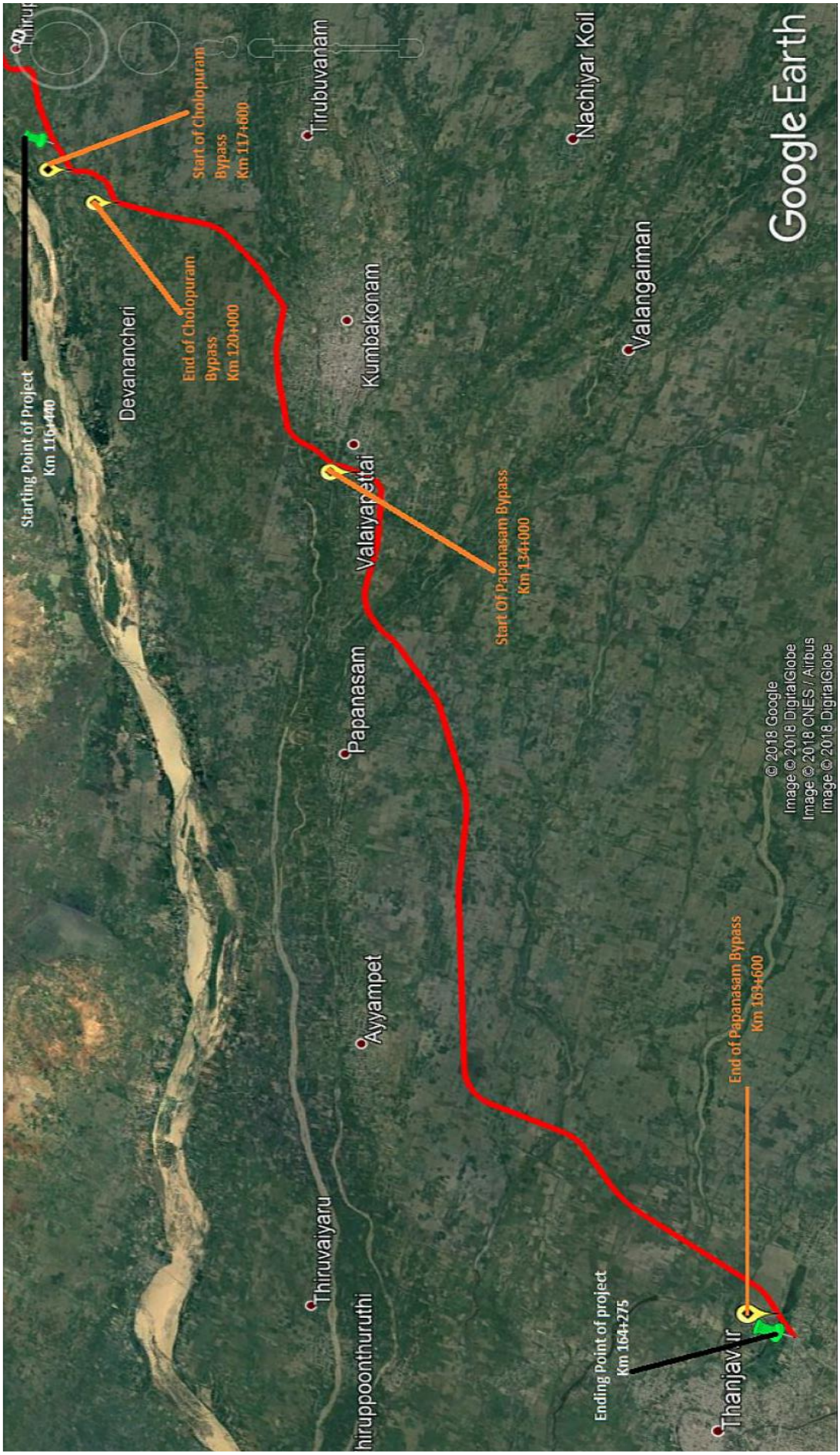
The Cholopuram to Thanjavur section of NH-45C is an important link to connect Metropolitan city of Chennai to religious and tourist places of Kumbakonam, Thanjavur, Tiruchirapalli. The project is also expected to provide improved connectivity to other religious places & other major cities like Thanjavur, Rameswaram, Madurai, Tiruchirappalli, etc.

Project Synopsis

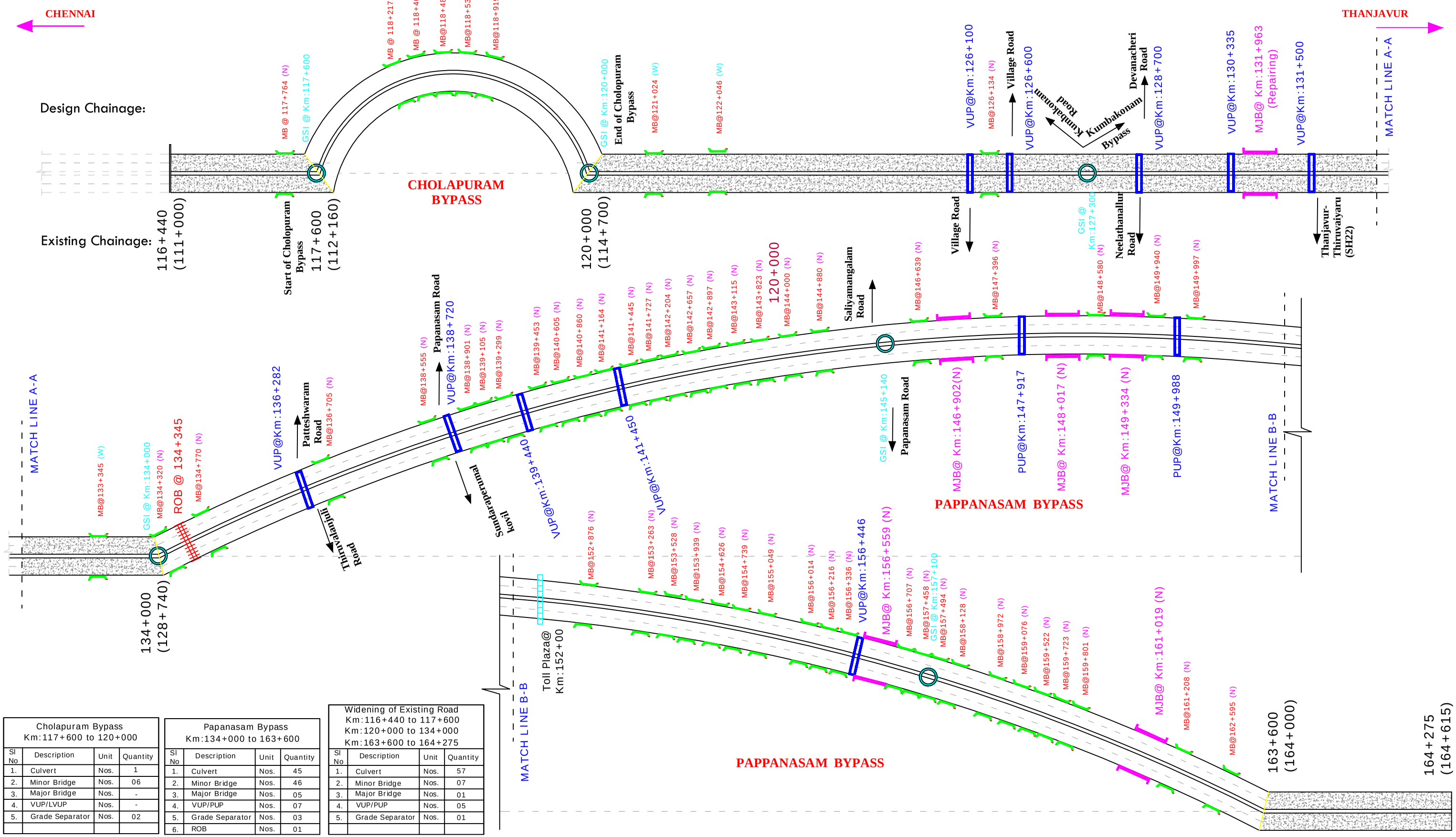
The Government of India had entrusted to the National Highway Authority of India (NHAI) the development, maintenance and management of National Highway No. 45C including the section from km 116.440 to Km 164.275 (approx. 47.835 Km). The Authority had resolved to augment for four Laning of Cholopuram - Thanjavur from Km 116.440 to Km 164.275 section of NH - 45C in the State of Tamilnadu under NHDP Phase-IV on "Hybrid Annuity" basis.

The scope of work will broadly include rehabilitation, upgradation and widening of the existing carriageway to four - lane standards with construction of new pavement, rehabilitation of existing pavement, construction and/or rehabilitation of major and minor bridges, culverts, road intersections, interchanges, drains etc. Including those prescribed in the Concession Agreement and its Schedule and the operation and maintenance itself. The map of project road is given in Figures below. The details of habitations are given in table - 01.

Figure 1: Project Location Map



STRIP PLAN - CHOLAPURAM TO THANJAVUR HIGHWAY PROJECT OF NH45 C



Cholapuram Bypass Km:117+600 to 120+000			
Sl No	Description	Unit	Quantity
1.	Culvert	Nos.	1
2.	Minor Bridge	Nos.	06
3.	Major Bridge	Nos.	-
4.	VUP/LVUP	Nos.	-
5.	Grade Separator	Nos.	02

Papanasam Bypass Km:134+000 to 163+600			
Sl No	Description	Unit	Quantity
1.	Culvert	Nos.	45
2.	Minor Bridge	Nos.	46
3.	Major Bridge	Nos.	05
4.	VUP/PUP	Nos.	07
5.	Grade Separator	Nos.	03
6.	ROB	Nos.	01

Widening of Existing Road Km:116+440 to 117+600 Km:120+000 to 134+000 Km:163+600 to 164+275			
Sl No	Description	Unit	Quantity
1.	Culvert	Nos.	57
2.	Minor Bridge	Nos.	07
3.	Major Bridge	Nos.	01
4.	VUP/PUP	Nos.	05
5.	Grade Separator	Nos.	01

LEGEND:

- Major Bridge(MJB)
- Minor Bridge(MB)
- Grade Separated Structure
- ROB
- Vehicle Under Pass (LVUP/VUP)
- Toll Plaza
- Reconstruction of Existing Road
- Bypass/Newconstruction

Salient Features of Project:

Sl No	Description	Unit	Scope
1.	Total Length of Project	Km	47.835
2.	Length of Widening Portion	Km	15.335
3.	Length of Bypass	Km	32.000
4.	Length of service/Slip Road	Km	27.100
5.	Culverts		
	Box Culvert	Nos.	74

Sl No	Description	Unit	Scope
	Slab Culvert	Nos.	29
6.	Minor Bridge	Nos.	59
7.	Major Bridge	Nos.	06
8.	VUP/PUP	Nos.	12
9.	Grade Separated Structure	Nos.	06
10.	ROB	Nos.	01

Sl No	Description	Unit	Scope
11.	Minor Intersection	Nos.	22
12.	Major Intersection	Nos.	20
13.	Bus Bays and Shelters	Nos.	05
14.	Toll Plaza	Nos.	01

Drawing Title

Strip Plan - Cholopuram to Thanjavur Highway Project

Date.	Project No.
30-09-2018	PCTHP/NHAI/TN/001

Table- 01: Details of Project Alignments

Sr. no.	Design Chainage (Km)		Length (Km)	TCS Type	Remarks
	From	To			
1	116.440	117.200	0.760	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
2	117.200	117.900	0.700	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
3	117.900	119.600	1.700	Type-A-3 (Fig 2.4 of the manual)	Bypass
4	119.600	120.420	0.820	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
5	120.420	122.000	1.580	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
6	122.000	125.300	3.300	Type-A-3 (Fig 2.4 of the manual)	Eccentric widening
7	125.300	125.700	0.400	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
8	125.700	127.700	2.000	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
9	127.700	128.300	0.600	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
10	128.300	129.100	0.800	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
11	129.100	129.970	0.870	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
12	129.970	130.700	0.730	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
13	130.700	131.050	0.350	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
14	131.050	131.850	0.800	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
15	131.850	132.100	0.250	Type-A-3 (Fig 2.4 of the manual)	Eccentric widening
16	132.100	133.580	1.480	Type-B (Fig 2.6 of the manual) without service road	Concentric widening
17	133.580	134.800	1.220	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
18	134.800	136.000	1.200	Type-A-3 (Fig 2.4 of the manual)	Bypass
19	136.000	136.600	0.600	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
20	136.600	138.500	1.900	Type-A-3 (Fig 2.4 of the manual)	Bypass
21	138.500	139.750	1.250	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
22	139.750	141.100	1.350	Type-A-3 (Fig 2.4 of the manual)	Bypass

Sr. no.	Design Chainage (Km)		Length (Km)	TCS Type	Remarks
	From	To			
23	141.100	141.800	0.700	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
24	141.800	144.450	2.650	Type-A-3 (Fig 2.4 of the manual)	Bypass
25	144.450	145.580	1.130	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
26	145.580	147.600	2.020	Type-A-3 (Fig 2.4 of the manual)	Bypass
27	147.600	148.320	0.720	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
28	148.320	149.720	1.400	Type-A-3 (Fig 2.4 of the manual)	Bypass
29	149.720	150.450	0.730	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
30	150.450	152.700	2.250	Type-A-3 (Fig 2.4 of the manual)	Bypass
31	152.700	153.300	0.600	Toll Plaza	
32	153.300	156.000	2.700	Type-A-3 (Fig 2.4 of the manual)	Bypass
33	156.000	157.350	1.350	Figure 7.8- Grade separator and its approaches with RE wall and both side 7.5 m wide Slip road	
34	157.350	164.275	6.925	Type-A-3 (Fig 2.4 of the manual)	Bypass
		Total Length	47.835		

1.1. Project Overview

Name of Work	Four Laning of Cholopuram-Thanjavur from km. 116.440 to Km.164.275 of NH-45C under NHDP-IV on Hybrid Annuity Mode Basis
Name of Employer	National Highways Authority of India (NHAI) G-5 & 6, Sector-10, Dwarka, New Delhi -110075
Name of Concessionaire	Patel Cholopuram-Thanjavur Highway Pvt Ltd, Patel House, Beside Prakruti Resorts, Chanani Road, Vadodara. Gujarat– 391740 Tel: +91-265 277 6678 Fax: +91-265 277 7878
Independent Engineer	M/s. Theme Engineering Services Pvt. Ltd, 8, Thomaiyammal Nagar, 6th Street, R.S College (Post), Thanjavur-613005.
EPC Contractor	M/s. Patel Infrastructure Limited, Patel House, Beside Prakruti Resorts, Chanani Road,Vadodara Gujarat– 391740, Tel: +91-265 277 6678 Fax: +91-265 277 7878
Design Consultant	CTL Global Services Pvt. Ltd. 101, IST Floor, Krishna Chambers, HAL, Airport Road, Bangalore-560017
Senior Lender	Punjab National Bank, Large Corporate Branch, Neelkamal Building, Opp. Sales India, Ashram Road, Ahmedabad - 380009
Lenders Independent Engineers	Sharul Techno-Financial Consultancy Services Pvt. Ltd., 403, Aspire Tower 5, Amanora Park Town, Hadapsar, Pune - 411028.
Length of Road (Design Length)	47.835 Kms.
Total Bid Cost	Rs. 1345.60 Crores (as per concession agreement)
Date of Concession Agreement	October 12, 2017
Concession Period	17 Years (Construction Period 2 Years from Appointed date, Operation period 15 years from COD)
Appointed Date	06.09.2018
Construction Period	02 years from Appointed date
Completion Date	04.09.2020
Maintenance Period	15 years from COD

1.2. Salient Project Features

Besides the construction of new carriageways and widening and strengthening of existing carriageways, the following table summaries the major elements of the project construction:

4 - Lane Divided Carriage Way	47.835 Kms
Service Road/ Slip Road	27.100 Kms
Major Bridge	06 Nos.
Minor Bridge	56 Nos.
Grade Separate Intersection	06 Nos.
Vehicular Underpass	10 Nos.
Pedestrian Underpass	02 Nos.
Rail-road Bridges	01 Nos
Box Culverts	74 Nos.
Slab Culverts	29 Nos.
Major Intersections	20 Nos.
Minor Intersections	22 Nos.
Bus Bays	05 Nos.
Rest Area	01 Nos
Toll Plaza	01 Nos.

1.3. Contractual Project Milestones

Following is a listing of the Key Project Milestones:

Mile Stone	Description	Target Date
Mile Stone-I	Concessionaire shall expended not less than 20 % of the Total capital cost and shall have commenced construction of the project and achieved 20% of physical progress on 214th day from the Appointed Date.	07th April 2019
Mile Stone-II	Concessionaire shall expended not less than 35% of the Total capital cost and shall have commenced construction of the project and achieved 35% of physical progress on 334th day from the Appointed Date	05th August 2019
Mile Stone-III	Concessionaire shall expended not less than 75 % of the Total capital cost and shall have commenced construction of the project and achieved 75% of physical progress on 584th day from the Appointed Date	11th April 2020
Scheduled Completion	Concessionaire shall have completed Project on 730th day from the Appointed Date	04th September 2020

1.4. Payment milestone during Construction Period

Payment Milestone	Eligibility Criteria	Payment Amount (Rs.)
Milestone-I	On Achievement of 10% of Physical Progress	107.65 Crs.
Milestone-II	On Achievement of 30% of Physical Progress	107.65 Crs.
Milestone-III	On Achievement of 50% of Physical Progress	107.65 Crs.
Milestone-IV	On Achievement of 75% of Physical Progress	107.65 Crs.
Milestone-V	On Achievement of 90% of Physical Progress	107.65 Crs.

1.5. Permits & Approvals

Sr. No.	Details	Authority	Current Status	Remarks
1	Extraction of Boulders from Quarries	Dist. Mining Officer	Obtained	PIL (EPC Contractor) have engaged Agate Infra Engineering for supply of boulders that is having a valid license for extraction of boulders and other required permission for the quarry at Kalpadi Village, Perambalur District.
2	Installation of Crusher	Village Panchayat Head	Obtained	
3	-----D O------	Pollution Control Board	Obtained	
4	Use of Explosives	Dist. Collector	Obtained	
5	Labour License	Labour Commissioner	Obtained	
6	Environmental Clearance		NA	
7	Trees Cutting Permission	Forest department through NHAI	Obtained	Work in Progress (Permission for removal of Teak wood trees is awaited)
8	Electric Poles Shifting	Tamil Nadu Electricity Board	Obtained	Work in Progress
9	Water Pipes Shifting	Tamil Nadu Water Supply and Drainage Board	Obtained	Work in Progress
10	Drawing Water from river/ reservoir	-	NA	-

2.1. Land Acquisition

As per the Schedule – A of Concession Agreement, the Proposed Right of Way (ROW) is of 45 & 60 meters as per table below.

Table 2.1-1: Details of proposed ROW as per Schedule-A				
	Design Chainage (Km)	Design Length (Km)	Width (m)	Remarks
(i) Full Right of Way (full width)				
Stretch	116.440 to 117.600	1.160	30	Within 15 (Fifteen) days from the date of Agreement.
Stretch	117.600 to 120.000	2.400	60	
Stretch	120.000 to 134.000	14.000	30	
Stretch	134.000 to 164.275	30.280	60	
Total Length		47.835		

Balance Right of way (width)				
	Design Chainage (Km)	Design Length (Km)	Width (m)	
Stretch	116.440 to 117.600	1.160	30	Within 90 (Ninety) days of the Appointed date
Stretch	120.000 to 120.340	0.34	20	
Stretch	124.700to 126.100	1.40	20	
Stretch	126. 700 to 127 .655	0.95	20	
Stretch	130.600 to 134.000	3.40	20	
Total Length		7.250		

Besides this, the Authority has to acquire additional land at Toll plaza location, Bus bays, turning radius at Major junctions.

Table 2.1-2: Status of Land Acquisition as per Site Condition				
Sl. No.	Description	Unit	Present Status	Remarks
A)	Total Length of the Project Highway	Km	47.835	
i)	Use of Existing Road Portion	Km	15.835	
ii)	Proposed Bypass / Realignment portion	Km	32.000	
B)	Hindered Length			
i)	LA Issues	Km	8.190	
ii)	Existing Buildings	Km	2.515	
iii)	Pending for Disbursement of Payment	Km	4.815	
iv)	Electrical Lines	Km	4.705	
v)	Rural Water Supply lines	Km	11.200	
C)	Net Hindered Length (both Side)	Km	17.700	
D)	Total Project Length (both Side)	Km	47.835	
E)	% Hindered Length	%	37.00%	

There has been increase in the Hindered length due to Diversion not possible at RE Wall stretches as Land not yet made available. The details of land acquisition status and available hindrances are produced on a strip chart under section 04.

The status of compensation disbursed is as below: -

Table 2.1-3:Compensation disbursement for land					
Sr. No.	Name of the District	Total No. of Land cases	Amount paid (in Nos.)	Balance to be Paid (in Nos.)	Remarks
1	Thanjavur	1467	1039	428	
	Total in Nos.	1467	1039	428	
	Total in %		70.82%	29.17%	

Table 2.1-4 - Compensation disbursement for Structures					
Sr. No.	Name of the District	Total No. of structures	Amount paid (in Nos)	Balance to be Paid (in Nos)	Remarks
1	Thanjavur	723	541	182	
	Total in Nos	723	541	182	
	Total in %		74.82%	25.18%	

The details of Chainages under hindrance due to such balance compensation issues to their land owners, structure payment issues, standing crops, water pipe lines etc. are as below –

1) Details of Stretches Under Hindrance (LHS):-

Table 2.1-5 A- Details of Stretches Under Hindrance (LHS)						
Sr. No.	From	To	Length	Effective Hindered Length	Side	Remarks
1	116+400	117+230	830	830	LHS	Land not yet handed over compensation yet to be paid
2	117+230	117+870	640	640	LHS	RE Wall Location (i)BHS -Land not yet handed over- (ii)Compensation not yet paid for the structures, (iii)Compensation for 3 Nos of temples on LHS Side are yet to be paid, (iv)NOC for Existing pond at Km 117+742 to Km 117+814 . EB & Water Pipeline
3	119+620	120+390	770	770	LHS	RE Wall Location (i)Compensation not yet Paid for the Lands & Existing Buildings, (ii)NOC pending for existing pond on 120+200 to 120+242 to be cleared, (iii)Temples (Km 120+180)Compensation to be paid
4	120+390	120+800	410	410	LHS	(i)Compensation for Existing Buildings on LHS Side are yet to be paid, (ii) Existing pond on LHS 120+642 to 120+734 to be cleared

5	121+220	121+550	330	330	LHS	Existing Crops on LHS Side
6	121+550	121+700	150	150	LHS	Shops & Temple (Km 121+600) Compensations are to be paid, Water Pipeline
7	121+850	121+860	10	10	LHS	Water Pipeline
8	122+080	122+120	40	40	LHS	Water Pipeline
9	124+550	124+650	100	100	LHS	Trees with fencing on LHS to be removed, Water Pipeline
10	124+700	125+400	700	700	LHS	Religious Structures
11	125+400	125+500	100	100	LHS	Compensation pending for Huts & RCC & tached roof buildings on poramboke land are pending, EB & Water Pipeline
12	125+580	125+730	150	150	LHS	Existing Buidings compenstion not yet paid , EB & Water Pipeline
13	125+730	127+670	1940	1940	LHS	RE Wall Location (i) Compensation pending from Km125+730 to Km 125+950 for the existing buildings, (ii)NOC pending for Existing pond at Km 126+ 090 to Km 126 +163 & Km 126+ 546 to Km 126 +596 & Km 126+675 to Km 126 +772, (iii) Water Pipeline (iv) Religious Structures
14	128+320	129+060	740	740	LHS	RE Wall Location (i) Km 128+400 Temple to be removed, (ii) Km 128+700 to 128 +900 VUP Location Existing Structures, (iii) Petrolbunk Compensation are yet to be paid, (iv) Temple (Km 128+400) compenstion not yet paid, EB & Water Pipeline (v) Religious Structures
15	129+500	129+570	70	70	LHS	Religious Structures
16	129+570	129+600	30	30	LHS	EB Poles, Water Pipeline

17	129+700	129+800	100	100	LHS	Compensation pending for Land & Structures
18	129+990	130+670	680	270	LHS	RE Wall Location (i) Km 130+200 to 130+ 400 Moopakovil village Compensation pending for Existing Buildings, Poramboke houses , (ii)Existing Pond Km 130 +621 to Km 130+690, Religious structures
19	131+070	131+830	760	760	LHS	RE Wall Location, Compensation not yet paid for Land & Structures, EB & Water Pipeline
20	131+830	133+610	1780	1780	LHS	Comensation Not yet paid for Land & Structures, Temple(Km 133+180) compenstion not yet paid
21	133+610	134+770	1160	1160	LHS	RE Wall Location- (i) Comensation Not yet paid for Land & Structures, Existing irrigation Sluices at Km 134+770 to be relocated, (ii) EB & Water Pipeline
22	136+010	136+560	550	550	LHS	RE Wall Location
23	138+200	138+530	330	330	LHS	Land on dispute - Court Issue (Mr.Dharmalingam & Mr.Shanmugam)
24	138+530	139+720	1190	1190	LHS	RE Wall Location Km 138+750 to Km 138+850 Land on dispute -Court Case- Mr.Dhakshinamoorthy, Mr.Rajini , Mr.Nagaraj) Payment Issue of Land Owner Mrs.Valarmathi Kailasam
25	141+110	141+770	660		LHS	RE Wall Location
26	141+900	142+400	500	500	LHS	Payment Issue of Land owners Mr.Pakir Mohammed
27	144+470	145+530	1060	50	LHS	RE Wall Location Km 144+800 to Km 144+850 teak trees to be removed
28	146+600	147+400	800	800	LHS	Km 146+650 to Km 146+800, teak trees to be removed Obstruction of Existing irrigation canal needs to be relocated.
29	147+400	147+450	50	50	LHS	Teak Wood trees to be removed, Obstruction of Existing irrigation canal needs to be relocated.
30	147+450	148+270	820	650	LHS	RE Wall Location Km 148+000 to Km 148+ 100 Teak wood trees to be removed, Obstruction of Existing irrigation canal needs to be relocated.
31	149+330	149+340	10	10	LHS	Teak Wood trees to be removed
32	149+740	150+430	690		LHS	RE Wall Location
33	150+600	150+900	300	300	LHS	Existing irrigation Sluices at Km 150+800 to be relocated, Teak Wood trees to be removed

34	152+800	153+100	300	300	LHS	Existing Irrigation Sluices at Km 152+900 to be relocated,
35	154+500	154+900	400	400	LHS	Vaiyacheri Village land on Dispute, Obstruction of Existing irrigation canal needs to be relocated.
36	156+030	157+360	1330	300	LHS	RE Wall Location Km 156+200 to Km 156+500 Teak wood trees to be removed
37	158+500	158+700	200	200	LHS	Hindrances of High Tension Transmission Towers.
38	160+200	160+400	200	200	LHS	Compensation Disbursement balance - Not allowed to work by owner
39	161+000	162+000	1000	1000	LHS	Land on dispute - Court Issue Ms Tamilselvei
	Total Hindered Length LHS (Km.)			17910		

