

National Highways Authority of India  
(Ministry of Road Transport & Highways)

Four Laning of Cholopuram Thanjavur from Km. 116.440 to Km. 164.275 of NH-45C under NHDP-IV on Hybrid Annuity Mode Basis.

PATEL CHOLOPURAM THANJAVUR HIGHWAY PRIVATE LIMITED



MONTHLY PROGRESS REPORT  
MARCH 2023

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## Executive Summary

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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.

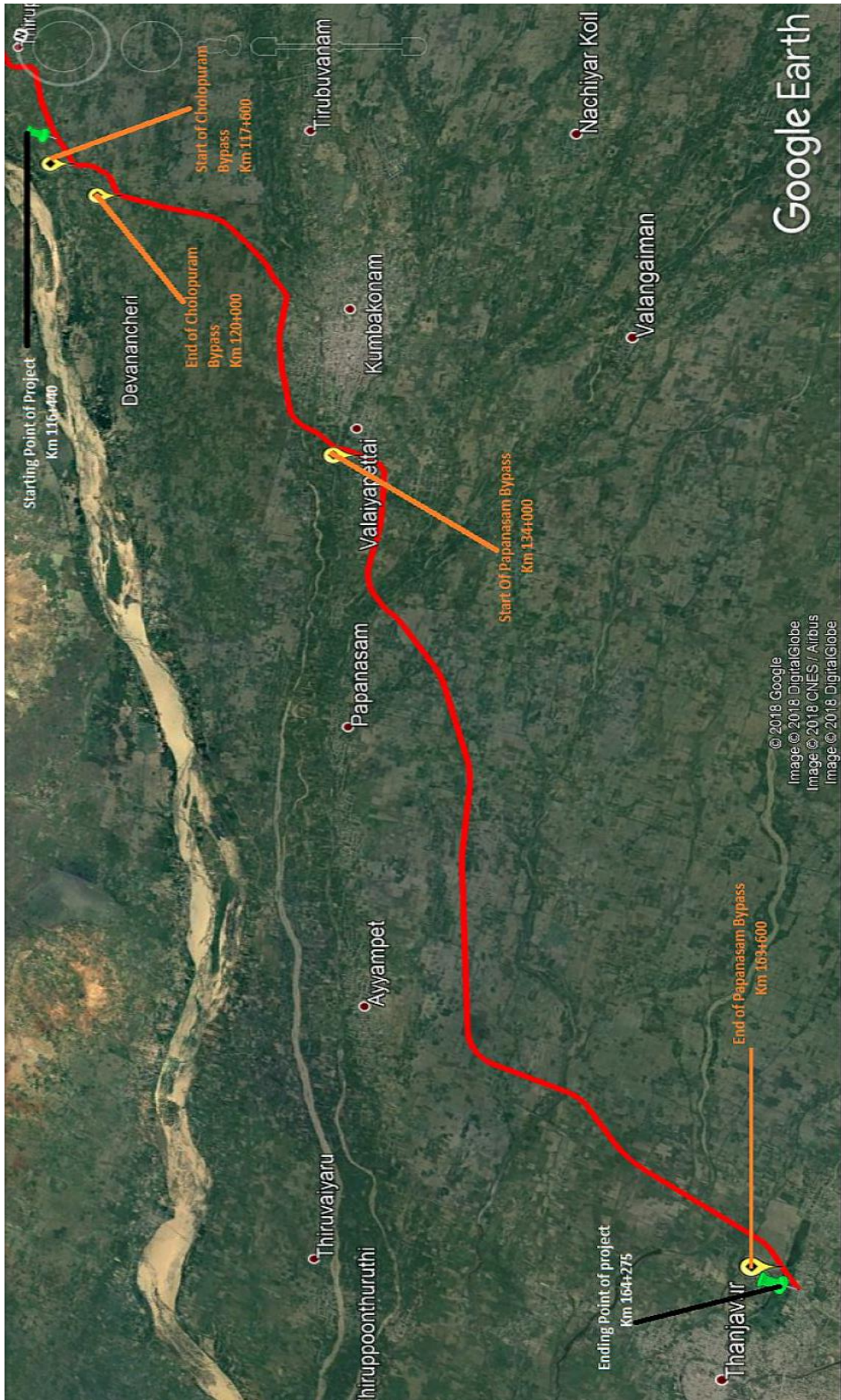
The Cholopuram to Thanjavur section of NH-45C is an important link to connect Metropolitan city of Chennai to religious and tourist places of Kumbakonam, Thanjavur, Tiruchirapalli. The project is also expected to provide improved connectivity to other religious places & other major cities like Thanjavur,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

### Project Synopsis

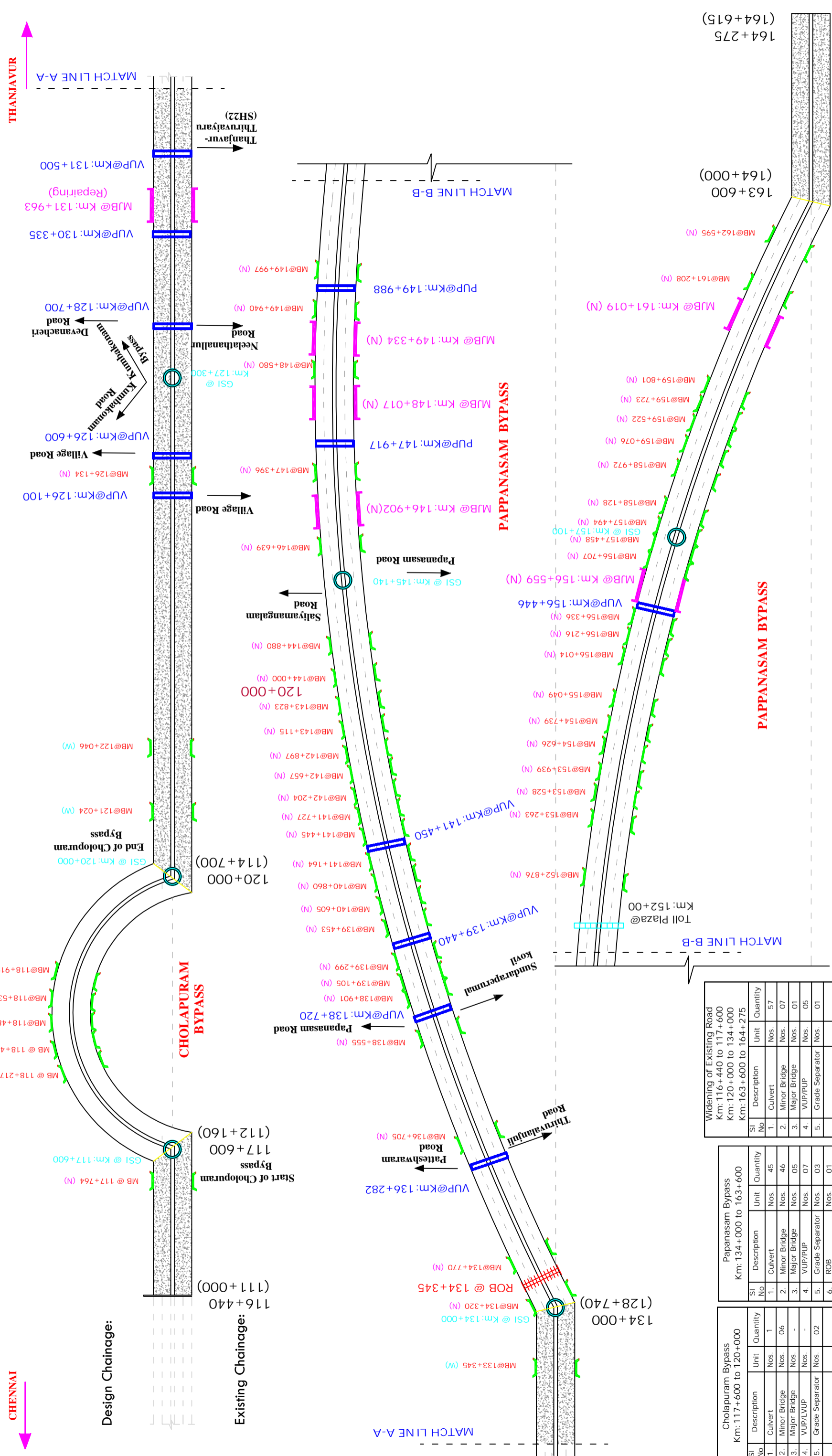
The Government of India had entrusted to the National Highway Authority of India (NHAI) the development, maintenance and management of National Highway No. 45C including the section from km 116.440 to Km 164.275 (approx. 47.835 Km). The Authority had resolved to augment for four Laning of Cholopuram - 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



CHENNAI

THANJAVUR

Design Chainage:

Existing Chainage:

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

| SI No | Description                              | Unit    | Quantity |
|-------|--|---------|----------|
| 1.    | Pappanasam Bypass Km: 134+000 to 163+600 | Culvert | Nos. 45  |
| 2.    | Minor Bridge                             | Nos.    | Nos. 46  |
| 3.    | Major Bridge                             | Nos.    | Nos. 01  |
| 4.    | VUP/LVUP                                 | Nos.    | Nos. 07  |
| 5.    | Grade Separator                          | Nos.    | Nos. 03  |
| 6.    | ROB                                      | Nos.    | Nos. 01  |

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

**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:**

| SI 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/Ship Road | Km   | 27.100 |
| 5.    | Culverts                    | Nos. | 74     |
| 6.    | Grade Separated Structure   | Nos. | 06     |
| 7.    | VUP/PJP                     | Nos. | 12     |
| 8.    | Major Bridge                | Nos. | 06     |
| 9.    | Minor Bridge                | Nos. | 59     |
| 10.   | Slab Culvert                | Nos. | 29     |
| 11.   | Minor Intersection          | Nos. | 22     |
| 12.   | Major Intersection          | Nos. | 20     |
| 13.   | Bus Bays and Shelters       | Nos. | 05     |
| 14.   | Toll Plaza                  | Nos. | 01     |
| 15.   | ROB                         | Nos. | 01     |

**Drawing Title**  
Strip Plan - Cholapuram to Thanjavur Highway Project

**Date:** 30-09-2018

**Project No.** 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)<br>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)<br>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)<br>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)<br>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)<br>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)<br>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)<br>without service road   | Concentric widening |

| Sr. no. | Design Chainage (Km) |                     | Length (Km)   | TCS Type   | Remarks |
|---------|----------------------|---------------------|---------------|--|---------|
|         | From                 | To                  |               |  |         |
| 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  |
| 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  |
|         |                      | <b>Total Length</b> | <b>47.835</b> |  |         |

## 1.1. Project Overview

|                                       |  |
|---------------------------------------|--|
| <b>Name of Work</b>                   | Four Laning of Cholopuram-Thanjavur from km. 116.440 to Km.164.275 of NH-45C under NHDP-IV on Hybrid Annuity Mode Basis  |
| <b>Name of Employer</b>               | National Highways Authority of India (NHAI)<br>G-5 & 6, Sector-10, Dwarka,<br>New Delhi -110075  |
| <b>Name of Concessionaire</b>         | Patel Cholopuram-Thanjavur Highway Pvt Ltd,<br>Patel House, Beside Prakruti Resorts,<br>Chanani Road, Vadodara.<br>Gujarat- 391740<br>Tel: +91-265 277 6678<br>Fax: +91-265 277 7878 |
| <b>Independent Engineer</b>           | M/s. Theme Engineering Services Pvt. Ltd,<br>8, Thomaiyammal Nagar, 6 <sup>th</sup> Street, R.S College (Post),<br>Thanjavur-613005.   |
| <b>EPC Contractor</b>                 | M/s. Patel Infrastructure Limited,<br>Patel House, Beside Prakruti Resorts,<br>Chanani Road, Vadodara<br>Gujarat- 391740,<br>Tel: +91-265 277 6678<br>Fax: +91-265 277 7878          |
| <b>Design Consultant</b>              | CTL Global Services Pvt. Ltd.<br>101, IST Floor, Krishna Chambers, HAL, Airport Road,<br>Bangalore-560017  |
| <b>Senior Lender</b>                  | Punjab National Bank, Large Corporate Branch,<br>Neelkamal Building, Opp. Sales India, Ashram Road,<br>Ahmedabad - 380009  |
| <b>Lenders Independent Engineers</b>  | Sharul Techno-Financial Consultancy Services Pvt. Ltd.,<br>403, Aspire Tower 5, Amanora Park Town, Hadapsar,<br>Pune - 411028.   |
| <b>Length of Road (Design Length)</b> | 47.835 Kms.  |
| <b>Total Bid Cost</b>                 | Rs. 1345.60 Crores (as per concession agreement)   |
| <b>Date of Concession Agreement</b>   | October 12, 2017   |
| <b>Concession Period</b>              | 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                   |
| Date of Settlement Agreement No.01 | 04.03.2021                   |
| Date of Settlement Agreement No.02 | 20.03.2023                   |
| 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       | 13.550 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     |
| Culverts                      | 103 Nos.   |
| Major Intersections           | 20 Nos.    |
| Minor Intersections           | 22 Nos.    |
| Bus Bays                      | 20 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 Dates as per CA          | Dates as per Settlement Agreement Signed on dated 04.03.2021  | Revised target dates as per Settlement Agreement Signed on dated 20.03.2023   |
|----------------------|---|---------------------------------|---|---|
| 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 214 <sup>th</sup> day from the Appointed Date. | 07 <sup>th</sup> April 2019     | ➤ 31 <sup>st</sup> May'2021- Total 22.846 Km. four lane to be completed for PCOD-I.   | ➤ 27 <sup>th</sup> Aug'2021- Total 22.846 Km. four lane to be completed for PCOD-I .<br>➤ 27 <sup>th</sup> Feb'2023- Total 32.500 Km. four lane to be completed for PCOD-II .<br>➤ 01 <sup>st</sup> June'2023- Total 35.314 Km. four lane to be completed for PCOD-III .<br>➤ 30 <sup>th</sup> June 2024- Total 47.835 Km four lane to be completed for final completion. |
| 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 334 <sup>th</sup> day from the Appointed Date.  | 05 <sup>th</sup> August 2019    | ➤ 30 <sup>th</sup> Nov'2021- Total 34.675 Km. four lane to be completed for PCOD-II.  |   |
| 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 584 <sup>th</sup> day from the Appointed Date. | 11 <sup>th</sup> April 2020     | ➤ 31 <sup>st</sup> July'2022- Total 46.665 Km. four lane to be completed for PCOD-III.<br>➤ Balance 1.170 Km. to be de-scoped from the scope of Concessionaire. |   |
| Scheduled Completion | Concessionaire shall have completed Project on 730 <sup>th</sup> day from the Appointed Date.   | 04 <sup>th</sup> September 2020 |   |   |

**Note:-** The Settlement Agreement was signed between Authority and Concessionaire for the completion of 22.846 Kms length by 31.05.2021, and further completion of additional 11.829 Kms length by 30.11.2021 i.e. up to Payment Date of 1<sup>st</sup> Annuity. The non-workable length/non-handed over length is 13.160 Km as per joint site verification by Concessionaire, IE and NHAI. Out of the total non-workable length/non-handed over length of 13.160 Kms, length equal to 11.990 Kms shall be handed over to the Concessionaire by 31.05.2021 and shall be completed by 31.07.2022. Remaining length of 1.170 Kms (i.e. 13.160 kms -11.990 kms) shall be de-scoped from the scope of work of Concessionaire as per the provision given in Article 16.6 of the Concession Agreement.

However, out of 11.990 Kms, only 2.870 Kms was handed over to the Concessionaire by 31.05.2021. Out of the balance length equal to 9.120 Kms (i.e. 11.990 kms - 2.870 kms), Concessionaire considered 1.599 Kms length as workable length and remaining length equal to 7.521 Kms (i.e. 9.120 kms - 1.599 kms) was under approval of descope proposal at NHAI, HQ in addition to 1.170 Kms which was already descope from the scope of work of Concessionaire.

The Independent Engineer (IE) also requested to Authority to provide EOT of 105 days for PCOD - 2 & PCOD - 3 on account of 2<sup>nd</sup> wave of COVID-19 and the request for EOT is also under approval at NHAI, HQ.

The Concessionaire had also requested to Authority/IE for the extension of time for PCOD-2 up to 28.02.2023 and PCOD-3 up to 28.06.2023 due to constraints of issue in obtaining permission for extracting soils from borrow area and also due to interruption in the availability of pond ash.

The Concessionaire had also submitted the proposal for additional descope to Authority/IE in 1.840 Km length in addition to the already proposed descope of 8.691 Km length due to interruption in the availability of pond ash required for the construction of RE Wall stretches, also due to local villagers were not allowing the concessionaire to continue the construction activities in some stretches and due to presence of existing irrigation canal within the project alignment. Hence, the concessionaire was not able to execute any construction activity in 1.840 Km length up to 31.05.2021 and submitted the proposal of additional descope to Authority/IE.

In line of the submission done by the concessionaire, Independent Engineer has examined both the proposals submitted by the concessionaire and Independent Engineer vide IE letter no. 4896 Dt. 04.11.2022 has recommended both the proposals to PIU, NHAI (i.e. total comprehensive descope proposal in 10.531 Km length (8.691Km+1.84Km) and extension of time proposal for PCOD-02 (completion of 34.675 Km) up to 27.02.2023 and extension of time proposal for PCOD-03 (completion of 37.304 Km duly considering the descope proposal of 10.531 Km length) up to 01.06.2023 for the approval of competent authority.

In line of the recommendation done by IE, PIU NHAI vide letter no. 3152 Dt. 04.11.2022 has also recommended both the proposals to RO, NHAI (i.e. total comprehensive descope proposal in 10.531 Km length (8.691Km+1.84Km) and extension of time proposal for PCOD-02 (completion of 34.675 Km) up to 27.02.2023 and extension of time proposal for PCOD-03 (completion of 37.304 Km duly considering the descope proposal of 10.531 Km length) up to 01.06.2023 for getting the approval from the competent authority.

In line of the recommendation given by PIU, NHAI regarding total comprehensive descope proposal in 10.531 Km length & additional EOT for 200 days, Settlement Agreement has been signed between NHAI (Authority) & PCTHPL (Concessionaire) on dated 20.03.2023 and the following has been finalized between NHAI (Authority) & PCTHPL (Concessionaire):-

1. The cumulative length for the completion of PCC-2 has been revised from 34.675 Km to 32.500 Km due to local public not allowing the concessionaire to execute the construction activities & demanding for the construction of additional scope of work and hence the same need to be considered under the proposal of change of scope.
2. The cumulative length for the completion of PCC-3 has been revised from 37.304 Km (duly considering the descope proposal of 10.531 Km length) to 35.314 Km due to local public not allowing the concessionaire to execute the construction activities & demanding for the construction of additional scope of work and hence the same need to be considered under the proposal of change of scope.
3. It was acknowledged by both the parties i.e. NHAI (Authority) & PCTHPL (Concessionaire) that 100% encumbrance free land is now available for the completion of entire project. Hence, from the project completion point of view, the descope length (i.e. 10.531 Km) & the length affected due to additional change of scope (i.e. 1.99 Km) has been considered for PCC-4 and the target date finalized for the completion of PCC-4 (i.e. 10.531 Km + 1.99 Km = 12.521 Km) is 30.06.2024.