2) Details of Stretches Under Hindrance (RHS):-

Table 2.1-5 B - Details of Stretches Under Hindrance (RHS)

Sr. No.	From	To	Length	Effective Hindered Length	Side	Remarks
1	116+400	117+230	830	830	RHS	Land not yet handed over compensation yet to be paid
2	117+230	117+870	640	640	RHS	RE Wall Location (i) BHS -Land not yet handed over-Compensation not paid for the structures, (ii) Chruch Compensation to be Paid. (iii) NOC for Existing pond at Km 117+742 to Km 117+814 . (iv)EB & Water Pipeline
3	119+620	120+390	770	770	RHS	RE Wall Location (i)Compensation not yet Paid for the Land & Existing Buildings, (ii)Temple (Km120+200) Compensation to be paid, (iii) Water Pipeline
4	120+390	120+800	410	410	RHS	(i) Existing Buildings on LHS Side and compensation not yet paid from for land owners (ii) Existing pond on RHS 120+642 to 120+732 to be cleared, Water Pipeline
5	121+400	121+450	50	50	RHS	LA Issue- House under Arbitration, Water Pipeline
6	121+550	121+700	150	150	RHS	Water Pipeline

7	121+850	121+860	10	10	RHS	Temple-Religious Statue on RHS side and compensation to be done, Water Pipeline
8	122+080	122+120	40	40	RHS	Vana kaliamman temple (Km 122+080) on RHS side with banyan tree compensation to be paid, Water Pipeline
9	124+550	124+650	100	100	RHS	Toyoto Showroom yard on RHS Side with fencing compensation to be paid, Water Pipeline
10	124+700	125+400	700	700	RHS	Religious Structures
11	125+400	125+500	100	100	RHS	Water Pipeline
12	125+580	125+730	150	150	RHS	Existing Buidings Temple(Km 125+670) compenstion not yet paid , Water Pipeline
13	125+730	127+670	1940	1940	RHS	RE Wall Location (i)125+730 to 125+950 Existing building to dismantled, (ii) Compensation to be paid (Including Toyoto showroom), (iii)127+300 Anuj Tiles showroom to be removed, Temple (Km 126+870)compenstion not yet paid , (iii) NOC pending for Existing pond at Km 126+ 546 to Km 126 +596 & Km 126+675 to Km 126 +772, Water Pipeline (iv) Religious Structures
14	128+320	129+060	740	740	RHS	RE Wall Location EB & Water Pipeline Religious Structures
15	129+500	129+570	70	70	RHS	Religious Structures
16	129+570	129+600	30	30	RHS	Existing Temple at Km 129+570 Compensation to be paid , EB Poles, Water Pipeline
17	129+700	129+800	100	100	RHS	Compensation pending for Land & Structures

18	129+990	130+670	680	200	RHS	RE Wall Location 130+200 to 130+ 400 Moopakovil Existing Buildings Compensation to be paid, Religious structures
19	131+070	131+830	760	760	RHS	RE Wall LocationExsisting Buildings & Shops Compensation not paid, EB & Water Pipeline
20	131+830	133+610	1780	1780	RHS	Comensation Not yet paid for Land & Structures, EB & Water Pipeline
21	133+610	134+770	1160	1160	RHS	RE Wall Location- (i)Comensation Not yet paid for Land & Structures, (ii) NOC pending for Existing pond at Km 133+756 to Km 133+814 & Km 134+320 to 134+340, EB & Water Pipeline
22	136+010	136+560	550	550	RHS	RE Wall Location
23	138+200	138+530	330	330	RHS	Land on dispute - Court Issue (Mr.Dharmalingam & Mr.Shanmugam)
24	138+530	139+720	1190	1190	RHS	RE Wall Location Km 138+750 to Km 138+850 Land on dispute -Court Case- Mr.Dhakshinamoorthy, Mr.Rajini , Mr.Nagaraj) Payment Issue of Land Owner Mrs.Valarmathi Kailasam
25	141+110	141+770	660		RHS	RE Wall Location
26	141+900	142+400	500	500	RHS	Payment Issue of Land owners Mr.Pakir Mohammed
27	144+470	145+530	1060	200	RHS	RE Wall Location Km 144+800 to Km 144+850, Km 146+650 to Km 146+800, teak trees to be removed
28	146+600	147+400	800	800	RHS	Km 146+650 to Km 146+800, teak trees to be removed Obstruction of Existing irrigation canal needs to be relocated.
29	147+400	147+450	50	50	RHS	Teak Wood trees to be removed
30	147+630	148+270	640	100	RHS	RE Wall Location Km 148+000 to Km 148+ 100 Teak wood trees to be removed
31	149+330	149+340	10	10	RHS	Teak Wood trees to be removed
32	149+740	150+430	690		RHS	RE Wall Location
33	150+600	150+900	300	300	RHS	Existing irrigation Sluices at Km 150+800 to be relocated, Teak Wood trees to be removed
34	152+900	152+930	30	30	RHS	

35	154+500	154+800	300	300	RHS	Vaiyacheri Village land on Dispute
36	156+030	157+360	1330	300	RHS	RE Wall Location Km 156+200 to Km 156+500 Teak wood trees to be removed
37	158+500	158+700	200	200	RHS	Hindrances of High Tension Transmission Towers.
38	160+200	160+400	200	200	RHS	Compensation Disbursement balance - Not allowed to work by owner
39	161+000	162+000	1000	1000	RHS	Land on dispute - Court Issue Ms Tamilselvei
	Total Hindered Length RHS (Km.)			17160		

2.2. Removal of Religious Structures

The following structures coming within the ROW are to be demolished

Table 2.2-1: Status of Removal of Religious structures

Sl. No.	Name of the District	Total No. of structures	Removed as on Date (in Nos.)	Balance (in Nos.)
1	Thanjavur	13	0	13
Note: Pending for disbursement of payment to the Religious structures.				

2.3. Shifting of Utilities and Electrical HT/LT Lines

To proceed with the project construction, several utilities are required to be shifted under the supervision of the respective authorities. These include a water supply line, hand pumps, overhead water tanks, besides Electrical lines, as shown in the table below.

Table 2.3-1: Status of sanction of Estimates - Relocation of RWS Pipe line

Sl. No	Name of the District	Chainages			Total Number of Estimates	Remarks
		From	To	Length in Km		
1	Thanjavur	116+440	164+275	47.835	32	Work is in Progress

Table 2.3-2: Status of sanction of Estimates - Electrical Lines Relocation

Sl. No	Name of the District	Chainages			Number of Estimates	Present Status	Remarks
		From	To	Length in Km			
1	Thanjavur	116+440	164+275	47.835	16	Work in Progress	

Estimates for shifting of the above Electric lines have been prepared. The estimated cost is approximately Rs. 10.50 crores.

Table 2.3-3: Status of Utility Relocation

Sl. No.	Authority	Description	Unit	Total Length/ Nos.	Work done	Balance	Remarks
1	BDO & EE,TWAD	Water Supply Pipe Line	Kms.	35.750	6.501	29.249	Work in Progress
2	BDO of Concern Union	Hand Pump/Pump Room with Bore well	Nos.	16	0	16	
3	BDO of Concern Union	Over Head Tank	Nos.	2	2	0	Completed
4	TNEB	Electrical Lines	Kms.	19.215	14.510	4.705	Work in Progress

Estimates have been done for the shifting of the water supply pipeline & related items mentioned above. The estimated cost is approximately Rs. 6.8 crores.

2.4. Tree felling

Table 2.4-1: Status of Tree felling

Sl. No.	Name of the District	Chainages			Effected Length in Kms	Total No. of Trees	Felled/ Removed as on Date	Balance no. of Trees	Remarks
		From	To	Length in Km					
1	Thanjavur	116+440	164+275	47.837	15.310	1461	1430	31	Work in Progress
			Total	47.835					

Teak Wood trees are not included in the above table since permissions for removal of teak wood trees is not yet obtained.

Table 2.1.6 - Hindrance Photographs (30.07.2019)								
Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	30	Houses (2 nos)	116+440	116+470	Houses (6 nos), Mango farm, Cocunut farm	30		
	60	Houses (6 nos), Culvert & Trees	116+520	116+580				
			116+580	116+600	Canal crossing, culvert & Trees	20		
	50	Houses (4 nos), Electrical Pole & Trees	116+600	116+650	Canal crossing & Trees	50		
	50	Houses (2 nos), Electrical Pole & Trees	116+650	116+700	Bore Well, Pump set, Electrical Pole & Trees	50		
	50	Trees	116+700	116+750	Houses (7 nos), Electrical Pole & Trees	50		
	50	Houses (6 nos), Electrical Pole & Trees	116+750	116+800	Houses (4 nos) & Cocunut Trees	50		
	50	Vinayagar Temple, Houses (7 nos) & Electrical Pole (3 nos)	116+800	116+850	Houses (5 nos), & Cocunut Trees	50		
	50	Houses (7 nos), Electrical Poles & Trees	116+850	116+900	Houses (8 nos) & Cocunut Trees	50		
	50	Houses (5 nos), Culvert, Electrical Poles & Cocunut Trees	116+900	116+950	Houses (6 nos) & Cocunut Trees	50		
	30	Houses (2 nos), Electrical Pole (3 nos) & Trees	116+950	117+980	Cocunut Trees & Nala	30		
	20	Houses (2 nos), Electrical Poles & Trees	116+980	117+000	Cocunut Trees, Fencing & Electrical Pole	20		
	50	Houses (7 nos), Electrical Pole (4 nos) & Trees	117+000	117+050	Church & Shops (3 nos)	50		

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	50	Houses (5 nos), Electrical Poles & Trees	117+050	117+100	Houses (7 nos), Electrical Poles & Trees	50		
	50	Houses (8 nos), Electrical Poles (3 nos) & Trees	117+150	117+200	Houses (6 nos), Ration Shop, Electrical Poles, Trees & Pond	50		
	50	Temple, Houses (2 nos) & Cocunut Trees	117+200	117+250	Houses (9 nos), Electrical Poles & Trees	50		
	50	Houses (3 nos), Electrical Poles & Trees	117+250	117+300	Houses (2 nos), Electrical Poles & Trees	50		
	50	Houses (3 nos), Electrical Poles & Trees	117+300	117+350	Houses (3 nos), Electrical Poles & Trees	50		
	50	Houses (4 nos), Electrical Poles & Trees	117+350	117+400	Houses (4 nos), Electrical Poles & Trees	50		
	50	Houses (5 nos), Electrical Poles & Trees	117+400	117+450	Houses (6 nos), Electrical Poles & Cocunut Trees	50		
	50	Houses (4 nos), Bus shelter, Water Tank, Electrical Poles & Trees	117+450	117+500	Houses (5 nos), Electrical Poles & Trees	50		
	50	Houses (4 nos), Electrical Poles & Trees	117+500	117+550	Trees & Electrical Poles	50		
	50	Trees & Electrical Poles	117+550	117+600	Houses (4 nos), Electrical Poles & Trees	50		
	50	Electrical Poles	117+600	117+650	Electrical Poles	50		
	20	House (1 no.) & Cocunut Trees	120+000					
	50	House (3 nos), Teak wood Trees	120+050	120+100	Bus shelter, House (3 nos), Electrical Pole (3 nos) & Teak wood Trees	50		

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	50	Cocunut farm, Pond & Trees	120+200	120+250	Temple, Houses (2 nos) & Electrical Pole	50		
	30	Houses (2 nos), Electrical Pole, Culvert & Cocunut farm	120+250	120+280	Houses (3 nos), Electrical Poles & Cocunut farm	30		
	20	Houses (1 no.), Electrical Pole, Culvert, Nala & Cocunut farm	120+280	120+300	Houses (2 nos), Electrical Poles & Cocunut farm	20		
	50	Houses (4 nos), Electrical Poles & Cocunut farm	120+300	120+350	Houses (3 nos), Electrical Poles, Culvert & Trees	50		
	50	Shops, Electrical Pole & Cocunut farm	120+350	120+400	House, Electrical Pole & Teak wood Trees	50		
	50	Houses (2 nos), Electrical Poles & Cocunut Trees	120+400	120+450	Houses (4 nos), Petrol Pump, Electrical Poles (2 nos) & Cocunut Trees	50		
	50	Houses (2 nos), Shops, Cocunut & Teak wood Trees	120+450	120+500	Houses (3 nos), Electrical Poles & Trees	50		
	50	Houses (8 nos), Electrical Poles, Cocunut & Teak wood Trees	120+500	120+550	Houses (8 nos), Electrical Poles, Cocunut & Teak wood Trees	50		
	50	Houses (4 nos) & Cocunut farm	120+550	120+600	House (1 no.), Electrical Pole & Cocunut Trees	50		
	50	Houses (6 nos), Fencing, Electrical Pole, Cocunut & Teak wood Trees	120+600	120+650	Houses (5 nos), Fencing, Electrical Pole, Cocunut, Mango Trees & Fish Pond	50		
	30	Houses, Cocunut & Teak wood Trees	120+650	120+680	Pond & Trees	30		
	40	Shops, Cocunut & Teak wood Trees	120+680	120+720	Next crop planted & Fencing	40		
	80	Next crop planted, Electrical Poles & Trees	120+720	120+800	House (1 no.), Transformer, Electrical Poles (4 nos) & Trees	80		

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	50	Houses (3 nos), Culvert & Trees	120+800	120+850	Houses (2 nos), Electrical Poles (3 nos) & Trees	50		
	30	Houses (3 nos), Electrical Poles & Trees	120+900	121+930	Houses (1 no.), Fencing, Electrical Pole (4 nos) & Trees	30		
	20	Preparing for next crop,Electrical Pole & Trees	121+930	121+950	Houses (2 nos), Electrical Pole (2 nos) & Trees	20		
	50	Electrical Pole & Trees	121+950	121+000	Houses (2 nos), Electrical Pole (2 nos) & Trees	50		
	10	Electrical Pole & Trees	121+050		Transformer, Electrical Poles (3 nos) & Trees	20		
-	-	-	121+100		Electrical Pole	10		
	50	Cocunut Trees, Teak wood Trees & Jungle	121+150		Electrical Pole & Trees	20		
	50	Bus shelter, Houses (3 nos), Electrical Poles (2 nos) & Trees	121+200	121+250	Bus shelter, Trees & Jungle	50		
	50	House (1 no.), Electrical Pole & Trees	121+250	121+300	House (3 no.), Electrical Poles (5 nos) & Trees	50		
	50	Electrical Pole, Trees & Jungle	121+300	121+350	House (2 nos), Electrical Pole & Trees	50		
	80	Electrical Pole, Trees & Jungle	121+350	121+430	Houses (9 nos), Electrical Poles (3 nos) & Trees	80		
	70	Electrical Poles, Trees & Jungle	121+430	121+500	Electrical Poles, Trees & Jungle	70		
	50	House (1 no.), Electrical Poles, Trees & Jungle	121+500	121+550	Electrical Poles, Culvert, Trees & Jungle	50		

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	70	Temple, Houses (3 nos) & Cocunut Trees	121+550	121+620	Houses (2 nos), Electrical Pole, Mango Trees 7 Jungle	70		
	60	Shops, Houses, Electrical Poles, Cocunut Trees, Jungle & Culvert	121+620	121+680	Cocunut Trees (12 nos), Trees & Jungle	60		
	40	Pump set, Structure & Cocunut Trees (8 nos)	121+680	121+720	Electrical Pole & Trees	40		
	20	Trees & Jungle	121+720	121+800	Electrical Pole	10		
	50	Transformer, Electrical Poles & Trees	121+800	121+850	Church Gate, Boundary Wall	50		
	15	Transformer, Electrical Poles (4 nos)	121+930		Electrical Poles (2 nos)	15		
	20	Electrical Poles, existing bridge structure & Trees	122+020		Electrical Pole & Trees	10		
		River crossing & Trees	122+030		River crossing & Trees			
-	-	-	122+080		Temple, Electrical Pole, Canal & Baniyan Trees	25		
	20	Electrical Pole & Trees	122+130		Trees (3 nos)	20		
	15	Electrical Poles, Canal, Banana farm & Teak wood Trees	122+200		Pump set & Electrical Poles	15		
	80	Banana farm, Canal, Teak wood Trees, Transformer & Electrical Poles	122+220	122+300	Teak wood Trees, Electrical Pole & Banana farm	80		
	100	Electrical Poles, Teak wood Trees & Canal	122+300	122+400	HP Petrol Bunk & Electrical Poles	100		

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
			122+900		Electrical Pole & Jungle	10		
			122+900	123+000	Electrical Pole, Trees & Jungle	100		
			123+000	123+150	Electrical Poles (3 nos)	150		
	70	Canal, Teak wood Trees & Jungle	123+230	123+300	Transformer, Electrical Poles (3 nos) & Trees	70		
	50	Electrical Pole & line crossing	123+300	123+350	Electrical Poles	50		
			123+900		Electrical Poles	15		
	100	Electrical Pole & Trees	125+700	125+800	Compound Wall	100		
	50	Houses (3 nos), Electrical Poles & Trees	125+800	125+850	Houses (4 nos), Electrical Poles & Trees	50		
	50	Houses (4 nos), Electrical Poles & Trees	125+850	125+900	Houses (2 nos), Electrical Poles & Trees	50		
	50	Govt building, House (1 no), Electrical Poles & Trees	125+900	125+950	Houses (3 nos), Electrical Poles & Trees	50		
	100	House (1 no), Water tap & Trees	125+950	126+050	Houses (3 nos) & Trees	100		
	50	Building, Hut (2 nos) & Trees (21 nos)	126+050	126+100	Temple, Houses (5 nos), Electrical Pole (4 nos) & Trees (13 nos)	50		
	100	Pond & Trees	126+400	126+500	Pond & Trees	100		

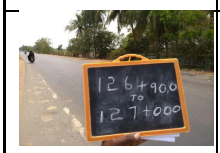
Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	100	Bus shelter, Fencing, Houses (4 nos), Electrical Pole & Trees (7 nos)	126+700	126+800	Rice Mill, Houses (4 nos), Hut, Electrical Pole & Trees (13 nos)	100		
	100	Houses (4 nos), Hand pump, Transformer & Electrical Poles	126+800	126+900	Temple, Houses (4 nos), Electrical Pole (2 nos) & Trees (13 nos)	100		
	100	Bus shelter, Pump house, Electrical Pole (4 nos) & Trees (13 nos)	126+900	127+000	Electrical Pole (4 nos), Telephone Pole, Sign board & Trees (14 nos)	100		
	100	Building (4 nos), Electrical Pole (4 nos), Sign boards (4 nos) & Trees (14 nos)	127+100	127+200	Pump house, Electrical Poles (4 nos), Transformer, Sign boards & Trees (10 nos)	100		
	100	Building (2 nos), Electrical Pole (9 nos), Sign boards (4 nos) & Trees (10 nos)	127+200	127+300	Arch, Compound Wall, Electrical Pole (5 nos) & Trees (3 nos)	100		
	30	Commercial building (3 nos), Electrical Pole (6 nos) & Line crossing & Trees (3 nos)	127+650	127+800	Building Compond Wall, Electrical Pole (6 nos) & Trees (2nos)	30		
			128+000	128+120	Pump house, Bore well, Transformer & Electrical Pole (3 nos)	30		
	10	Electrical Pole (1 no.)	128+120	128+200	Electrical Pole (4 nos)	40		
-	-	-	128+200	128+300	Electrical Pole (2 nos)	20		
	25	Small Temple with Gate	128+300	128+350	Electrical Pole (2 nos)	20		
			128+350	128+400	Electrical Pole (2 nos)	20		
	15	Electrical Pole	128+400	128+500	Electrical Poles (3 nos)	30		
			128+500	128+550	Electrical Poles (2 nos)	20		

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
-	-	-	128+550	128+600	Electrical Poles	10		
			128+600	128+700	Shops (6 nos) & Houses (2 nos), Electrical Poles (5 nos)	40		
	60	Fencing, Trees & Jungle	128+700	128+800	-	-	-	
	40	Indian Oil Petrol Bunk, Small Temple, steel pole & Trees	128+800	128+900	-	-		
	50	Shops (9 nos), Transformer & Electrical Poles (5 nos)	128+950	129+000	Electrical Pole & Trees	20		
	30	Electrical Pole (3 nos), Street light & Steel arch	129+120	129+200	Under construction house, Trees & Jungle	40		
	30	Electrical Pole	129+200	129+300				
	50	Wooden work factory, Electrical Pole (4 nos)	129+700	129+750	Electrical Pole	50		
	50	Building, Electrical Pole, Trees (4 nos)	129+900	129+950	Compound Wall, Electrical Pole & Trees	50		
			129+950	130+000	Transformer, Electrical Poles (2 nos)	20		
	20	Electrical Pole	130+000	130+120	Electrical Poles (5 nos), Arch	20		
	60	Electrical Pole (3 nos)	130+120	130+200	Houses (3 nos), Electrical Poles (4 nos) & Transformer	60		
	50	Houses (2 nos), Electrical Pole	130+200	130+250	Houses (6 nos), Electrical Poles (2 nos)	50		

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	50	Shops, Electrical Pole	130+300	130+350	Compound Wall, Electrical Pole (3 nos)	50		
	50	Houses (3 nos), Electrical Poles (2 nos)	130+350	130+400	Houses (6 nos), Electrical Poles (2 nos)	50		
	50	Houses (7 nos), Electrical Poles (2 nos)	130+400	130+450	Houses (3 nos)	50		
			130+550	130+600	Fencing Pole preperation shop, Trees & Jungle	20		
			130+600	130+700	Shops (6 nos), Electrical Poles (2 nos) & Trees	40		
	30	House with Gate (1 no), Electrical Pole (3 nos),	130+700	130+780	Trees, Electrical Poles & Culvert structure	30		
	10	Electrical Pole & Line crossing	130+780	130+800	Electrical Pole & Line crossing	10		
			130+800	130+900	Electrical Pole	40		
	20	Electrical Pole (3 nos),	130+900	131+000	Arch, Existing culvert, Electrical Pole,	20		
	20	Electrical Pole	131+000	131+100	Building (4 nos), Shop & Electrical Pole	40		
	20	Electrical Pole	131+100	131+200	Temple (1 no.)	25		
			131+200	131+300	Electrical Pole	20		
	30	Carpender Shop, Electrical Pole (4 nos) & Jungle	131+300	131+400	Under construction building, Electrical Pole, Pump set, Trees & Jungle	30		

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	40	Electrical Poles (2 nos)	131+400	131+500	Electrical Pole,	35		
			131+500	131+600	Marble showroom, Electrical Poles & Line crossing (2 nos), Trees & Jungle	40		
	20	Electrical Poles (2 nos)	131+600	131+700	Electrical Pole	20		
	40	High mast light, Sign boards, Houses (4 nos), Electrical Poles (3 nos) & Trees (8 nos)	131+700	131+800	Advertisement board, Fencing, Houses (4 nos), Electrical Poles (2 nos) & Trees	40		
	40	Cocunut farm	132+000	132+100	Trees & Jungle	40		
	60	Banana farm & Trees (10 nos)	132+100	132+200	Trees & Jungle	40		
	50	Houses (3 nos), Shop (1 no. & Electrical Pole	132+200	132+250	Electrical Pole, Trees & Jungle	50		
	60	House, Teak wood Trees, Banana & Cocunut Trees	132+300	132+400	Teak wood Trees, Banana & Cocunut Trees, Electrical Pole & Jungle	60		
	30	Teak wood Trees & Trees (6 nos)	132+500	132+600	Compound wall, Trees (6 nos) & Jungle	30		
	30	Bore well, Pump set, Electrical Poles (9 nos) & Line crossing & Trees	132+600	132+730	Under construction House (1 no.), Electrical Poles (4 nos) & Line crossing & Trees	30		
	50	Electrical Pole	132+800	132+900	Cocunut farm, Electrical Poles (2 nos), Teak wood Trees & Jungle	50		
	100	Banana farm, Pump set & Trees	132+900	133+000	Pump set, Banana farm, Electrical Poles (2 nos) & Line crossing & Cocunut Trees	100		
	100	Motor garage shop, Electrical Pole (2 nos) & Banana farm	133+000	133+100	Cocunut Trees, Existing culvert & Jungle	100		

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	45	Temple, Hand pump, 1 no. of buildings, Electrical Poles (2 nos) & Trees	133+100	133+150	Electrical Poles (2 nos) & line crossing & Trees	20		
	50	High mast light, 3 no. of buildings, Electrical Poles (4 nos) & Trees	133+150	133+200	Houses (3 nos), Street lighting pole, Electrical Poles (2 nos) & Trees	50		
	50	Cocunut farm, Pump set & Trees	133+350	133+400	Trees & Jungle	50		
	50	Compound wall, Electrical Pole & Trees (7 nos)	133+400	133+500	Trees, Existing culvert & Jungle	30		
	60	Hotels (2 nos), Electrical Poles (2 nos) & Trees	133+500	133+600				
	30	Houses (2 nos), Electrical Pole (1 no.), School compond wall fencing	133+600	133+700	Compound wall, Transformer, Electrical Poles (2 nos), Arch & Trees (10 nos)	60		
	40	Compound Wall, Electrical Pole, Trees & Jungle	133+700	133+750	House (1 no.), Pond, Compound wall, building & Electrical Poles & Trees	40		
	30	House, Electrical Pole, Trees & Jungle	133+750	133+800	House, Electrical Poles & Trees	30		
	50	Houses (3 nos), Trees & Jungle	133+800	133+900	House (1 no.), Electrical Poles (3 nos), Trees & Jungle	40		
	30	Sign boards, Houses (2 nos), Building, Electrical Poles (2 nos),	133+900	133+950	Shops, Lighting Poles (2 nos) & Electrical Poles (2 nos)	30		
	30	High mast light, Sign baords & Electrical Poles	133+950	134+000	High mast light, Sign baords & Electrical Poles	30		
	30	House & Trees	134+080		House & Trees	30		Encroachment
	-	Railway Crossing	134+380		Railway Crossing	-		ROB @ CH: 134+345

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	20	Regulator & Trees	134+710		-	-	-	water regulator sluice to be relocated
	40	HT Tower	135+400				-	
	10	Electrical Pole & Line Crossing	136+100		Electrical Pole & Line Crossing	10		
	10	Road crossing, Electrical pole & Trees	136+300		Patteswaram to Swamimalai Road	10		VUP @ CH: 136+282
	10	Electrical Pole & Line crossing	137+040		Electrical Pole & Line crossing	10		
	20	Road crossing & Electrical pole	137+100		House & Trees	20		
	-	-	137+150		Electrical Pole	10		
	70	Standing crop, Transformer, Electrical Pole & Trees	137+550	137+620	Standing crop, Road crossing (Patteswaram to Sundaraperumalkoil) & Trees	70		
	10	Electrical Pole & Line Crossing	137+850		Electrical Pole & Line Crossing	10		
	10	Electrical Pole	137+900		Electrical Pole	10		
	150	Mango farm & Teak wood Trees	138+300	138+450	Pump set, Mango farm & Teak wood Trees	150		
	100	Pump set, Banana farm, Cocunut farm & Canal crossing	138+450	138+550	Pump set, Banana farm, Cocunut farm & Canal crossing	100		
	50	Fish pond	138+620	138+670				