**Status of Progress of Work as per Settlement Agreement Dt. 20.03.2023:-**

| Sr. No. | Description                            | Target      | Achieved as on date | Remarks   |
|---------|--|-------------|---------------------|---|
| 1       | Completion of 22.846 kms by 27.08.2021 | 605.62 Cr.  | 65.77%              | IE vide letter no. 987 dated 02.11.2021 has issued the Provisional Completion Certificate-1 (PCC-1) for the completion of 22.846 Kms w.e.f. 27.08.2021. |
| 2       | Completion of 32.500 kms by 27.02.2023 | 898.19 Cr.  |                     |   |
| 3       | Completion of 35.314 kms by 01.06.2023 | 987.68 Cr.  |                     |   |
| 4       | Completion of 47.835 kms by 30.06.2024 | 1345.60 Cr. |                     |   |

**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 |                  |
| 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.

|   | Design Chainage (Km) | Design Length (Km) | Width (m) | Remarks  |
|---|----------------------|--------------------|-----------|--|
| <b>(i) Full Right of Way (full width)</b> |                      |                    |           |  |
| 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        |  |
| <b>Total Length</b>                       |                      | <b>47.835</b>      |           |  |

|                     | Design Chainage (Km) | Design Length (Km) | Width (m) | Remarks                                       |
|---------------------|----------------------|--------------------|-----------|---|
| 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             | 124.700 to 126.100   | 1.40               | 20        |   |
| Stretch             | 126.700 to 127.655   | 0.95               | 20        |   |
| Stretch             | 130.600 to 134.000   | 3.40               | 20        |   |
| <b>Total Length</b> |                      | <b>7.250</b>       |           |   |

Besides this, the Authority has to acquire additional land at Toll plaza location, Bus bays/Bus Shelter, turning radius at Minor & Major junctions. The location of Bus bays/Bus Shelter as per Schedule C of Concession Agreement & Finalized by IE is given below in the tabular form:-

| Sr. No. | Design Chainage | Side           | Remarks |
|---------|-----------------|----------------|---------|
| 1       | 116.487         | Both Hand Side |         |
| 2       | 116.860         | Both Hand Side |         |
| 3       | 117.460         | Both Hand Side |         |
| 4       | 120.600         | Both Hand Side |         |
| 5       | 121.250         | Both Hand Side |         |
| 6       | 121.630         | Both Hand Side |         |
| 7       | 123.200         | Both Hand Side |         |
| 8       | 123.850         | Both Hand Side |         |
| 9       | 125.500         | Both Hand Side |         |
| 10      | 126.100         | Both Hand Side |         |
| 11      | 127.330         | Both Hand Side |         |
| 12      | 128.715         | Both Hand Side |         |

|    |         |                |  |
|----|---------|----------------|--|
| 13 | 130.349 | Both Hand Side |  |
| 14 | 131.750 | Both Hand Side |  |
| 15 | 133.240 | Both Hand Side |  |
| 16 | 134.010 | Both Hand Side |  |
| 17 | 136.307 | Both Hand Side |  |
| 18 | 145.165 | Both Hand Side |  |
| 19 | 157.188 | Both Hand Side |  |
| 20 | 163.620 | Both Hand Side |  |

The status of compensation disbursed for Land & Structure is as below: -

| Table 2.1-2: 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                    | 1074                  | 393                          |         |
|   | <b>Total in Nos.</b> | <b>1467</b>             | <b>1074</b>           | <b>393</b>                   |         |
|   | <b>Total in %</b>    |                         | <b>73.21%</b>         | <b>26.79%</b>                |         |

| Table 2.1-3 - 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            | 813                     | 670                  | 143                         |         |
|  | <b>Total in Nos</b>  | <b>813</b>              | <b>670</b>           | <b>143</b>                  |         |
|  | <b>Total in %</b>    |                         | <b>82.41%</b>        | <b>17.59%</b>               |         |

## 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                      | 10                           | 3<br>(125+670-RHS<br>126+870-RHS<br>133+180-LHS) |
| 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 |         |

**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 (including DI and PVC lines) | Kms. | 35.750             | 7.960     | 27.79   | Work in Progress |
| 2       | BDO of Concern Union | Hand Pump/Pump Room with Bore well                  | Nos. | 16                 | 3         | 13      |                  |
| 3       | BDO of Concern Union | Over Head Tank                                      | Nos. | 2                  | 2         | 0       | Completed        |
| 4       | TNEB                 | Electrical Lines                                    | Kms. | 19.215             | 15.605    | 3.610   | Work in Progress |

**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 | 47.835        | 15.310                 | 1461               | 1461                       | 0                    |                 |
| 2            | Thanjavur            | 116+440   | 164+275 | 47.835        | -                      | 508                | 508                        | 0                    | Teak Wood trees |
| <b>Total</b> |                      |           |         | <b>47.835</b> |                        |                    |                            |                      |                 |

## 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/ Drawings submitted | Design/ Drawings 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                        | 9                          | 1                         |
| 5       | Minor Intersections    | No   | 22                        | 2                          | -                         |
| 6       | Toll Plaza             | No   | 01                        | 01                         | 01                        |
| 7       | Rest Area              | No   | 02                        | 01                         | -                         |
| 8       | Bus Bay                | No   | 20                        | 20                         | 20                        |
| 9       | Service Roads          | No   | 27.10                     | 26.97                      | 26.97                     |

**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   | 05                        | 03                         | 03                          |
| 2      | Minor Bridges                | No   | 56                        | 56                         | 53                          |
| 3      | Grade Separated Intersection | No   | 06                        | 06                         | 06                          |
| 4      | VUP/PUP                      | No   | 12                        | 12                         | 12                          |
| 5      | Box /Slab Culvert            | No   | 103                       | 103                        | 103                         |
| 6      | ROB                          | No   | 01                        | 01                         | Structural drawing approved |

## 4. Physical Progress of Work

### 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 March 2023 is as follows.

#### CUMULATIVE STATEMENT

##### For Main Carriageway

| Sr. No. | Description                         | Total Length of Project (in. Km.) | Progress up to Previous Report (in Km) | Progress during this Report (In Km.) | Cumulative Progress Achieved up to this Report (In Km) | In Progress (In Km.) | Balance Length to be Completed | Cumulative % of Progress Achieved |
|---------|-------------------------------------|-----------------------------------|--|--------------------------------------|--|----------------------|--------------------------------|-----------------------------------|
| 1       | <b>Clearing and Grubbing</b>        |                                   |  |                                      |  |                      |                                |                                   |
|         | LHS                                 | 47.835                            | 42.980                                 | 0.000                                | 42.980   | 0.000                | 4.855                          | 89.85%                            |
|         | RHS                                 | 47.835                            | 42.910                                 | 0.000                                | 42.910   | 0.000                | 4.925                          | 89.70%                            |
| 2       | <b>Embankment Top</b>               |                                   |  |                                      |  |                      |                                |                                   |
|         | LHS                                 | 47.835                            | 33.570                                 | 0.835                                | 34.405   | 1.650                | 13.430                         | 71.92%                            |
|         | RHS                                 | 47.835                            | 33.750                                 | 0.585                                | 34.335   | 2.440                | 13.500                         | 71.78%                            |
| 3       | <b>Subgrade Top</b>                 |                                   |  |                                      |  |                      |                                |                                   |
|         | LHS                                 | 47.835                            | 33.025                                 | 0.965                                | 33.990   | 0.415                | 13.845                         | 71.06%                            |
|         | RHS                                 | 47.835                            | 32.965                                 | 1.190                                | 34.155   | 0.180                | 13.680                         | 71.40%                            |
| 4       | <b>GSB/ Cement Treated Sub-Base</b> |                                   |  |                                      |  |                      |                                |                                   |
|         | LHS                                 | 47.835                            | 32.780                                 | 0.600                                | 33.380   | 0.000                | 14.455                         | 69.78%                            |
|         | RHS                                 | 47.835                            | 32.905                                 | 0.870                                | 33.775   | 0.000                | 14.060                         | 70.61%                            |
| 5       | <b>Wet Mix Macadam</b>              |                                   |  |                                      |  |                      |                                |                                   |
|         | LHS                                 | 47.835                            | 32.720                                 | 0.220                                | 32.940   | 0.000                | 14.895                         | 68.86%                            |
|         | RHS                                 | 47.835                            | 32.725                                 | 0.550                                | 33.275   | 0.000                | 14.560                         | 69.56%                            |
| 6       | <b>Dense Bitumen Macadam</b>        |                                   |  |                                      |  |                      |                                |                                   |
|         | LHS                                 | 47.835                            | 32.710                                 | 0.075                                | 32.785   | 0.000                | 15.050                         | 68.54%                            |
|         | RHS                                 | 47.835                            | 32.700                                 | 0.000                                | 32.700   | 0.000                | 15.135                         | 68.36%                            |
| 7       | <b>Bituminous Concrete</b>          |                                   |  |                                      |  |                      |                                |                                   |
|         | LHS                                 | 47.835                            | 32.685                                 | 0.000                                | 32.685   | 0.000                | 15.150                         | 68.33%                            |
|         | RHS                                 | 47.835                            | 32.685                                 | 0.000                                | 32.685   | 0.000                | 15.150                         | 68.33%                            |

**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               | 27.100                             | 5.370                                 | 1.660                               | 7.030   | 0                    | 20.070                         | 25.94%                            |
| 2       | Sub grade                | 27.100                             | 5.370                                 | 1.660                               | 7.030   | 0                    | 20.070                         | 25.94%                            |
| 3       | GSB/ Cement Treated Base | 27.100                             | 5.355                                 | 1.675                               | 7.030   | 0                    | 20.070                         | 25.94%                            |
| 4       | Wet Mix Macadam          | 27.100                             | 5.275                                 | 1.335                               | 6.610   | 0                    | 20.490                         | 24.39%                            |
| 5       | Dense Bituminous Macadam | 27.100                             | 5.275                                 | 0.175                               | 5.450   | 0                    | 21.650                         | 20.11%                            |
| 6       | Bituminous Concrete      | 27.100                             | 2.400                                 | 0                                   | 2.400   | 0                    | 24.700                         | 8.86%                             |

**For Structure Works**

| Sr. No. | Type of Structure          | Total No. of Structures | No. of Structures               |                              |                             |             |         | Remarks   |
|---------|----------------------------|-------------------------|---------------------------------|------------------------------|-----------------------------|-------------|---------|---|
|         |                            |                         | Completed up to previous Report | Completed during this Report | Completed up to this Report | In Progress | Balance |   |
| 1       | Culvert                    | 103                     | 92.775                          | 0                            | 92.775                      | 9.225       | 1.00    |   |
| 2       | Pedestrian Underpass (PUP) | 2                       | 2                               | 0                            | 2                           | 0           | 0       |   |
| 3       | Vehicular Under Pass (VUP) | 10                      | 9.00                            | 0                            | 9.00                        | 0           | 1.00    | Balance 1 No. has been included under Negative COS. |
| 4       | Minor Bridges (MNB)        | 56                      | 49.00                           | 0                            | 49.00                       | 1.00        | 6.00    | 2 Nos. has been included under Negative COS.        |
| 5       | Major Bridges (MJB)        | 5                       | 2.00                            | 0                            | 2.00                        | 1.00        | 2.00    |   |
| 6       | Flyover                    | 6                       | 6                               | 0                            | 6                           | 0           | 0       |   |
| 7       | ROB                        | 1                       | 1.00                            | 0                            | 1.00                        | 0           | 0       |   |



The Physical Progress of the Project up to **March 2023** as per approved Schedule G is given below:-

**Table 4.1 Physical Progress of Work**

| Item  | Stage for Payment                                     | Unit | Qty.  | Weightage in percentage to Contract Price | Progress Achieved upto March'2023 |            | Remarks |
|---|---|------|-------|---|-----------------------------------|------------|---------|
|   |   |      |       |   | Quantity                          | Percentage |         |
| Road works including culverts, minor bridges, underpasses, overpasses, approaches to ROB/RUB/Major Bridge s/ Structures (but excluding service roads) | <b>A- Widening and strengthening of existing road</b> |      |       |   |                                   |            |         |
|   | (1) Earthwork up to top of the sub-grade              | Km.  | 28.70 | 4.26%                                     | 18.074                            | 2.681%     |         |
|   | (2) Granular work (sub-base, base, shoulders)         |      |       |   |                                   |            |         |
|   | (a) GSB/ Cement Treated Base                          | Km.  | 28.70 | 1.40%                                     | 17.679                            | 0.863%     |         |
|   | (b) WMM/ Cement Treated Base                          | Km.  | 28.70 | 2.10%                                     | 17.539                            | 1.283%     |         |
|   | (3) Shoulders   | Km.  | 7.10  | 0.03%                                     | 7.10                              | 0.030%     |         |
|   | (4) Bituminous work                                   |      |       |   |                                   |            |         |
|   | (a) DBM   | Km.  | 28.70 | 1.61%                                     | 16.889                            | 0.946%     |         |
|   | (b) BC  | Km.  | 28.70 | 1.48%                                     | 16.584                            | 0.858%     |         |
|   | (5) Rigid Pavement                                    |      |       |   |                                   |            |         |
|   | Concrete Work   | Km.  |       |   |                                   |            |         |
|   | (6) Widening and Repair of Culverts                   | Nos  | 33    | 0.57%                                     | 31.650                            | 0.548%     |         |
|   | (7) Widening and Repair of Minor Bridges              | Nos  | 3     | 0.38%                                     | 2.775                             | 0.352%     |         |
|   | <b>B- New realignment/bypass</b>                      |      |       |   |                                   |            |         |
|   | (1) Earthwork up to top of the sub-grade              | Km.  | 63.33 | 16.30%                                    | 48.715                            | 12.542 %   |         |
|   | (2) Granular work (sub-base, base, shoulders)         |      |       |   |                                   |            |         |
|   | (a) GSB/ Cement Treated Base                          | Km.  | 62.13 | 3.39%                                     | 47.408                            | 2.590%     |         |
|   | (b) WMM/ Cement Treated Base                          | Km.  | 62.13 | 3.83%                                     | 46.636                            | 2.873%     |         |
|   | (3) Shoulders   | Km.  | 48.19 | 0.10%                                     | 42.260                            | 0.088%     |         |
|   | (4) Bituminous work                                   |      |       |   |                                   |            |         |
|   | (a) DBM   | Km.  | 62.13 | 3.48%                                     | 46.546                            | 2.607%     |         |
|   | (b) BC  | Km.  | 62.13 | 3.21%                                     | 45.677                            | 2.362%     |         |
|   | (5) Rigid Pavement                                    |      |       |   |                                   |            |         |
| Concrete Work   | Km  |      |       |   |                                   |            |         |
| <b>C- New culverts, minor bridges, underpasses, overpasses on existing road, realignments, bypasses:</b>  |   |      |       |   |                                   |            |         |

|                        |  |          |     |       |        |        |  |
|------------------------|--|----------|-----|-------|--------|--------|--|
|                        | <b>(1) Culverts</b>  | Nos<br>. | 70  | 5.95% | 61.125 | 5.191% |  |
|                        | <b>(2) Minor bridges</b>                                     |          |     |       |        |        |  |
|                        | (i) Foundation   | Nos<br>. | 170 | 6.71% | 116.00 | 4.580% |  |
|                        | (ii) Substructure  | Nos<br>. | 270 | 3.50% | 208.00 | 2.693% |  |
|                        | (iii) Superstructure (including crash barrier etc. complete) | Nos<br>. | 142 | 3.78% | 95.25  | 2.533% |  |
|                        | <b>(3) Cattle/Pedestrian underpasses</b>                     |          |     |       |        |        |  |
|                        | (i) Foundation   | Nos<br>. | 4   | 0.15% | 4.00   | 0.150% |  |
|                        | (ii) Substructure  | Nos<br>. | 8   | 0.08% | 8.00   | 0.084% |  |
|                        | (iii) Superstructure (including crash barrier etc. complete) | Nos<br>. | 4   | 0.06% | 3.70   | 0.052% |  |
|                        | <b>(4) Pedestrian overpasses</b>                             |          |     |       |        |        |  |
|                        | (i) Foundation   | Nos<br>. |     |       |        |        |  |
|                        | (ii) Substructure  | Nos<br>. |     |       |        |        |  |
|                        | (iii) Superstructure (including crash barrier etc. complete) | Nos<br>. |     |       |        |        |  |
|                        | <b>(5) Grade separated structures</b>                        |          |     |       |        |        |  |
|                        | <b>(a) Underpass (10 VUP)</b>                                |          |     |       |        |        |  |
|                        | (i) Foundation   | Nos<br>. | 40  | 2.50% | 36.00  | 2.249% |  |
|                        | (ii) Substructure  | Nos<br>. | 40  | 0.91% | 36.00  | 0.818% |  |
|                        | (iii) Superstructure (including crash barrier etc. complete) | Nos<br>. | 20  | 1.14% | 16.05  | 0.912% |  |
|                        | <b>(c) Vehicular Overpass (VOP)</b>                          |          |     |       |        |        |  |
|                        | (i) Foundation   | Nos<br>. |     |       |        |        |  |
|                        | (ii) Substructure  | Nos<br>. |     |       |        |        |  |
|                        | (iii) Superstructure (including crash barrier etc. complete) | Nos<br>. |     |       |        |        |  |
|                        | <b>(c) Flyover</b>   |          |     |       |        |        |  |
|                        | (i) Foundation   | Nos<br>. | 24  | 2.25% | 24.00  | 2.250% |  |
|                        | (ii) Substructure  | Nos<br>. | 24  | 0.82% | 24.00  | 0.818% |  |
|                        | (iii) Superstructure (including crash barrier etc. complete) | Nos<br>. | 12  | 1.02% | 10.65  | 0.908% |  |
| Major Bridge works and | <b>Major Bridge works and ROB/RUB</b>                        |          |     |       |        |        |  |
|                        | <b>A- Widening and Repair of Minor Bridges</b>               |          |     |       |        |        |  |
|                        | (1) Foundations  |          |     |       |        |        |  |

|  |  |     |        |       |           |        |        |  |
|--|--|-----|--------|-------|-----------|--------|--------|--|
| ROB/<br>RUB  | (a) Open Foundation  | Nos | .      |       |           |        |        |  |
|  | (b) Pile foundation/ well foundation   | Nos | .      |       |           |        |        |  |
|  | (2) Substructure   | Nos | .      |       |           |        |        |  |
|  | (3) Superstructure (including crash barrier etc. complete)                                   | Nos | .      |       |           |        |        |  |
|  | <b>C- New Major Bridges</b>  |     |        |       |           |        |        |  |
|  | (1) Foundations  |     |        |       |           |        |        |  |
|  | (a) Open Foundation  | Nos | .      |       |           |        |        |  |
|  | (b) Pile foundation/ well foundation   | Nos | .      | 76    | 2.17%     | 50.00  | 1.431% |  |
|  | (2) Substructure   | Nos | .      | 76    | 1.23%     | 50.00  | 0.810% |  |
|  | (3) Superstructure (including crash barrier etc. complete)                                   | Nos | .      | 62    | 1.50%     | 32.40  | 0.782% |  |
| <b>D- New rail-road bridges</b>                              |  |     |        |       |           |        |        |  |
| <b>(a) ROB</b>   |  |     |        |       |           |        |        |  |
| (i) Foundation   | Nos  | .   | 8      | 1.50% | 8.00      | 1.500% |        |  |
| (ii) Substructure  | Nos  | .   | 8      | 0.80% | 8.00      | 0.800% |        |  |
| (iii) Superstructure (including crash barrier etc. complete) | Nos  | .   | 6      | 1.49% | 5.10      | 1.264% |        |  |
| Structures<br>(elevated sections,<br>reinforced earth)       | <b>Structures (elevated sections, reinforced earth)</b>                                      |     |        |       |           |        |        |  |
|  | (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) |     |        |       |           |        |        |  |
| (a) Construction of RS Wall Facia                            | Sqm  | .   | 179469 | 7.52% | 53,298.00 | 2.233% |        |  |
| Other Works  | <b>Other Works</b>   |     |        |       |           |        |        |  |
|  | (i) Service roads/ Slip Roads  | Km  |        | 27.1  | 3.86%     | 2.400  | 0.342% |  |
|  | (ii) Toll Plaza  | Nos | .      | 1     | 1.38%     | 0.140  | 0.193% |  |
|  | (iii) Road side drains   | Km  |        | 12.08 | 1.64%     | 3.004  | 0.407% |  |
|  | (iv) Road signs, markings, km stones, safety devices, ....                                   |     |        |       |           |        |        |  |
|  | (a) Road signs, markings, km stones, ...   | Km  |        | 95.67 | 2.02%     | 57.740 | 1.220% |  |

|   |     |       |                |        |               |  |
|---|-----|-------|----------------|--------|---------------|--|
| (b) Concrete Crash Barrier/ W-Beam Crash Barrier in Road work | Km  |       |                |        |               |  |
| (i) Concrete Crash Barrier                                    | Km  | 25.42 | 2.01%          | 7.758  | 0.615%        |  |
| (ii) W-Beam Crash Barrier                                     | Km  | 32.75 | 0.70%          | 11.340 | 0.243%        |  |
| <b>(v) Project facilities</b>                                 |     |       |                |        |               |  |
| (a) Bus Bays  | No. | 20    | 0.01%          | 3.00   | 0.001%        |  |
| (b) Truck Lay-byes  | No. |       |                |        |               |  |
| (b) Rest areas  | No. | 2     | 0.22%          |        |               |  |
| (vi) Repairs to bridges/structures                            | Nos | 4     | 0.01%          |        |               |  |
| (vii) Road side plantation                                    | Km  | 22.54 | 0.60%          |        |               |  |
| (viii) Protection works                                       |     |       |                |        |               |  |
| (a) Boulder pitching on slopes                                | Km  | 32.75 | 0.19%          | 11.340 | 0.065%        |  |
| (b) Toe/Retaining wall  | Km  |       |                |        |               |  |
| (x) Miscellaneous   | Ls. | 100%  | 0.150%         |        |               |  |
| <b>Total</b>  |     |       | <b>100.00%</b> |        | <b>65.77%</b> |  |