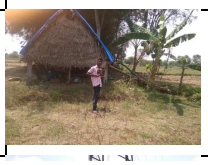
Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	10	Electrical Pole & Line Crossing & Trees	138+680		Electrical Pole & Line Crossing & Trees	10		
	20	Road Crossing, Trees & EB Pole	138+730					
	20	Cocunut farm, Electrical Pole & Trees	138+730	138+750	Cocunut farm, Electrical Pole & Trees	20		
	50	Houses (7 nos), Trees & Electrical Poles	138+750	138+800	Cocunut farm, Banana farm & Teak wood Trees	50		
	20	Electrical Poles & Line Crossing, Road crossing & Trees	139+450		Electrical Poles & Line Crossing, Road crossing & Trees	20		
-	-	-	139+460		Sump, Pump house & Bore Well	30		
	20	Small Temple	140+900		EB Pole & Line Crossing	20		
	15	Road crossing & Trees	141+102		Nallur to Avuru Road	15		
	-	Electrical Pole & Line Crossing & Trees	141+330		Electrical Pole & Line Crossing & Trees	-		
	20	Bore well, Pump house & Trees	142+260		EB Pole & Line Crossing	10		
	20	Bore Well	142+500		Electrical Pole & Line Crossing	10		
	80	Bamboo, Mango trees & Sugarcane farm	142+570	142+650	Bamboo, Mango trees & Sugarcane farm	80		
	20	High Tension Tower	142+850		-	-		

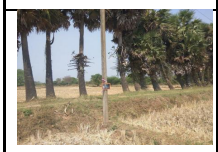
Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	-	-	143+100		High Tension Tower	20		
	20	EB Pole	143+600		EB Pole	20		
			143+850		Electrical Pole & Line Crossing & Trees	15		
	50	Teak wood trees	144+750		Teak wood trees	50		
	20	Temple	145+500		-	-	-	-
	-	-	145+520		Pump Set & Electrical Pole	20		
	10	Electrical Pole & Line Crossing	146+000		Electrical Pole & Line Crossing	10		
	20	Pump set	146+050		Electrical Pole & Line Crossing	10		
	10	Electrical Pole & Line Crossing	146+070					
	20	Pump set & Trees	146+130		Electrical Pole & Line Crossing	10		
	10	Electrical Pole	146+200		-	-	-	
	20	Electrical Pole	146+300		Electrical Pole	20		
	20	Electrical Pole & Line Crossing	146+700	146+720	Electrical Pole & Line Crossing & Trees	20		

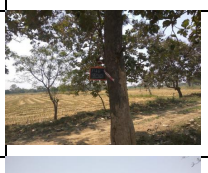
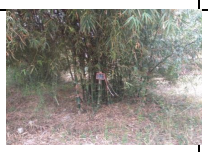
Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	1500	Existing Canal	146+600	148+100	Existing Canal	1500		
	10	Nala Crossing, Trees & Electrical Pole	146+780		Nala Crossing, Trees & Electrical Pole	10		
	20	Pump set, River Crossing, Trees & Electrical Pole	146+830		River Crossing, Trees & Electrical Pole	20		
	20	Pump set	146+900		Trees & EB Pole	20		
	30	Nala Crossing & Trees	146+900		Nala Crossing & Trees	30		
	15	Pump set	147+050		-	-		
			147+100		High Tension Tower	40		
	20	High Tension Tower	147+330		-	-		
	20	Bore well & Pump house	147+380		-	-	-	
	30	Nala Crossing & Trees	147+370	147+400	House	30		
-	-	-	147+410	147+450	Houses, Trees & Electrical Line	40		
	20	Teak wood trees	147+520		Teak wood trees	20		
	30	Electrical Pole & Line Crossing	147+880		Electrical Pole & Line Crossing	30		

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	20	Road Crossing, Trees & EB Pole	147+900		Road Crossing, Trees & EB Pole	20		
			147+900	148+020	EB Pole	50		
	250	Pump set & EB Pole	148+300	148+550	Pump set & EB Pole	250		
	10	EB Pole & trees (5 nos)	149+100		Pump set & EB Pole	20		
	10	EB Electrical Pole	149+150		EB Electrical Pole	10		
	20	Pump set	149+900		Pump set & Electrical Pole	20		
	20	Pump house	150+610		EB Pole & Line crossing & Trees (2 nos)	10		
	70	River Crossing, Trees & EB Pole	150+780		Regulator & trees	70		
		Existing Sluice	150+800		Existing Sluice			
			151+500	151+630	Electrical Pole	50		
	20	Pump set & Electrical Pole & line crossing	151+650		Electrical Pole	20		
	-	Road Crossing, Trees & EB Pole	152+350		Sulamangalam to Palasakudi Road existing culvert	-		
		Existing Sluice	152+900		Existing Sluice			

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	20	anal Crossing & Trees	152+900		Canal Crossing & Trees	20		
	10	EB Pole & Trees	153+500		EB Pole & Trees	10		
	15	Electrical Tower	153+720		Electrical Pole & Trees	15		
	40	Houses (6 nos), Electrical pole & Trees	154+590	154+630	Houses (6 nos), Electrical pole & Trees	40		
	120	Bamboo trees & trees & Canal crossing	154+630	154+750	Bamboo trees & trees & Canal crossing	120		
	10	Electrical Pole	154+650		Electrical Pole & Trees	15		
	90	Houses (4 nos) & Trees	154+680	154+770	Bamboo trees	90		
	50	Electrical poles	155+950	155+080	Electrical poles	50		
	10	Pump set & Electrical poles	155+760	155+770	Road crossing	10		
	20	Water tank & Trees	155+780					
	10	Canal crossing & Electrical Pole & Line crossing	156+000		Canal crossing & Electrical Pole & Line crossing	10		
	20	Electrical Pole	156+420	156+440	Teak wood trees	20		
	10	Road Crossing, Trees & EB Pole	156+470	156+480	Kondavattanthidal & Perunakkanallur	10		

Photo	Obstruction Length (m)	LHS - Type of Hindrance	Chainage		RHS - Type of Hindrance	Obstruction Length (m)	Photo	Remarks
			From	To				
	70	Road Crossing, Trees & EB Pole	156+480	156+550	Kondavattanthidal & Perunakkanallur	70		
	60	River crossing & Trees	156+700		River crossing & Trees	60		
	50	Electrical pole	157+150		Electrical pole	50		
	20	Canal crossing, Jungle & Trees	159+510		Canal crossing, Jungle & Trees	10		
	150	Agricultural Land (Court case)	161+050	161+200	Agricultural Land (Court case)	150		
			162+150	162+250	House, Trees (5 nos), Bore well & Pump Set	100		
	-	-	163+620	163+650	Houses (2 nos), Electrical pole, Road Crossing & Trees	30		
	400	River crossing, Jungle & Trees	163+700	164+100	River crossing, Jungle & Trees	400		
	25	Shops (6 nos)	164+250	164+275	Trees (7 nos)	25		

3.1. Pre-Construction Activities

Detailed Design & Drawings

The Plan and Profile, as well as the Pavement Designs for the entire 47.835 km project length has been completed and reviewed by the Independent Engineer (IE). Construction Methodology, QA & QC procedures submitted to the IE has been reviewed and accepted.

Table 3.1-1: Status of Design and Drawings-Highway

Sl. No.	Description	Unit	Total Scope as per Sch.-B	Design submitted	Drawing Approved
1	Pavement Design	Km	47.835	47.835	47.835
2	Plan & Profile	Km	47.835	47.835	47.835
3	Typical Cross Sections	Type	5	5	-
4	Major Intersections	No	20	-	-
5	Minor Intersections	No	22	-	-
6	Toll Plaza (Typical Details)	No	01	-	-
7	Rest Area	No	01	-	
8	Bus Bay	No	05	-	
9	Service Roads	No	27.10	27.10	22.534

Table 3.1-2 : Status of Design and Drawings –Structures

Sr. No	Description	Unit	Total Scope as per Sch. B	Design/ Drawings Submitted	Design/ Drawings Approved
1	Major Bridges	No	06	03	01
2	Minor Bridges	No	56	56	44
3	Grade Separated Intersection	No	06	06	06
4	VUP/PUP	No	12	12	12
5	Box /Slab Culvert	No	103	97	97
6	ROB	No	01	01	GAD approved

4.1. Physical Progress of Work

The following table summarize the quantum of work achieved towards the construction of the various elements of the highway.

The Progress of the Major Works carried out at the Site in the Month of July 2019 is as follows.

CUMMULATIVE STATEMENT

For Main Carriageway

Sr. No.	Description	Total Length of Highway Excluding Toll Plaza (in. Km.)	Progress up to Previous Month (in Km)	Progress during this Month (In Km.)	Cumulative Progress Achieved up to this Month (In Km)	In Progress (In Km.)	Balance Length to be Completed	Cumulative % of Progress Achieved
1	Clearing and Grubbing							
	LHS	46.925	31.28	0.21	31.49	0	15.435	67.11%
	RHS	46.925	30.72	0.20	30.92	0	16.005	65.89%
2	Embankment							
	LHS	46.925	0	0.500	0.500	10.250	46.425	0.99%
	RHS	46.925	0	0.500	0.500	9.480	46.425	0.99%
3	Sub grade							
	LHS	46.925	0	0	0	0.400	46.925	0.00%
	RHS	46.925	0	0	0	0.400	46.925	0.00%
4	GSB/ Cement Treated Base							
	LHS	46.925	0	0	0	0	46.925	0.00%
	RHS	46.925	0	0	0	0	46.925	0.00%
5	Wet Mix Macadam							
	LHS	46.925	0	0	0	0	46.925	0.00%
	RHS	46.925	0	0	0	0	46.925	0.00%
6	Dense Bitumen Macadam							
	LHS	46.925	0	0	0	0	46.925	0.00%
	RHS	46.925	0	0	0	0	46.925	0.00%
7	Bituminous Concrete							
	LHS	46.925	0	0	0	0	46.925	0.00%
	RHS	46.925	0	0	0	0	46.925	0.00%

For Service Road

Sr. No.	Description	Total Length of Service Road (Km.)	Progress up to Previous Month (in Km)	Progress during this Month (In Km.)	Cumulative Progress Achieved up to this Month (In Km)	In Progress (In Km.)	Balance Length to be Completed	Cumulative % of Progress Achieved
1	Embankment	27.1	0	0	0	0	27.1	0.00%
2	Sub grade	27.1	0	0	0	0	27.1	0.00%
3	GSB/ Cement Treated Base	27.1	0	0	0	0	27.1	0.00%
4	Wet Mix Macadam	27.1	0	0	0	0	27.1	0.00%
5	Dense Bitumen Macadam	27.1	0	0	0	0	27.1	0.00%
6	Bituminous Concrete	27.1	0	0	0	0	27.1	0.00%

Structure Work

Sr. No.	Type of Structure	Total No. of Structures	No. of Structures		
			Completed	In Progress	Balance
1	Culvert	103	22	20	61
2	Light Vehicular Underpass	2	0	2	0
3	Vehicular Underpass	10	0	9	1
4	Minor Bridges	56	11	22	23
5	Major Bridge	5	0	1	4
6	Flyover	6	0	6	0

Physical Progress of Project up to July 2019 as per approved Schedule G:

Item	Stage for Payment	Unit	Qty.	Weightage in % to Contract Price	Completed up to July'19	% Physical Progress
Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RUB/ Major Bridges/ Structures (but excluding service roads)	A- Widening and strengthening of existing road					
	(1) Earthwork up to top of the sub-grade	Km	28.70	4.26%	0	0.000%
	(2) Granular work (sub-base, base, shoulders)					
	(a) GSB/ Cement Treated Base	Km	28.70	1.40%	0	0.000%
	(b) WMM/ Cement Treated Base	Km	28.70	2.10%	0	0.000%
	(3) Shoulders	Km	7.10	0.07%	0	0.000%
	(4) Bituminous work					
	(a) DBM	Km	28.70	2.58%	0	0.000%
	(b) BC	Km	28.70	1.23%	0	0.000%
	(5) Rigid Pavement					
	Concrete Work	Km				
	(6) Widening and Repair of Culverts	Nos.	33	0.57%	6.80	0.118%
	(7) Widening and Repair of Minor Bridges	Nos.	3	0.38%	0	0.000%
	B- New realignment/bypass					
	(1) Earthwork up to top of the sub-grade	Km	63.33	18.30%	0	0.000%
	(2) Granular work (sub-base, base, shoulders)					
	(a) GSB/ Cement Treated Base	Km	62.13	3.83%	0	0.000%
	(b) WMM/ Cement Treated Base	Km	62.13	3.39%	0	0.000%
	(3) Shoulders	Km	48.19	0.06%	0	0.000%
	(4) Bituminous work					
	(a) DBM	Km	62.13	4.08%	0	0.000%
	(b) BC	Km	62.13	1.89%	0	0.000%
	(5) Rigid Pavement					
	Concrete Work	Km				
	C- New culverts, minor bridges, underpasses, overpasses on existing road, realignments, bypasses:					

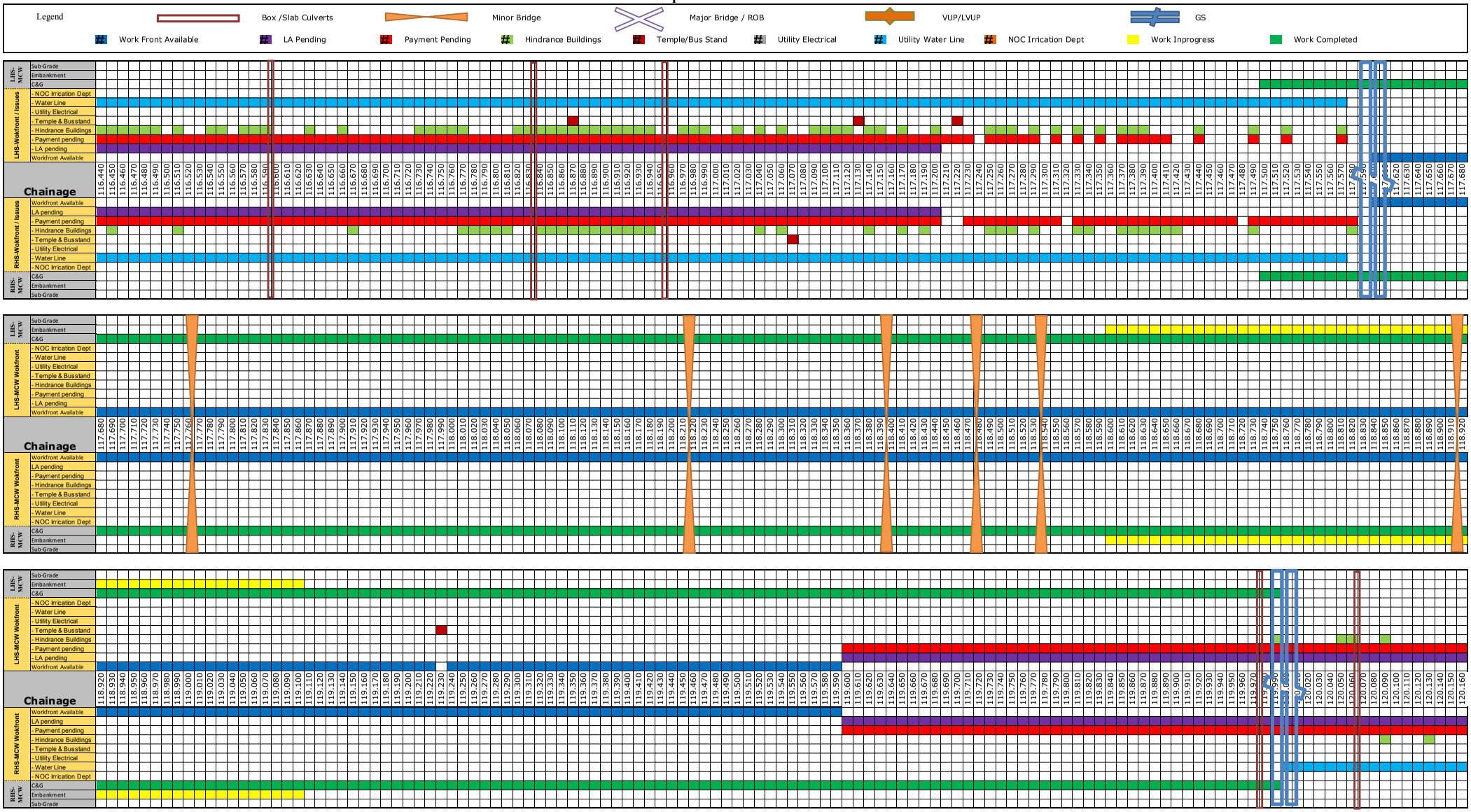
	(1) Culverts	Nos.	70	3.35%	11.90	0.569%
	(2) Minor bridges					
	(i) Foundation	Nos.	170	2.59%	48.00	0.732%
	(ii) Substructure	Nos.	270	4.23%	52.00	0.816%
	(iii) Superstructure (including crash barrier etc. complete)	Nos.	142	2.77%	23.00	0.449%
	(3) Cattle/Pedestrian underpasses					
	(i) Foundation	Nos.	4	0.04%	2.00	0.022%
	(ii) Substructure	Nos.	8	0.08%	0	0.000%
	(iii) Superstructure (including crash barrier etc. complete)	Nos.	4	0.06%	0	0.000%
	(4) Pedestrian overpasses					
	(i) Foundation	Nos.				
	(ii) Substructure	Nos.				
	(iii) Superstructure (including crash barrier etc. complete)	Nos.				
	(5) Grade separated structures					
	(a) Underpass (10 VUP)					
	(i) Foundation	Nos.	40	0.88%	15.0	0.176%
	(ii) Substructure	Nos.	40	0.45%	0	0.000%
	(iii) Superstructure (including crash barrier etc. complete)	Nos.	20	1.10%	0	0.000%
	(c) Vehicular Overpass (VOP)					
	(i) Foundation	Nos.				
	(ii) Substructure	Nos.				
	(iii) Superstructure (including crash barrier etc. complete)	Nos.				
	(c) Flyover					
	(i) Foundation	Nos.	24	0.53%	8.0	0.176%
	(ii) Substructure	Nos.	24	0.27%	0	0.000%
	(iii) Superstructure (including crash barrier etc. complete)	Nos.	12	0.99%	0	0.000%
Major Bridge works and ROB/RUB	Major Bridge works and ROB/RUB					
	A- Widening and Repair of Major Bridges					
	(1) Foundations					
	(a) Open Foundation	Nos.				
	(b) Pile foundation/ well foundation	Nos.				
	(2) Substructure	Nos.				
	(3) Superstructure (including crash barrier etc. complete)	Nos.				
	C- New Major Bridges					
	(1) Foundations					
	(a) Open Foundation	Nos.				
	(b) Pile foundation/ well foundation	Nos.	76	2.97%	0	0.000%
	(2) Substructure	Nos.	76	2.03%	0	0.000%
	(3) Superstructure (including crash barrier etc. complete)	Nos.	62	1.80%	0	0.000%
	D- New rail-road bridges					
	(a) ROB					
	(i) Foundation	Nos.	8	0.24%	0	0.000%
	(ii) Substructure	Nos.	8	0.10%	0	0.000%

	(iii) Superstructure (including crash barrier etc. complete)	Nos.	6	1.15%	0	0.000%
Structures (elevated sections, reinforced earth)	Structures (elevated sections, reinforced earth)					
	(1) Foundation	Nos.				
	(2) Substructure	Nos.				
	(3) Superstructure (including crash barrier etc. complete)	Nos.				
	(4) Reinforced earth Wall (includes Approaches of ROB, Underpasses, Overpasses,Flyover etc)		179469	8.52%	29651.9	1.409%
Other Works	Other Works					
	(i) Service roads/ Slip Roads	Km	27.1	3.86%	0	0.000%
	(ii) Toll Plaza	Nos.	1	1.88%	0	0.000%
	(iii) Road side drains	Km	12.08	1.64%	0	0.000%
	(iv) Road signs, markings, km stones, safety devices, ...					
	(a) Road signs, markings, km stones, ...	Km	95.67	2.02%	0	0.000%
	(b) Concrete Crash Barrier/ W-Beam Crash Barrier in Road work	Km				
	(i) Concrete Crash Barrier	Km	25.42	3.33%	0	0.000%
	(ii) W-Beam Crash Barrier	Km	32.75	0.70%	0	0.000%
	(v) Project facilities					
	(a) Bus Bays	No.	5	0.01%	0	0.000%
	(b) Truck Lay-byes	No.				
	(b) Rest areas	No.	1	0.22%	0	0.000%
	(vi)Repairs to bridges/structures	Nos.				
	(vii) Road side plantation	Km	22.54	0.60%	0	0.000%
	(viii) Protection works					
	(a) Boulder pitchin on slopes	Km	32.75	0.19%	0	0.000%
	(b) Toe/Retaining wall	Km				
	(x) Miscellaneous	Ls.	100%	7.24%	54%	3.882%
	Total			100.00%		8.504%

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Cholopuram - Thanjavur Project

Strip Chart as on 29-07-2019



Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Cholopuram - Thanjavur Project

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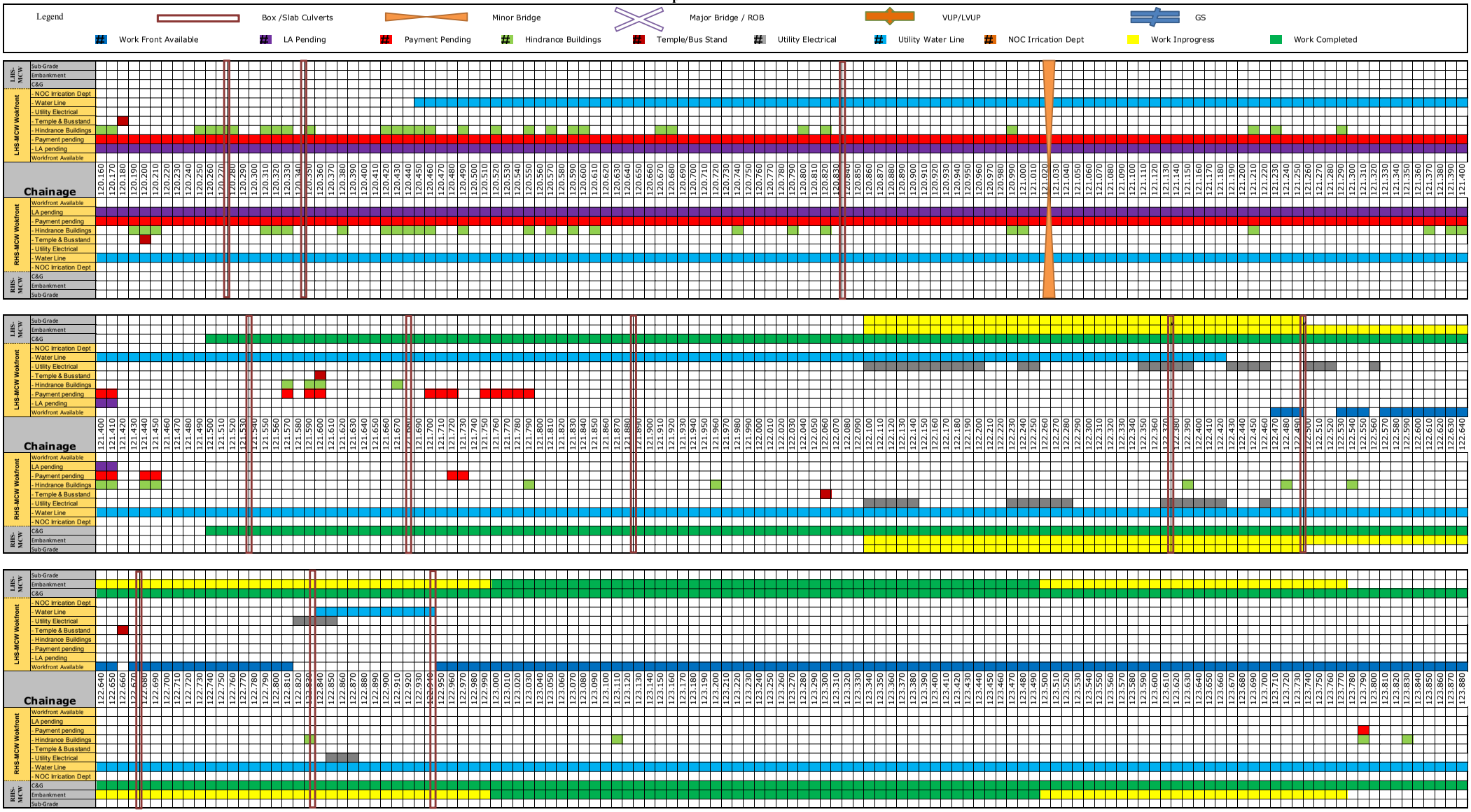

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Cholopuram - Thanjavur Project

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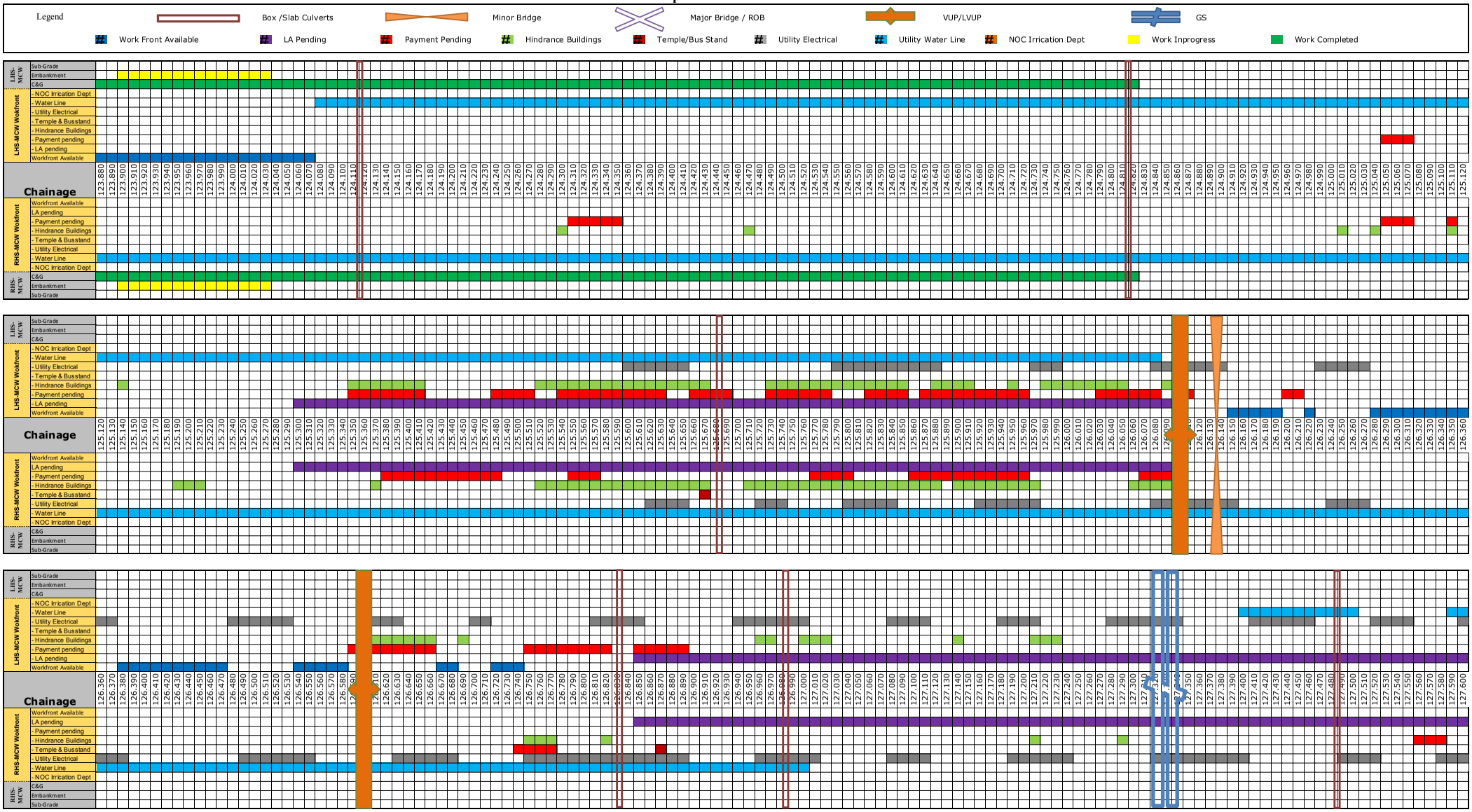