**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**

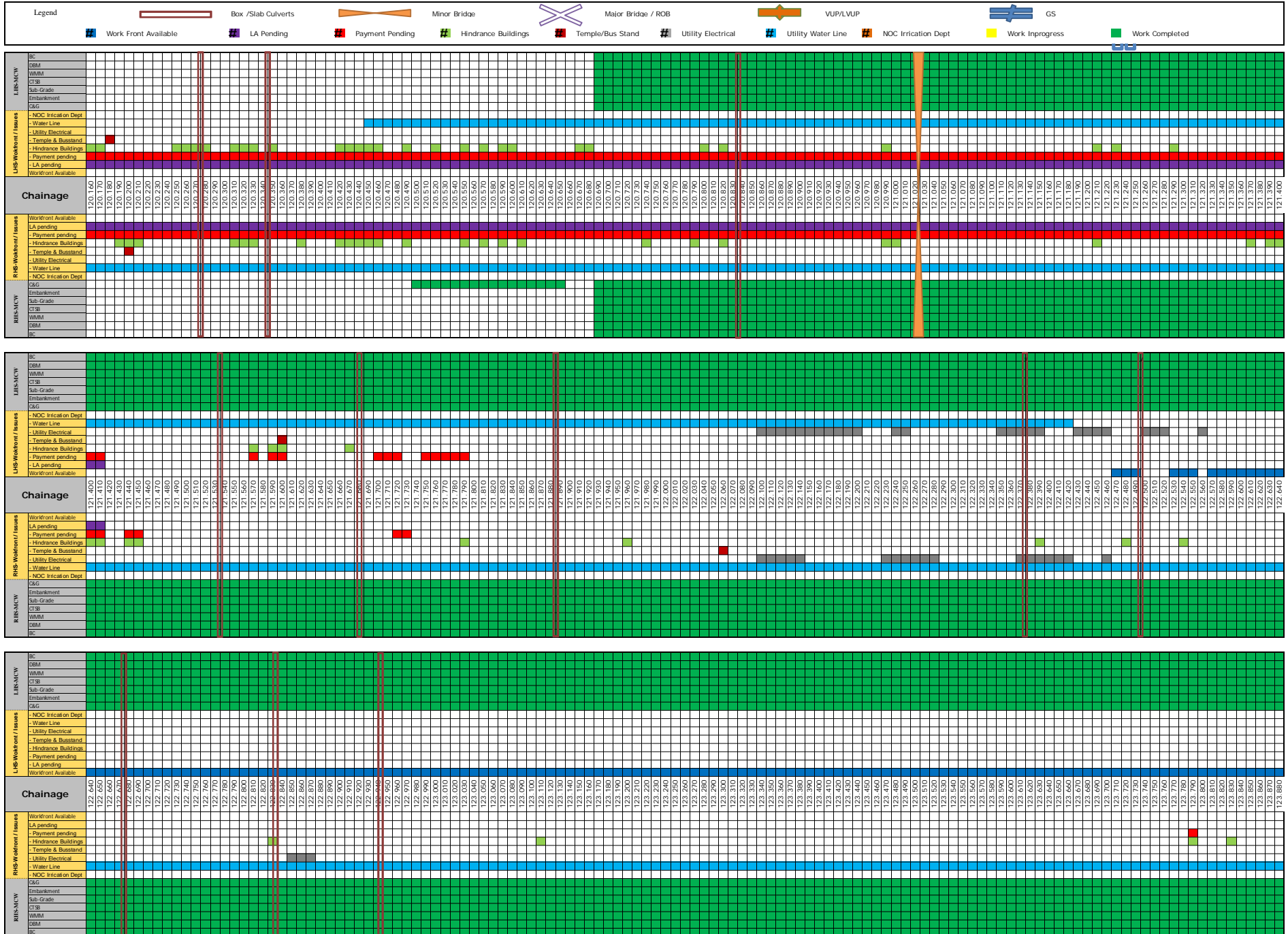
**Strip Chart as on 31.03.2023**



Four Lining 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

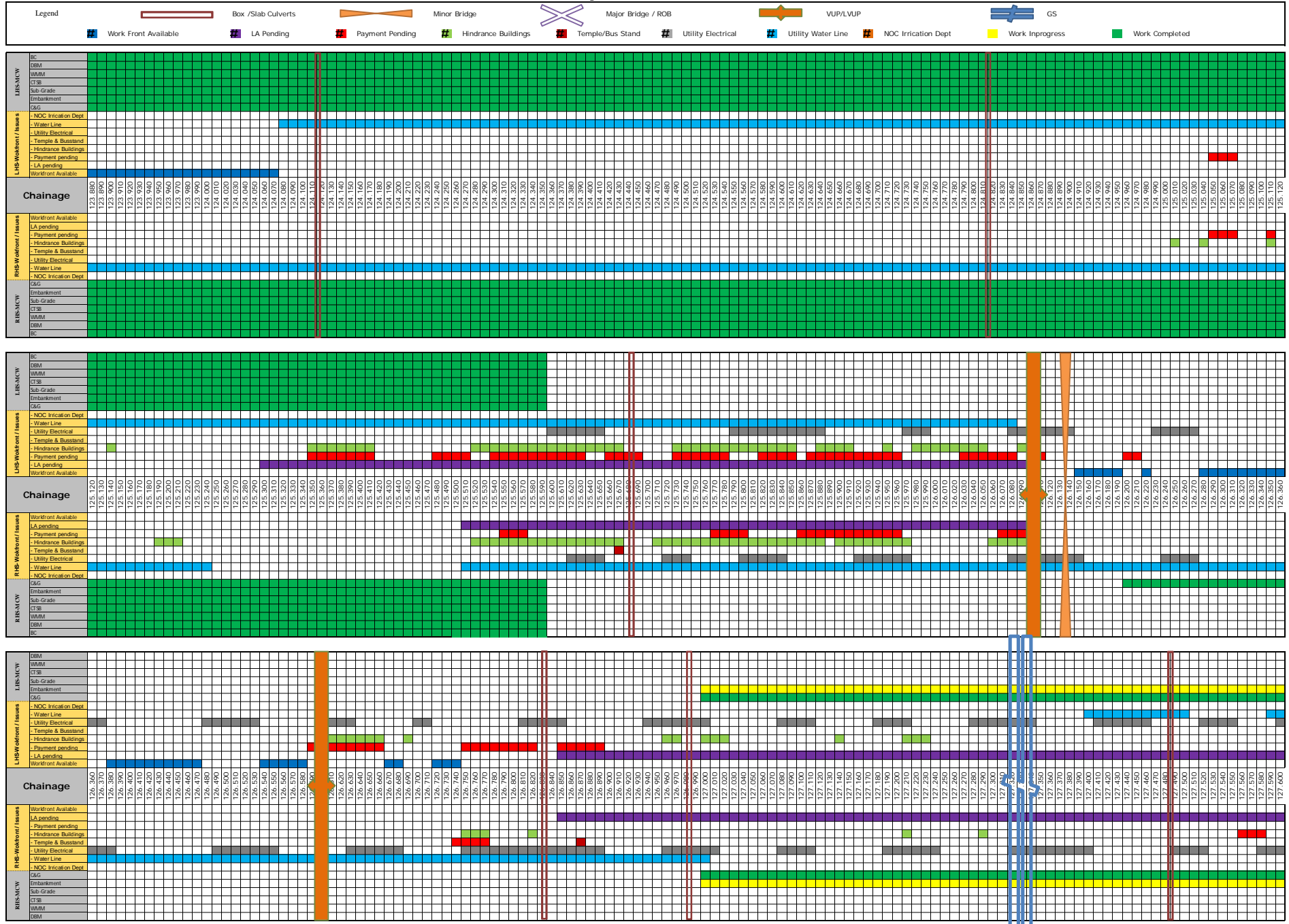
Strip Chart as on 31.03.2023



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

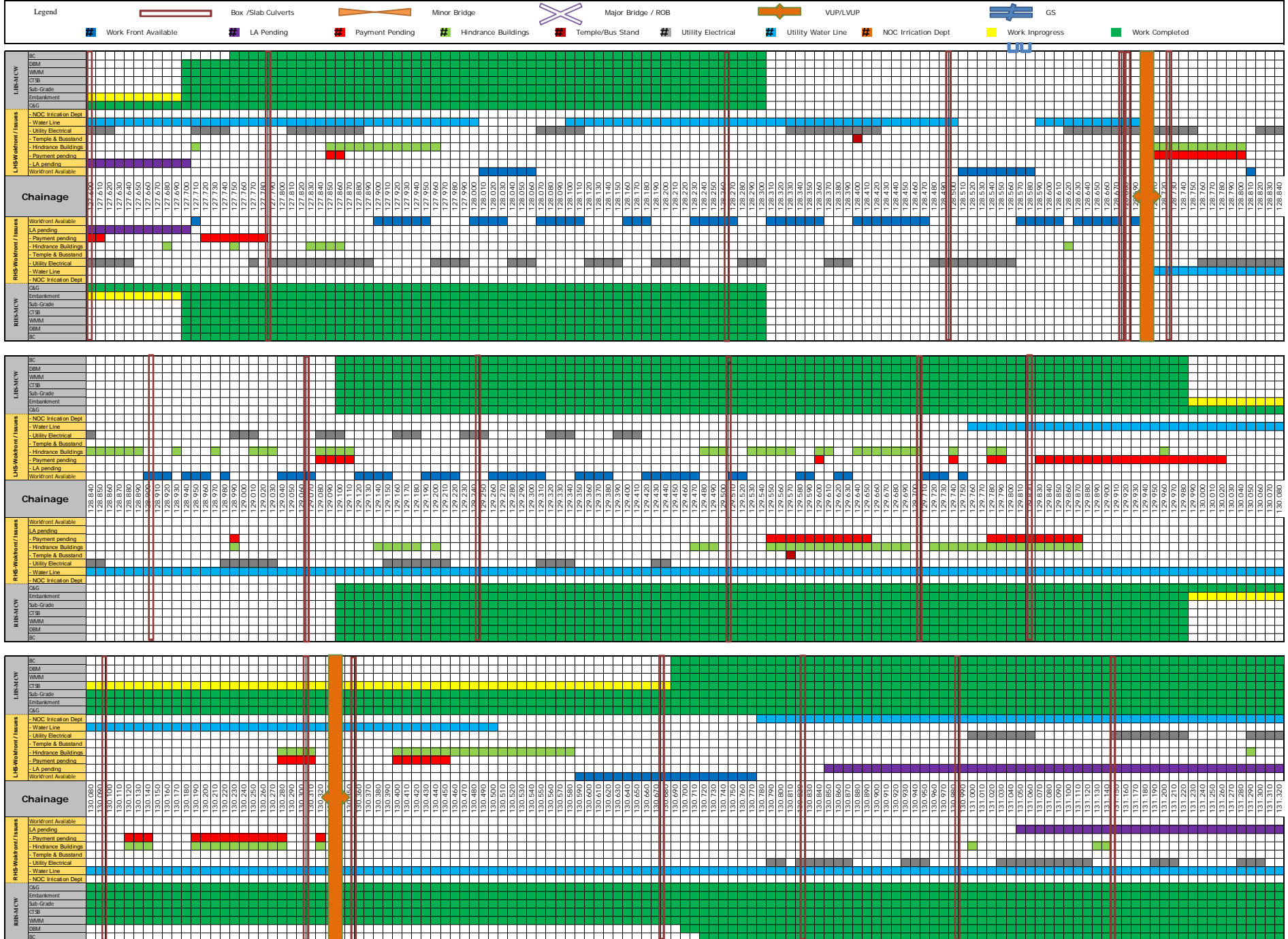
Strip Chart as on 31.03.2023



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 31.03.2023

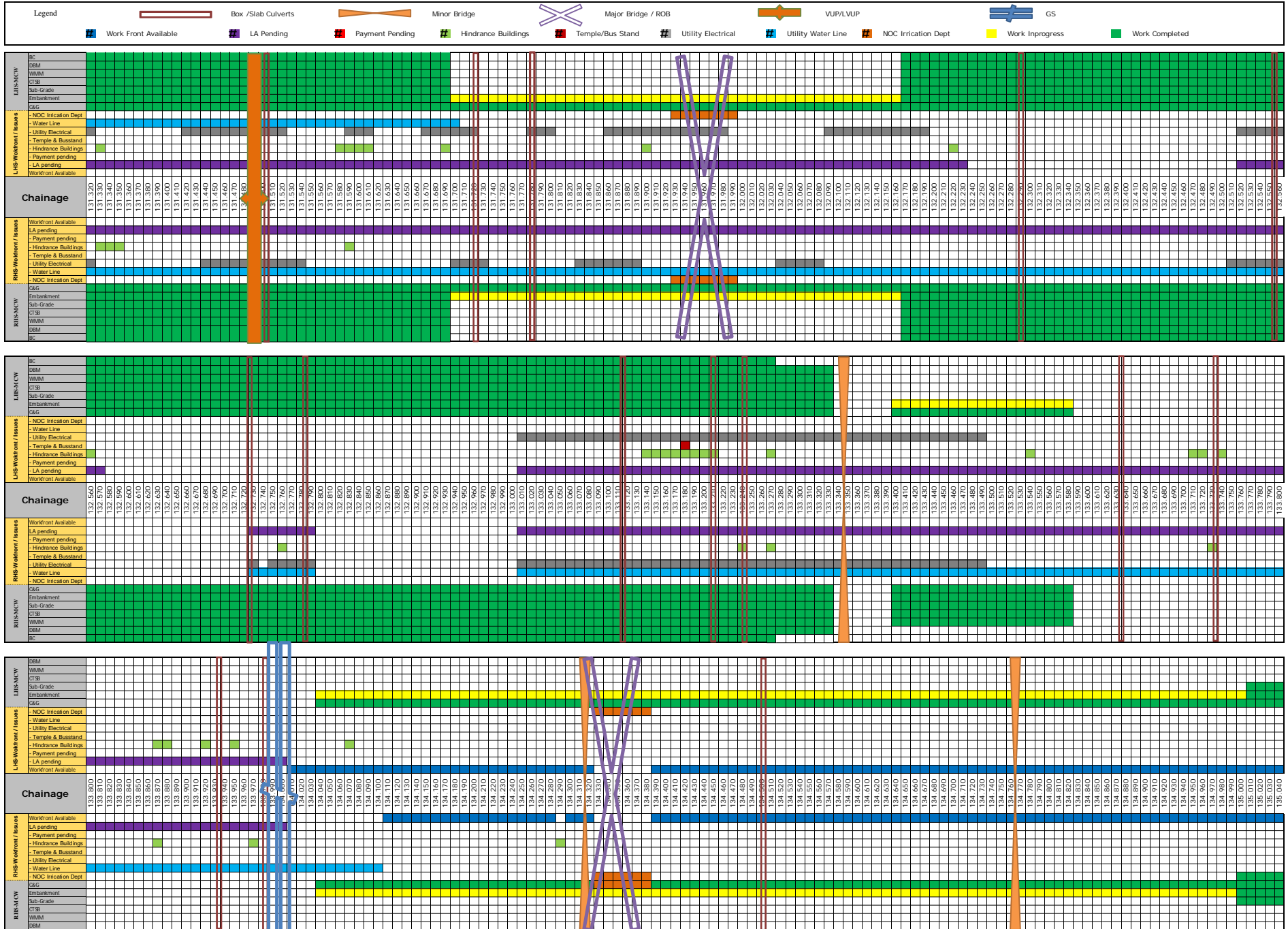




Four Lining of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.