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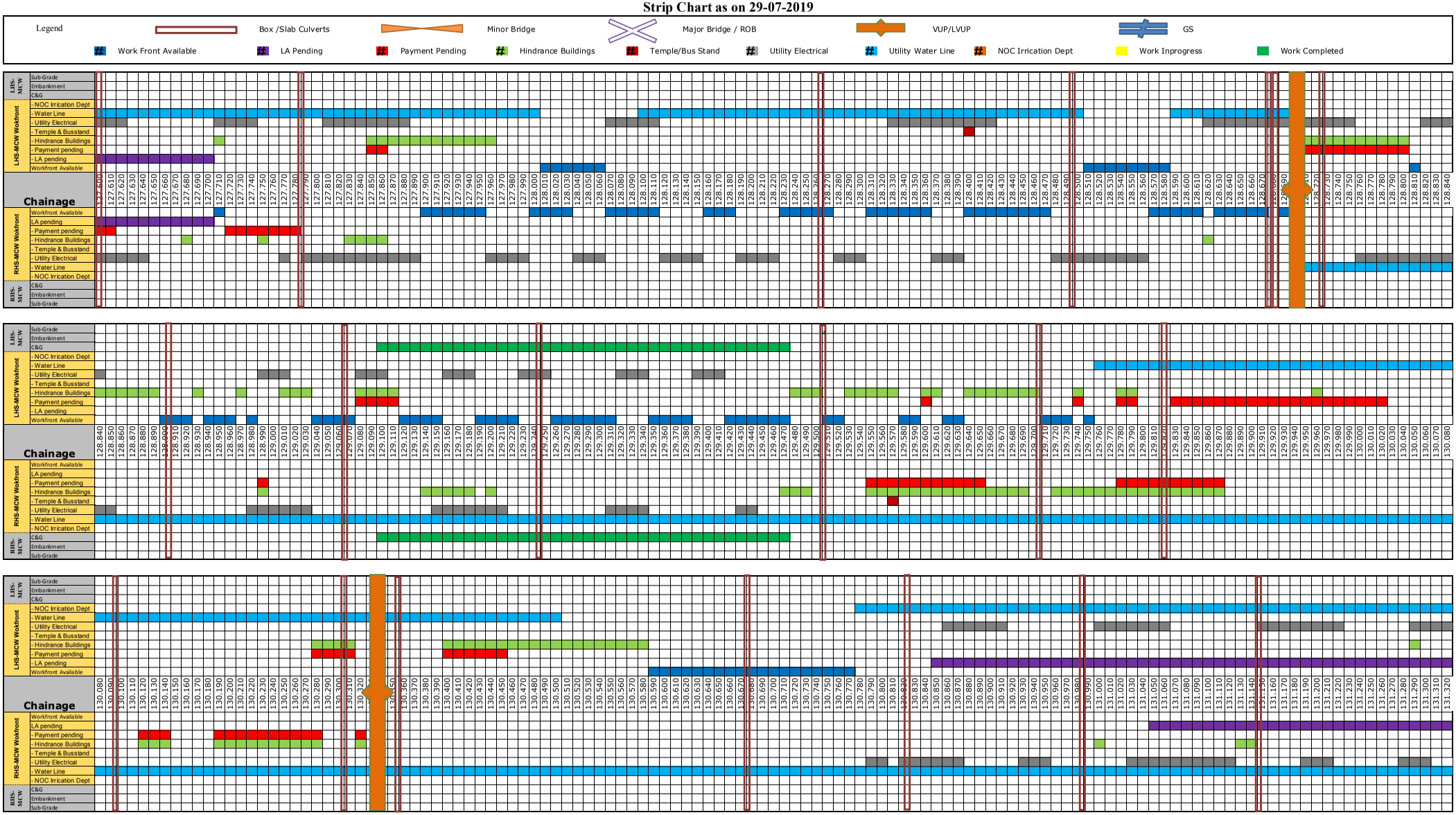

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Cholopuram - Thanjavur Project

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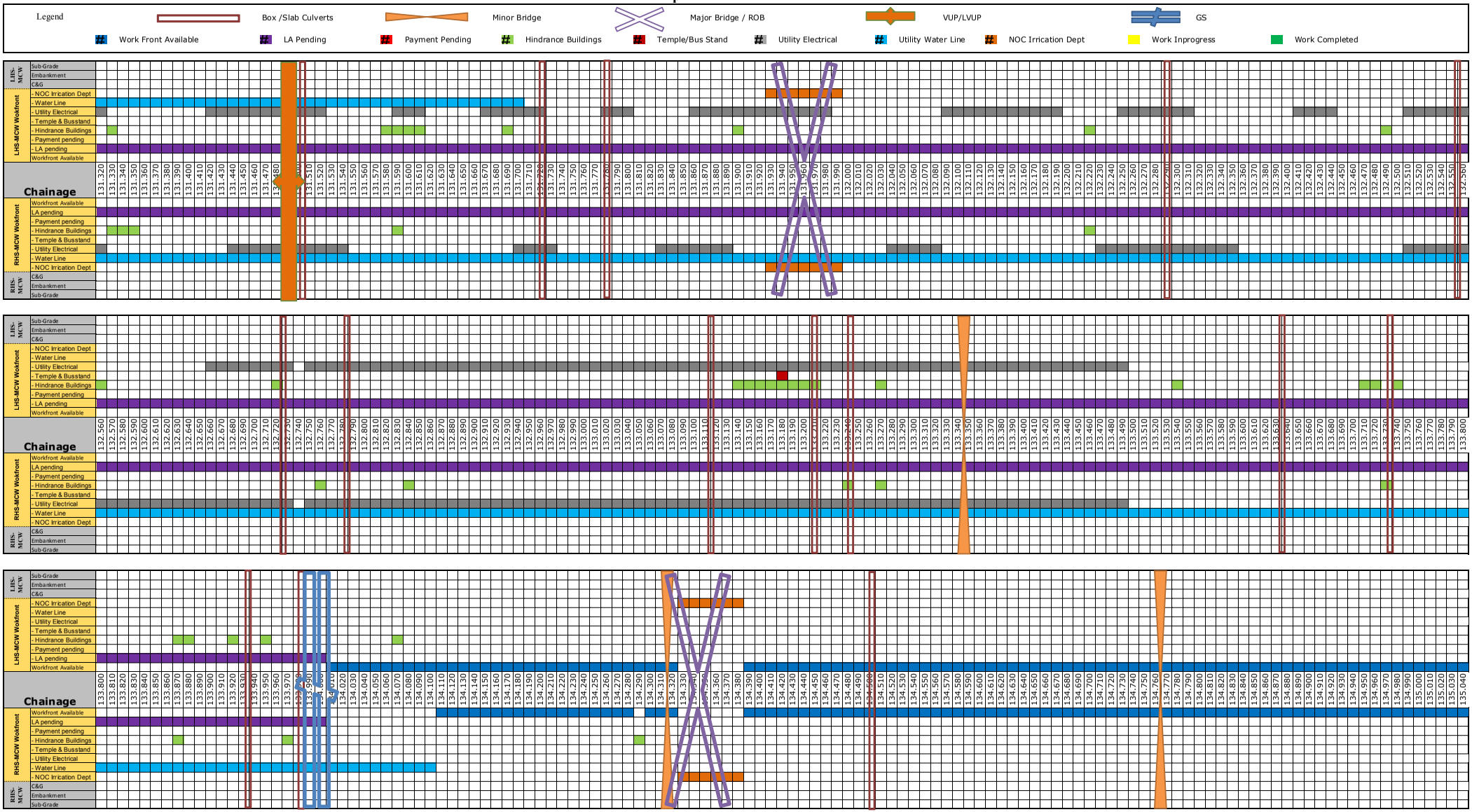

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Cholopuram - Thanjavur Project

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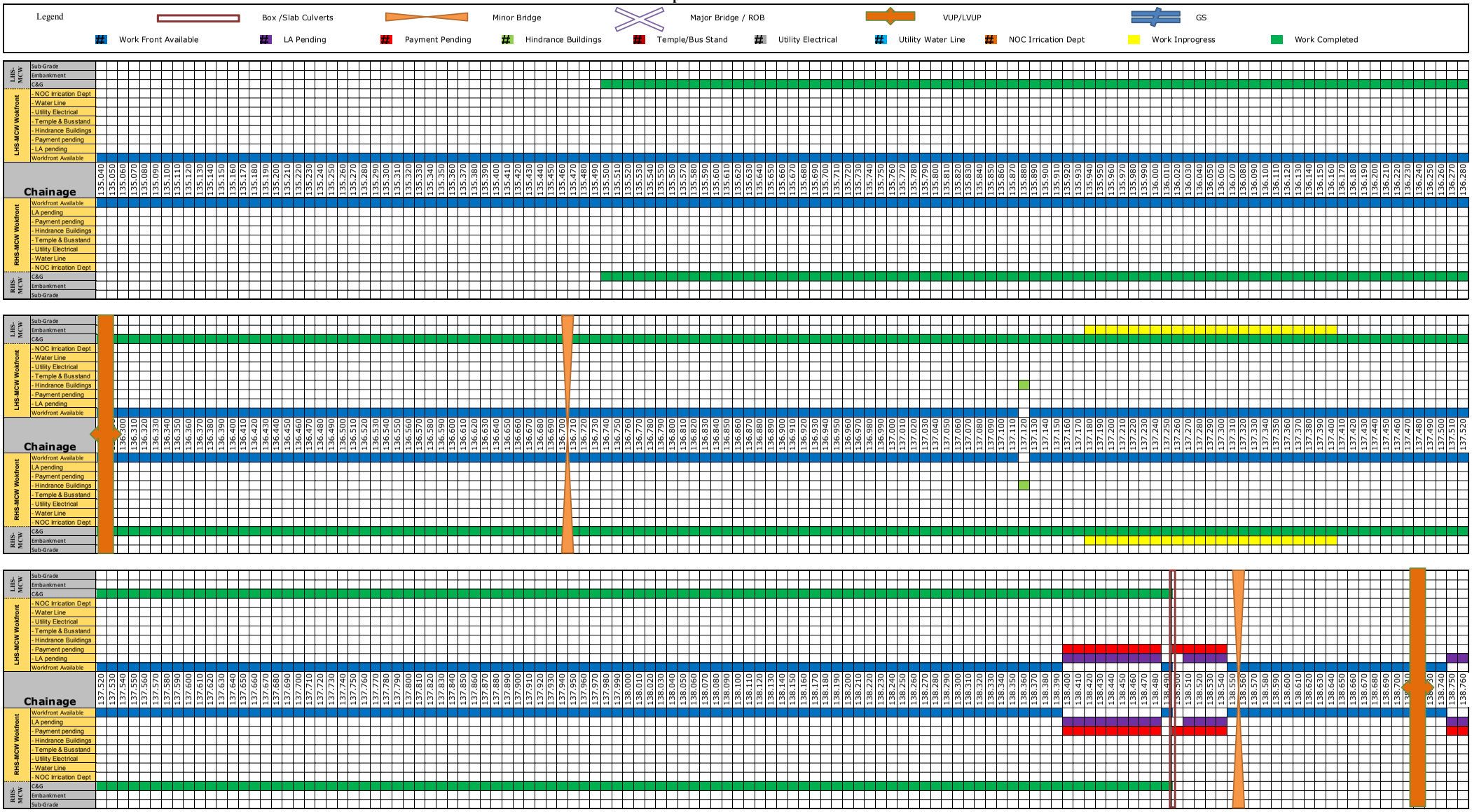

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Cholopuram - Thanjavur Project

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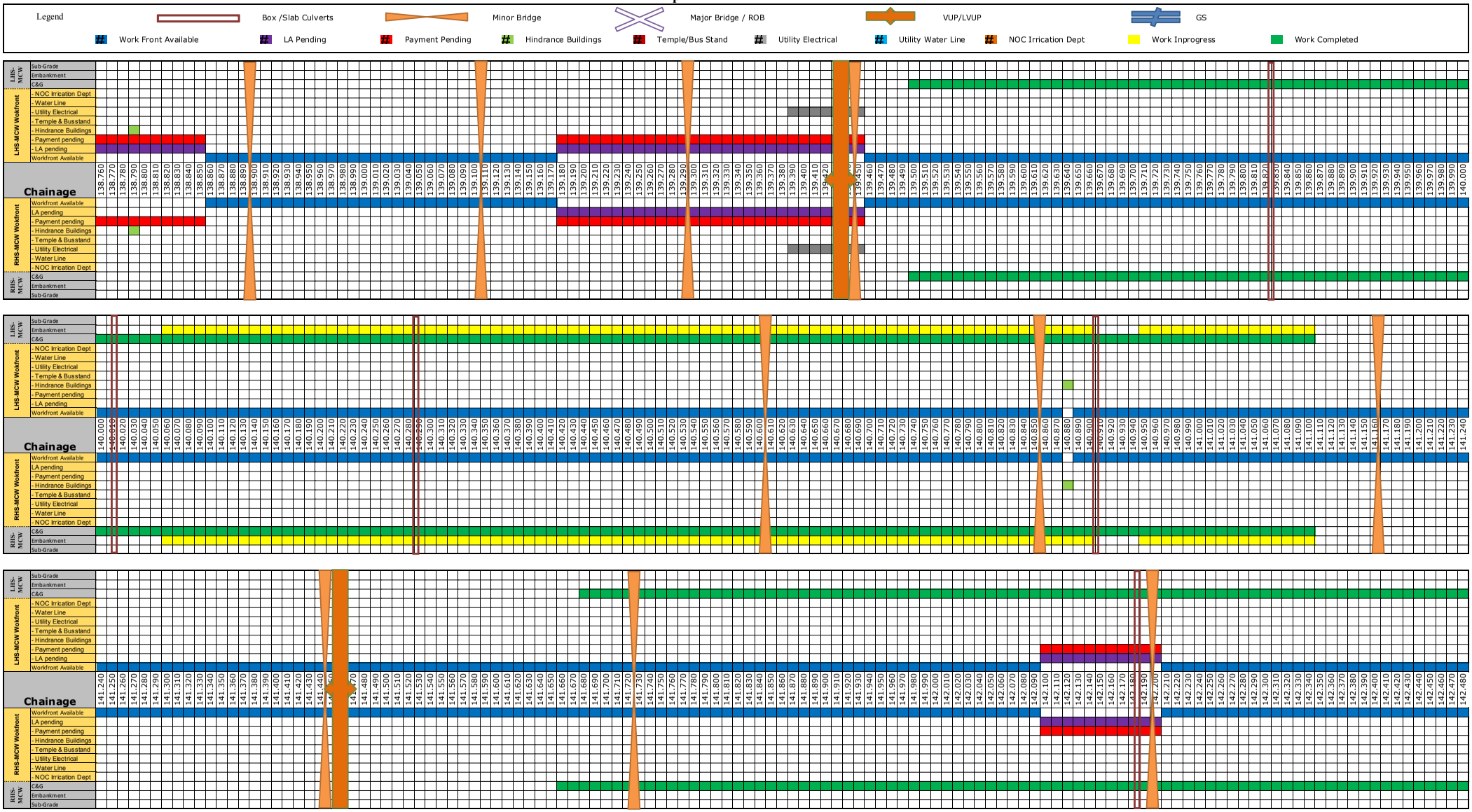

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Cholopuram - Thanjavur Project

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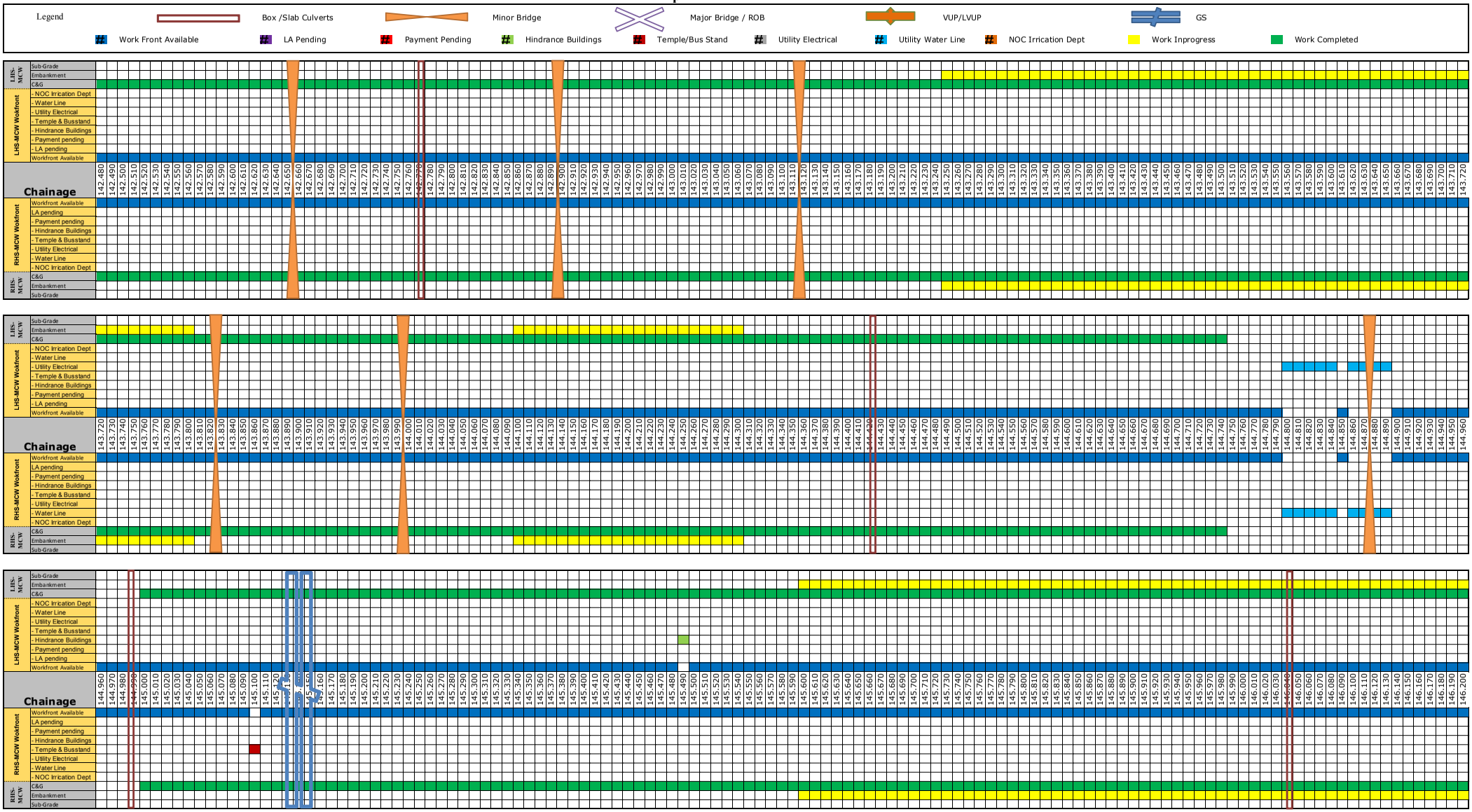

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Cholopuram - Thanjavur Project

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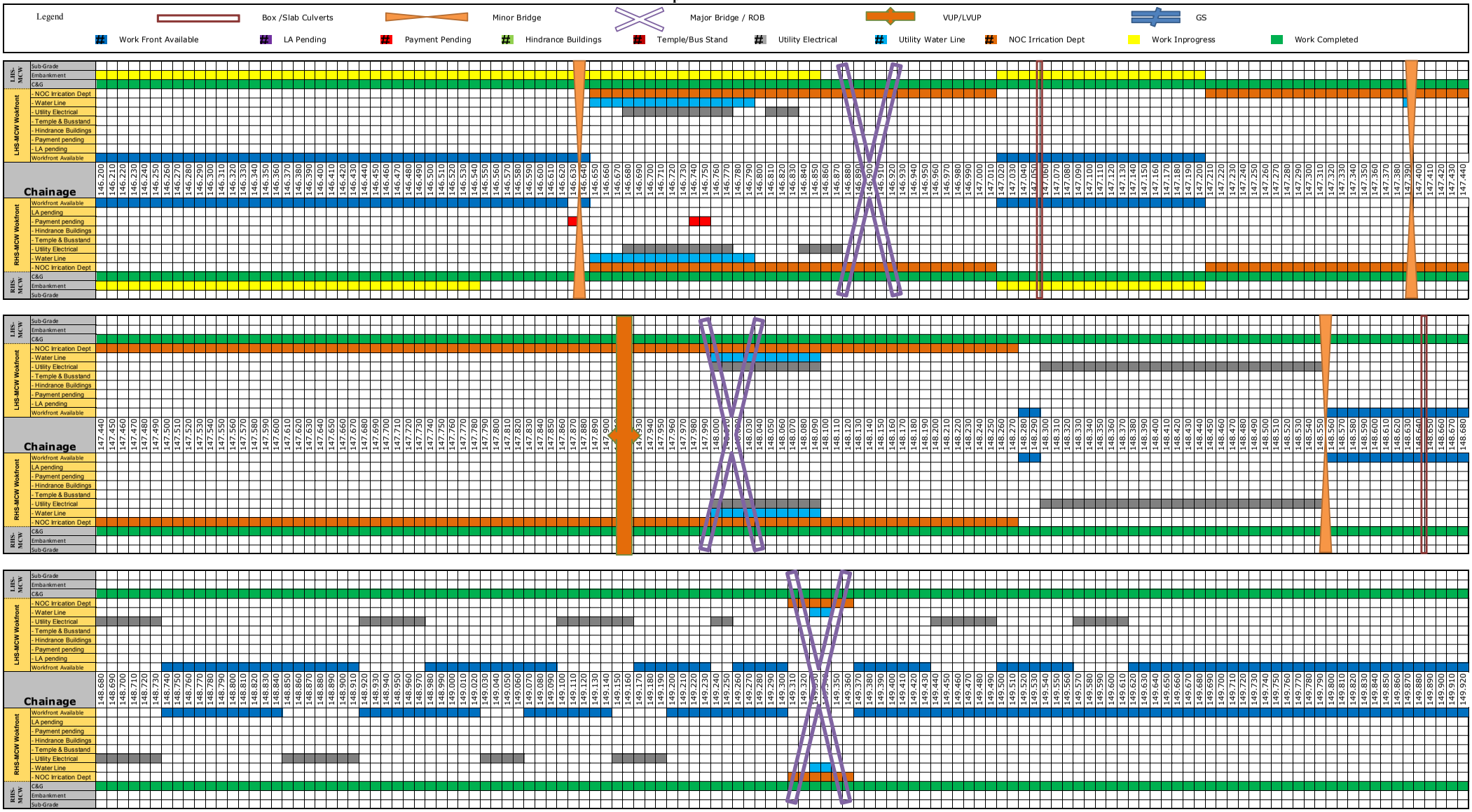

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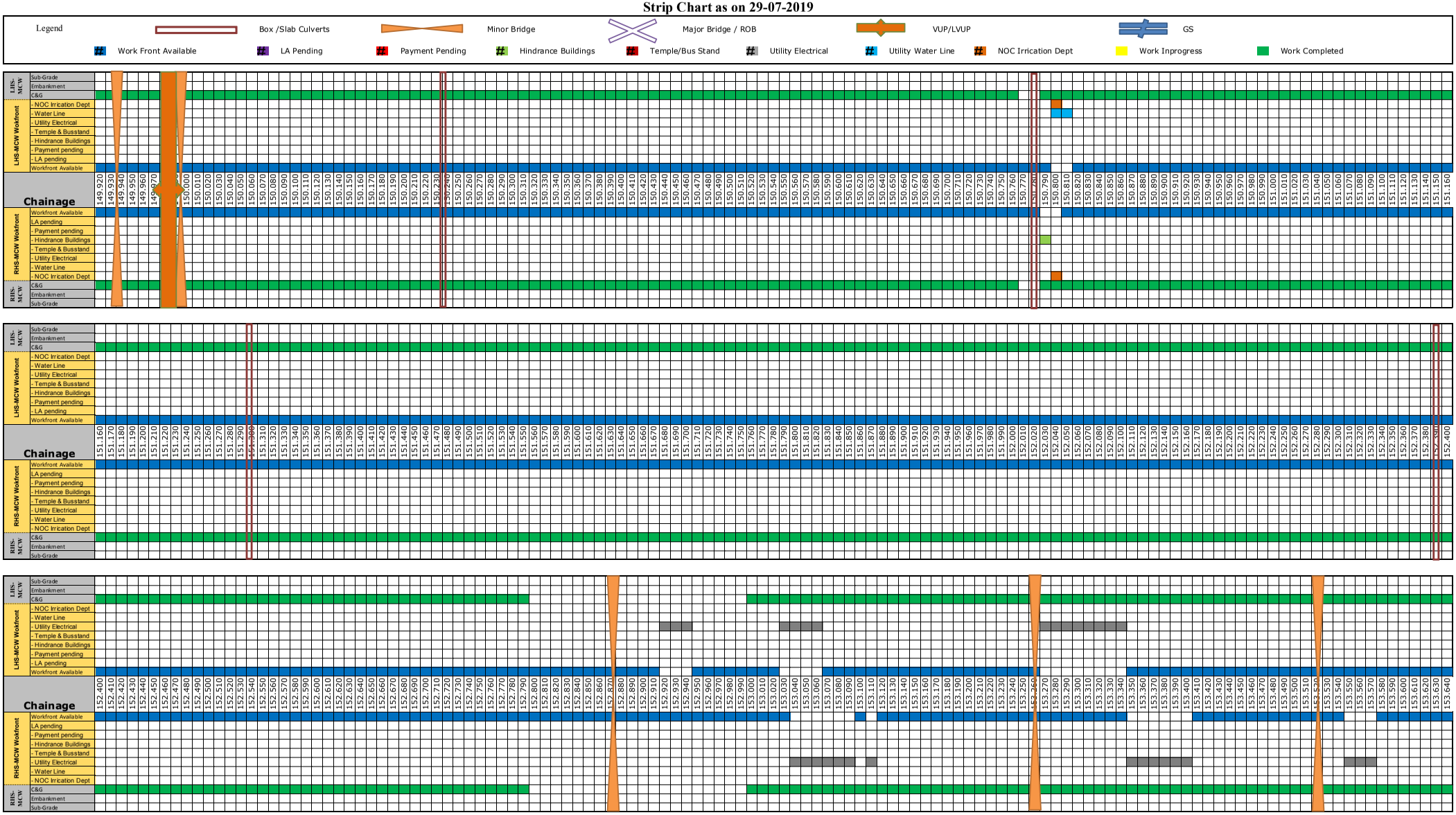
Cholopuram - Thanjavur Project