Cholopuram - Thanjavur Project

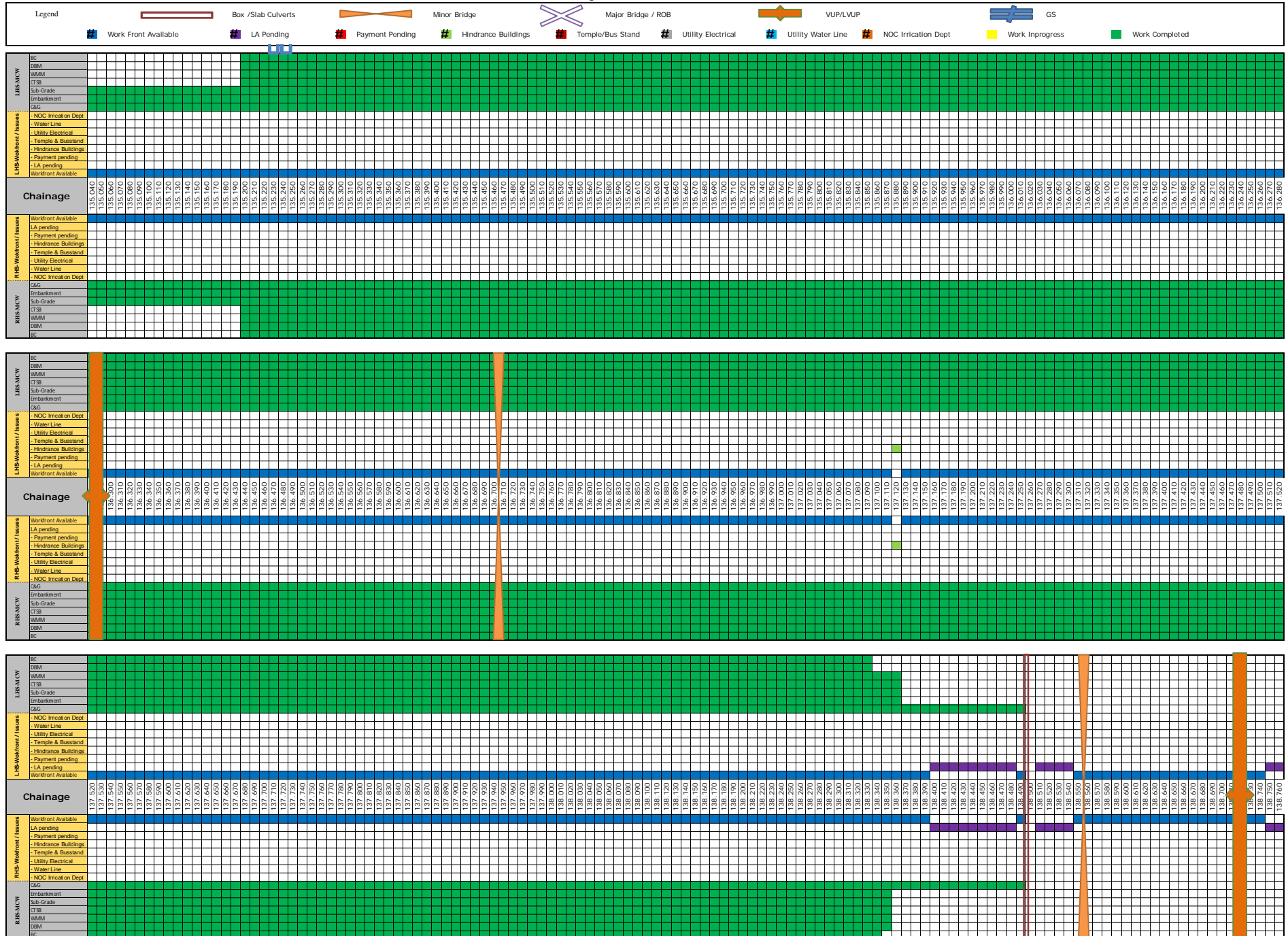
Strip Chart as on 31.03.2023



Four Lining 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

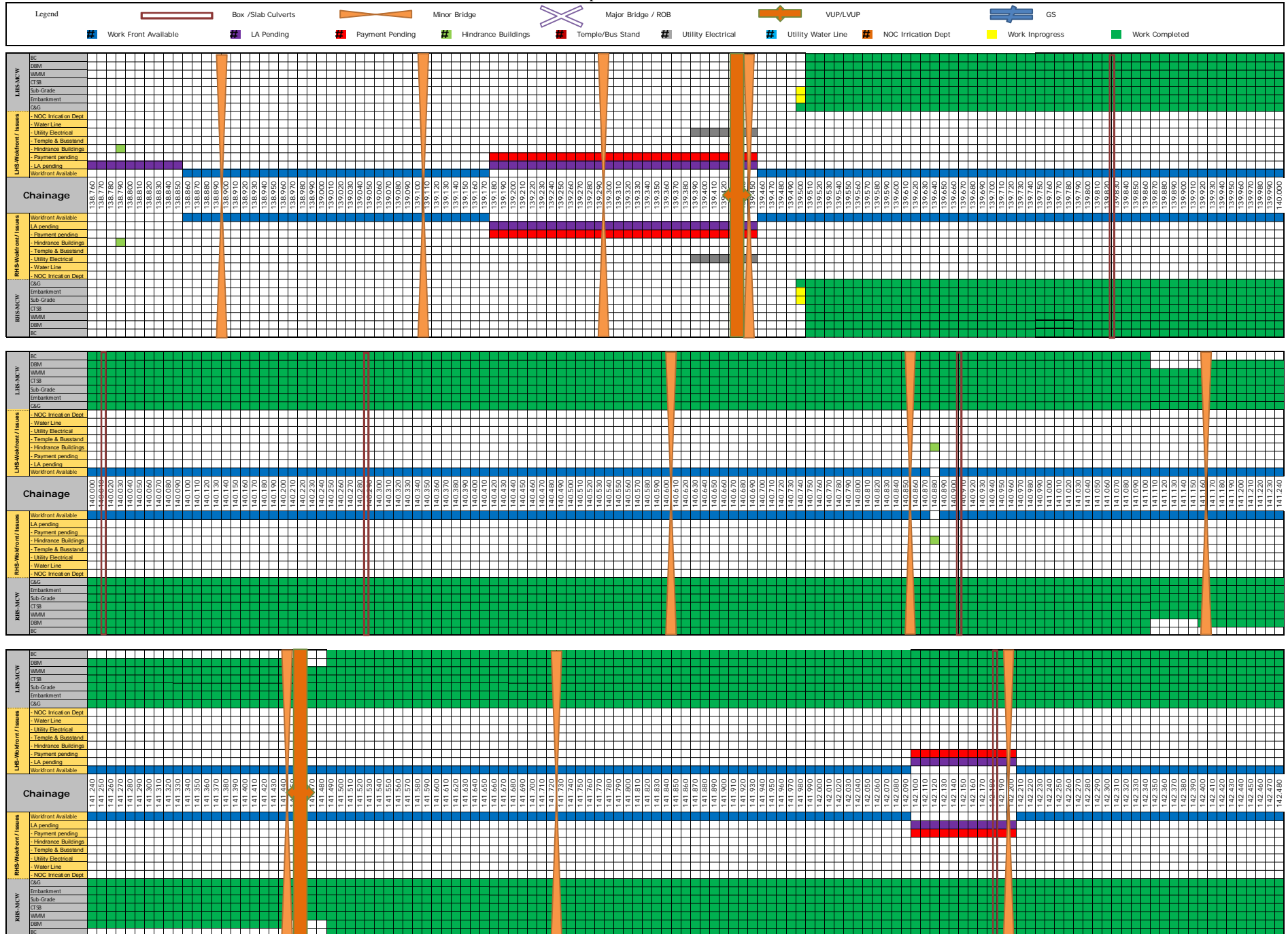
Strip Chart as on 31.03.2023



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 31.03.2023



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

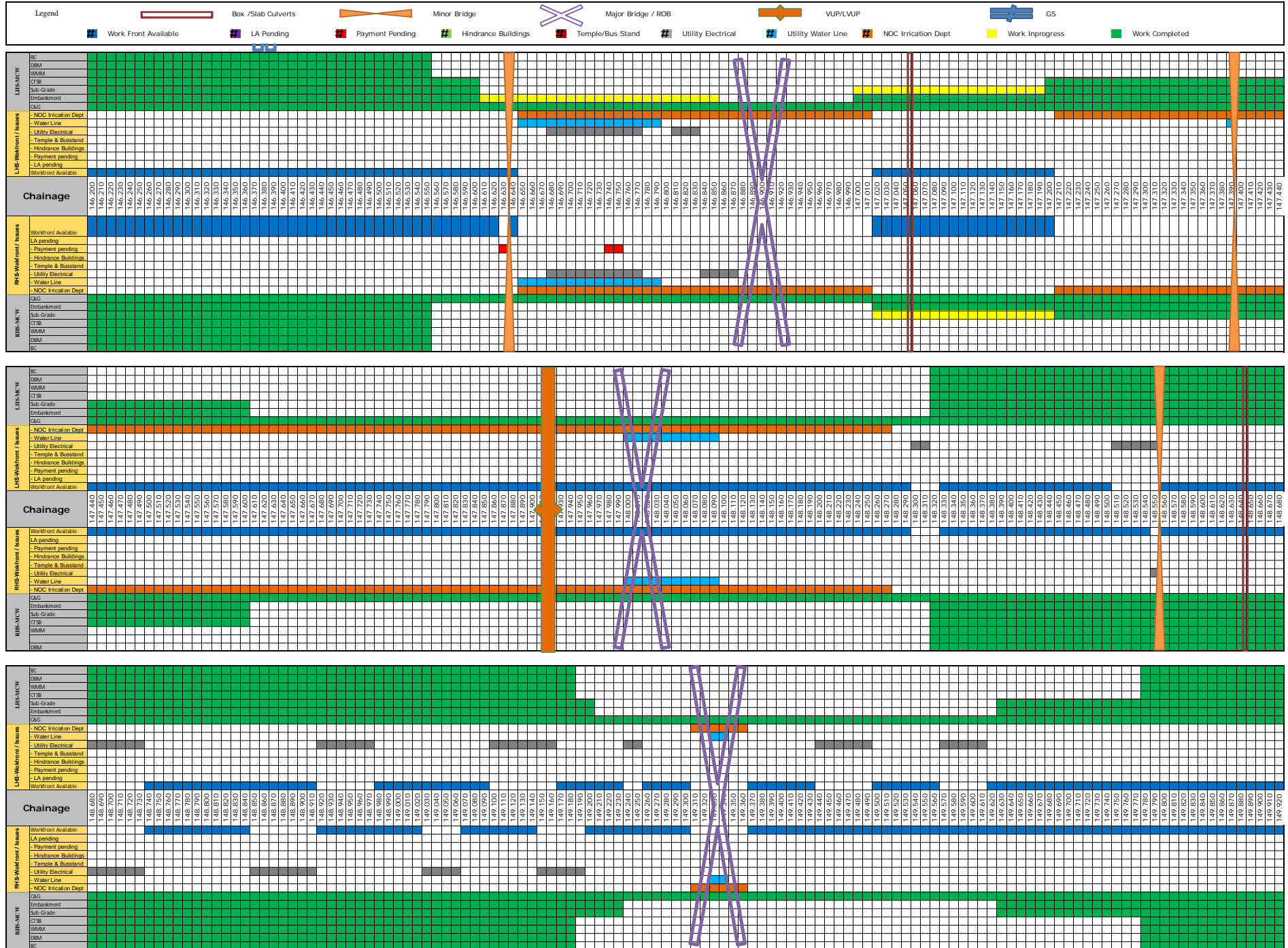
Strip Chart as on 31.03.2023



**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**

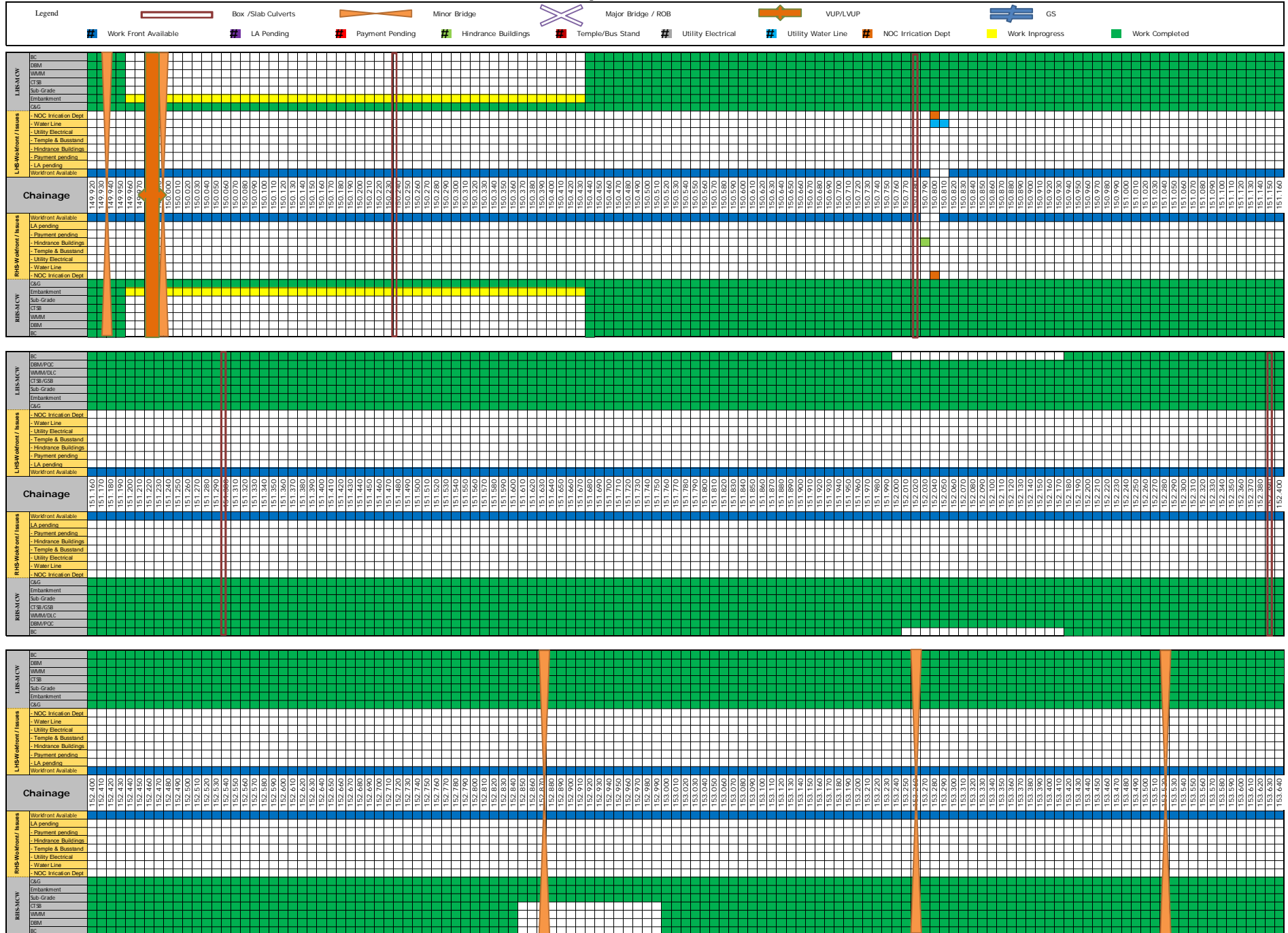
**Strip Chart as on 31.03.2023**



Four Lining 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

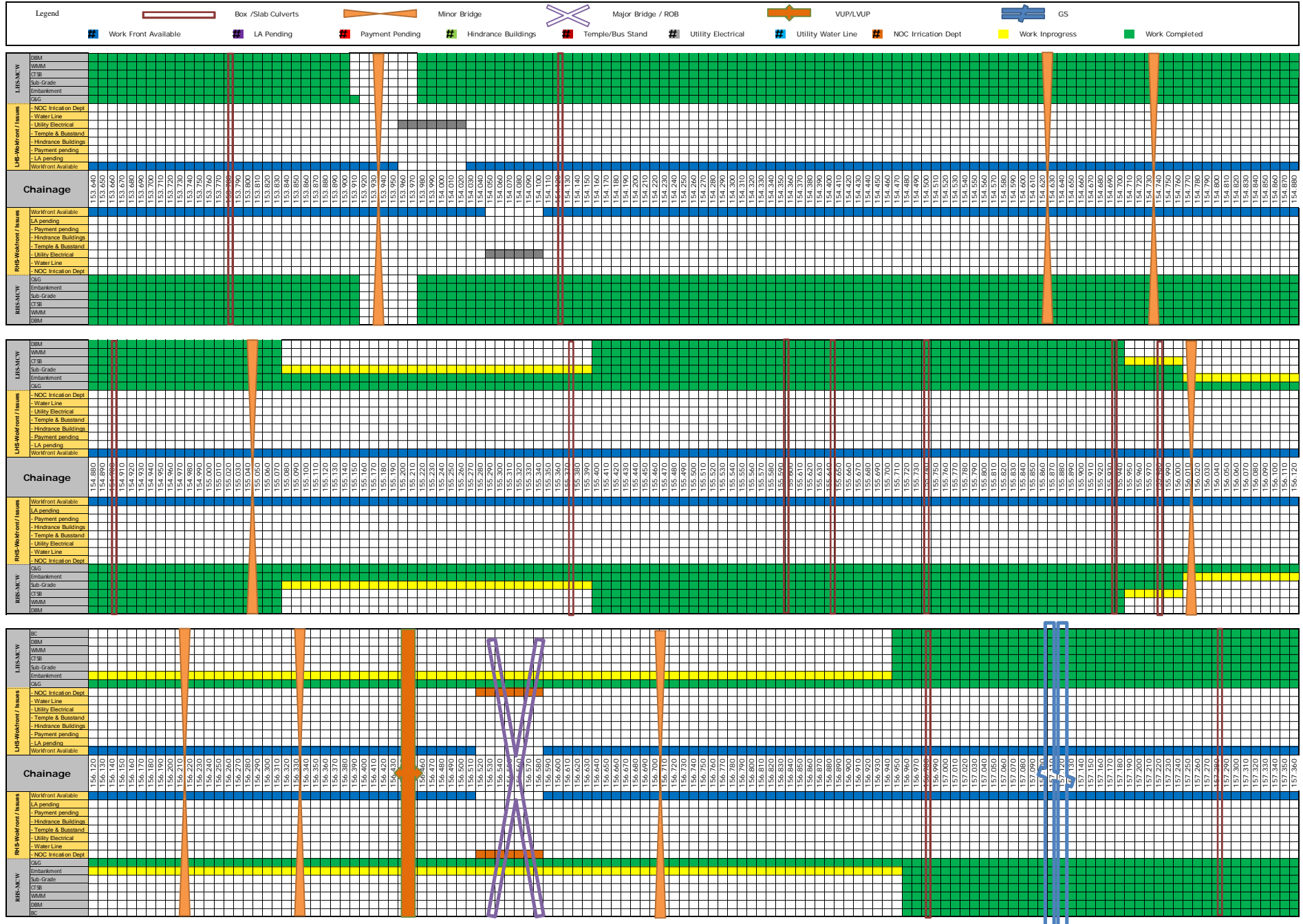
Strip Chart as on 31.03.2023



Four Lining 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

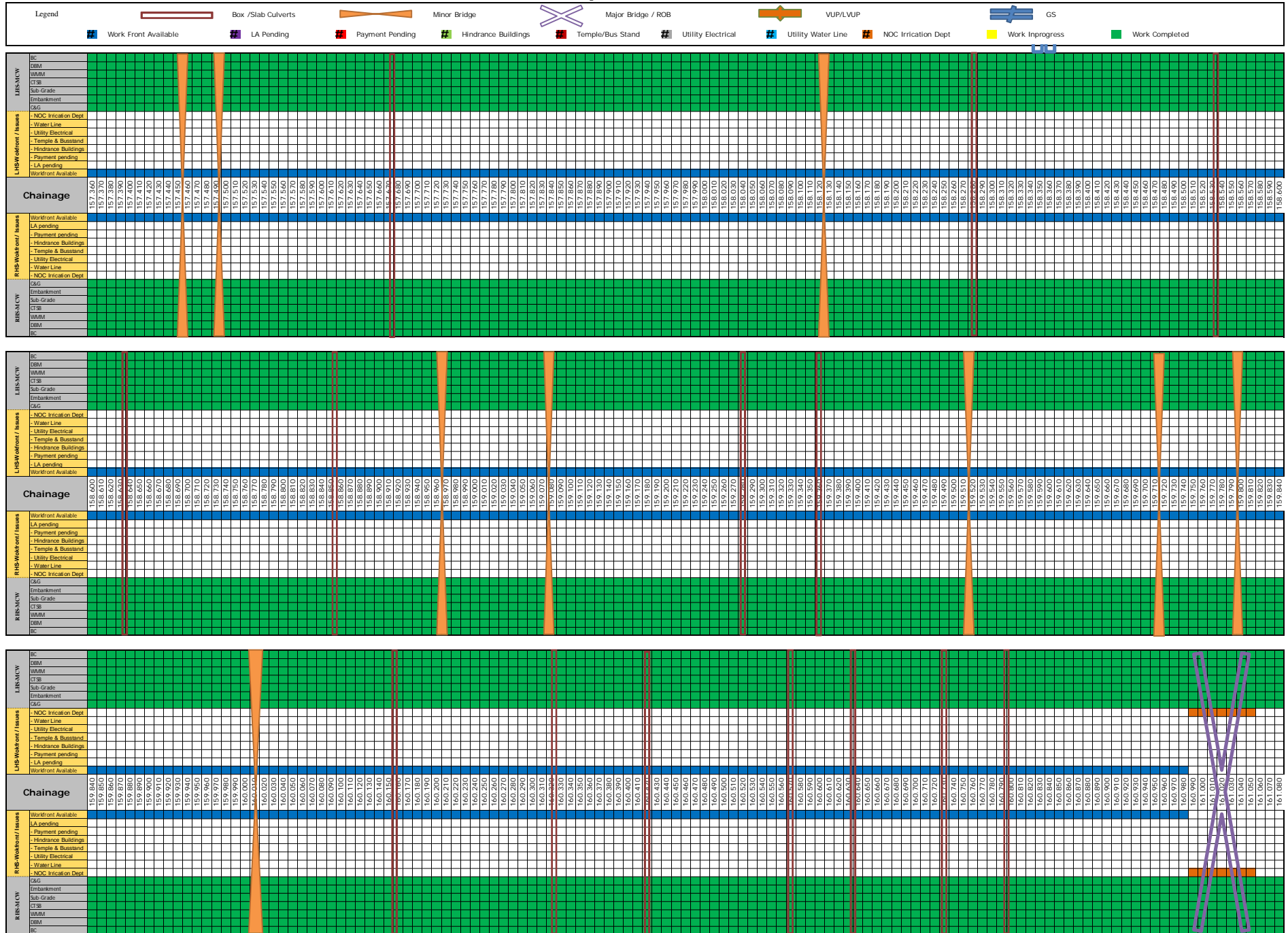
Strip Chart as on 31.03.2023



Four Lining 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 31.03.2023

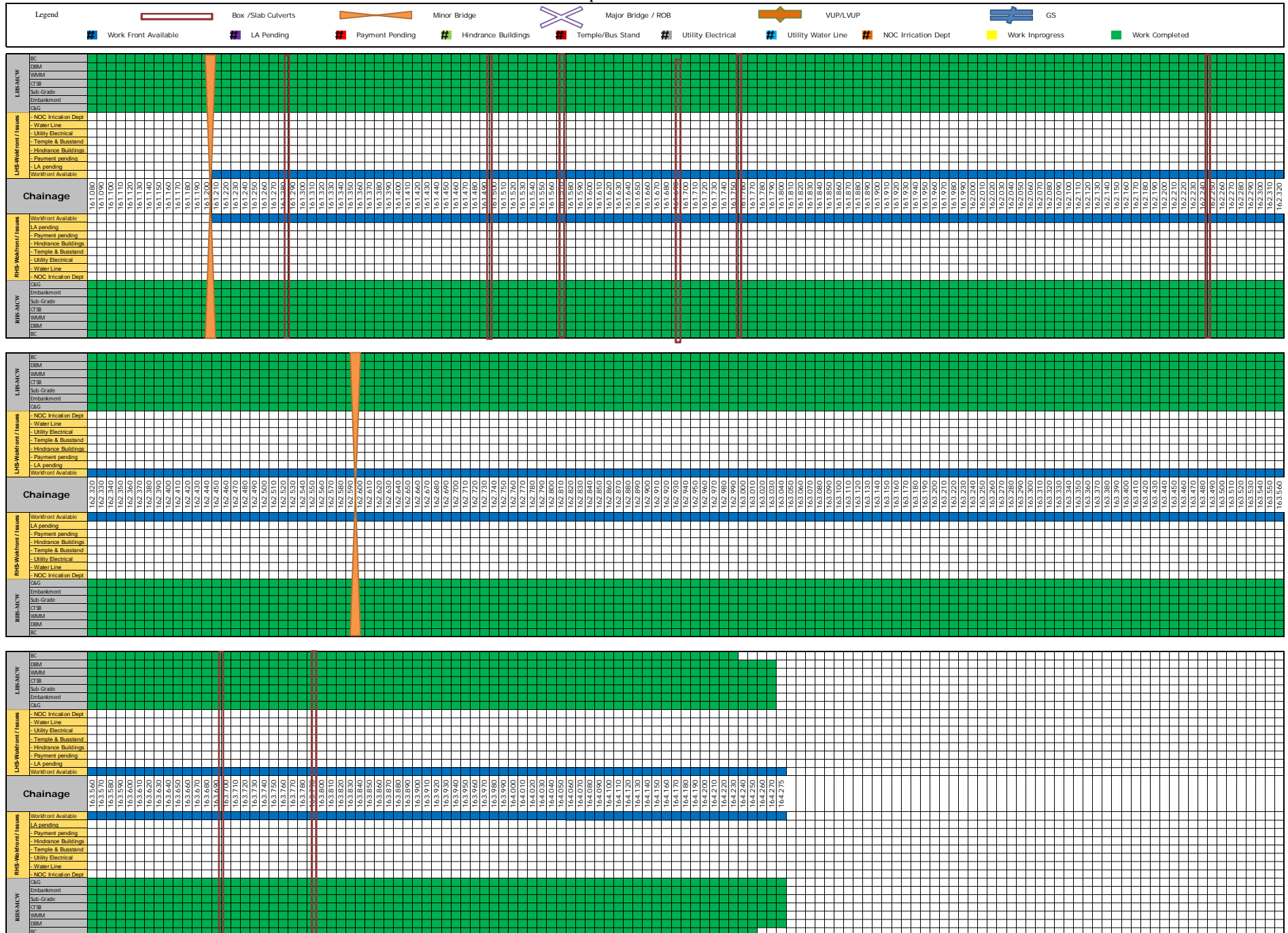




Four Lining of Cholopuram to Thanjavur from Km. 116.440 to Km. 164.275 Section of NH45C in the state of Tamil Nadu Under NHDP Phase-IV on Hybrid Annuity Mode.

Cholopuram - Thanjavur Project

Strip Chart as on 31.03.2023



**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 4.3 - 1 : Strip Chart for status of Box Culverts on Existing Road<br>( Main Carriageway ) |                           |                         |                                |                         |                            | IN PROGRESS     |                       |      |      |      |     |                  |            | COMPLETED  |                  |     |      |      |      |                       |                 |  |
|---|---------------------------|-------------------------|--------------------------------|-------------------------|----------------------------|-----------------|-----------------------|------|------|------|-----|------------------|------------|------------|------------------|-----|------|------|------|-----------------------|-----------------|--|
| MPR MARCH 2023  |                           |                         |                                |                         |                            | LHS             |                       |      |      |      |     |                  |            | RHS        |                  |     |      |      |      |                       |                 |  |
| 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 | 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                   | 116.612                 | 1 x 2.0m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 2   | 116.837                   | 116.846                 | 1 x 2.0m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 3   | 116.954                   | 116.963                 | 1 x 1.6m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 4   | 120.068                   | 120.077                 | 1 x 3.0m                       | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 5   | 120.280                   | 120.289                 | 1 x 1.5m                       | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 6   | 120.346                   | 120.356                 | 1 x 1.5m                       | Reconstruction          | Box Culvert                |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 7   | 120.836                   | 120.845                 | 1 x 2.0m                       | Widening                | Box Culvert                |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 8   | 121.540                   | 121.550                 | 1 x 3.0m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 9   | 121.683                   | 121.693                 | 1 x 1.5m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 10  | 121.885                   | 121.895                 | 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                   | 122.688                 | 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                   | 125.685                 | 1 x 1.5m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 19  | 126.836                   | 126.854                 | 1 x 3.0m                       | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 20  | 126.987                   | 127.007                 | 1 x 2.0m                       | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 21  | 127.488                   | 127.498                 | 1 x 1.2m                       | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 22  | 127.600                   | 127.612                 | 3 x 1.2m                       | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 23  | 127.788                   | 127.800                 | 1 x 0.9m                       | Widening                | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 24  | 128.267                   | 128.279                 | 1 x 0.9m                       | Widening                | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 25  | 128.494                   | 128.505                 | 1 x 1.2m                       | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 26  | 128.675                   | 128.667                 | 1 x 2.0m                       | Reconstruction          | Box Culvert                |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 27  | 128.682                   | 128.693                 | 1 x 2.0m                       | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 28  | 128.727                   | 128.724                 | 3 x 1.2m                       | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 29  | 128.904                   | 128.916                 | 1 x 1.2m                       | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 30  | 129.067                   | 129.079                 | 1 x 1.2m                       | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 31  | 129.246                   | 129.260                 | 1 x 0.9m                       | Widening                | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 32  | 129.507                   | 129.519                 | 1 x 3.0m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 33  | 129.707                   | 129.719                 | 1 x 2.5m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 34  | 129.823                   | 129.835                 | 1 x 0.9m                       | Widening                | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 35  | 130.096                   | 130.109                 | 1 x 1.2m                       | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 36  | 130.307                   | 130.318                 | 1 x 1.5m                       | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 37  | 130.357                   | 130.369                 | 1 x 1.5m                       | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 38  | 130.680                   | 130.693                 | 2 x 1.2m                       | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 39  | 130.827                   | 130.839                 | 1 x 0.9m                       | Widening                | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 40  | 130.989                   | 130.999                 | 1 x 3.0m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 41  | 131.146                   | 131.159                 | 1 x 0.9m                       | Widening                | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 42  | 131.505                   | 131.517                 | 1 x 3.0m                       | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 43  | 131.722                   | 131.733                 | 1 x 1.2m                       | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 44  | 131.780                   | 131.792                 | 1 x 1.2m                       | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 45  | 132.300                   | 132.319                 | 1 x 3.0m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 46  | 132.557                   | 132.571                 | 1 x 3.0m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 47  | 132.730                   | 132.742                 | 1 x 3.0m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 48  | 132.789                   | 132.803                 | 1 x 2.0m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 49  | 133.115                   | 133.128                 | 1 x 5.0m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 50  | 133.210                   | 133.222                 | 1 x 2.0m                       | Widening                | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 51  | 133.240                   | 133.268                 | 1 x 0.9m                       | Widening                | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 52  | 133.635                   | 133.579                 | 1 x 2.0m                       | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 53  | 133.734                   | 133.748                 | 1 x 2.0m                       | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 54  | 133.935                   | 133.948                 | 1 x 1.2m                       | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 55  | 133.987                   | 133.979                 | 1 x 1.5m                       | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 56  | 163.700                   | 163.700                 | 2 x 0.9m                       | Widening                | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 57  | 163.793                   | 163.828                 | 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 4.3 - 1 : Strip Chart for status of Box Culverts on Existing Road ( Service Road ) |                           |                         |                                |                         |                            | IN PROGRESS     |                       |      |      |      |     |                  |            | COMPLETED  |                  |     |      |      |      |                       |                 |  |
|--|---------------------------|-------------------------|--------------------------------|-------------------------|----------------------------|-----------------|-----------------------|------|------|------|-----|------------------|------------|------------|------------------|-----|------|------|------|-----------------------|-----------------|--|
| MPR MARCH 2023   |                           |                         |                                |                         |                            | LHS             |                       |      |      |      |     |                  |            | RHS        |                  |     |      |      |      |                       |                 |  |
| 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 | 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                   | 120.077                 | 1 x 3.0                        | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 2  | 120.280                   | 120.289                 | 1 x 1.5                        | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 3  | 120.346                   | 120.356                 | 1 x 1.5                        | Reconstruction          | Box Culvert                |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 4  | 126.836                   | 126.854                 | 1 x 3.0                        | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 5  | 126.987                   | 127.007                 | 1 x 2.0                        | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 6  | 127.488                   | 127.498                 | 1 x 1.2                        | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 7  | 127.600                   | 127.612                 | 3 x 1.2                        | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 8  | 128.494                   | 128.505                 | 1 x 1.2                        | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 9  | 128.675                   | 128.667                 | 1 x 2.0                        | Reconstruction          | Box Culvert                |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 10   | 128.682                   | 128.693                 | 1 x 2.0                        | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 11   | 128.727                   | 128.724                 | 3 x 1.2                        | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 12   | 128.904                   | 128.916                 | 1 x 1.2                        | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 13   | 129.067                   | 129.079                 | 1 x 1.2                        | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 14   | 130.096                   | 130.109                 | 1 x 1.2                        | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 15   | 130.307                   | 130.318                 | 1 x 1.5                        | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 16   | 130.357                   | 130.369                 | 1 x 1.5                        | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 17   | 130.680                   | 130.693                 | 2 x 1.2                        | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 18   | 131.146                   | 131.159                 | 1 X 0.9                        | Widening                | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 19   | 131.505                   | 131.517                 | 1 x 3.0                        | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 20   | 131.722                   | 131.733                 | 1 x 1.2                        | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 21   | 131.780                   | 131.792                 | 1 x 1.2                        | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 22   | 133.635                   | 133.579                 | 1 x 2.0                        | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 23   | 133.734                   | 133.748                 | 1 x 2.0                        | Reconstruction          | Slab Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 24   | 133.935                   | 133.948                 | 1 x 1.2                        | Reconstruction          | Pipe Culvert               |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 25   | 133.987                   | 133.979                 | 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 4.3 - 2 : Strip Chart for status of Box Culverts on Bypass ( Main Carriageway ) |                           |                         |                                |                 |                   | IN PROGRESS     |                       |      |      |      |     |                  |            | COMPLETED  |                  |     |      |      |      |                       |                 |  |
|---|---------------------------|-------------------------|--------------------------------|-----------------|-------------------|-----------------|-----------------------|------|------|------|-----|------------------|------------|------------|------------------|-----|------|------|------|-----------------------|-----------------|--|
| MPR MARCH 2023  |                           |                         |                                |                 |                   | LHS             |                       |      |      |      |     |                  |            | RHS        |                  |     |      |      |      |                       |                 |  |
| Sr. No.   | Design Chainage As per CA | Revised Design Chainage | Number and Length of Spans (m) | Remarks         | Type of Structure | 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 1.5m                       | 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                   | 144.500                 | 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                   | 147.075                 | 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                   | 150.791                 | 1 x 4.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 16  | 152.390                   | 152.418                 | 1 x 4.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 17  | 153.781                   | 153.809                 | 1 x 2.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 18  | 154.129                   | 154.157                 | 1 x 4.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 19  | 154.900                   | 154.927                 | 1 x 3.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 20  | 155.381                   | 155.407                 | 1 x 3.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 21  | 155.601                   | 155.628                 | 1 x 4.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 22  | 155.645                   | 155.672                 | 1 x 3.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 23  | 155.743                   | 155.770                 | 1 x 2.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 24  | 155.938                   | 155.962                 | 1 x 4.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 25  | 156.984                   | 157.012                 | 1 x 3.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 26  | 157.283                   | 157.310                 | 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                   | 158.310                 | 1 x 2.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 29  | 158.531                   | 158.558                 | 1 x 2.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 30  | 158.639                   | 158.665                 | 1 x 2.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 31  | 158.852                   | 158.882                 | 1 x 5.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 32  | 159.282                   | 159.300                 | 1 x 4.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 33  | 159.361                   | 159.385                 | 1 x 3.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 34  | 160.157                   | 160.176                 | 1 x 4.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 35  | 160.326                   | 160.350                 | 1 x 3.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 36  | 160.420                   | 160.445                 | 1 x 2.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 37  | 160.572                   | 160.594                 | 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                   | 160.754                 | 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                   | 161.759                 | 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 4.3 - 2 : Strip Chart for status of Box Culverts on Bypass ( Service Road ) |                           |                         |                                |                 |                   | IN PROGRESS     |                       |      |      |      |     |                  |            | COMPLETED  |                  |     |      |      |      |                       |                 |  |
|---|---------------------------|-------------------------|--------------------------------|-----------------|-------------------|-----------------|-----------------------|------|------|------|-----|------------------|------------|------------|------------------|-----|------|------|------|-----------------------|-----------------|--|
| MPR MARCH 2023  |                           |                         |                                |                 |                   | LHS             |                       |      |      |      |     |                  |            | RHS        |                  |     |      |      |      |                       |                 |  |
| Sr. No.   | Design Chainage As per CA | Revised Design Chainage | Number and Length of Spans (m) | Remarks         | Type of Structure | 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 1.5m                       | 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   | 144.426                   | 144.500                 | 1 x 4.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 5   | 150.237                   | 150.265                 | 1 x 4.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 6   | 156.984                   | 157.012                 | 1 x 3.0m x 2.0m                | New Costruction | Box Culvert       |                 |                       |      |      |      |     |                  |            |            |                  |     |      |      |      |                       |                 |  |
| 7   | 157.283                   | 157.310                 | 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 4.3 - 3 : Strip Chart for status of MNB - Box (Main Carriageway) |                           |                  |                                |                   |          | IN PROGRESS     |                     |      |      |      |     |                  |            | COMPLETED  |                  |     |      |      |      |                     |                 |
|--|---------------------------|------------------|--------------------------------|-------------------|----------|-----------------|---------------------|------|------|------|-----|------------------|------------|------------|------------------|-----|------|------|------|---------------------|-----------------|
| MPR MARCH 2023   |                           |                  |                                |                   |          | LHS             |                     |      |      |      |     |                  |            | RHS        |                  |     |      |      |      |                     |                 |
| Sr. No.  | Design Chainage As per CA | Revised Chainage | Number and Length of Spans (m) | Type of Structure | Stretch  | Protection Work | Retaining Wall + CB | Slab | Wall | Raft | PCC | Granular Filling | Excavation | Excavation | Granular Filling | PCC | Raft | Wall | Slab | Retaining Wall + CB | Protection Work |
| <b>MNB IN EXISTING LENGTH</b>  |                           |                  |                                |                   |          |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 1  | 121.024                   | 121.035          | 1 x 6.0m                       | MNBB              | Existing |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 2  | 122.046                   | 122.058          | 3 x 7.5m                       | MNBB              | Existing |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| <b>MNB IN BYPASS</b>   |                           |                  |                                |                   |          |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 1  | 117.764                   | 117.779          | 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  | 126.134                   | 126.134          | 2 X 10.0m                      | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 8  | 134.320                   | 134.320          | 2x 10.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 9  | 134.770                   | 134.774          | 1 x 10.0m                      | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 10   | 136.705                   | 136.738          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 11   | 138.555                   | 138.585          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 12   | 138.901                   | 138.935          | 6 x 7.5m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 13   | 139.105                   | 139.138          | 2 x 15m                        | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 14   | 139.299                   | 139.335          | 4 x 7.5m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 15   | 139.453                   | 139.485          | 1 x 7.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 16   | 140.605                   | 140.637          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 17   | 140.860                   | 140.892          | 1 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 18   | 141.164                   | 141.145          | 1 x 10.0m                      | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 19   | 141.445                   | 141.466          | 1 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 20   | 141.727                   | 141.760          | 1 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 21   | 142.204                   | 142.235          | 1 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 22   | 142.657                   | 142.687          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 23   | 142.897                   | 142.932          | 2 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 24   | 143.115                   | 143.136          | 6 x 7.5m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 25   | 143.823                   | 143.852          | 2 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 26   | 144.000                   | 143.995          | 2 x 10.0m                      | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 27   | 144.880                   | 144.916          | 4 x 7.5m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 28   | 146.639                   | 146.671          | 1 x 10.0m                      | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 29   | 147.396                   | 147.426          | 1 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 30   | 148.560                   | 148.592          | 1 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 31   | 149.940                   | 149.962          | 1 x 10.0m                      | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 32   | 149.997                   | 150.028          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 32   | 150.800                   |                  |                                | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 32   | 152.876                   | 152.911          | 2 x 10.0m                      | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 32   | 153.263                   | 153.287          | 1 x 10.0m                      | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 35   | 153.528                   | 153.557          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 36   | 153.939                   | 153.968          | 1 x 10.0m                      | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 37   | 154.626                   | 154.659          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 38   | 154.739                   | 154.764          | 1 x 10.0m                      | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 39   | 155.049                   | 155.082          | 2 x 7.5m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 40   | 156.014                   | 156.040          | 1 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 41   | 156.216                   | 156.244          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 42   | 156.336                   | 156.366          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 43   | 156.707                   | 156.734          | 1 x 10.0m                      | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 44   | 157.458                   | 157.485          | 1 x 7.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 45   | 157.494                   | 157.517          | 1 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 46   | 158.128                   | 158.155          | 1 x 7.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 47   | 158.972                   | 158.994          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 48   | 159.076                   | 159.103          | 1 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 49   | 159.723                   | 159.742          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 50   | 159.801                   | 159.835          | 1 x 6.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 51   | 161.208                   | 161.227          | 1 x 8.0m                       | MNBB              | Bypass   |                 |                     |      |      |      |     |                  |            |            |                  |     |      |      |      |                     |                 |
| 52   | 162.595                   | 162.618          | 2 x 15m                        | 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 4.3 - 3 : Strip Chart for status of MNB - Deck Type (Main Carriageway) |                 |         |                | IN PROGRESS        |      |                  |                |                 |          |                 |                    | COMPLETED                      |                           |          |                 |                |                  |      |               |  |  |  |  |  |  |  |  |  |
|--|-----------------|---------|----------------|--------------------|------|------------------|----------------|-----------------|----------|-----------------|--------------------|--------------------------------|---------------------------|----------|-----------------|----------------|------------------|------|---------------|--|--|--|--|--|--|--|--|--|
| MPR MARCH 2023   |                 |         |                | LHS                |      |                  |                |                 |          |                 |                    | RHS                            |                           |          |                 |                |                  |      |               |  |  |  |  |  |  |  |  |  |
| SR. NO.  | MNB at Chainage | Span    | Pier/ Abutment | Crash Barrier      | Slab | Girder Launching | Girder Casting | Piercap/Abic ap | Pier/Abt | Open Foundation | PCC For foundation | PCC For foundation/Piling work | Open Foundation/ Pile Cap | Pier/Abt | Piercap/Abic ap | Girder Casting | Girder Launching | Slab | Crash Barrier |  |  |  |  |  |  |  |  |  |
| 1  | 133+345         | 3x12.5m | A1             | EXISTING STRUCTURE |      |                  |                |                 |          |                 |                    |                                |                           |          |                 |                |                  |      |               |  |  |  |  |  |  |  |  |  |
|  |                 |         | P1             |                    |      |                  |                |                 |          |                 |                    |                                |                           |          |                 |                |                  |      |               |  |  |  |  |  |  |  |  |  |
|  |                 |         | P2             |                    |      |                  |                |                 |          |                 |                    |                                |                           |          |                 |                |                  |      |               |  |  |  |  |  |  |  |  |  |
|  |                 |         | A2             |                    |      |                  |                |                 |          |                 |                    |                                |                           |          |                 |                |                  |      |               |  |  |  |  |  |  |  |  |  |
| 2  | 159+522         | 1x15.0m | 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 4.3 - 3 : Strip Chart for status of MNB - Box ( Service Road ) |                           |                  |                                |                   |         | IN PROGRESS     |      |      |      |     |                  |            | COMPLETED  |                  |     |      |      |      |                 |
|--|---------------------------|------------------|--------------------------------|-------------------|---------|-----------------|------|------|------|-----|------------------|------------|------------|------------------|-----|------|------|------|-----------------|
| MPR MARCH 2023   |                           |                  |                                |                   |         | LHS             |      |      |      |     |                  |            | RHS        |                  |     |      |      |      |                 |
| Sr. No.  | Design Chainage As per CA | Revised Chainage | Number and Length of Spans (m) | Type of Structure | Stretch | Protection Work | Slab | Wall | Raft | PCC | Granular Filling | Excavation | Excavation | Granular Filling | PCC | Raft | Wall | Slab | Protection Work |
| <b>MNB SERVICE ROAD IN BYPASS</b>                                    |                           |                  |                                |                   |         |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 1  | 117.764                   | 117.779          | 2 x 10.0m                      | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 2  | 126.134                   | 126.134          | 2 X 10.0m                      | MNBB              | Realign |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 3  | 134.320                   | 134.320          | 2x 10.0m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 4  | 134.770                   | 134.774          | 1 x 10.0m                      | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 5  | 138.555                   | 138.585          | 1 x 6.0m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 6  | 138.901                   | 138.935          | 6 x 7.5m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 7  | 139.105                   | 139.138          | 2 x 15m                        | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 8  | 139.299                   | 139.335          | 4 x 7.5m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 9  | 139.453                   | 139.485          | 1 x 7.0m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 10   | 141.164                   | 141.145          | 1 x 10.0m                      | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 11   | 141.445                   | 141.466          | 1 x 8.0m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 12   | 141.727                   | 141.760          | 1 x 8.0m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 13   | 144.880                   | 144.916          | 4 x 7.5m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 14   | 149.940                   | 149.962          | 1 x 10.0m                      | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 15   | 149.997                   | 150.028          | 1 x 6.0m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 16   | 156.014                   | 156.040          | 1 x 8.0m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 17   | 156.216                   | 156.244          | 1 x 6.0m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 18   | 156.336                   | 156.366          | 1 x 6.0m                       | MNBB              | Bypass  |                 |      |      |      |     |                  |            |            |                  |     |      |      |      |                 |
| 19   | 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 4.3 - 4 : Strip Chart for status of PUP |                           |                      |                                |        | IN PROGRESS     |      |      |      |     |            | COMPLETED  |     |      |      |      |                 |
|---|---------------------------|----------------------|--------------------------------|--------|-----------------|------|------|------|-----|------------|------------|-----|------|------|------|-----------------|
| MPR MARCH 2023                                |                           |                      |                                | 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 4.3- 5 : Strip Chart for status of MJB<br>( Main Carriageway ) |                               |                  |                |                  |          |          |      |  | IN PROGRESS |          |          |                  |                |                  |      |               | COMPLETED |  |
|--|-------------------------------|------------------|----------------|------------------|----------|----------|------|--|-------------|----------|----------|------------------|----------------|------------------|------|---------------|-----------|--|
| MPR MARCH 2023   |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| MJB at Chainage 131+980 (3x20) -WIDENING RHS                         |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| LHS/LSR  |                               |                  |                |                  |          |          |      |  | RHS/RSR     |          |          |                  |                |                  |      |               |           |  |
| 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   | Existing Bridge (Repair Only) |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| P1   | Existing Bridge (Repair Only) |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| P2   | Existing Bridge (Repair Only) |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| A2   | Existing Bridge (Repair Only) |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| MJB at Chainage 149+334 (3x20)- BYPASS                               |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| LHS/LSR  |                               |                  |                |                  |          |          |      |  | RHS/RSR     |          |          |                  |                |                  |      |               |           |  |
| 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 156+559 (6x20)- BYPASS                               |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| LHS/LSR  |                               |                  |                |                  |          |          |      |  | RHS/RSR     |          |          |                  |                |                  |      |               |           |  |
| 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 |           |  |
| P2   |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| P3   |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| P4   |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| P5   |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| P6   |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| A2   |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| MJB at Chainage 161+019 (6x20)- BYPASS                               |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| LHS/LSR  |                               |                  |                |                  |          |          |      |  | RHS/RSR     |          |          |                  |                |                  |      |               |           |  |
| 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   |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| P6   |                               |                  |                |                  |          |          |      |  |             |          |          |                  |                |                  |      |               |           |  |
| 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 4.3 - 6 : Strip Chart for status of FLYOVER |                |          |                   |    | IN PROGRESS   |      |                  |                |                 |          |          |     |      | COMPLETED |     |          |          |                 |                |                  |      |               |  |
|---|----------------|----------|-------------------|----|---------------|------|------------------|----------------|-----------------|----------|----------|-----|------|-----------|-----|----------|----------|-----------------|----------------|------------------|------|---------------|--|
| MPR MARCH 2023                                    |                |          |                   |    | LHS           |      |                  |                |                 |          |          |     |      | RHS       |     |          |          |                 |                |                  |      |               |  |
| Sr. No.   | FO at Chainage | Span     |                   |    | Crash Barrier | Slab | Girder Launching | Girder Casting | Piercap/Abtc ap | Pier/Abt | Pile Cap | PCC | Pile | Pile      | PCC | Pile Cap | Pier/Abt | Piercap/Abtc ap | 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 |               |      |                  |                |                 |          |          |     |      |           |     |          |          |                 |                |                  |      |               |  |