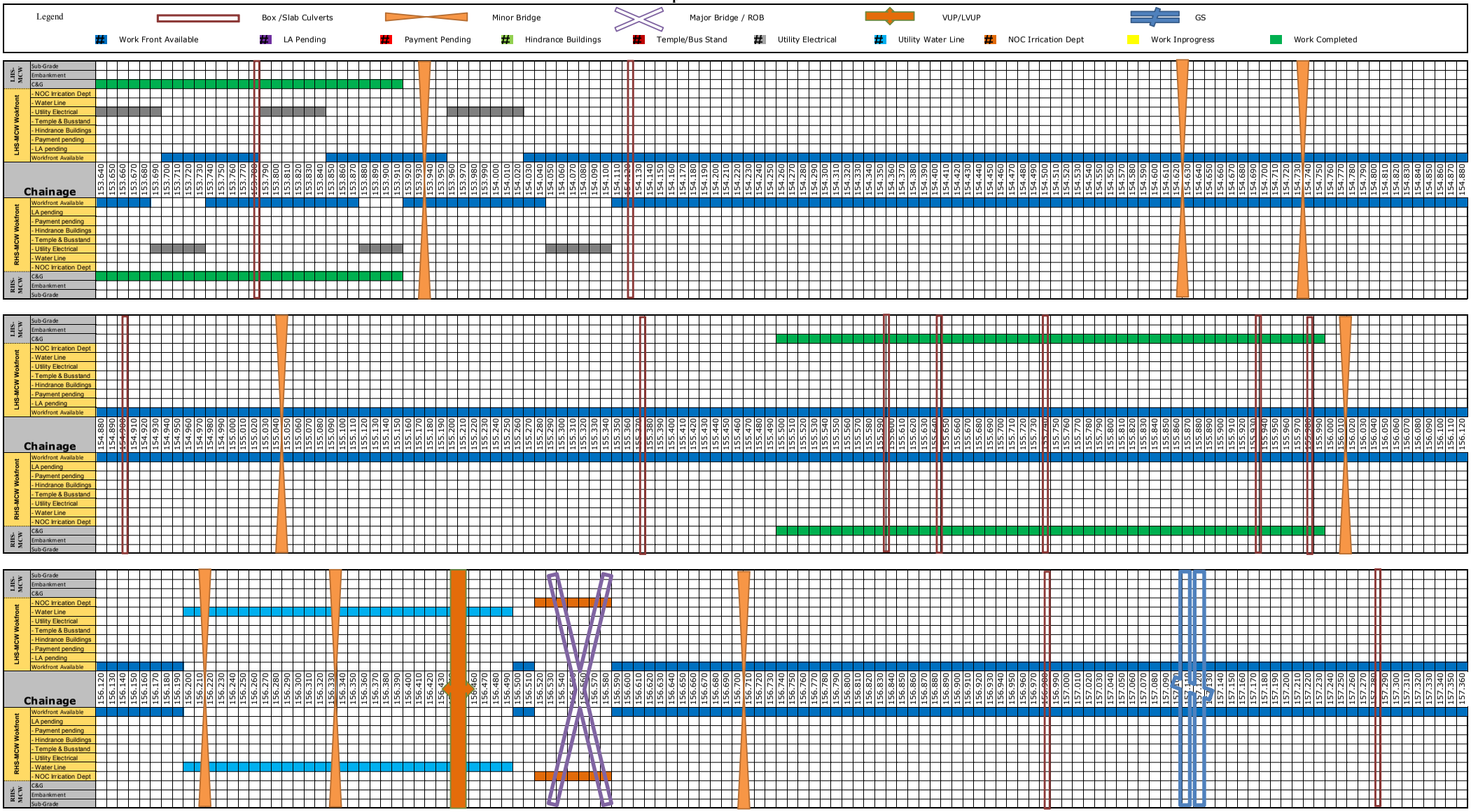
Strip Chart as on 29-07-2019



Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Cholopuram - Thanjavur Project

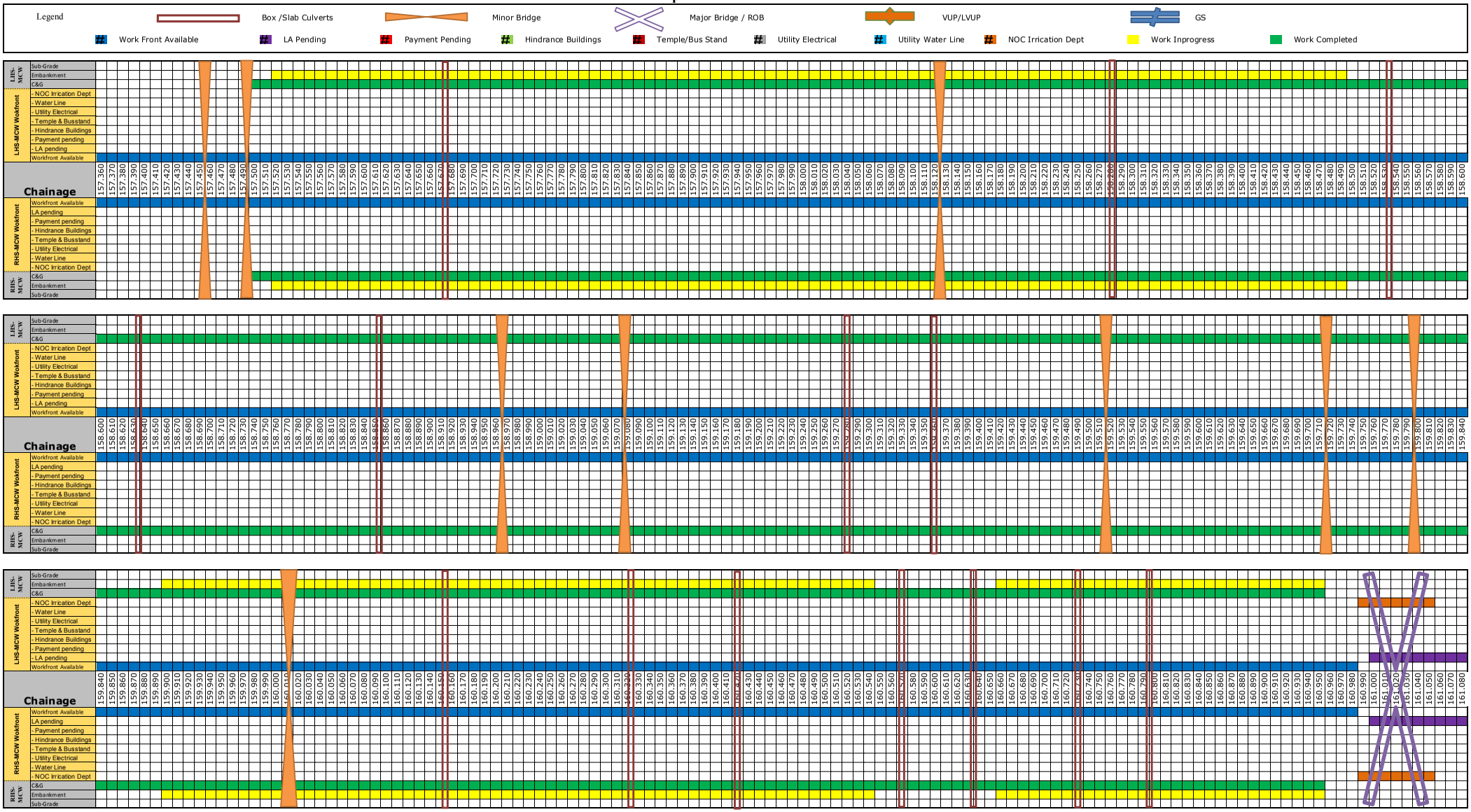
Strip Chart as on 29-07-2019



Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Cholopuram - Thanjavur Project

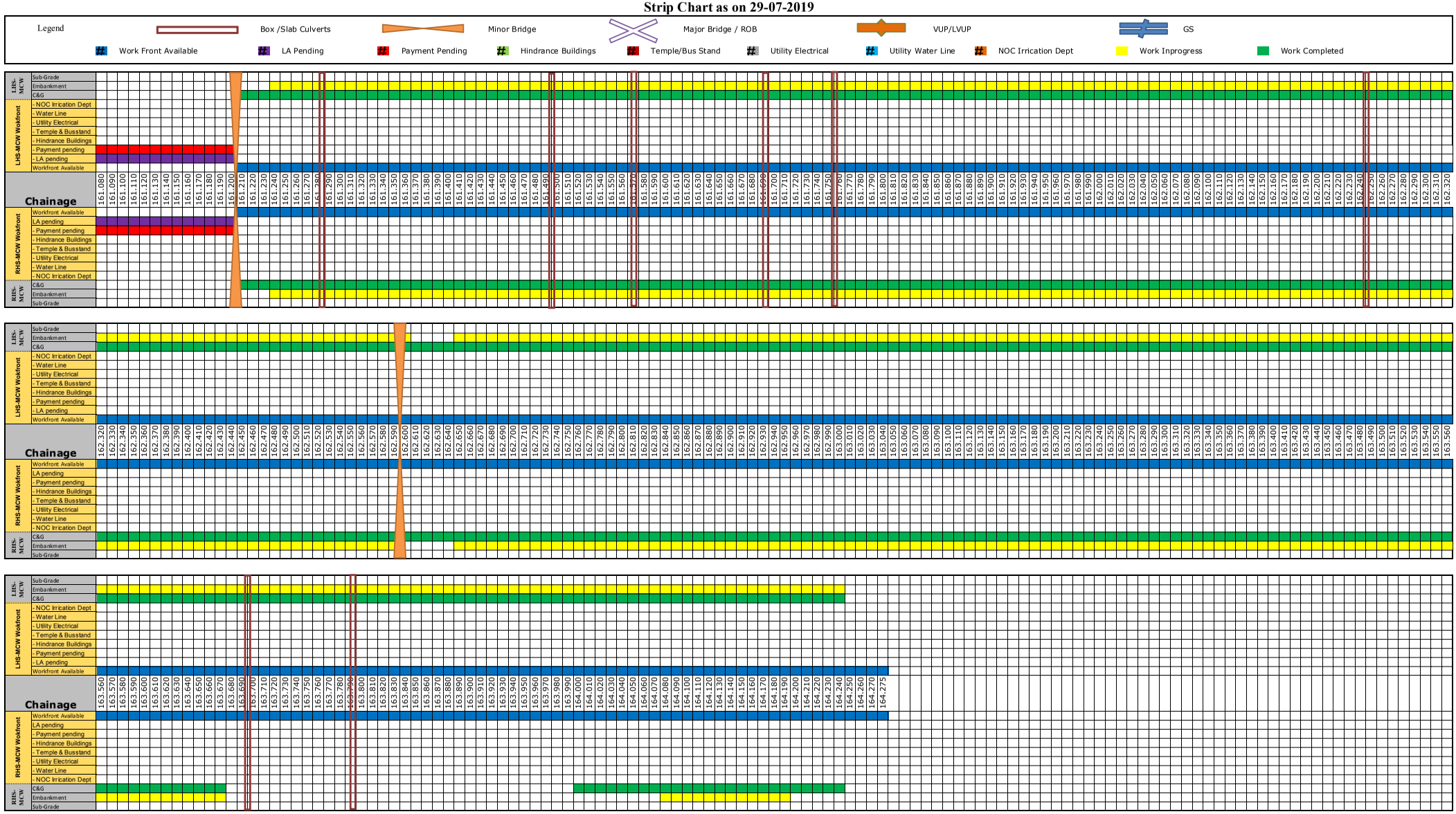
Strip Chart as on 29-07-2019



Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Cholopuram - Thanjavur Project

Strip Chart as on 29-07-2019



Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 1 : Strip Chart for status of Box Culverts on Existing Road (Main Carriageway)

IN PROGRESS | COMPLETED

MPR JULY 2019

Sr. No.	Design Chainage As per CA	Revised Design Chainage	Number and Length of Spans (m)	Remarks (As per Schd B)	Type of Existing Structure	LHS								RHS							
						Protection Work	Return Wall & Parapet	Slab	Wall	Raft	PCC	Granular Filling	Excavation	Excavation	Granular Filling	PCC	Raft	Wall	Slab	Return Wall & Parapet	Protection Work
1	116.602		1 x 2.0m	Widening	Slab Culvert																
2	116.837		1 x 2.0m	Widening	Slab Culvert																
3	116.954		1 x 1.6m	Widening	Slab Culvert																
4	120.068		1 x 3.0	Reconstruction	Slab Culvert																
5	120.280		1 x 1.5	Reconstruction	Slab Culvert																
6	120.346		1 x 1.5	Reconstruction	Box Culvert																
7	120.836		1 x 2.0m	Widening	Box Culvert																
8	121.540		1 x 3.0m	Widening	Slab Culvert																
9	121.683		1 x 1.5m	Widening	Slab Culvert																
10	121.885		2 x 1.0m	Widening	Pipe Culvert																
11	122.375	122.385	1 x 1.0m	Widening	Pipe Culvert																
12	122.497	122.508	2 x 1.0m	Widening	Pipe Culvert																
13	122.678	122.678	2 x 1.0m	Widening	Pipe Culvert																
14	122.835	122.845	1 x 3.0m	Widening	Slab Culvert																
15	122.943	122.952	2 x 1.0m	Widening	Pipe Culvert																
16	124.118	124.120	1 x 1.5m	Widening	Slab Culvert																
17	124.820	124.823	1 x 1.0m	Widening	Pipe Culvert																
18	125.682		1 x 1.5m	Widening	Slab Culvert																
19	126.836	126.854	1 x 3.0	Reconstruction	Slab Culvert																
20	126.987		1 x 2.0	Reconstruction	Slab Culvert																
21	127.488		1 x 1.2	Reconstruction	Pipe Culvert																
22	127.600	127.612	3 x 1.2	Reconstruction	Pipe Culvert																
23	127.788		1 x 0.9m	Widening	Pipe Culvert																
24	128.267		1 x 0.9m	Widening	Pipe Culvert																
25	128.494	128.505	1 x 1.2	Reconstruction	Pipe Culvert																
26	128.675		1 x 2.0	Reconstruction	Box Culvert																
27	128.682		1 x 2.0	Reconstruction	Slab Culvert																
28	128.727		3 x 1.2	Reconstruction	Pipe Culvert																
29	128.904		1 x 1.2	Reconstruction	Pipe Culvert																
30	129.067	129.079	1 x 1.2	Reconstruction	Pipe Culvert																
31	129.246	129.260	1 x 0.9m	Widening	Pipe Culvert																
32	129.507		1 x 3.0m	Widening	Slab Culvert																
33	129.707		1x2.5m	Widening	Slab Culvert																
34	129.823		1 x 0.9m	Widening	Pipe Culvert																
35	130.096		1 x 1.2	Reconstruction	Pipe Culvert																
36	130.307	130.318	1 x 1.5	Reconstruction	Slab Culvert																
37	130.357	130.368	1 x 1.5	Reconstruction	Slab Culvert																
38	130.680		2 x 1.2	Reconstruction	Pipe Culvert																
39	130.827		1 x 0.9m	Widening	Pipe Culvert																
40	130.989		1 x 3.0m	Widening	Slab Culvert																
41	131.146	131.159	1 x 0.9m	Widening	Pipe Culvert																
42	131.505		1 x 3.0	Reconstruction	Slab Culvert																
43	131.722	131.733	1 x 1.2	Reconstruction	Pipe Culvert																
44	131.780	131.792	1 x 1.2	Reconstruction	Pipe Culvert																
45	132.300		1 x 3.0m	Widening	Slab Culvert																
46	132.557		1 x 3.0m	Widening	Slab Culvert																
47	132.730		1 x 3.0m	Widening	Slab Culvert																
48	132.789		1 x 2.0m	Widening	Slab Culvert																
49	133.115		1 x 5.0m	Widening	Slab Culvert																
50	133.210		1 x 2.0m	Widening	Slab Culvert																
51	133.240		1 x 0.9m	Widening	Pipe Culvert																
52	133.635	133.579	1 x 2.0	Reconstruction	Slab Culvert																
53	133.734	113.748	1 x 2.0	Reconstruction	Slab Culvert																
54	133.935		1 x 1.2	Reconstruction	Pipe Culvert																
55	133.987		1 x 1.5	Reconstruction	Slab Culvert																
56	163.700		2 x 0.9m	Widening	Pipe Culvert																
57	163.793		1 x 0.9m	Widening	Pipe Culvert																

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 1 : Strip Chart for status of Box Culverts on Existing Road (Service Road)

IN PROGRESS | COMPLETED

MPR JULY 2019

Sr. No.	Design Chainage As per CA	Revised Design Chainage	Number and Length of Spans (m)	Remarks (As per Schd B)	Type of Existing Structure	LHS								RHS							
						Protection Work	Return Wall & Parapet	Slab	Wall	Raft	PCC	Granular Filling	Excavation	Excavation	Granular Filling	PCC	Raft	Wall	Slab	Return Wall & Parapet	Protection Work
1	120.068	120.068	1 x 3.0	Reconstruction	Slab Culvert																
2	120.280	120.288	1 x 1.5	Reconstruction	Slab Culvert																
3	120.346	120.356	1 x 1.5	Reconstruction	Box Culvert																
4	126.836	126.829	1 x 3.0	Reconstruction	Slab Culvert																
5	126.987	127.007	1 x 2.0	Reconstruction	Slab Culvert																
6	127.488	127.433	1 x 1.2	Reconstruction	Pipe Culvert																
7	127.600	127.612	3 x 1.2	Reconstruction	Pipe Culvert																
8	128.494	128.504	1 x 1.2	Reconstruction	Pipe Culvert																
9	128.675	128.667	1 x 2.0	Reconstruction	Box Culvert																
10	128.682	128.674	1 x 2.0	Reconstruction	Slab Culvert																
11	128.727	128.738	3 x 1.2	Reconstruction	Pipe Culvert																
12	130.096	130.109	1 x 1.2	Reconstruction	Pipe Culvert																
13	130.307	130.318	1 x 1.5	Reconstruction	Slab Culvert																
14	130.357	130.369	1 x 1.5	Reconstruction	Slab Culvert																
15	130.680	130.692	2 x 1.2	Reconstruction	Pipe Culvert																
16	131.505	131.516	1 x 3.0	Reconstruction	Slab Culvert																
17	131.722	131.732	1 x 1.2	Reconstruction	Pipe Culvert																
18	131.780	131.791	1 x 1.2	Reconstruction	Pipe Culvert																
19	133.734	133.747	1 x 2.0	Reconstruction	Slab Culvert																
20	133.935	133.938	1 x 1.2	Reconstruction	Pipe Culvert																

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 2 : Strip Chart for status of Box Culverts on Bypass (Main Carriageway)

IN PROGRESS

COMPLETED

MPR JULY 2019

Sr. No.	Design Chainage As per CA	Revised Design Chainage	Number and Length of Spans (m)	Remarks	Type of Structure	LHS								RHS							
						Protection Work	Return Wall & Parapet	Slab	Wall	Raft	PCC	Granular Filling	Excavation	Excavation	Granular Filling	PCC	Raft	Wall	Slab	Return Wall & Parapet	Protection Work
1	119.971	119.879	1 x 1.5	Reconstruction	Slab Culvert																
2	134.500	134.514	1 x 2.0m x 2.0m	New Costruction	Box Culvert																
3	138.492	138.523	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
4	139.827	139.856	1 x 2.0m x 2.0m	New Costruction	Box Culvert																
5	140.010	140.040	1 x 2.0m x 2.0m	New Costruction	Box Culvert																
6	140.292	140.322	1 x 3.0m x 2.0m	New Costruction	Box Culvert																
7	140.911	140.945	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
8	142.189	142.048	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
9	142.776	142.812	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
10	144.426		1 x 4.0m x 2.0m	New Costruction	Box Culvert																
11	146.049	146.079	1 x 3.0m x 2.0m	New Costruction	Box Culvert																
12	147.060	147.093	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
13	148.650	148.650	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
14	150.237	150.265	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
15	150.780		1 x 4.0m x 2.0m	New Costruction	Box Culvert																
16	152.390		1 x 4.0m x 2.0m	New Costruction	Box Culvert																
17	153.781		1 x 2.0m x 2.0m	New Costruction	Box Culvert																
18	154.129		1 x 4.0m x 2.0m	New Costruction	Box Culvert																
19	154.900		1 x 3.0m x 2.0m	New Costruction	Box Culvert																
20	155.381		1 x 3.0m x 2.0m	New Costruction	Box Culvert																
21	155.601		1 x 4.0m x 2.0m	New Costruction	Box Culvert																
22	155.645		1 x 3.0m x 2.0m	New Costruction	Box Culvert																
23	155.743		1 x 2.0m x 2.0m	New Costruction	Box Culvert																
24	155.938		1 x 4.0m x 2.0m	New Costruction	Box Culvert																
25	156.984		1 x 3.0m x 2.0m	New Costruction	Box Culvert																
26	157.283		1 x 4.0m x 2.0m	New Costruction	Box Culvert																
27	157.678	157.701	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
28	158.283		1 x 2.0m x 2.0m	New Costruction	Box Culvert																
29	158.531		1 x 2.0m x 2.0m	New Costruction	Box Culvert																
30	158.639		1 x 2.0m x 2.0m	New Costruction	Box Culvert																
31	158.852		1 x 5.0m x 2.0m	New Costruction	Box Culvert																
32	159.282		1 x 4.0m x 2.0m	New Costruction	Box Culvert																
33	159.361		1 x 3.0m x 2.0m	New Costruction	Box Culvert																
34	160.157		1 x 4.0m x 2.0m	New Costruction	Box Culvert																
35	160.326		1 x 3.0m x 2.0m	New Costruction	Box Culvert																
36	160.420		1 x 2.0m x 2.0m	New Costruction	Box Culvert																
37	160.572		1 x 2.0m x 2.0m	New Costruction	Box Culvert																
38	160.635	160.658	1 x 2.0m x 2.0m	New Costruction	Box Culvert																
39	160.733		1 x 2.0m x 2.0m	New Costruction	Box Culvert																
40	160.798	160.850	1 x 2.0m x 2.0m	New Costruction	Box Culvert																
41	161.288	161.310	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
42	161.499	161.501	1 x 2.0m x 2.0m	New Costruction	Box Culvert																
43	161.573	161.595	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
44	161.693	161.717	1 x 2.0m x 2.0m	New Costruction	Box Culvert																
45	161.757		1 x 2.0m x 2.0m	New Costruction	Box Culvert																
46	162.243	162.255	1 x 4.0m x 2.0m	New Costruction	Box Culvert																

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 2 : Strip Chart for status of Box Culverts on Bypass (Service Road)

IN PROGRESS

COMPLETED

MPR JULY 2019

Sr. No.	Design Chainage As per CA	Revised Design Chainage	Number and Length of Spans (m)	Remarks	Type of Structure	LHS								RHS							
						Protection Work	Return Wall & Parapet	Slab	Wall	Raft	PCC	Granular Filling	Excavation	Excavation	Granular Filling	PCC	Raft	Wall	Slab	Return Wall & Parapet	Protection Work
1	119.971	119.978	1 x 1.5	Reconstruction	Slab Culvert																
2	134.500	134.515	1 x 2.0m x 2.0m	New Costruction	Box Culvert																
3	138.492	138.503	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
10	144.426	144.500	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
14	150.237	150.268	1 x 4.0m x 2.0m	New Costruction	Box Culvert																
25	156.984	156.991	1 x 3.0m x 2.0m	New Costruction	Box Culvert																
26	157.283	157.289	1 x 4.0m x 2.0m	New Costruction	Box Culvert																

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 3 : Strip Chart for status of MNB - Box
(Main Carriageway)

IN PROGRESS

COMPLETED

MPR JULY 2019

Sr. No.	Design Chainage As per CA	Revised Chainage	Number and Length of Spans (m)	Type of Structure		LHS Protection Work	LHS Retaing Wall + CB	LHS Slab	LHS Wall	LHS Raft	LHS PCC	LHS Granular Filling	LHS Excavation	RHS Excavation	RHS Granular Filling	RHS PCC	RHS Raft	RHS Wall	RHS Slab	RHS Retaing Wall + CB	RHS Protection Work
MNB IN EXISTING LENGTH																					
1	121.024		1 x 6.0m	MNBB	Existing																
2	122.046		3 x 7.5m	MNBB	Existing																
3	133.345		3 x 12.5m	MNBB	Existing																
						0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MNB IN BYPASS																					
1	117.764	117.764	2 x 10.0m	MNBB	Bypass																
2	118.217	118.110	1 x 8.0m	MNBB	Bypass																
3	118.400	119.570	1 x 6.0m	MNBB	Bypass																
4	118.480	118.480	1 x 6.0m	MNBB	Bypass																
5	118.539	118.548	1 x 8.0m	MNBB	Bypass																
6	118.919	119.100	1 x 6.0m	MNBB	Bypass																
7	134.320		2x 10.0m	MNBB	Bypass																
8	134.770	134.774	1 x 10.0m	MNBB	Bypass																
?.	136.705	136.738	1 x 6.0m	MNBB	Bypass																
10	138.555	138.585	1 x 6.0m	MNBB	Bypass																
11	139.453		1 x 7.0m	MNBB	Bypass																
12	140.605	140.637	1 x 6.0m	MNBB	Bypass																
13	140.860	140.892	1 x 8.0m	MNBB	Bypass																
14	141.164	141.145	1 x 10.0m	MNBB	Bypass																
15	141.445		1 x 8.0m	MNBB	Bypass																
16	141.727	141.760	1 x 8.0m	MNBB	Bypass																
17	142.204	142.235	1 x 8.0m	MNBB	Bypass																
18	142.657	142.687	1 x 6.0m	MNBB	Bypass																
19	142.897	142.932	2 x 8.0m	MNBB	Bypass																
20	143.823	143.852	2 x 8.0m	MNBB	Bypass																
21	144.000		2 x 10.0m	MNBB	Bypass																
22	146.639		1 x 10.0m	MNBB	Bypass																
23	147.396	147.426	1 x 8.0m	MNBB	Bypass																
24	148.560	148.592	1 x 8.0m	MNBB	Bypass																
25	149.940	149.962	1 x 10.0m	MNBB	Bypass																
26	149.997		1 x 6.0m	MNBB	Bypass																
27	152.876		2 x 10.0m	MNBB	Bypass																
28	153.263	153.287	1 x 10.0m	MNBB	Bypass																
29	153.528	153.557	1 x 6.0m	MNBB	Bypass																
30	153.939	153.968	1 x 10.0m	MNBB	Bypass																
31	154.626	154.659	1 x 6.0m	MNBB	Bypass																
32	154.739	154.764	1 x 10.0m	MNBB	Bypass																
33	156.014	156.040	1 x 8.0m	MNBB	Bypass																
34	156.216	156.244	1 x 6.0m	MNBB	Bypass																
35	156.336	156.366	1 x 6.0m	MNBB	Bypass																
36	156.707		1 x 10.0m	MNBB	Bypass																
37	157.458	157.485	1 x 7.0m	MNBB	Bypass																
38	157.494	157.517	1 x 8.0m	MNBB	Bypass																
39	158.128	158.155	1 x 7.0m	MNBB	Bypass																
40	158.972	158.994	1 x 6.0m	MNBB	Bypass																
41	159.076		1 x 8.0m	MNBB	Bypass																
42	159.723		1 x 6.0m	MNBB	Bypass																
43	159.801		1 x 6.0m	MNBB	Bypass																
44	161.208	161.227	1 x 8.0m	MNBB	Bypass																

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 3 : Strip Chart for status of MNB - Deck Type (Main Carriageway)

IN PROGRESS

COMPLETED

MPR JULY 2019

SR.NO.	MNB at Chainage	Span		LHS								RHS							
				Crash Barrier	Slab	Girder Launching	Girder Casting	Piercap/Abtcap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Piercap/Abtcap	Girder Casting	Girder Launching	Slab	Crash Barrier
1	126+134	1x20.0m	A1																
			A2																
2	138+901	3x15.0m	A1																
			P1																
			P2																
			A2																
3	139+105	2x15.0m	A1																
			P1																
			A2																
4	139+299	2x15.0m	A1																
			P1																
			A2																
5	143+115	3x15.0m	A1																
			P1																
			P2																
			A2																
6	144+880	2x15.0m	A1																
			P1																
			A2																
7	155+049	1x15.0m	A1																
			A2																
8	159+522	1x15.0m	A1																
			A2																
9	162+595	2x15.0m	A1																
			P1																
			A2																

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 3 : Strip Chart for status of MNB - Box (Service Road)

IN PROGRESS

COMPLETED

MPR JULY 2019

Sr. No.	Design Chainage As per CA	Revised Chainage	Number and Length of Spans (m)	Type of Structure		LHS							RHS						
						Protection Work	Slab	Wall	Raft	PCC	Granular Filling	Excavation	Excavation	Granular Filling	PCC	Raft	Wall	Slab	Protection Work
MNB IN BYPASS																			
1	117.764	117.764	2 x 10.0m	MNBB	Bypass														
7	134.320	134.320	2x 10.0m	MNBB	Bypass														
8	134.770	134.774	1 x 10.0m	MNBB	Bypass														
10	138.555	138.585	1 x 6.0m	MNBB	Bypass														
11	139.453	139.485	1 x 7.0m	MNBB	Bypass														
14	141.164	141.145	1 x 10.0m	MNBB	Bypass														
15	141.445	141.466	1 x 8.0m	MNBB	Bypass														
16	141.727	141.760	1 x 8.0m	MNBB	Bypass														
25	149.940	149.962	1 x 10.0m	MNBB	Bypass														
26	149.997	150.028	1 x 6.0m	MNBB	Bypass														
33	156.014	156.040	1 x 8.0m	MNBB	Bypass														
34	156.216	156.244	1 x 6.0m	MNBB	Bypass														
35	156.336	156.366	1 x 6.0m	MNBB	Bypass														
36	156.707	156.734	1 x 10.0m	MNBB	Bypass														

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 3 : Strip Chart for status of MNB - Deck Type (Servie Road)

IN PROGRESS

COMPLETED

MPR JULY 2019

SR.NO.	MNB at Chainage	Chainge as peR Site	Span		LHS								RHS							
					Crash Barrier	Slab	Girder Launching	Girder Casting	Piercap/Abtcap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Piercap/Abtcap	Girder Casting	Girder Launching	Slab	Crash Barrier
1	126+134	126+134	1x20.0m	A1																
				A2																
2	138+901	138+935	3x15.0m	A1																
				P1																
				P2																
				A2																
3	139+105	139+138	2x15.0m	A1																
				P1																
				A2																
4	139+299	139+335	2x15.0m	A1																
				P1																
				A2																
5	144+880	114+916	2x15.0m	A1																
				P1																
				A2																

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 4 : Strip Chart for status of PUP						IN PROGRESS						COMPLETED					
	MPR	JULY	2019		LHS						RHS						
Sr. No.	Design Chainage As per CA	Chainage as Per Site	Number and Length of Spans (m)		Protection Work	Slab	Wall	Raft	PCC	Excavation	Excavation	PCC	Raft	Wall	Slab	Protection Work
1	147.917	147.951	1 X 7 m	BYPASS												
2	149.988	150.023	1 X 7 m	BYPASS												

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 5 : Strip Chart for status of MJB
(Main Carriageway)

IN PROGRESS

COMPLETED

MPR JULY 2019

MJB at Chainage 146+902 (4x20) -BYPASS

	LHS/LSR								RHS/LSR							
	Crash Barrier	Slab	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Slab	Crash Barrier
A1																
P1																
P2																
P3																
A2																

MJB at Chainage 148+017 (3x20)- BYPASS

	LHS/LSR								RHS/LSR							
	Crash Barrier	Slab	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Slab	Crash Barrier
A1																
P1																
P2																
A2																

MJB at Chainage 149+334 (3x20)- BYPASS

	LHS/LSR								RHS/LSR							
	Crash Barrier	Slab	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Slab	Crash Barrier
A1																
P1																
P2																
A2																

MJB at Chainage 156+559 (6x20)- BYPASS

	LHS/LSR								RHS/LSR							
	Crash Barrier	Slab	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Slab	Crash Barrier
A1																
P1																
P2																
P3																
P4																
P5																
A2																

MJB at Chainage 161+019 (6x20)- BYPASS

	LHS/LSR								RHS/LSR							
	Crash Barrier	Slab	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Slab	Crash Barrier
A1																
P1																
P2																
P3																
P4																
P5																
A2																

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 5 : Strip Chart for status of MJB (Service Road)

IN PROGRESS

COMPLETED

MPR JULY 2019

MJB at Chainage 148+017 (3x20)- BYPASS SERVICE ROAD

	LHS/LSR								RHS/LSR							
	Crash Barrier	Slab	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Slab	Crash Barrier
A1																
P1																
P2																
A2																

MJB at Chainage 156+559 (6x20)- BYPASS SERVICE ROAD

	LHS/LSR								RHS/LSR							
	Crash Barrier	Slab	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Slab	Crash Barrier
A1																
P1																
P2																
P3																
P4																
P5																
A2																

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu
Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 6 : Strip Chart for status of FLYOVER — IN PROGRESS — COMPLETED

MPR JULY 2019					LHS									RHS								
Sr.No.	FO at Chainage	Span			Crash Barrier	Slab	Girder Launching	Girder Casting	Piercap/Abtcap	Pier/Abt	Pile Cap	PCC	Pile	Pile	PCC	Pile Cap	Pier/Abt	Piercap/Abtcap	Girder Casting	Girder Launching	Slab	Crash Barrier
1	117+600	1 x 30 m	BYPASS+ EXISTING	A1																		
				A2																		
2	120+000	1 x 30 m	BYPASS+ EXISTING	A1																		
				A2																		
3	127+300	1 x 30 m	EXISTING	A1																		
				A2																		
4	134+000	1 x 30 m	BYPASS+ EXISTING	A1																		
				A2																		
5	145+140	1 x 30 m	BYPASS	A1																		
				A2																		
6	157+100	1 x 30 m	BYPASS	A1																		
				A2																		
Total Completed					0	0	0	0	0	0	4	4	61	46	4	4	0	0	0	0	0	0

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu
Under NHDP Phase-IV on Hybrid Annuity Mode

Table 4.2 - 7 : Strip Chart for status of VUP — IN PROGRESS — COMPLETED

MPR JULY 2019

SR.NO.	VUP at Chainage	Span			LHS									RHS								
					Crash Barrier	Slab	Girder Launching	Girder Casting	Piercap/Abtcap	Pier/Abt	Pile Cap	PCC	Pile	Pile	PCC	Pile Cap	Pier/Abt	Piercap/Abtcap	Girder Casting	Girder Launching	Slab	Crash Barrier
1	126+100	1x25	EXISTING	A1																		
				A2																		
2	126+600	1x25	EXISTING	A1																		
				A2																		
3	128+700	1x25	EXISTING	A1																		
				A2																		
4	130+335	1x25	EXISTING	A1																		
				A2																		
5	131+500	1x25	EXISTING	A1																		
				A2																		
6	136+282	1x25	BYPASS	A1																		
				A2																		
7	138+720	1x25	BYPASS	A1																		
				A2																		
8	139+440	1x25	BYPASS	A1																		
				A2																		
9	141+450	1x25	BYPASS	A1																		
				A2																		
10	156+446	1x25	BYPASS	A1																		
				A2																		

Four Laning of Cholopuram to Thanjavur from Km.116.440 to Km.164.275 Section of NH45C in the state of Tamil Nadu
Under NHDP Phase-IV on Hybrid Annuity Mode

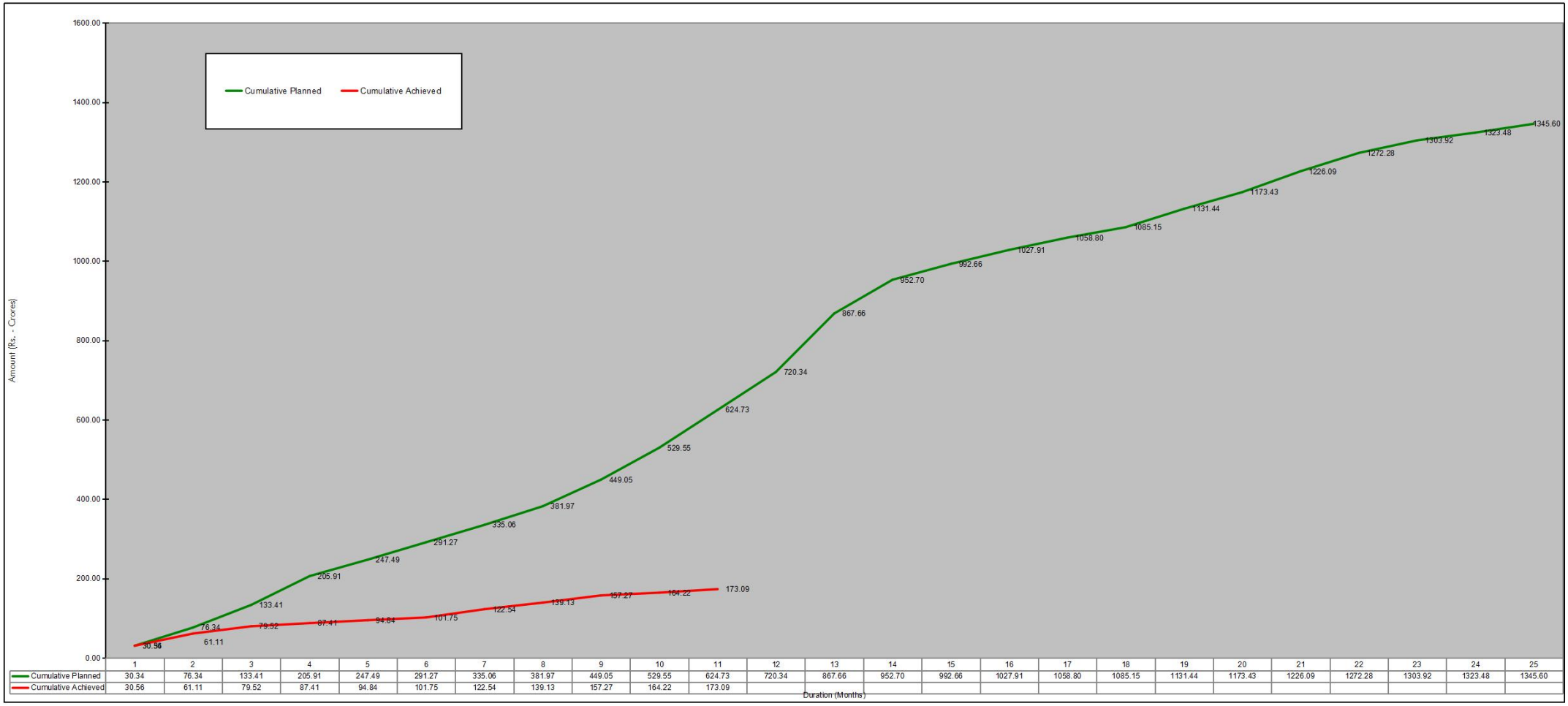
	Table 4.2 - 8 : Strip Chart for status of ROB	IN PROGRESS	COMPLETED

MPR JULY 2019	ROB at Chainage 134+345 (1 x 20.285m+1 x 30.426m+1 x 20.285m (Skew 9.6 °))- EXISTING																			
	LHS/LSR										RHS/LSR									
	Crash Barrier	Slab	Steel Girder Launching	Steel Girder Erection	Girder Launching	Girder Casting	Pier Cap/Abt Cap	Pier/Abt	Pile Cap	Pile	Pile	Pile Cap	Pier/Abt	Pier Cap/Abt Cap	Girder Casting	Girder Launching	Steel Girder Erection	Steel Girder Launching	Slab	Crash Barrier
A1																				
P1																				
P2																				
A2																				

Figure 3a : Financial Progress - Planned vs Achieved - S Curve
Figure 3b : Physical Progress - Planned vs Achieved - S Curve

Four Laning of Cholopuram – Thanjavur from Km. 116.440 to 164.275 Section of NH45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode

Fig. 03a- Financial Progress (S-Curve)

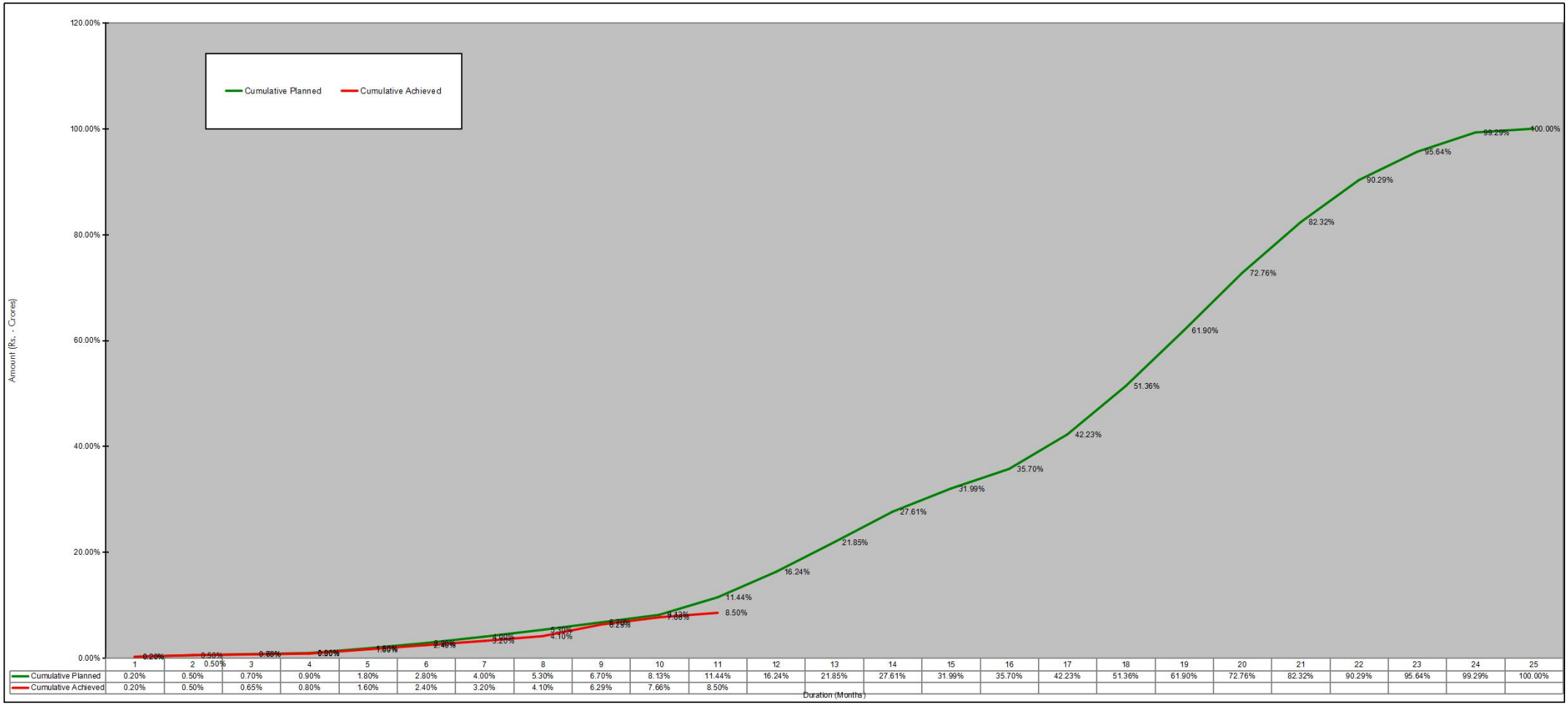


	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Cumulative Planned	30.34	76.34	133.41	205.91	247.49	291.27	335.06	381.97	449.05	529.55	624.73	720.34	867.66	952.70	992.66	1027.91	1058.80	1085.15	1131.44	1173.43	1226.09	1272.28	1303.92	1323.48	1345.60
Cumulative Achieved	30.56	61.11	79.52	87.41	94.84	101.75	122.54	139.13	157.27	164.22	173.09														

	Schedule	2019																	2020							
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	Monthly Planned	30.34	46.00	57.07	72.50	41.58	43.78	43.78	46.91	67.08	80.50	95.17	95.61	147.32	85.04	39.97	35.24	30.90	26.34	46.29	41.99	52.67	46.19	31.64	19.56	22.12
	MonthlyAchieved	30.56	30.56	18.41	7.89	7.43	6.90	20.79	16.59	18.14	6.95	8.87														
	Cumulative Planned	30.34	76.34	133.41	205.91	247.49	291.27	335.06	381.97	449.05	529.55	624.73	720.34	867.66	952.70	992.66	1027.91	1058.80	1085.15	1131.44	1173.43	1226.09	1272.28	1303.92	1323.48	1345.60
	Cumulative Achieved	30.56	61.11	79.52	87.41	94.84	101.75	122.54	139.13	157.27	164.22	173.09														
	Monthly Planned (%)	2.3%	3.4%	4.2%	5.4%	3.1%	3.3%	3.3%	3.5%	5.0%	6.0%	7.1%	7.1%	10.9%	6.3%	3.0%	2.6%	2.3%	2.0%	3.4%	3.1%	3.9%	3.4%	2.4%	1.5%	1.6%
	Monthly Achieved (%)	2.3%	2.3%	1.4%	0.6%	0.6%	0.5%	1.5%	1.2%	1.3%	0.5%	0.7%														
	Cumulative Planned (%)	2.3%	5.7%	9.9%	15.3%	18.4%	21.6%	24.9%	28.4%	33.4%	39.4%	46.4%	53.5%	64.5%	70.8%	73.8%	76.4%	78.7%	80.6%	84.1%	87.2%	91.1%	94.6%	96.9%	98.4%	100.0%
	Cumulative Achieved (%)	2.3%	4.5%	5.91%	6.50%	7.05%	7.56%	9.11%	10.3%	11.7%	12.2%	12.9%														

Four Laning of Cholopuram – Thanjavur from Km. 116.440 to 164.275 Section of NH45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode

Fig. 03b- Physical Progress (S-Curve)



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
Cumulative Planned	0.20%	0.50%	0.70%	0.90%	1.80%	2.80%	4.00%	5.30%	6.70%	8.13%	11.44%	16.24%	21.85%	27.61%	31.99%	35.70%	42.23%	51.36%	61.90%	72.76%	82.32%	90.29%	95.64%	99.29%	100.00%
Cumulative Achieved	0.20%	0.50%	0.65%	0.80%	1.60%	2.40%	3.20%	4.10%	6.29%	7.66%	8.50%														

	Schedule	2019																	2020							
		Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	Monthly Planned	0.20%	0.30%	0.20%	0.20%	0.90%	1.00%	1.20%	1.30%	1.40%	1.43%	3.31%	4.80%	5.61%	5.76%	4.38%	3.71%	6.53%	9.13%	10.54%	10.86%	9.56%	7.97%	5.35%	3.65%	0.71%
	MonthlyAchieved	0.20%	0.30%	0.15%	0.15%	0.80%	0.80%	0.80%	0.90%	2.19%	1.37%	0.85%														
	Cumulative Planned	0.20%	0.50%	0.70%	0.90%	1.80%	2.80%	4.00%	5.30%	6.70%	8.13%	11.44%	16.24%	21.85%	27.61%	31.99%	35.70%	42.23%	51.36%	61.90%	72.76%	82.32%	90.29%	95.64%	99.29%	100.00%
	Cumulative Achieved	0.20%	0.50%	0.65%	0.80%	1.60%	2.40%	3.20%	4.10%	6.29%	7.66%	8.50%														

6.1. List of Lab Equipment's

A site laboratory has been set up with all equipment required for testing soil, GSB, WMM, Bitumen, aggregate and concrete. Following tables represents the list of QA/QC equipment's available at Pateeswaram Lab.

Table 6.1 - 2 QA/QC Lab Equipment at Pateeswaram Lab

Sl. No	Equipment List	Quantity
A)	SOIL	
1	Proctor Moulds (Big) Collar or Base plate & Rammer 4.89 kg	6
2	Proctor Moulds (Small) Collar or Base plate & Rammer 2.6 kg	4
3	Atterberg Limits Test(Apparatus)	1
4	Soil Cone Penetrometer	1
5	CBR Moulds with collar or Base Plate	60
6	CBR Plunger	4
7	Proving Ring(25 KN)	1
8	Proving Ring(10 KN)	1
9	Proving Ring(2.5 KN)	1
10	FSI JARS BOROSIL -100 ml	40
11	Spacer Disc(with Handle)	4
12	CBR Testing Machine	1
13	CBR Surcharge Central Hole Weights 2.5 kg	60
14	CBR Surcharge Slotted Weights 2.5 kg	60
15	CBR Perorated Brass plates	60
16	Sand Pouring Cylinders (100 mm Dia) Complete with Calibrating Container with Trays	2
17	Sand Pouring Cylinders (150 mm Dia) Complete with Calibrating Container with Trays	2
18	Sand Pouring Cylinders (200 mm Dia) Complete with Calibrating Container with Trays	2
19	Rapid Moisture Meters	4
20	Calcium Carbide Bottles	10
21	Spatula Big	10
22	Spatula Small	10
23	Hammers big	4
24	Chisels big	20
25	Electronic Balance Capacity 100 kg (10 gram accuracy)	1
26	Electronic Balance Capacity 50 kg (1 gram accuracy)	2
27	Electronic Balance Capacity 30 kg (1 gram accuracy)	2
28	Electronic Balance Capacity 10 kg (1 gram accuracy)	1
29	Electronic Balance Capacity 5 kg (0.5 gram accuracy)	1
30	Electronic Balance Capacity 600gram(0.01 gram accuracy)	2
31	Hot Air Oven (Big)250oC	1
32	Hot Air Oven (Small)250oC	1
33	Direct Shear Test Apparatus	1

Sl. No	Equipment List	Quantity
34	Filter Paper Dia 100 mm	10
35	Filter Paper Dia 150 mm	10
36	Pipettes	4
37	Plastic Bottles	4
38	Enamel tray -450x300x40 mm	12
39	G.I tray-1500x1500x100mm	4
40	French Curves	2
B)	CONCRETE WORKS	
41	Compressive Testing machine(2000KN)	1
42	Flextural strength testing machine digital	1
43	Concrete Cube Moulds With Base Plate(15cm)	200
44	Concrete Cube Moulds With Base Plate(10cm)	18
45	Motor Cube Moulds (7.06cm) with Base Plate	12
46	Motor Cube Vibrating Machine(12000 Rmp)	1
47	Concrete Mixer Electrically Operated	1
48	Cube Vibrating Machine (Big)	1
49	Slump Cone Testing Appratus	10
50	Vicat Needle Apparatus , with dash pot complete with set of needles and brass mould	2
51	Soundness Testing Apparatus	2
52	Trowels With Wodden Handles	4
53	A I V Testing Machine	1
54	Loss Angels abrasion Testing Machine	1
55	Sand Equvivalant Testing Apparatus	1
56	Flakiness Index Test Guage	1
57	Elongation Index Test Guage	1
58	Density Basket	2
59	Bulk Density Cylinder (5lt)	1
60	Bulk Density Cylinder (15lt)	1
61	Bulk Density Cylinder (30lt)	1
62	Gi trays -450x600x50mm	9
63	Enamal trays -300x250x40 mm	9
64	Trays for Samples Collections	12
65	Riffle Box (40 MM)	1
66	Riffle Box (20 MM)	1
67	PYcnometer Bottels (1000 ml)	4
68	Specific Gravity & water absorotion test apparatus with Electronic balance	1
69	DLC Compaction vibrating hammer	1
70	Cement mortar cube mould 5.0 cm	12
71	Sandard Sand Grade-1 bag of 25 kg	2
72	Sandard Sand Grade-2 bag of 25 kg	2
73	Sandard Sand Grade-3 bag of 25 kg	2
C)	BITUMINOUS WORKS	
74	Specific Gravity Bottels (50 ml)	2
75	Specific Gravity Bottels (100 ml)	2

Sl. No	Equipment List	Quantity
76	Pen Sky- Martins closed Tester (Flash & Fire point)	2
77	Dial gauge 0.01x30 mm adis make	4
78	Ring & Ball Apparatus (Softening Point)	1
79	Bitumen Penetrometer (automatic)	1
80	Marshall Stability Apparatus (set)	1
81	Marshall Compaction Pedestal	2
82	Marshall Compaction Rammer 4.53 KG	4
83	Marshall Moulds (101.6 mm Dia)	30
84	Modified Marshall Compaction Pedestal	1
85	Modified Marshall Compaction Rammer 10.2 KG	4
86	viscometer u tub size no 12	2
87	Breaker - glass 600 ml for ring and ball apparatus	4
88	Bitumen Extraction Apparatus (centrifuge Type)	1
89	Proving Ring(50 KN)	1
90	Proving Ring(100 KN)	1
91	Digital Thermometers	10
92	Glass Thermometer	10
93	IR Thermometer	5
94	Core Cutting Machine With Apparatus (set)	1
95	Diamond Core Cutting Bit (100mm Dia)	1
96	Core Barrels for Core Cutting Machine	1
97	Vacuum Pump (specific Gravity of Bitumen Mix GMM)	1
98	Constant temperature Water bath (Digital)	2
99	Penetration cup 55x70 mm	2
100	penetration cup 55x35 mm	2
101	Specific Gravity Flask (2000 ml)	1
102	Specific Gravity Flask (5000 ml)	1
103	Specimen Extractor (Tikki, Goli & Rod)Marshall	1
104	Emulsion Trays	6
105	Viscometer viscosity of emulsified bitumen	1
106	Stop Watch	4
107	Hot Plates Electrical	2
108	Viscometer viscosity of bitumen	1
FOR I.S SIEVES 450 MM DIA		
109	100MM	2
110	90MM	2
111	75MM	2
112	63MM	2
113	53MM	2
114	50MM	2
115	45MM	2
116	40MM	2
117	37.5MM	2
118	31.5MM	2
119	26.5MM	2
120	25MM	2

Sl. No	Equipment List	Quantity
121	22.4MM	2
122	20MM	2
123	19MM	2
124	16 MM	2
125	14MM	2
126	13.2MM	2
127	12.5MM	2
128	11.2MM	2
129	10MM	2
130	9.5MM	2
131	6.3MM	2
132	5.6MM	2
133	4.75MM	2
134	2.36 MM	2
FOR I.S SIEVES 200 MM DIA		
135	37.5MM	2
136	6.5MM	2
137	22.4MM	2
138	19MM	2
139	16MM	2
140	14 MM	2
141	13.2MM	2
142	12.5MM	2
143	11.2MM	2
144	10MM	2
145	9.5MM	2
146	5.6MM	2
147	4.75MM	2
148	2.80MM	2
149	2.36MM	2
150	2.00MM	2
151	1.80MM	2
152	1.40MM	2
153	1.18MM	2
154	1.00MM	2
155	0.710 mc	1
156	0.600 mc	2
157	0.500 mc	1
158	0.45 mc	1
159	0.425 mc	2
160	0.355 mc	2
161	0.300 mc	2
162	0.150 mc	2
163	0.090 mc	2
164	0.075 mc	6

Sl. No	Equipment List	Quantity
GENERAL & CONTROL OF PROFILE AND SURFACE EVENNESS		
165	Rain Guage	1
166	Vernier Calliper	1
167	Glass Measuring Cylinder -1000 ml	2
168	Glass Measuring Cylinder -500 ml	2
169	Glass Measuring Cylinder -250 ml	2
170	Glass Measuring Cylinder -250 ml	2
171	Plastic Measuring Cylinder- 1000 ml	2
172	Plastic Measuring Cylinder- 500 ml	2
173	Plastic Measuring Cylinder- 250 ml	2
174	Plastic Measuring Cylinder- 250 ml	2
175	Depth gauge	4
176	Digital thermo hygrometer	2
177	Sampling containers 100 gms	200
178	3 Meter straight edge and measuring wedge	1
179	Camber template board	2
180	5 mtr tape	2
181	10 mtr tape	2
182	30 mtr tape	4
183	50 mtr tape	4

6.2. Quality Control Test Summary

GSB material, soil samples from borrow areas, aggregates, cement and bitumen are being tested regularly. Trial mix design for concrete with different admixtures is also in progress.