**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 4.3 - 7 : Strip Chart for status of VUP |                 |      |          | IN PROGRESS   |      |                  |                |                |          |          |     |      |      | COMPLETED |          |          |                |                |                  |      |               |  |
|---|-----------------|------|----------|---------------|------|------------------|----------------|----------------|----------|----------|-----|------|------|-----------|----------|----------|----------------|----------------|------------------|------|---------------|--|
| MPR MARCH 2023                                |                 |      |          | LHS           |      |                  |                |                |          |          |     |      |      | RHS       |          |          |                |                |                  |      |               |  |
| SR. NO.                                       | VUP 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   | 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 4.3 - 8 : Strip Chart for status of ROB |               | IN PROGRESS  |                        |                          |                  |                |                  |          |          |      |         | COMPLETED |          |                  |                |                  |                          |                        |      |               |
|---|---------------|--|------------------------|--------------------------|------------------|----------------|------------------|----------|----------|------|---------|-----------|----------|------------------|----------------|------------------|--------------------------|------------------------|------|---------------|
| MPR MARCH 2023                                |               | ROB at Chainage 134+345 (1 x 20.285m+1 x 30.426m+1 x 20.285m (Skew 9.6 °))- EXISTING |                        |                          |                  |                |                  |          |          |      |         |           |          |                  |                |                  |                          |                        |      |               |
| LHS/LSR                                       |               |  |                        |                          |                  |                |                  |          |          |      | RHS/RSR |           |          |                  |                |                  |                          |                        |      |               |
|   | Crash Barrier | Slab   | Steel Girder Launching | Steel Girder Fabrication | 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 Fabrication | Steel Girder Launching | Slab | Crash Barrier |
| A1  |               |  | NA                     | NA                       |                  |                |                  |          |          |      |         |           |          |                  |                |                  | NA                       | NA                     |      |               |
| P1  |               |  |                        |                          | NA               | NA             |                  |          |          |      |         |           |          |                  | NA             | NA               |                          |                        |      |               |
| P2  |               |  |                        |                          | NA               | NA             |                  |          |          |      |         |           |          |                  | NA             | NA               |                          |                        |      |               |
| A2  |               |  | NA                     | NA                       |                  |                |                  |          |          |      |         |           |          |                  |                |                  | NA                       | NA                     |      |               |

## 5. Financial & Physical Progress of Work

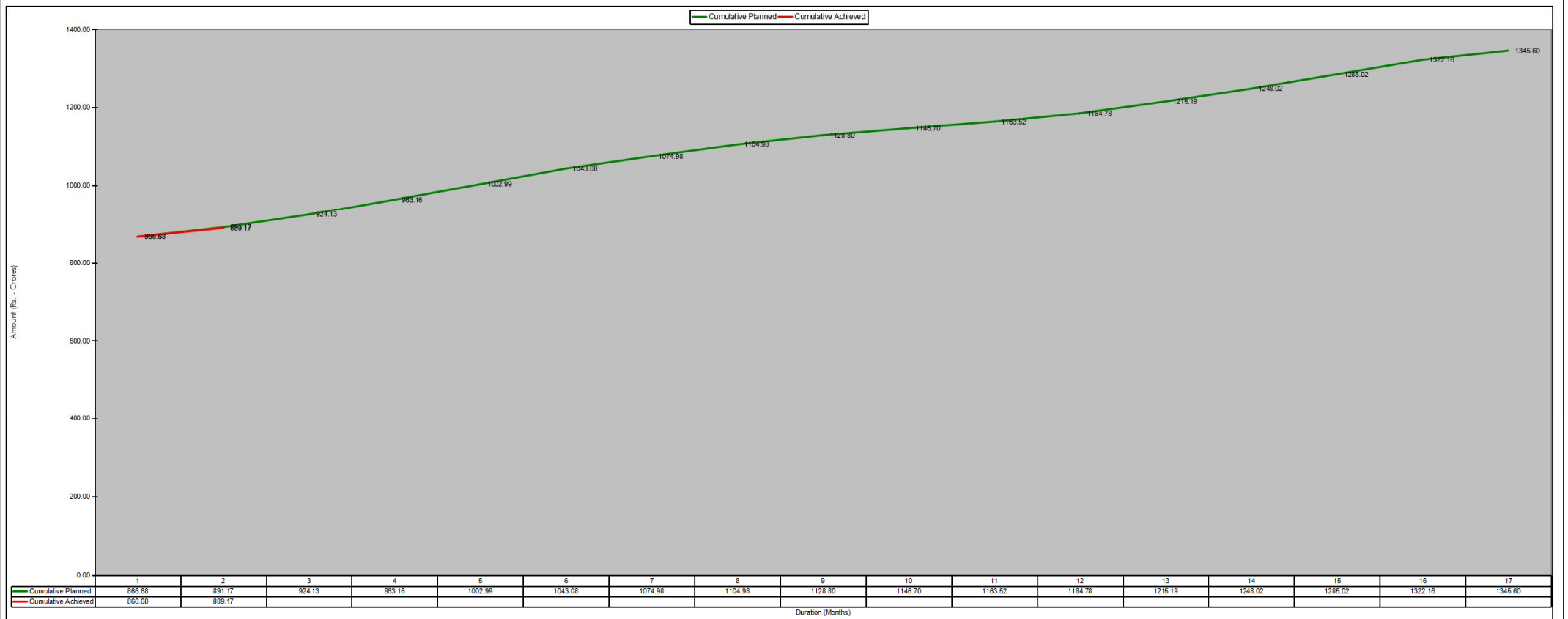
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Figure 3a : Financial Progress - Planned vs Achieved - S Curve

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

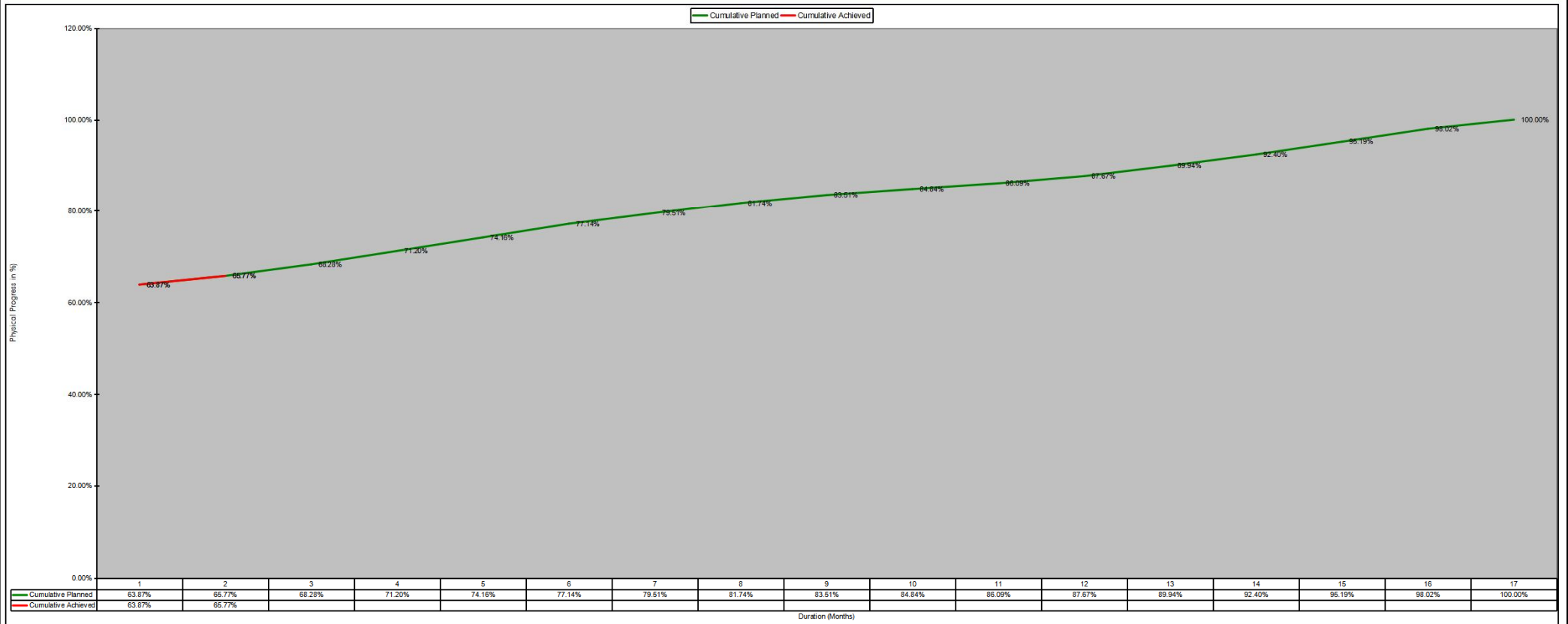
Four Laning of Cholopuram - Thanjavur from Km. 116.440 to 164.275 Section of NH45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode.

Fig. 03a- Financial Progress (Revised S-Curve) as per Settlement Agreement signed on dated 20.03.2023.



| Schedule  | 2023                    |        |        |        |        |         |         |           |         |          |          |         | 2024     |         |         |         |         |         |  |
|---|-------------------------|--------|--------|--------|--------|---------|---------|-----------|---------|----------|----------|---------|----------|---------|---------|---------|---------|---------|--|
|   | Up to February          | March  | April  | May    | June   | July    | August  | September | October | November | December | January | February | March   | April   | May     | June    |         |  |
|   | 1                       | 2      | 3      | 4      | 5      | 6       | 7       | 8         | 9       | 10       | 11       | 12      | 13       | 14      | 15      | 16      | 17      |         |  |
| Revised Target vs Achieved as per Revised Target set forth in the Settlement Agreement signed on dated 20.03.2023 | Monthly Planned         | 866.68 | 24.49  | 32.97  | 39.02  | 39.83   | 40.10   | 31.89     | 30.01   | 23.82    | 17.90    | 16.82   | 21.26    | 30.41   | 32.83   | 37.00   | 37.14   | 23.44   |  |
|   | Monthly Achieved        | 866.68 | 22.50  |        |        |         |         |           |         |          |          |         |          |         |         |         |         |         |  |
|   | Cumulative Planned      | 866.68 | 891.17 | 924.13 | 963.16 | 1002.99 | 1043.08 | 1074.98   | 1104.98 | 1128.80  | 1146.70  | 1163.52 | 1184.78  | 1215.19 | 1248.02 | 1285.02 | 1322.16 | 1345.60 |  |
|   | Cumulative Achieved     | 866.68 | 889.17 |        |        |         |         |           |         |          |          |         |          |         |         |         |         |         |  |
|   | Monthly Planned (%)     | 64.41% | 1.8%   | 2.5%   | 2.9%   | 3.0%    | 3.0%    | 2.4%      | 2.2%    | 1.8%     | 1.3%     | 1.3%    | 1.6%     | 2.3%    | 2.4%    | 2.8%    | 2.8%    | 1.7%    |  |
|   | Monthly Achieved (%)    | 64.41% | 1.67%  |        |        |         |         |           |         |          |          |         |          |         |         |         |         |         |  |
|   | Cumulative Planned (%)  | 64.41% | 66.2%  | 68.7%  | 71.6%  | 74.5%   | 77.5%   | 79.9%     | 82.1%   | 83.9%    | 85.2%    | 86.5%   | 88.0%    | 90.3%   | 92.7%   | 95.5%   | 98.3%   | 100.0%  |  |
|   | Cumulative Achieved (%) | 64.41% | 66.08% |        |        |         |         |           |         |          |          |         |          |         |         |         |         |         |  |

Fig. 03b- Physical Progress (Revised S-Curve) as per Settlement Agreement signed on dated 20.03.2023.



| Schedule  | 2023                |        |        |        |        |        |        |           |         |          |          |         | 2024     |        |        |        |        |         |
|---|---------------------|--------|--------|--------|--------|--------|--------|-----------|---------|----------|----------|---------|----------|--------|--------|--------|--------|---------|
|   | Up to February      | March  | April  | May    | June   | July   | August | September | October | November | December | January | February | March  | April  | May    | June   |         |
|   | 1                   | 2      | 3      | 4      | 5      | 6      | 7      | 8         | 9       | 10       | 11       | 12      | 13       | 14     | 15     | 16     | 17     |         |
| Revised Target vs Achieved as per Revised Target set forth in the Settlement Agreement signed on dated 20.03.2023 | Monthly Planned     | 63.87% | 1.90%  | 2.51%  | 2.92%  | 2.96%  | 2.98%  | 2.37%     | 2.23%   | 1.77%    | 1.33%    | 1.25%   | 1.58%    | 2.27%  | 2.46%  | 2.79%  | 2.83%  | 1.98%   |
|   | Monthly Achieved    | 63.87% | 1.90%  |        |        |        |        |           |         |          |          |         |          |        |        |        |        |         |
|   | Cumulative Planned  | 63.87% | 65.77% | 68.28% | 71.20% | 74.16% | 77.14% | 79.51%    | 81.74%  | 83.51%   | 84.84%   | 86.09%  | 87.67%   | 89.94% | 92.40% | 95.19% | 98.02% | 100.00% |
|   | Cumulative Achieved | 63.87% | 65.77% |        |        |        |        |           |         |          |          |         |          |        |        |        |        |         |



The Escrow Details / Financial Expenses details up to the month of March 2023 are given below in the tabular form:-

Table 5.1- 1 Pen Picture Escrow

| Total Project Cost (Cr.) | Cumulative inflow to Escrow till Mar- 2023 (Cr.) | Cumulative out flow from escrow till Mar- 2023 (Cr.) | Inflow to Escrow During Mar- 2023 (Cr.) | Outflow from Escrow during Mar- 2023 (Cr.) |
|--------------------------|--|--|---|--|
| 1,345.60                 | 1,154.65   | 1153.89  | 33.72                                   | 60.33                                      |

Table 5.1- 2 Escrow Details

| Total Project Cost (Cr.) | Cumulative expenses till Mar- 2023 (Cr.) | Escrow Plan till Mar- 2023 - Debt (HAM) (Cr.) | Escrow Plan till Mar- 2023 - Equity (HAM) (Cr.) | Escrow Plan till Mar- 2023 - VGF (HAM) (Cr.) | Escrow actual till Mar- 2023 - Debt (HAM) (Cr.) | Escrow actual till Mar- 2023 - Equity (HAM) (Cr.) | Escrow actual till Mar- 2023 - VGF (HAM) (Cr.) |
|--------------------------|--|---|---|--|---|---|--|
| 1,345.60                 | 910.76                                   | 645.89  | 161.47  | 538.24                                       | 367.47  | 118.51  | 400.84   |

### 6.1. List of Lab Equipment's

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

| Sl. No         | Equipment List   | Quantity |
|----------------|--|----------|
| <b>A) SOIL</b> |  |          |
| 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   |
| 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>B) CONCRETE WORKS</b> |   |     |
| 41                       | Compressive Testing machine(2000KN)   | 1   |
| 42                       | Flexural 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 Apparatus  | 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 Wooden Handles   | 4   |
| 53                       | A I V Testing Machine   | 1   |
| 54                       | Loss Angels abrasion Testing Machine  | 1   |
| 55                       | Sand Equivalent Testing Apparatus   | 1   |

|                                   |  |    |
|-----------------------------------|--|----|
| 56                                | Flakiness Index Test Gauge   | 1  |
| 57                                | Elongation Index Test Gauge  | 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                                | Enamel trays -300x250x40 mm  | 9  |
| 64                                | Trays for Samples Collections  | 12 |
| 65                                | Riffle Box ( 40 MM )   | 1  |
| 66                                | Riffle Box ( 20 MM )   | 1  |
| 67                                | Pycnometer Bottles ( 1000 ml)  | 4  |
| 68                                | Specific Gravity & water absorption test apparatus with Electronic balance | 1  |
| 69                                | DLC Compaction vibrating hammer  | 1  |
| 70                                | Cement mortar cube mould 5.0 cm  | 12 |
| 71                                | Standard Sand Grade-1 bag of 25 kg   | 2  |
| 72                                | Standard Sand Grade-2 bag of 25 kg   | 2  |
| 73                                | Standard Sand Grade-3 bag of 25 kg   | 2  |
| <b><u>C) BITUMINOUS WORKS</u></b> |  |    |
| 74                                | Specific Gravity Bottles ( 50 ml )   | 2  |
| 75                                | Specific Gravity Bottles ( 100 ml )  | 2  |
| 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  |
| <b>FOR I.S SIEVES 450 MM DIA</b> |  |    |
| 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  |

|                                  |         |   |
|----------------------------------|---------|---|
| 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 |
| <b>FOR I.S SIEVES 200 MM DIA</b> |         |   |
| 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   |
| <b>GENERAL &amp; CONTROL OF PROFILE AND SURFACE EVENNESS</b> |   |     |
| 165  | Rain Gauge                                | 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 March 2023 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 Hybrid Annuity Mode.**

**Summary of Quality Control Report / Monthly Progress Report (QC) - MONTH : March 2023**

| S. No.   | Description                         | IS Specification Clause | Frequency of Tests           | Test conducted upto Previous month |        |        |                              | Tests conducted during reporting month March 2023 |        |        |                              | Test conducted upto this month |        |        |                              |
|--|-------------------------------------|-------------------------|------------------------------|------------------------------------|--------|--------|------------------------------|---|--------|--------|------------------------------|--------------------------------|--------|--------|------------------------------|
|  |                                     |                         |                              | No. of test Conducted              | 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 |
| <b>1.0 Tests on OGL</b>  |                                     |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 1.1  | Grain size analysis                 | IS:2720 (Part4)         | 1 test / 250 meters          | 421                                | 421    | 0      | 224                          | 0   | 0      | 0      | 0                            | 421                            | 421    | 0      | 224                          |
| 1.2  | Atterberg Limits                    | IS:2720 (Part5)         | 1 test / 250 meters          | 421                                | 421    | 0      | 224                          | 0   | 0      | 0      | 0                            | 421                            | 421    | 0      | 224                          |
| 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          | 421                                | 403    | 18     | 224                          | 0   | 0      | 0      | 0                            | 421                            | 403    | 18     | 224                          |
| <b>2.0 Cutting &amp; Existing Portion for EMB/ SG (MoRT&amp;H 305)</b>                             |                                     |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 2.1  | Grain size analysis                 | IS:2720 (Part4)         | 1 test / 1500 m <sup>3</sup> | 114                                | 114    | 0      | 42                           | 0   | 0      | 0      | 0                            | 114                            | 114    | 0      | 42                           |
| 2.2  | Atterberg Limits                    | IS:2720 (Part5)         | 1 test / 1500 m <sup>3</sup> | 114                                | 114    | 0      | 42                           | 0   | 0      | 0      | 0                            | 114                            | 114    | 0      | 42                           |
| 2.3  | Proctor                             | IS:2720 (Part8)         | 1 test / 1500 m <sup>3</sup> | 114                                | 114    | 0      | 42                           | 0   | 0      | 0      | 0                            | 114                            | 114    | 0      | 42                           |
| 2.4  | Free Swell index                    | IS:2720 (Part40)        | 1 test / 1500 m <sup>3</sup> | 114                                | 114    | 0      | 42                           | 0   | 0      | 0      | 0                            | 114                            | 114    | 0      | 42                           |
| 2.5  | California bearing ratio            | IS:2720 (Part16)        | 1 test / 3000 m <sup>3</sup> | 108                                | 108    | 0      | 44                           | 0   | 0      | 0      | 0                            | 108                            | 108    | 0      | 44                           |
| <b>3.0 Borrow Area for EMB/ Subgrade (MoRT&amp;H 305)</b>  |                                     |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 3.1  | Grain size analysis                 | IS:2720 (Part4)         | 1 test / 1500 m <sup>3</sup> | 2636                               | 2636   | 0      | 582                          | 25  | 25     | 0      | 5                            | 2661                           | 2661   | 0      | 587                          |
| 3.2  | Atterberg Limits                    | IS:2720 (Part5)         | 1 test / 1500 m <sup>3</sup> | 2636                               | 2636   | 0      | 582                          | 25  | 25     | 0      | 5                            | 2661                           | 2661   | 0      | 587                          |
| 3.3  | Proctor                             | IS:2720 (Part8)         | 1 test / 1500 m <sup>3</sup> | 2675                               | 2675   | 0      | 588                          | 25  | 25     | 0      | 5                            | 2700                           | 2700   | 0      | 593                          |
| 3.4  | Free Swell index                    | IS:2720 (Part40)        | 1 test / 1500 m <sup>3</sup> | 2632                               | 2632   | 0      | 582                          | 25  | 25     | 0      | 5                            | 2657                           | 2657   | 0      | 587                          |
| 3.5  | California bearing ratio            | IS:2720 (Part16)        | 1 test / 3000 m <sup>3</sup> | 300                                | 300    | 0      | 129                          | 7   | 7      | 0      | 3                            | 307                            | 307    | 0      | 132                          |
| 3.7  | Angle of Internal Friction (φ)      | IS:2720 (Part13)        | As required                  | 308                                | 308    | 0      | 74                           | 2   | 2      | 0      | 1                            | 310                            | 310    | 0      | 75                           |
| <b>4.0 Field Density Test (MoRT&amp;H 305)</b>   |                                     |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 4.1  | Field density (OGL)                 | IS:2720 (Part28)        | 10 test / 3000 sqm           | 6730                               | 6730   | 15     | 2263                         | 25  | 25     | 0      | 5                            | 6755                           | 6755   | 15     | 2268                         |
| 4.2  | Field density (EMB)                 | IS:2720 (Part28)        | 10 test / 3000 sqm           | 118565                             | 18356  | 209    | 21058                        | 542   | 542    | 0      | 125                          | 119107                         | 18898  | 209    | 21183                        |
| 4.3  | Field density (SG)                  | IS:2720 (Part28)        | 10 test / 2000 sqm           | 13285                              | 13282  | 3      | 2427                         | 0   | 0      | 0      | 0                            | 13285                          | 13282  | 3      | 2427                         |
| 4.4  | Field density (Shoulder)            | IS:2720 (Part28)        | 10 test / 2000 sqm           | 422                                | 422    | 0      | 104                          | 0   | 0      | 0      | 0                            | 422                            | 422    | 0      | 104                          |
| <b>5.0 Safe Bearing capacity of soil (Highway &amp; Structure)</b>                                 |                                     |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 5.1  | Grain size analysis                 | IS:2720 (Part40)        | As required                  | 169                                | 169    | 0      | 41                           | 0   | 0      | 0      | 0                            | 169                            | 169    | 0      | 41                           |
| 5.2  | Atterberg Limits                    | IS:2720 (Part4)         | As required                  | 169                                | 169    | 0      | 41                           | 0   | 0      | 0      | 0                            | 169                            | 169    | 0      | 41                           |
| 5.3  | Proctor                             | IS:2720 (Part5)         | As required                  | 169                                | 169    | 0      | 40                           | 0   | 0      | 0      | 0                            | 169                            | 169    | 0      | 40                           |
| 5.4  | Free Swell index                    | IS:2720 (Part8)         | As required                  | 169                                | 162    | 7      | 41                           | 0   | 0      | 0      | 0                            | 169                            | 162    | 7      | 41                           |
| 5.5  | Bearing Capacity                    | IS:6403 / IS:1888       | As required                  | 169                                | 18     | 151    | 41                           | 0   | 0      | 0      | 0                            | 169                            | 18     | 151    | 41                           |
| 5.6  | Plate Load Test                     | IS:6403 / IS:1888       | As required                  | 36                                 | 36     | 0      | 27                           | 0   | 0      | 0      | 0                            | 36                             | 36     | 0      | 27                           |
| <b>6.0 Filter Media &amp; Back filling (MoRT&amp;H 2500)</b>                                       |                                     |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 6.1  | Gradation                           |                         | As required                  | 442                                | 442    | 0      | 122                          | 10  | 10     | 0      | 3                            | 452                            | 452    | 0      | 125                          |
| 6.2  | Backfilling field density           |                         | 1 test / 1000 m <sup>3</sup> | 48                                 | 48     | 0      | 36                           | 0   | 0      | 0      | 0                            | 48                             | 48     | 0      | 36                           |
| <b>7.0 Granular Bedding Material (For Structures-Ground Improvement)- Stock &amp; Site Testing</b> |                                     |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 7.1  | Gradation                           | Table 400-1             | As required                  | 244                                | 244    | 0      | 53                           | 0   | 0      | 0      | 0                            | 244                            | 244    | 0      | 53                           |
| 7.2  | Atterberg Limits                    | IS:2720 (Part5)         | As required                  | 244                                | 244    | 0      | 53                           | 0   | 0      | 0      | 0                            | 244                            | 244    | 0      | 53                           |
| 7.3  | Proctor                             | IS:2720 (Part8)         | As required                  | 137                                | 137    | 0      | 25                           | 0   | 0      | 0      | 0                            | 137                            | 137    | 0      | 25                           |
| 7.4  | CBR Test                            | IS:2720 (Part16)        | As required                  | 29                                 | 29     | 0      | 24                           | 0   | 0      | 0      | 0                            | 29                             | 29     | 0      | 24                           |
| 7.5  | Aggregate Impact value              | IS:2386 Part-4          | As required                  | 42                                 | 42     | 0      | 29                           | 0   | 0      | 0      | 0                            | 42                             | 42     | 0      | 29                           |
| 7.6  | Field Density                       | IS:2720 (Part28)        | As required                  | 2215                               | 2215   | 0      | 479                          | 0   | 0      | 0      | 0                            | 2215                           | 2215   | 0      | 479                          |
| <b>8.0 CTSB</b>  |                                     |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 8.1  | Gradation                           | Table 400-4             | 1 test / 400m <sup>3</sup>   | 557                                | 557    | 0      | 138                          | 3   | 3      | 0      | 2                            | 560                            | 560    | 0      | 140                          |
| 8.2  | Atterberg Limits                    | IS:2720 (Part5)         | 1 test / 400m <sup>3</sup>   | 555                                | 555    | 0      | 137                          | 3   | 3      | 0      | 2                            | 558                            | 558    | 0      | 139                          |
| 8.3  | Proctor                             | IS:2720 (Part8)         | As required                  | 25                                 | 25     | 0      | 23                           | 0   | 0      | 0      | 0                            | 25                             | 25     | 0      | 23                           |
| 8.4  | Aggregate Impact value              | IS:2386 Part-4          | As required                  | 129                                | 129    | 0      | 76                           | 0   | 0      | 0      | 0                            | 129                            | 129    | 0      | 76                           |
| 8.5  | Field Density                       | IS:2720 (Part28)        | 1 set of 2 Test per 500Sqm   | 6069                               | 6069   | 0      | 1254                         | 23  | 23     | 0      | 5                            | 6092                           | 6092   | 0      | 1259                         |
| 8.6  | Specific gravity & Water absorption | IS:2386 (Part3)         | As required                  | 5                                  | 5      | 0      | 5                            | 0   | 0      | 0      | 0                            | 5                              | 5      | 0      | 5                            |
| 8.7  | Cubes casting & Testing (Sets)      | IRC SP 89 (2010)        | A set of 3 specimens         | 1464                               | 1464   | 0      | 321                          | 15  | 15     | 0      | 7                            | 1479                           | 1479   | 0      | 328                          |
| 8.8  | CBR Test                            | IS:2720 (Part16)        | As required                  | 16                                 | 16     | 0      | 13                           | 0   | 0      | 0      | 0                            | 16                             | 16     | 0      | 13                           |

**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.**

**Summary of Quality Control Report / Monthly Progress Report (QC) - MONTH : March 2023**

| S. No.  | Description                                 | IS Specification Clause                        | Frequency of Tests   | Test conducted upto Previous month |        |        |                              | Tests conducted during reporting month March 2023 |        |        |                              | Test conducted upto this month |        |        |                              |
|---|---|--|--|------------------------------------|--------|--------|------------------------------|---|--------|--------|------------------------------|--------------------------------|--------|--------|------------------------------|
|   |   |  |  | No. of test Conducted              | 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 |
| <b>9.0 WMM</b>                                    |   |  |  |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 9.1   | Individual / Combined Gradation             | Table 400-3                                    | 1 test / 200m <sup>3</sup>   | 544                                | 544    | 0      | 121                          | 0   | 0      | 0      | 0                            | 544                            | 544    | 0      | 121                          |
| 9.2   | Aggregate Impact Value                      | IS:2386 Part-4                                 | 1 test / 1000 m <sup>3</sup>   | 319                                | 319    | 0      | 79                           | 0   | 0      | 0      | 0                            | 319                            | 319    | 0      | 79                           |
| 9.3   | Flakiness & Elagation index                 | IS:2386 Part1                                  | 1 test / 500 m <sup>3</sup>  | 311                                | 321    | 0      | 87                           | 0   | 0      | 0      | 0                            | 311                            | 321    | 0      | 87                           |
| 9.4   | Atterberg Limils                            | IS:2720 (Part5)                                | 1 test / 200m <sup>3</sup>   | 510                                | 510    | 0      | 116                          | 0   | 0      | 0      | 0                            | 510                            | 510    | 0      | 116                          |
| 9.5   | Proctor                                     | IS:2720 (Part8)                                | As required  | 20                                 | 20     | 0      | 17                           | 0   | 0      | 0      | 0                            | 20                             | 20     | 0      | 17                           |
| 9.6   | CBR   | IS:2720 (Part16)                               | As required  | 16                                 | 16     | 0      | 14                           | 0   | 0      | 0      | 0                            | 16                             | 16     | 0      | 14                           |
| 9.7   | Field Density                               | IS:2720 (Part28)                               | 1 set Test per 1000 Sq.m / 3 pits  | 2032                               | 2032   | 0      | 508                          | 0   | 0      | 0      | 0                            | 2032                           | 2032   | 0      | 508                          |
| <b>10.0 Dense Bituminous Macadam (Grade - II)</b> |   |  |  |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 10.1  | Gradation                                   | MoRT&H Section-500/Clause - 507 & Table 500-10 | One set for individual constituent and mixed aggregate from dryer for each 400 tonnes of mix subject to minimum of two Tests per day per plant | 498                                | 498    | 0      | 153                          | 0   | 0      | 0      | 0                            | 498                            | 498    | 0      | 153                          |
| 10.2  | Flakiness & Elongation Index                | IS:2386 (Part 1)1963                           | 1 Test for 350 m <sup>3</sup>  | 173                                | 173    | 0      | 65                           | 0   | 0      | 0      | 0                            | 173                            | 173    | 0      | 65                           |
| 10.3  | Aggregate Impact Value Test                 | IS:2386 (Part 4)1963                           | 1 Test for 350 m <sup>3</sup>  | 173                                | 173    | 0      | 65                           | 0   | 0      | 0      | 0                            | 173                            | 173    | 0      | 65                           |
| 10.4  | Binder content and grading of mix           | IRC: SP 11-1988 (APP-5)                        | One Test for each 400 tonnes of mix produced subject to a minimum of two test per day per plant  | 192                                | 192    | 0      | 73                           | 0   | 0      | 0      | 0                            | 192                            | 192    | 0      | 73                           |
| 10.5  | Marshall Stability of mix                   | ASTM D 2726 / 1188                             | 3 Tests for stability flow value density and void contents for each 400 tonnes of mix subject to minimum of two Tests per plant per day        | 286                                | 286    | 0      | 88                           | 0   | 0      | 0      | 0                            | 286                            | 286    | 0      | 88                           |
| 10.6  | Core Cutting and Density Of Compatied Layer | Table 900 - 4 of MoRT&H                        | 1 set Test per 700 Sq.m / 1 pits   | 888                                | 888    | 0      | 266                          | 0   | 0      | 0      | 0                            | 888                            | 888    | 0      | 266                          |
| 10.7  | Sand Equivalent Test                        | IS:2720 (Part 37) 1963                         | One Test for each source   | 16                                 | 16     | 0      | 15                           | 0   | 0      | 0      | 0                            | 16                             | 16     | 0      | 15                           |
| 10.8  | Los Angeles Abrasion Value                  | IS:2386 (Part 3) 1963                          | 1 Test for 350 m <sup>3</sup>  | 135                                | 135    | 0      | 46                           | 0   | 0      | 0      | 0                            | 135                            | 135    | 0      | 46                           |
| 10.9  | Stripping                                   | IS:6241  | One Test for each source   | 7                                  | 7      | 0      | 7                            | 0   | 0      | 0      | 0                            | 7                              | 7      | 0      | 7                            |
| 10.10   | Retained Tensile Strength                   | AASHTO 284                                     | One Test for each source   | 8                                  | 8      | 0      | 8                            | 0   | 0      | 0      | 0                            | 8                              | 8      | 0      | 8                            |
| 10.11   | Water absorption of Aggregates              | IS:2386 (Part3)                                | One Test for each source   | 3                                  | 3      | 0      | 1                            | 0   | 0      | 0      | 0                            | 3                              | 3      | 0      | 1                            |
| 10.12   | Plasticity Index                            | IS:2720 (Part 5)                               | One Test for each source   | 6                                  | 6      | 0      | 5                            | 0   | 0      | 0      | 0                            | 6                              | 6      | 0      | 5                            |
| <b>11.0 Bituminous Concrete Grade - (II)</b>      |   |  |  |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 11.1  | Gradation                                   | MoRT&H Section-500/Clause - 507 & Table 500-10 | One set for individual constituent and mixed aggregate from dryer for each 400 tonnes of mix subject to minimum of two Tests per day per plant | 246                                | 246    | 0      | 61                           | 0   | 0      | 0      | 0                            | 246                            | 246    | 0      | 61                           |
| 11.2  | Flakiness & Elongation Index                | IS:2386 (Part 1)1963                           | 1 Test for 350 m <sup>3</sup>  | 87                                 | 87     | 0      | 27                           | 0   | 0      | 0      | 0                            | 87                             | 87     | 0      | 27                           |
| 11.3  | Aggregate Impact Value Test                 | IS:2386 (Part 4)1963                           | 1 Test for 350 m <sup>3</sup>  | 87                                 | 87     | 0      | 27                           | 0   | 0      | 0      | 0                            | 87                             | 87     | 0      | 27                           |
| 11.4  | Binder content and grading of mix           | IRC: SP 11-1988 (APP-5)                        | One Test for each 400 tonnes of mix produced subject to a minimum of two test per day per plant  | 124                                | 124    | 0      | 43                           | 0   | 0      | 0      | 0                            | 124                            | 124    | 0      | 43                           |
| 11.5  | Marshall Stability of mix                   | ASTM D 2726 / 1188                             | 3 Tests for stability flow value density and void contents for each 400 tonnes of mix subject to minimum of two Tests per plant per day        | 547                                | 547    | 0      | 41                           | 0   | 0      | 0      | 0                            | 547                            | 547    | 0      | 41                           |
| 11.6  | Core Cutting and Density Of Compatied Layer | Table 900 - 4 of MoRT&H                        | 1 set Test per 700 Sq.m / 1 pits   | 824                                | 824    | 0      | 219                          | 0   | 0      | 0      | 0                            | 824                            | 824    | 0      | 219                          |
| 11.7  | Sand Equivalent Test                        | IS:2720 (Part 37) 1963                         | One Test for each source   | 1                                  | 1      | 0      | 1                            | 0   | 0      | 0      | 0                            | 1                              | 1      | 0      | 1                            |
| 11.8  | Los Angeles Abrasion Value                  | IS:2386 (Part 3) 1963                          | 1 Test for 350 m <sup>3</sup>  | 87                                 | 87     | 0      | 28                           | 0   | 0      | 0      | 0                            | 87                             | 87     | 0      | 28                           |
| 11.9  | Stripping                                   | IS:6241  | One Test for each source   | 2                                  | 2      | 0      | 2                            | 0   | 0      | 0      | 0                            | 2                              | 2      | 0      | 2                            |
| 11.10   | Retained Tensile Strength                   | AASHTO 284                                     | One Test for each source   | 2                                  | 2      | 0      | 2                            | 0   | 0      | 0      | 0                            | 2                              | 2      | 0      | 2                            |
| 11.11   | Water absorption of Aggregates              | IS:2386 (Part3)                                | One Test for each source   | 2                                  | 2      | 0      | 2                            | 0   | 0      | 0      | 0                            | 2                              | 2      | 0      | 2                            |
| 11.12   | Plasticity Index                            | IS:2720 (Part 5)                               | One Test for each source   | 2                                  | 2      | 0      | 2                            | 0   | 0      | 0      | 0                            | 2                              | 2      | 0      | 2                            |