The detailed list of quality control test conducted up to the month of July - 2019 are tabulated below -

Four Laning of Cholopuram - Thanjavur From km 116.440 to km 164.275 Section of NH-45C in the State of TamilNadu Under NHDP Phase-IV on

Summary of Quality Control Report / Monthly Progress Report (QC) - MONTH : JULY-2019

S. No.	Description	IS Specification Clause	Frequency of Tests	Test conducted upto Previous month				Tests conducted during reporting month upto 25th JULY-2019				Test conducted upto this month			
				No. of test Conducted (1 Test =3Sets)	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos.of test witnessed by IE
1.0 Tests on OGL															
1.1	Grain size analysis	IS:2720 (Part4)	1 test / 250 meters	312	312	0	147	60	60		60	372	372	0	207
1.2	Atterberg Limits	IS:2720 (Part5)	1 test / 250 meters	312	312	0	147	60	60		60	372	372	0	207
1.3	Proctor	IS:2720 (Part8)	1 test / 250 meters	233	233	0	68	0	0	0	0	233	233	0	68
1.4	Free Swell index	IS:2720 (Part40)	1 test / 250 meters	312	304	8	147	60	50	10	60	372	354	18	207
1.5	California bearing ratio	IS:2720 (Part16)	As required	0	0	0	0	0	0	0	0	0	0	0	0
2.0 Cutting portion & Existing for EMB/SG (MoRT&H 305)															
3.1	*Grain size analysis*	IS:2720 (Part4)	1 test /1500 m^3	3	3	0	1	0	0	0	0	3	3	0	1
3.2	*Atterberg Limits*	IS:2720 (Part5)	1 test /1500 m^3	3	3	0	1	0	0	0	0	3	3	0	1
3.3	*Proctor*	IS:2720 (Part8)	1 test /1500 m^3	3	3	0	1	0	0	0	0	3	3	0	1
3.4	*Free Swell index*	IS:2720 (Part40)	1 test /1500 m^3	3	3	0	1	0	0	0	0	3	3	0	1
3.5	*California bearing ratio*	IS:2720 (Part16)	1 test / 3000 m^3	0	0	0	0	0	0	0	0	0	0	0	0
3.0 Borrow Area for EMB/Subgrade (MoRT&H 305)															
3.1	Grain size analysis	IS:2720 (Part4)	1 test /1500 m^3	282	282	0	56	90	90	0	30	372	372	0	86
3.2	Atterberg Limits	IS:2720 (Part5)	1 test /1500 m^3	282	282	0	56	90	90	0	30	372	372	0	86
3.3	Proctor	IS:2720 (Part8)	1 test /1500 m^3	282	282	0	56	90	90	0	30	372	372	0	86
3.4	Free Swell index	IS:2720 (Part40)	1 test /1500 m^3	282	282	0	56	90	90	0	30	372	372	0	86
3.5	California bearing ratio	IS:2720 (Part16)	1 test / 3000 m^3	7	7	0	3	5	5	0	3	12	12	0	6
4.0 Field Density Test MORT&H 305															
4.1	Field density (OGL)	IS:2720 (Part28)	1 test /3000 sqm	2943	2943	3	1355	412	409	3	102	3355	3352	6	1457
4.2	Field density (EMB)	IS:2720 (Part28)	1 test /3000 sqm	2392	2392	9	638	1963	1960	3	490	4355	4352	12	1128
4.3	Field density (SG)	IS:2720 (Part28)	1 test / 2000 sqm	0	0	0	0	20	20	0	20	20	0	0	20
4.4	Field density (Shoulder)	IS:2720 (Part28)	1 test / 2000 sqm	0	0	0	0	0	0	0	0	0	0	0	0
5.0 Safe Bearing capacity of soil															
5.1	Grain size analysis	IS:2720 (Part40)	As required	126	126	0	28	3	3	0	1	129	129	0	29
5.2	Atterberg Limits	IS:2720 (Part4)	As required	126	126	0	27	3	3	0	1	129	129	0	28
5.3	Proctor	IS:2720 (Part5)	As required	126	126	0	27	3	3	0	1	129	129	0	28
5.4	Free Swell index	IS:2720 (Part8)	As required	126	125	1	28	3	3	0	1	129	128	1	29
5.5	Bearing Capacity	IS:6403 / IS 1888	As required	126	1	125	30	0	0	0	0	126	1	125	30
5.6	Plate Load Test	IS:6403 / IS 1888	As required	12	12	0	7	6	6	0	6	18	18	0	13
6.0 Filter Media & Back filling MoRT&H 2500															
6.1	*Gradation*		As required	24	24	0	5	0	0	0	0	24	24	0	5
6.2	*Backfilling field density*		1 test /1000 m^3	0	0	0	0	0	0	0	0	0	0	0	0
6.3	*RE Wall field density*		As required	0	0	0	0	0	0	0	0	0	0	0	0

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S. No.	Description	IS Specification Clause	Frequency of Tests	Test conducted upto Previous month				Tests conducted during reporting month upto 25th JULY-2019				Test conducted upto this month			
				No. of test Conducted (1 Test =3Sets)	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos.of test witnessed by IE
7.0 Granular Bedding Material (For Structures-Ground Improvement)-Design Approval															
7.1	Gradation	Table 400-1	As required	5	5	0	5	0	0	0	0	5	5	0	5
7.2	Atterberg Limits	IS:2720 (Part5)	As required	3	3	0	3	0	0	0	0	3	3	0	3
7.3	Proctor	IS:2720 (Part8)	As required	3	3	0	3	0	0	0	0	3	3	0	3
7.4	CBR Test	IS:2720 (Part16)	As required	1	1	0	1	0	0	0	0	1	1	0	1
7.5	Aggregate Impact value	IS:2386 Part-4	As required	3	3	0	3	0	0	0	0	3	3	0	3
8.0 Granular Bedding Material (For Structures-Ground Improvement)- Stock & Site Testing															
8.1	*Gradation*	Table 400-1	As required	60	60	0	29	4	4	0	2	64	64	0	31
8.2	*Atterberg Limits*	IS:2720 (Part5)	As required	60	60	0	29	4	4	0	2	64	64	0	31
8.3	*Proctor*	IS:2720 (Part8)	As required	7	7	0	6	1	1	0	1	8	8	0	7
8.4	*CBR Test*	IS:2720 (Part16)	As required	7	7	0	6	1	1	0	1	8	8	0	7
8.5	*Aggregate Impact value*	IS:2386 Part-4	As required	4	4	0	4	1	1	0	1	5	5	0	5
8.6	*Field Density*	IS:2720 (Part28)	As required	794	794	0	156	66	66	0	25	860	860	0	181
9.0 CTSB Mix Design/Site Frequency MoRT&H 403															
9.1	*Gradation*	Table 400-4	1 test/400m^3	16	16	0	5	42	42	0	42	58	58	0	47
9.2	*Atterberg Limits*	IS:2720 (Part5)	1 test/400m^3	15	15	0	6	9	9	0	9	24	24	0	15
9.3	*Proctor*	IS:2720 (Part8)	As required	17	17	0	9	6	6	0	6	23	23	0	15
9.4	*Aggregate Impact value*	IS:2386 Part-4	As required	15	15	0	5	9	9	0	9	24	24	0	14
9.5	*Field Density*	IS:2720 (Part28)	1 set of 2 Test per	0	0	0	0	0	0	0	0	0	0	0	0
9.6	*Specific gravity& Water absorption*	IS:2386 (Part2)	As required	11	11	0	4	3	3	0	1	14	14	0	5
9.7	*Cubes casting& Testing*	IRC SP 89 (2010)	Minimum 5 Cubes	26	26	0	16	2	2	0	2	28	28	0	18
9.8	*CBR Test*	IS:2720 (Part16)	As required	3	3	0	3	0	0	0	0	3	3	0	3
9.9	Organic Content	IRC SP 89 (2010)	As required	1	1	0	0	0	0	0	0	1	1	0	0
10	Total SO4 Content	IRC SP 89 (2010)	As required	1	1	0	0	0	0	0	0	1	1	0	0
10.1	10% Fines Value	BS:812 (111)	As required	1	1	0	0	0	0	0	0	1	1	0	0
10.2	Durability Test	IRC SP 89 (2010)	As required	3	3	0	3	0	0	0	0	3	3	0	3
11.0 WMM Mix (Design)															
11.1	*Individual / Combined Gradation*	Table 400-3	1 test/200m^3	47	47	0	47	0	0	0	0	47	47	0	47
11.2	*Aggregate Impact Value*	IS:2386 Part-4	1 test/ 1000 m^3	8	8	0	8	0	0	0	0	8	8	0	8
11.3	*Flakiness & Elagation index*	IS:2386 Part1	1 test/ 500 m^3	8	8	0	8	0	0	0	0	8	8	0	8
11.4	*Atterberg Limits*	IS:2720 (Part5)	1 test/200m^3	6	6	0	6	0	0	0	0	6	6	0	6
11.5	*Water absorption*	IS:2386 Part2	As required	3	3	0	3	0	0	0	0	3	3	0	3
11.6	*Proctor*	IS:2720 (Part8)	As required	3	3	0	3	0	0	0	0	3	3	0	3
11.7	*CBR*	IS:2720 (Part16)	As required	3	3	0	3	0	0	0	0	3	3	0	3
11.8	*Field Density(Trial strech)*	IS:2720 (Part28)	1 set Test per	0	0	0	0	0	0	0	0	0	0	0	0

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S. No.	Description	IS Specification Clause	Frequency of Tests	Test conducted upto Previous month				Tests conducted during reporting month upto 25th JULY-2019				Test conducted upto this month			
				No. of test Conducted (1 Test =3Sets)	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos.of test witnessed by IE
12.0 WMM Site Frequency MoRT&H 406															
12.1	Individual / Combined Gradation	Table 400-3	1 test/200m^3	0	0	0	0	0	0	0	0	0	0	0	0
12.2	Aggregate Impact Value	IS:2386 Part-4	1 test/ 1000 m^3	0	0	0	0	0	0	0	0	0	0	0	0
12.3	Flakiness & Elagation index	IS:2386 Part1	1 test/ 500 m^3	0	0	0	0	0	0	0	0	0	0	0	0
12.4	Atterberg Limits	IS:2720 (Part5)	1 test/200m^3	0	0	0	0	0	0	0	0	0	0	0	0
12.5	Water absorption	IS:2386 Part2	As required	0	0	0	0	0	0	0	0	0	0	0	0
12.6	Proctor	IS:2720 (Part8)	As required	0	0	0	0	0	0	0	0	0	0	0	0
12.7	CBR	IS:2720 (Part16)	As required	0	0	0	0	0	0	0	0	0	0	0	0
13.0 Fine Aggregate MoRT&H 1008															
13.1	Grade / Sieve analysis	IS:2386 (Part1)	As required	240	240	0	70	87	87	0	35	327	327	0	105
13.2	Specific gravity& Water absorption	IS:2386 (Part2)	As required	10	10	0	4	2	2	0	1	12	12	0	5
13.3	Fineness Modulus	MORTH Sec. 1008&383	As required	240	240	0	70	87	87	0	35	327	327	0	105
13.4	Alkali aggregate reactivity test	IS:2386 (Part-7)IS : 456	1 test per source	2	2	0	1	0	0	0	0	2	2	0	1
13.5	Deleterious constituents	IS:2386 (Part2)	1 test per source	2	2	0	1	0	0	0	0	2	2	0	1
14.0 Coarse Aggregate MoRT&H 1007															
14.1	Gradation	IS:2386 (Part2)	As required	312	312	0	92	87	87	0	35	399	399	0	127
14.2	Specific gravity& Water absorption	IS:2386 (Part3)	As required	14	14	0	6	2	2	0	1	16	16	0	7
14.3	Aggregate Impact Value	IS:2386 (Part4)	As required	58	58	0	19	2	2	0	1	60	60	0	20
14.4	Flakiness index	IS:2386 (Part1)	As required	58	58	0	19	2	2	0	1	60	60	0	20
14.5	Soundness	IS:2386 (Part5)	As required	1	1	0	1	0	0	0	0	1	1	0	1
14.6	Alkali aggregate reactivity test	IS:2386 (Part-7)IS : 456	1 test per source	1	1	0	1	0	0	0	0	1	1	0	1
14.7	Deleterious constituents	IS:2386 (Part2)	1 test per source	1	1	0	1	0	0	0	0	1	1	0	1
14.8	Petrograhic Examination	IS:2386 (Part8)	1 test per source	1	1	0	1	0	0	0	0	1	1	0	1
15.0 Cement MoRT&H 1006															
15.1	Chemical test	IS:4031,4032	1 test per source	12	12	0	7	0	0	0	0	12	12	0	7
15.2	Fineness	IS:4031 (Part1)	500mt (or) Every week	57	57	0	23	4	4	0	2	61	61	0	25
15.3	Normal Consistency	IS:4031 (Part4)	500mt (or) Every week	57	57	0	26	4	4	0	2	61	61	0	28
15.4	Initial,Final setting time	IS:4031 (Part5)	500mt (or) Every week	57	57	0	26	4	4	0	2	61	61	0	28
15.5	Soundness of Cement	IS:4031 (Part3)	500mt (or) Every week	57	57	0	26	4	4	0	2	61	61	0	28
15.6	Compressive Strength-set	IS:4031 (Part6)													
	3 days		500mt (or) Every week	77	77	0	34	6	6	0	3	83	83	0	37
	7 days		500mt (or) Every week	78	78	0	36	6	6	0	3	84	84	0	39
	28 days		500mt (or) Every week	73	73	0	10	11	11	0	6	84	84	0	16

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				No. of test Conducted (1 Test =3Sets)	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos.of test witnessed by IE
16.0 Water															
161	*Chemical test*	IS 2386	1 test per source	7	7	0	3	0	0	0	0	7	7	0	3
17.0 Admixture															
17.1	*Chemical Test*	IS 9103	1 test per source	2	2	0	0	0	0	0	0	2	2	0	0
18.0 Steel															
18.1	*8 mm Dia*	IS 1786	Physical &Chemical Properties (1) Test on first lot.(2) Further supply will be provided with mtc. (3) As required by engineer.	6	4	0	3	0	0	0	0	6	4	0	3
18.2	*10 mm Dia*	IS 1786		9	6	0	5	0	0	0	0	9	6	0	5
18.3	*12 mm Dia*	IS 1786		9	5	0	4	0	0	0	0	9	5	0	4
18.4	*16 mm Dia*	IS 1786		9	4	0	3	0	0	0	0	9	4	0	3
18.5	*20 mm Dia*	IS 1786		15	5	0	5	0	0	0	0	15	5	0	5
18.6	*25 mm Dia*	IS 1786		4	4	0	3	0	0	0	0	4	4	0	3
18.7	*32 mm Dia*	IS 1786		1	1	0	1	0	0	0	0	1	1	0	1
19.(A) Concrete Cube Strength of Design Mix															
	M15 PCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	48	48	0	44	6	6	0	6	54	54	0	50
	28Days Compressive Strength			45	45	0	35	6	6	0	6	51	51	0	41
	M20 PCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	45	45	0	41	6	6	0	6	51	51	0	47
	28Days Compressive Strength			39	39	0	35	6	6	0	6	45	45	0	41
	M25 PCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	45	45	0	41	6	6	0	6	51	51	0	47
	28Days Compressive Strength			39	39	0	35	6	6	0	6	45	45	0	41
	M30 RCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	51	51	0	47	6	6	0	6	57	57	0	53
	28Days Compressive Strength			48	48	0	44	6	6	0	6	54	54	0	50
	M30 RCC PUMPABLE														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	30	30	0	26	3	3	0	3	33	33	0	29
	28Days Compressive Strength			24	24	0	20	6	6	0	6	30	30	0	26
	M35 RCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	48	48	0	44	3	3	0	3	51	51	0	47
	28Days Compressive Strength			45	45	0	41	6	6	0	6	51	51	0	47
	M35 RCC PILING														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	48	48	0	44	3	3	0	3	51	51	0	47
	28Days Compressive Strength			45	45	0	41	6	6	0	6	51	51	0	47

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	M35 RCC PUMPABLE														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	30	30	0	26	3	3	0	3	33	33	0	29
	28Days Compressive Strength			24	24	0	20	6	6	0	6	30	30	0	26
	M35 RE BLOCK														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	45	45	0	39	15	15	0	15	60	60	0	54
	28Days Compressive Strength			45	45	0	45	0	0	0	0	45	45	0	45
	M40 RCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	21	21	0	21	0	0	0	0	21	21	0	21
	28Days Compressive Strength			9	9	0	9	0	0	0	0	9	9	0	9
	M40 RCC PUMPABLE														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	15	15	0	21	9	3	6	6	24	18	0	27
	28Days Compressive Strength			31	31	0	31	3	3	3	0	34	34	0	31
	M45 RCC PUMPABLE														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	12	12	0	12	9	3	6	6	21	15	0	18
	28Days Compressive Strength			19	19	0	19	3	3	0	0	22	22	0	19
19.(B) Concrete Cube Strength of Site Cubes															
	M15 PCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	118	118	0	60	33	33	0	20	151	151	0	80
	28Days Compressive Strength			224	224	0	118	57	57	0	32	281	281	0	150
	M20 PCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	0	0	0	0	2	2	0	1	2	2	0	1
	28Days Compressive Strength			0	0	0	0	4	4	0	2	4	4	0	2
	M25 RCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	6	2	0	2	1	1	0	1	7	3	0	3
	28Days Compressive Strength			5	3	0	2	5	5	0	2	10	8	0	4
	M30 RCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	187	187	0	63	67	67	0	31	254	254	0	94
	28Days Compressive Strength			379	379	0	102	84	84	0	30	463	463	0	132
	M30 RCC PUMPABLE														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	1	1	0	1	0	0	0	0	1	1	0	1
	28Days Compressive Strength			0	0	0	0	0	0	0	0	0	0	0	0
	M35 RCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	146	146	0	50	37	37	0	20	183	183	0	70
	28Days Compressive Strength			192	192	0	64	131	131	0	75	323	323	0	139

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				No. of test Conducted (1 Test =3Sets)	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos.of test witnessed by IE	No. of test Conducted	Passed	Failed	Nos.of test witnessed by IE
	M35 RCC PILING														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	298	298	0	76	50	50	0	20	348	348	0	96
	28Days Compressive Strength			778	778	0	230	269	269	0	180	1047	1047	0	410
	M35 RCC PUMPABLE														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	91	91	0	29	36	36	0	20	127	127	0	49
	28Days Compressive Strength			202	202	0	57	88	88	0	35	290	290	0	92
	M35 RE BLOCK														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	596	596	0	195	67	67	0	32	663	663	0	227
	28Days Compressive Strength			893	893	0	288	154	154	0	60	1047	1047	0	348
	M40 RCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	0	0	0	0	0	0	0	0	0	0	0	0
	28Days Compressive Strength			0	0	0	0	0	0	0	0	0	0	0	0
	M45 RCC														
	7Days Compressive Strength	IS:516 / IS:456	MORT&H Sec. 1700	0	0	0	0	2	2	0	2	2	2	0	2
	28Days Compressive Strength			0	0	0	0	0	0	0	0	0	0	0	0
20.0 BENTONITE															
20.1	*Density*	MORT&H Sec. 1115.2.3	As required	127	127	0	30	30	30	0	15	157	157	0	45
20.2	*Marsh Cone Viscosity*			127	127	0	30	30	30	0	15	157	157	0	45
20.3	*pH Value*			127	127	0	30	30	30	0	15	157	157	0	45
20.4	*Silt Content*			1	1	0	0	0	0	0	0	1	1	0	0
20.5	*Liquid Limit*			1	1	0	0	1	1	0	1	2	2	0	1
21.0 Fine Aggregate MoRT&H 1008-(RE-Block)															
21.1	*Grade / Sieve analysis*	IS:2386 (Part1)	As required	326	326	0	79	45	45	0	25	371	371	0	104
21.2	*Fineness Modulus*	MORT&H Sec. 1008&38	As required	326	326	0	79	45	45	0	25	371	371	0	104
21.3	*Specific gravity& Water absorption*	IS:2386 (Part2)	As required	5	5	0	1	2	2	0	1	7	7	0	2
22.0 Coarse Aggregate MoRT&H 1007-(RE-Block)															
22.1	*Gradation*	IS:2386 (Part2)	As required	325	325	0	79	45	45	0	22	370	370	0	101
22.2	*Specific gravity& Water absorption*	IS:2386 (Part3)	As required	5	5	0	1	2	2	0	1	7	7	0	2
22.3	*Aggregate Impact Value*	IS:2386 (Part4)	1 test / each source	12	12	0	3	2	2	0	1	14	14	0	4
22.4	*Flakiness index*	IS:2386 (Part1)	1 test / each source	12	12	0	3	2	2	0	1	14	14	0	4

EPC Contractor Representative

Concessionaire Representative

Independent Engineer Representative

7. Weather Report

Date	Temperature (Celsius)		Humidity (%)		Rainfall (mm)	Remarks
	Min	Max	Min	Max		
01-07-19	29.4	37.10	34.0	64.0	0.0	Sunny
02-07-19	29.9	36.40	39.0	64.0	0.0	Sunny
03-07-19	29.6	38.10	35.0	67.0	0.0	Sunny
04-07-19	29.9	37.60	36.0	69.0	0.0	Sunny
05-07-19	29.5	36.20	41.0	66.0	0.0	Sunny
06-07-19	29.4	36.30	39.0	64.0	0.0	Sunny
07-07-19	30.1	39.70	40.0	65.0	0.0	Sunny
08-07-19	29.5	37.30	37.0	66.0	0.0	Sunny
09-07-19	29.0	37.20	39.0	72.0	0.0	Sunny
10-07-19	28.4	36.00	43.0	70.0	0.0	Sunny
11-07-19	29.8	35.20	40.0	66.0	0.0	Sunny
12-07-19	29.6	36.40	41.0	71.0	0.0	Sunny
13-07-19	29.1	34.60	47.0	71.0	0.0	Sunny
14-07-19	27.9	37.10	40.0	75.0	22.0	Sunny
15-07-19	27.5	36.80	39.0	71.0	0.0	Sunny
16-07-19	28.5	36.30	41.0	68.0	0.0	Sunny
17-07-19	28.8	35.90	43.0	71.0	0.0	Sunny
18-07-19	29.1	36.30	42.0	69.0	0.0	Sunny
19-07-19	28.1	33.50	54.0	76.0	2.0	Sunny
20-07-19	29.0	36.10	40.0	62.0	0.0	Sunny
21-07-19	28.4	34.20	48.0	69.0	0.0	Sunny
22-07-19	27.1	31.00	55.0	70.0	0.0	Sunny
23-07-19	28.1	34.90	42.0	65.0	0.0	Sunny
24-07-19	29.8	36.60	40.0	68.0	0.0	Sunny
25-07-19	28.1	37.30	40.0	74.0	0.0	Sunny
26-07-19	28.1	33.00	49.0	71.0	0.0	Sunny
27-07-19	29.4	37.10	34.0	64.0	0.0	Sunny
28-07-19	29.9	36.40	39.0	64.0	0.0	Sunny
29-07-19	29.6	38.10	35.0	67.0	0.0	Sunny
30-07-19	29.9	37.60	36.0	69.0	0.0	Sunny
31-07-19	29.5	36.20	41.0	66.0	0.0	Sunny

8. Safety

Various issues related to environment and safety, such as traffic management, safety signage's, disposal of waste materials and oil spillage, housekeeping, area barricading and traffic management, etc., are being taken care of during the execution of the project.

Periodic Safety meetings being conducted on a regular basis and the details of the phonographs for the same along with action taken are as below.

1. Safety Induction Meeting Organized for skilled labours at Patteeswaram Camp.

9. Support Required from NHAI

Concessionaire requests NHAI to take early action on the following issues:

1. Pending Disbursement of Payment to the beneficiaries from CALA towards Land and Buildings in Thanjavur District. – Request Authority to advise/instruct the Competent Authority of Land Acquisition to speed up the process of disbursement of pending payment.

2. Permission from Local Authorities for procurement of Borrow Earth for Irrigation Tanks.

Sl. No.	District	Taluk	Location/ Villages	Date of Applied	Present Status
1	Ariyalur	Sripuranthan	Periya Eri, Udayarpalayam	19.02.2019	Application submitted to District Collector, Ariyalur
2	Ariyalur	Karaikurichi	Ukkadai Periya Eri,Udayarpalayam	19.02.2019	
3	Ariyalur	Karaikurichi	Kovathattai Eri, Udayarpalayam	19.02.2019	Waiting for EC Clearence
4	Ariyalur	Udayarpalayam	Karaikurichi	19.02.2019	Application submitted to District Collector, Ariyalur, Under NOC Permission
5	Ariyalur	Udayarpalayam	Karaikurichi	19.02.2019	
6	Ariyalur	Udayarpalayam	Sripuranthan	18.02.2019	
1	Thanjavur	Papanasam	Sikkapattu, Puliyakudi-02	12.10.2018	a) Gazette notified on 05.05.2017 and application submitted to District Collector, Thanjavur for NOC Process. b) The temporary permission received for Rajan eri/Nanjikottai on 19.02.2019
2	Thanjavur	Papanasam	Puliyakudi-01	12.10.2018	
3	Thanjavur	Thanjavur	Vudayaneri, Pachamada eri, Kumaravodi Eri./Nanjikottai	12.10.2018	
4	Thanjavur	Thanjavur	Rajan eri/Nanjikottai	12.10.2018	
5	Thanjavur	Thanjavur	Poneri/ Kulichapattu	12.10.2018	
6	Thanjavur	Thanjavur	Kallapuli eri/Valamarkottai	12.10.2018	Gazette to be notified.
7	Thanjavur	Thanjavur	Kollankarai/Annuvaththi Eri	13.02.2019	Application submitted to District Collector, Thanjavur, for NOC Process

3. Rerouting of existing canal between Km.146+600 to 148+100

4. NOC from PWD/WRO, Govt of Tamilnadu for construction of Minor Bridge(17 Nos) and Major Bridge (05 Nos)

5. NOC from PWD/WRO, Govt of Tamilnadu for construction of project highways in the existing ponds (in a length of 1.667 Kms).

6. Removal/relocation of existing irrigation sluice and regulator in the locations of Km:150+800, Km:152+900 & Km:134+770.

7. Additional land acquisition for Toll plaza location, Bus bays. Turning radius at Major junctions.

8. Permission for Removal of Teak wood trees from the Project Highway in length of 680m.

9. Removal of Religious structures of 13 Nos. and Bus stand from the proposed ROW.

10. Removal of Government Buildings like VAO office, School, Post Office & Ration Shop etc. in 15 nos. of locations.

11. Removal of unauthorized occupations in 25 nos. of locations in the project highways.

12. Hindrances/Occupations/Land Acquisition issues in the following locations due to various reasons,

Sl. No	From	To	Effected Length in (M)	Nature of Hindrance	Survey No	Name of Village	Name of Land Owner
1	138+400	138+480	520 m	Court Stay	4/4A	Thiruvalanzuli	Mr.Dharmalingam
2	138+500	138+540		Court Stay	-	Thiruvalanzuli	Mr.Shanmugam
3	138+750	138+850	500 m	Court Stay		Thiruvalanzuli	Mr.Dhahshnamoorthy , Mr.Rajini, Mr.nagaraj
4	139+180	139+450	670 m	Payment Issue	15A,15/1, 15/2	Nallur	Mrs.Valarmathi Kailasam
5	142+100	142+200	500 m	Payment Issue	326/1, 326/2, 326/3, 326/4, 326/5, 326/ 6	Gopurajapuram	Mr.Pakir Mohammed 9566541123
6	160+200	160+400	600 m	Payment for coconut tree is pending	128/7, 131/10B, 131/14, 132/6	Kurangalur	Mr.Elango
6	161+100	161+200	1000 m	LA issues	3/1A,3/1B	Kadakadapai	Ms Tamilselvei
7	162+400	162+600	600 m	LA issues	70/3, 71/2 & 71/3	Kadakadapai	Mr.James P Raja
Total Effected Length in Meters			4390				

Table 10.1. Details of Important Events

Sl. No	Date of Events	Description of Events	Remarks
1)	01.07.2019	Meeting with OSD, MoRT&H at RO, NHAI, Madurai	
2)	11.07.2019	Progress Review Meeting at Pateeswaram Camp with IE Officials	
3)	18.07.2019	Project Director, Team Leader Visited Project Highway for Dynamic Routine Test at 157+188	
4)	21.07.2019	Team Leader & Resident Engineer Visited Crusher	

11. Organization Chart

The following figures represent the organization structure of the EPC and SPV Team.

1. Fig. 4 - Organization Chart - EPC Team

2. Fig. 5 - Organization Chart - SPV Team

Figure 4 - ORGANAIZATION CHART - EPC TEAM

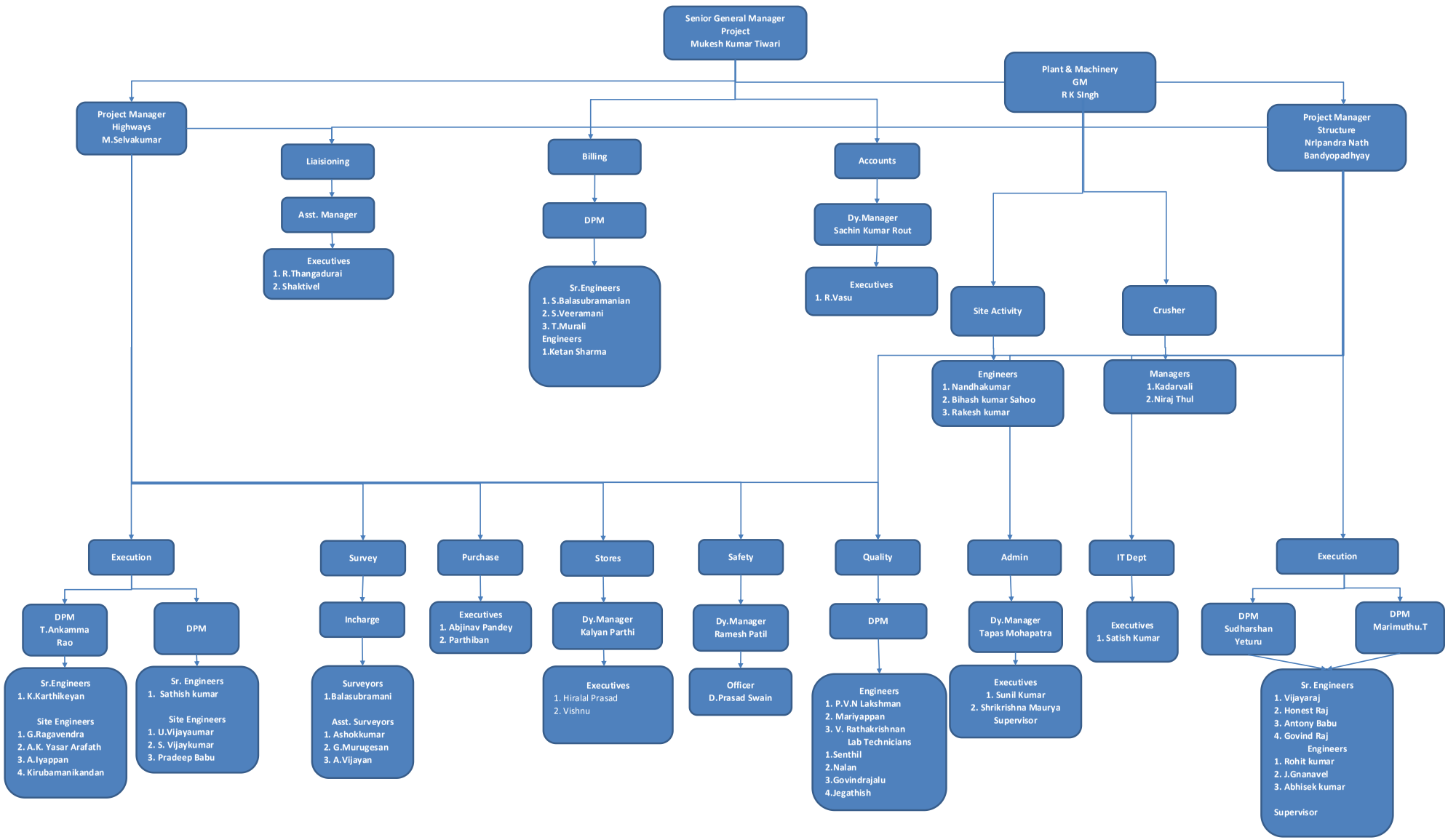
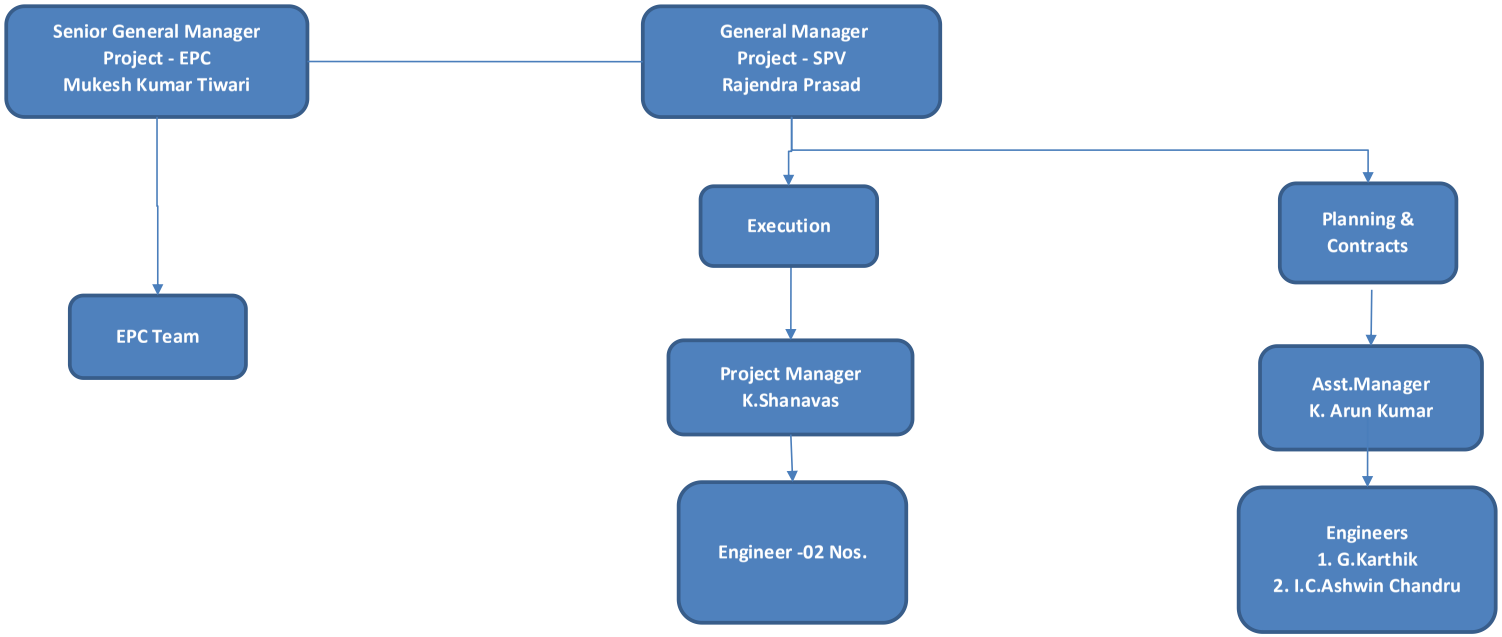


Figure 5 - ORGANAIZATION CHART - SPV TEAM



12. List of Plants, Machinery and Equipment's

S.No	Name of the Machinery	Capacity / Model	Mobilized at Site	Remarks
1	Grader	120K2	5	
2	Excavator/JCB	JCB-220	6	
3	Dozer		1	
4	Soil Compactor	HAMM 311	4	
5	Backhoe Loader	JCB 3DX	5	
6	Tipper	Bharat Benz- 3128C	16	
7	Transit Mixer	2523C	11	
8	Loader	455 ZX	6	
9	Trailer		3	
10	Water Tanker		8	
11	Diesel Tanker		3	
12	Boom Placer	S-36	0	
13	Tractor	5036 D V-2	3	
14	Mobile Service Van		1	
15	Tower Light	AJASKY	3	
16	Hydra Crane		4	
17	Asphalt Batch Mix Plant		1	
18	Wet Mix Plant	250 TPH	1	
14	Concrete Batch Mix Plant 45 cum	45 cum	2	
15	Concrete Batch Mix Plant 60 cum	60 cum	1	
16	Crusher Plant (3 Stage)	250 TPH	3	
17	Weigh Bridge for Camp 100MT	100MT	2	
18	Weigh Bridge for Crusher 100MT	100MT	1	
19	Genset Base Camp	25KV	2	
20	Genset (Crusher) 63KVA	63KVA	3	
21	Genset (H.M & B/P)	82.50KV	3	
22	Genset (B/P-CP-45)	125KV	1	
23	Genset 650 KVA	650 KVA	1	
26	Genset (Crusher)	1010KVA	3	
27	Genset 15KVA	15KVA	1	

13. Change of Scope Proposals

Table 13.1 - Status of Change of Scope Proposals

Sl. No.	Proposal Details	Date of Proposal	Current Status	COS Amount	Actual Date of Approval
1	Replacement of Pipe Culvert with box Culvert	25.04.2018	Approved in-principle by Authority. Preparation of Details Quantities in proper order is in Progress	NA	NA

14. Details of Correspondences

The following tables list out the correspondences between the parties.

Table 14.1. - Concessionaire to NHAI

Table 14.2. - NHAI to Concessionaire

Table 14.3. - Concessionaire to Independent Engineer

Table 14.4. - Independent Engineer to Concessionaire

TABLE 14.1 - CORRESPONDANCE - CONCESSIONAIRE TO NHAI				
S.No	Date	Letter No	Subject	Remarks
1	7/2/2019	PCTHPL/CTP/NHAI/2019/412	RA.Bill No.06 - Shifting of Electrical Utility as per Cl.11.2.1 of Concession Agreement	
2	7/3/2019	PCTHPL/CTP/NHAI/2019/420	Request to Release the withheld GST Amount for RA Bill No 2 for shifting of Electrical utilities	
3	7/10/2019	PCTHPL/CTP/NHAI/2019/426	Submission of our GST payment auditor certificate for RA Bill No-04 of Electrical Utility Shifting works	
4	7/10/2019	PCTHPL/CTP/NHAI/2019/427	Submission of our GST payment auditor certificate for RA Bill No-03 of Electrical Utility Shifting works	
5	7/25/2019	PCTHPL/CTP/NHAI/2019/445	RA.Bill No.07 - Shifting of Electrical Utility as per Cl.11.2.1 of Concession Agreement	
6	7/26/2019	PCTHPL/CTP/NHAI/2019/446	Submission of EPF and ESIC paid challan - Request to release the withheld from the Utility Shifting Bills	

TABLE 14.2 - CORRESPONDANCE - NHAI TO CONCESSIONAIRE				
S.No	Date	Letter No	Subject	Remarks
1	7/23/2019	NHAI/PIU/Thanj/11026/12/2018/1447	Shifting of Service Connection to the borewells affected due to land acquisition-requested	
2	7/23/2019	NHAI/PIU/Thanj/11026/24/2012/1451	Pro.4 lane ROB at RLY km 320 800 between Darasuram and Swamimalai Railway stations Submission of Geotechnical Report for ROB at Chainage 134+345	

TABLE 14.3 - CORRESPONDANCE - CONCESSIONAIRE TO INDEPENDENT ENGINEER				
S.No	Date	Letter No	Subject	Remarks
1	7/2/2019	PCTHPL/CTP/IE/2019/413	Submission of Plate Load Test Reports	
2	7/2/2019	PCTHPL/CTP/IE/2019/414	Job Mix Design Report for CTSB	
3	7/2/2019	PCTHPL/CTP/IE/2019/415	Submission of Soil Test Report for the Borrow Area No.19	
4	7/2/2019	PCTHPL/CTP/IE/2019/416	Submission of Soil Test Report for the Borrow Area No.20	
5	7/2/2019	PCTHPL/CTP/IE/2019/417	Submission of Soil Test Report for the Borrow Area No.21	
6	7/2/2019	PCTHPL/CTP/IE/2019/418	Shifting_Relocation of Minor Bridge from Design Chainage Km 134+320 to Design Chainage 150+813	
7	7/3/2019	PCTHPL/CTP/IE/2019/419	Regarding Slight Modification in Span arrangement of 7 nos. Minor Bridges in Project.	
8	7/3/2019	PCTHPL/CTP/IE/2019/421	Submission of Monthly Progress Report for the Month of June 2019	
9	7/6/2019	PCTHPL/CTP/IE/2019/422	Submission of soft copies of design & calculation for the proposed ROB at Km134+345	
10	7/6/2019	PCTHPL/CTP/IE/2019/423	Compliance report NCR 07 -Concrete Cubes required strength at 28 days not achieved for GSI at Km 145+165 for pile concrete	
11	7/8/2019	PCTHPL/CTP/IE/2019/424	Submission of Fly Ash Deatils for Cement Concrete & CTSB	
12	7/9/2019	PCTHPL/CTP/IE/2019/425	Submission of Pile Load Test Methodology for a GSI at Ch.127+293 Km	
13	7/11/2019	PCTHPL/CTP/IE/2019/428	Submission of Plan & Profile Drawings from Km. 163+000 to Km.164+296.204 of the Project Highway (R3)	
14	7/12/2019	PCTHPL/CTP/IE/2019/429	Submission of Design & Drawings for 03 Nos of Minor Bridges	
15	7/12/2019	PCTHPL/CTP/IE/2019/430	Submission of Reports & STAAD file soft copies for 4 Minor Bridges (R1)	
16	7/13/2019	PCTHPL/CTP/IE/2019/431	Compliance Report - Regarding slight Modification in span arrangement of 07 Nos of Minor Bridge in Project Highway	
17	7/16/2019	PCTHPL/CTP/IE/2019/432	Survey No.13 _ 5A Porakudi Village of Papanasam Taluk in Thanjavur District – No Objection Certificate requested - Reply Comments	
18	7/17/2019	PCTHPL/CTP/IE/2019/433	Technical proposal for analysing the strength on hardened concrete on structures	
19	7/17/2019	PCTHPL/CTP/IE/2019/434	Third Party Test Report on Coarse Aggregates from Rakkathampatti Quarry	
20	7/18/2019	PCTHPL/CTP/IE/2019/435	Submission of Design and drawings of Major bridge cum VUP at Km.156+584	
21	7/17/2019	PCTHPL/CTP/IE/2019/436	Termination letter for the awarded Shifting of Electrical Utilities (HT/LT Lines, Poles and related) work as per provision provided under clause 24 of the Sub-Contract Agreement	
22	7/18/2019	PCTHPL/CTP/IE/2019/437	Submission of Concrete Mix Design Reports for (M-15, M-20) PCC, (M-30, M-35)RCC, (M-30, M35) Pumpable & M-35 Piling	
23	7/20/2019	PCTHPL/CTP/IE/2019/438	Compliance Report-Assembly Question No 50141 by Shri.K.Anbalagan M.L.A Kumbakonam Assembly constituency	
24	7/23/2019	PCTHPL/CTP/IE/2019/439	Submission of Kerb Drawing for Flexible Pavement of the Project Highway	
25	7/23/2019	PCTHPL/CTP/IE/2019/440	Video Recording as per the clause 13.6 of Concession Agreement for the quarterly period of April to June 2019	
26	7/24/2019	PCTHPL/CTP/IE/2019/441	Compliance report for Road Safety Meeting held at Collector's Office, Thanjavur on 25.06.2019	
27	7/24/2019	PCTHPL/CTP/IE/2019/442	Submission of Revised Methodology for CTSB - Compliance Report	
28	7/24/2019	PCTHPL/CTP/IE/2019/443	Submission of POT-PTFE Bearings Credential from Ms BBR India Pvt Ltd	
29	7/25/2019	PCTHPL/CTP/IE/2019/444	Request for Extension of time for Project Completion Schedule (Schedule - G) of Concession Agreement	

TABLE 14.4 - CORRESPONDANCE - INDEPENDENT ENGINEER TO CONCESSIONAIRE / NHAI				
S.No	Date	Letter No	Subject	Remarks
1	7/6/2019	THEME/NHAI/CHO-TNJR/CON/0719/325	Source Approval for Water	
2	7/6/2019	THEME/NHAI/CHO-TNJR/CON/0719/326	Survey No 255 28 Baburajapuram Village of Kumbakonam Taluk in Thanjavur District – No Objection Certificate requested	
3	7/6/2019	THEME/NHAI/CHO-TNJR/CON/0719/327	Survey No.13_5A Porakudi Village of Papanasam Taluk in Thanjavur District – No Objection Certificate requested	
4	7/8/2019	THEME/NHAI/CHO-TNJR/CON/0719/328	Compliance report – Design and Drawings of Drains	
5	7/8/2019	THEME/NHAI/CHO-TNJR/CON/0719/329	Review of Soil Test Reports for the Borrow Area No. 19	
6	7/9/2019	THEME/NHAI/CHO-TNJR/CON/0719/330	Review of Soil Test Reports for the Borrow Area No. 20	
7	7/9/2019	THEME/NHAI/CHO-TNJR/CON/0719/331	Review of Soil Test Reports for the Borrow Area No. 21	
8	7/9/2019	THEME/NHAI/CHO-TNJR/CON/0719/332	Regarding Slight Modification in Span arrangement of 7 nos. Minor Bridges in Project Highway	
9	7/10/2019	THEME/NHAI/CHO-TNJR/CON/0719/333	Review of Job Mix Design reports for CTSB	
10	7/11/2019	THEME/NHAI/CHO-TNJR/CON/0719/334	Minutes of Project Meeting No.9	
11	7/12/2019	THEME/NHAI/CHO-TNJR/CON/0719/335	Creation of Centralized Data Bank Data Archives of all NHAI Projects available at RO's PIUs under Command & Control Centre at NHAI HQ	
12	7/12/2019	THEME/NHAI/CHO-TNJR/CON/0719/336	Construction of new bridge at Asoor Bypass Roundana – Request to complete the Bridge work	
13	7/12/2019	THEME/NHAI/CHO-TNJR/CON/0719/337	Compliance report – NCR 07 – Concrete cubes required strength at 28 days not achieved for Grade Separator at Km 145+165 for pile concrete	
14	7/16/2019	THEME/NHAI/CHO-TNJR/CON/0719/338	Shifting relocation of Minor Bridge from Design Chainage Km 134+320 to Design Chainage 150+813	
15	7/16/2019	THEME/NHAI/CHO-TNJR/CON/0719/339	Road Safety Meeting held at Collector's Office, Thanjavur on 25.06.2019 - Demand – Action requested	
16	7/16/2019	THEME/NHAI/CHO-TNJR/CON/0719/340	Survey No.13 5A Porakudi Village of Papanasam Taluk in Thanjavur District and Survey No. 285 2B Baburajapuram Village of Kumbakonam Taluk in Thanjavur District – NOC requested	
17	7/17/2019	THEME/NHAI/CHO-TNJR/CON/0719/341	Review of Plan and Profile of the Project Highway (Revislon-03)	
18	7/22/2019	THEME/NHAI/CHO-TNJR/CON/0719/342	Called for 'Compliance Report Action taken report in point's discussion at Road Safety Meeting	

15. Progress Photographs

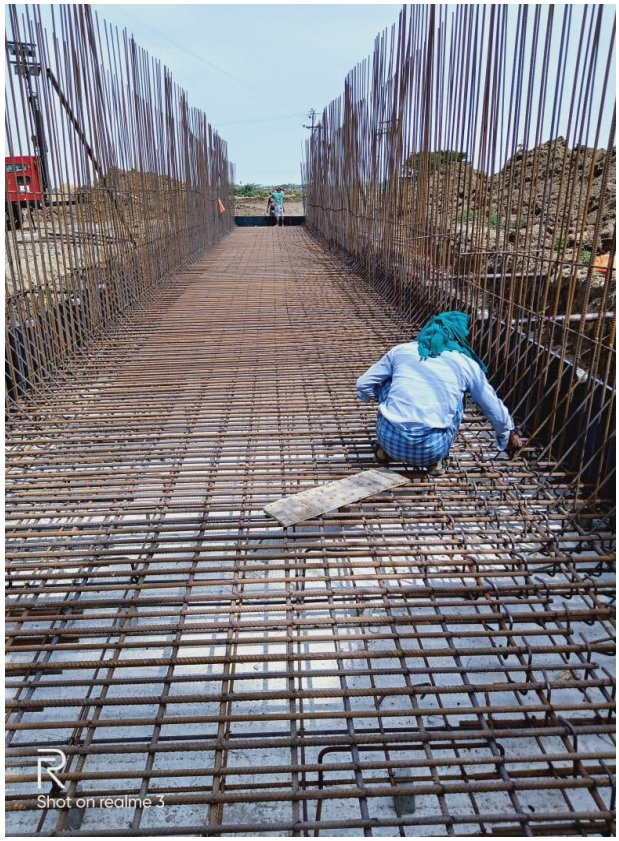
Sl. No	Description	Location	Side	Remarks
1.	PROJECT DIRECTOR ALONG WITH TEAM LEADER VISITED DYNAMIC LOAD TEST ALONG THE PROJECT HIGHWAY	157+155	LHS	
2.	TEAM LEADER ALONG WITH RESIDENT ENGINEER VISITED CRUSHER			

Sl. No	Description	Location	Side	Remarks
3.	DISMANTLING OF EXISTING STRUCTURES IS IN PROGRESS	126+020	RHS	
4.	DISMANTLING OF EXISTING STRUCTURES IS IN PROGRESS	120+420	RHS	

Sl. No	Description	Location	Side	Remarks
5.	EMBANKMENT IS IN PROGRESS	123+150		
6.	EMBANKMENT IS IN PROGRESS	123+650		

Sl. No	Description	Location	Side	Remarks
7.	EMBANKMENT IS IN PROGRESS	118+240		
8.	EMBANKMENT IS IN PROGRESS	118+480		

Sl. No	Description	Location	Side	Remarks
9.	BOX CULVERT – RETURN WALL IN PROGRESS	161+595	RHS	
10.	BOX CULVERT - RAFT REINFORCEMENT IS IN PROGRESS	126+854	RHS	



Sl. No	Description	Location	Side	Remarks
11.	BOX CULVERT – RETURN WALL SHUTTERING COMPLETED	122+952	RHS	
12.	BOX CULVERT - RAFT REINFORCEMENT COMPLETED	131+159	RHS	

Sl. No	Description	Location	Side	Remarks
13.	MNB – SLAB CONCRETE IN PROGRESS	140+892	BHS	
14.	MNB – WALL IN PROGRESS	157+517	BHS	

Sl. No	Description	Location	Side	Remarks
15.	MNB – WALL IN PROGRESS	117+764	BHS	
16.	MNB – SLAB IN PROGRESS	118+548	BHS	

Sl. No	Description	Location	Side	Remarks
13.	GSI- PILE CAP IN PROGRESS	157+188		
14.	VUP-PILE CAP PCC COMPLETED	139+477		

Sl. No	Description	Location	Side	Remarks
15.	VUP- PILE CAP IN PROGRESS	141+470		
16.				

Sl. No	Description	Location	Side	Remarks
17.	MJB- PILE REINFORCEMENT IN PROGRESS	161+030		
18.	ROB- PILE REINFORCEMENT IN PROGRESS	134+345		

Sl. No	Description	Location	Side	Remarks
19.	SAFETY MASS MEETING CONDUCTED ABOUT AWARENESS OF BLOOD DONATION AT PATEESWARAM CAMP	138+200	LHS	
20.