**Four Lining of Cholapuram - 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.**

**Summary of Quality Control Report / Monthly Progress Report (QC) - MONTH : March 2023**

| S. No.   | Description   | IS Specification Clause | Frequency of Tests           | Test conducted upto Previous month |        |        |                              | Tests conducted during reporting month March 2023 |        |        |                              | Test conducted upto this month |        |        |                              |
|--|---|-------------------------|------------------------------|------------------------------------|--------|--------|------------------------------|---|--------|--------|------------------------------|--------------------------------|--------|--------|------------------------------|
|  |   |                         |                              | No. of test Conducted              | 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 |
| <b>12.0 Bitumen test</b>                                       |   |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 12.1   | Absolute Viscosity at 60°C poise, Minimum                             | IS:1206-1978 part-2     | As per table 2 of IS 73-2013 | 181                                | 181    | 0      | 59                           | 5   | 5      | 0      | 2                            | 186                            | 186    | 0      | 61                           |
| 12.2   | Penetration Test at 25°C, 100gr, 0.1mm, 5sec                          | IS:1203-1978            | As per table 2 of IS 73-2013 | 261                                | 261    | 0      | 61                           | 5   | 5      | 0      | 2                            | 266                            | 266    | 0      | 63                           |
| 12.3   | Softening point (R&B) Min   | IS:1205-1978            | As per table 2 of IS 73-2013 | 305                                | 305    | 0      | 81                           | 5   | 5      | 0      | 2                            | 310                            | 310    | 0      | 83                           |
| 12.4   | Elastic Recovery of half thread in ductilometer at 15°C, Percent, min | IS:15462 -2019          | As per table 2 of IRC SP 53  | 125                                | 125    | 0      | 38                           | 2   | 2      | 0      | 1                            | 127                            | 127    | 0      | 39                           |
| 12.5   | Separation, Difference In Softening Point (R&B)°C max                 | IS:15462 -2019          | As per table 2 of IRC SP 53  | 119                                | 119    | 0      | 38                           | 2   | 2      | 0      | 1                            | 121                            | 121    | 0      | 39                           |
| 12.6   | Test on Residue from TFOT   |                         |                              |                                    |        |        |                              | 0   | 0      | 0      | 0                            | 0                              | 0      | 0      | 0                            |
| 12.7   | Viscosity ratio at 60°C max   | IS:1206-1978 part-2     | 1 Test per Lot               | 50                                 | 50     | 0      | 28                           | 1   | 1      | 0      | 1                            | 51                             | 51     | 0      | 29                           |
| 12.8   | Ductility at 25°C , cm, Min   | IS:1208-1978            | 1 Test per Lot               | 50                                 | 50     | 0      | 27                           | 1   | 1      | 0      | 1                            | 51                             | 51     | 0      | 28                           |
| <b>13.0 Emulsion SS1 &amp; RS1</b>                             |   |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 13.1   | Saybolt furoil Viscosity  | IS:13117                | 1 Test per Lot               | 33                                 | 33     | 0      | 21                           | 2   | 2      | 0      | 1                            | 35                             | 35     | 0      | 22                           |
| 13.2   | Residue on 600 micron is sieve  | IS:8887                 | 1 Test per Lot               | 33                                 | 33     | 0      | 21                           | 2   | 2      | 0      | 1                            | 35                             | 35     | 0      | 22                           |
| 13.3   | Water Content, Percent by mass  | IS:8887                 | 1 Test per Lot               | 33                                 | 33     | 0      | 21                           | 2   | 2      | 0      | 1                            | 35                             | 35     | 0      | 22                           |
| <b>14.0 Emulsion Prime coat &amp; Tack Coat</b>                |   |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 14.1   | Rate of Spread of Binder  | IRC: SP 16              | Three test per Day           | 816                                | 861    | 861    | 195                          | 0   | 0      | 0      | 0                            | 816                            | 861    | 861    | 195                          |
| <b>15.0 Coarse/Fine Aggregate (MoRT&amp;H 1007 &amp; 1008)</b> |   |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 15.1   | Gradation   | IS:2386 (Part2)         | As required                  | 1232                               | 1232   | 0      | 384                          | 4   | 4      | 0      | 2                            | 1236                           | 1236   | 0      | 386                          |
| 15.2   | Specific gravity & Water absorption                                   | IS:2386 (Part3)         | As required                  | 79                                 | 79     | 0      | 43                           | 1   | 1      | 0      | 1                            | 80                             | 80     | 0      | 44                           |
| 15.3   | Aggregate Impact Value  | IS:2386 (Part4)         | As required                  | 246                                | 246    | 0      | 88                           | 3   | 3      | 0      | 1                            | 249                            | 249    | 0      | 89                           |
| 15.4   | Flakiness index   | IS:2386 (Part1)         | As required                  | 243                                | 243    | 0      | 86                           | 3   | 3      | 0      | 1                            | 246                            | 246    | 0      | 87                           |
| <b>16.0 Cement (MoRT&amp;H 1006)</b>                           |   |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 16.1   | Fineness  | IS:4031 (Part1)         | 500mt (or) Every week        | 307                                | 307    | 0      | 117                          | 5   | 5      | 0      | 0                            | 312                            | 312    | 0      | 117                          |
| 16.2   | Normal Consistency  | IS:4031 (Part4)         | 500mt (or) Every week        | 307                                | 307    | 0      | 117                          | 5   | 5      | 0      | 0                            | 312                            | 312    | 0      | 117                          |
| 16.3   | Initial, Final setting time   | IS:4031 (Part5)         | 500mt (or) Every week        | 307                                | 307    | 0      | 117                          | 5   | 5      | 0      | 0                            | 312                            | 312    | 0      | 117                          |
| 16.4   | Soundness of Cement   | IS:4031 (Part3)         | 500mt (or) Every week        | 167                                | 167    | 0      | 73                           | 0   | 0      | 0      | 0                            | 167                            | 167    | 0      | 73                           |
| 16.5   | Compressive Strength-set  | IS:4031 (Part6)         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
|  | 3 days  |                         | 500mt (or) Every week        | 328                                | 328    | 0      | 125                          | 6   | 6      | 0      | 0                            | 334                            | 334    | 0      | 125                          |
|  | 7 days  |                         | 500mt (or) Every week        | 317                                | 317    | 0      | 121                          | 5   | 5      | 0      | 0                            | 322                            | 322    | 0      | 121                          |
|  | 28 days   |                         | 500mt (or) Every week        | 318                                | 318    | 0      | 100                          | 5   | 5      | 0      | 0                            | 323                            | 323    | 0      | 100                          |
| <b>17.0 Concrete Cube Strength of Site Cubes 28 Days</b>       |   |                         |                              |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 17.1   | M15 PCC   | IS:516 / IS:456         | MoRT&H Sec. 1700             | 1229                               | 1229   | 0      | 460                          | 15  | 15     | 0      | 5                            | 1244                           | 1244   | 0      | 465                          |
| 17.2   | M20 PCC   | IS:516 / IS:456         | MoRT&H Sec. 1700             | 46                                 | 46     | 0      | 15                           | 0   | 0      | 0      | 0                            | 46                             | 46     | 0      | 15                           |
| 17.3   | M20 RCC   | IS:516 / IS:456         | MoRT&H Sec. 1700             | 428                                | 428    | 0      | 49                           | 5   | 5      | 0      | 1                            | 433                            | 433    | 0      | 50                           |
| 17.4   | M20 KERB  | IS:516 / IS:456         | MoRT&H Sec. 1700             | 607                                | 607    | 0      | 442                          | 0   | 0      | 0      | 0                            | 607                            | 607    | 0      | 442                          |
| 17.5   | M25 RCC   | IS:516 / IS:456         | MoRT&H Sec. 1700             | 439                                | 439    | 0      | 99                           | 5   | 5      | 0      | 1                            | 444                            | 444    | 0      | 100                          |
| 17.6   | M30 RCC   | IS:516 / IS:456         | MoRT&H Sec. 1700             | 2654                               | 2654   | 0      | 672                          | 0   | 0      | 0      | 0                            | 2654                           | 2654   | 0      | 672                          |
| 17.7   | M30 RCC PUMPABLE  | IS:516 / IS:456         | MoRT&H Sec. 1700             | 880                                | 880    | 0      | 225                          | 23  | 23     | 0      | 7                            | 903                            | 903    | 0      | 232                          |
| 17.8   | M35 RCC   | IS:516 / IS:456         | MoRT&H Sec. 1700             | 1110                               | 1093   | 17     | 375                          | 0   | 0      | 0      | 0                            | 1110                           | 1093   | 17     | 375                          |
| 17.9   | M35 RCC PILING  | IS:516 / IS:456         | MoRT&H Sec. 1700             | 3050                               | 3050   | 0      | 1008                         | 0   | 0      | 0      | 0                            | 3050                           | 3050   | 0      | 1008                         |
| 17.10  | M35 RCC PUMPABLE  | IS:516 / IS:456         | MoRT&H Sec. 1700             | 5134                               | 5134   | 0      | 1430                         | 53  | 53     | 0      | 20                           | 5187                           | 5187   | 0      | 1450                         |
| 17.11  | M35 RE BLOCK  | IS:516 / IS:456         | MoRT&H Sec. 1700             | 1916                               | 1916   | 0      | 613                          | 0   | 0      | 0      | 0                            | 1916                           | 1916   | 0      | 613                          |
| 17.12  | M40 RCC   | IS:516 / IS:456         | MoRT&H Sec. 1700             | 1827                               | 1827   | 0      | 368                          | 12  | 12     | 0      | 6                            | 1839                           | 1839   | 0      | 374                          |
| 17.13  | M45 PUMP  | IS:516 / IS:456         | MoRT&H Sec. 1700             | 644                                | 644    | 0      | 164                          | 0   | 0      | 0      | 0                            | 644                            | 644    | 0      | 164                          |
| 17.14  | Cement Grout  | IS:516 / IS:456         | MoRT&H Sec. 1700             | 56                                 | 56     | 0      | 13                           | 0   | 0      | 0      | 0                            | 56                             | 56     | 0      | 13                           |

**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.**

**Summary of Quality Control Report / Monthly Progress Report (QC) - MONTH : March 2023**

| S. No.  | Description                               | IS Specification Clause | Frequency of Tests   | Test conducted upto Previous month |        |        |                              | Tests conducted during reporting month March 2023 |        |        |                              | Test conducted upto this month |        |        |                              |
|---|---|-------------------------|--|------------------------------------|--------|--------|------------------------------|---|--------|--------|------------------------------|--------------------------------|--------|--------|------------------------------|
|   |   |                         |  | No. of test Conducted              | 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 |
| <b>18.0 BENTONITE</b>                                     |   |                         |  |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 18.1  | Density                                   | MoRT&H Sec. 1115.2.3    | As required  | 446                                | 446    | 0      | 136                          | 0   | 0      | 0      | 0                            | 446                            | 446    | 0      | 136                          |
| 18.2  | Marsh Cone Viscosity                      |                         |  | 446                                | 446    | 0      | 136                          | 0   | 0      | 0      | 0                            | 446                            | 446    | 0      | 136                          |
| 18.3  | pH Value                                  |                         |  | 446                                | 446    | 0      | 136                          | 0   | 0      | 0      | 0                            | 446                            | 446    | 0      | 136                          |
| 18.4  | Silt Content                              |                         |  | 15                                 | 15     | 0      | 6                            | 0   | 0      | 0      | 0                            | 15                             | 15     | 0      | 6                            |
| 18.5  | Liquid Limit                              |                         |  | 18                                 | 18     | 0      | 7                            | 0   | 0      | 0      | 0                            | 18                             | 18     | 0      | 7                            |
| <b>19.0 Fine Aggregate (MoRT&amp;H 1008)-(RE-Block)</b>   |   |                         |  |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 19.1  | Grade / Sieve analysis                    | IS:2386 (Part1)         | As required  | 728                                | 728    | 0      | 223                          | 0   | 0      | 0      | 0                            | 728                            | 728    | 0      | 223                          |
| 19.2  | Fineness Modulus                          | MoRT&H Sec.1008 & 383   | As required  | 728                                | 728    | 0      | 223                          | 0   | 0      | 0      | 0                            | 728                            | 728    | 0      | 223                          |
| 19.3  | Specific gravity & Water absorption       | IS:2386 (Part2)         | As required  | 24                                 | 24     | 0      | 12                           | 0   | 0      | 0      | 0                            | 24                             | 24     | 0      | 12                           |
| <b>20.0 Coarse Aggregate (MoRT&amp;H 1007)-(RE-Block)</b> |   |                         |  |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 20.1  | Gradation                                 | IS:2386 (Part2)         | As required  | 676                                | 676    | 0      | 182                          | 0   | 0      | 0      | 0                            | 676                            | 676    | 0      | 182                          |
| 20.2  | Specific gravity & Water absorption       | IS:2386 (Part3)         | As required  | 27                                 | 27     | 0      | 19                           | 0   | 0      | 0      | 0                            | 27                             | 27     | 0      | 19                           |
| 20.3  | Aggregate Impact Value                    | IS:2386 (Part4)         | 1 test / each source & monthly   | 72                                 | 72     | 0      | 36                           | 0   | 0      | 0      | 0                            | 72                             | 72     | 0      | 36                           |
| 20.4  | Flakiness index                           | IS:2386 (Part1)         | 1 test / each source & monthly   | 52                                 | 52     | 0      | 23                           | 0   | 0      | 0      | 0                            | 52                             | 52     | 0      | 23                           |
| <b>21.0 DLC</b>   |   |                         |  |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 21.1  | Gradation                                 | MoRT&H Section-601      | 1 test / 400m <sup>3</sup>   | 11                                 | 11     | 0      | 5                            | 0   | 0      | 0      | 0                            | 11                             | 11     | 0      | 5                            |
| 21.2  | Field Density                             | MoRT&H Sec 903.5.1      | 3 Sample for 2000 Sqm  | 43                                 | 43     | 0      | 10                           | 0   | 0      | 0      | 0                            | 43                             | 43     | 0      | 10                           |
| 21.3  | Cubes casting & Testing (Sets)            | IS:516                  | 1 set for 1000 Sqm   | 20                                 | 20     | 0      | 6                            | 0   | 0      | 0      | 0                            | 20                             | 20     | 0      | 6                            |
| <b>22.0 Pavement Quality Concrete</b>                     |   |                         |  |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 22.1  | Gradation                                 | IS:2386 (P-1)           | 1 Test per day   | 35                                 | 35     | 0      | 11                           | 0   | 0      | 0      | 0                            | 35                             | 35     | 0      | 11                           |
| 22.2  | Aggregate Impact Value                    | IS:2386 (Part 4)1963    | As required  | 16                                 | 16     | 0      | 7                            | 0   | 0      | 0      | 0                            | 16                             | 16     | 0      | 7                            |
| 22.3  | Los Angeles Abrasion Value                | IS:2386 (Part 4)1963    | As required  | 16                                 | 16     | 0      | 7                            | 0   | 0      | 0      | 0                            | 16                             | 16     | 0      | 7                            |
| 22.4  | Compressive Strength                      | IS:516                  | 2 Cubes /150 cum (min 6 cubes)   | 42                                 | 42     | 0      | 13                           | 0   | 0      | 0      | 0                            | 42                             | 42     | 0      | 13                           |
| 22.5  | Flexural Strength                         | IS:516                  | 2 Beams /150 cum (min 6 Beams)   | 42                                 | 42     | 0      | 14                           | 0   | 0      | 0      | 0                            | 42                             | 42     | 0      | 14                           |
| 22.6  | Thickness of measurement for trail length | IS:516                  | 3 cores per trail length   | 16                                 | 16     | 0      | 7                            | 0   | 0      | 0      | 0                            | 16                             | 16     | 0      | 7                            |
| <b>23.0 Steel Third Party</b>                             |   |                         |  |                                    |        |        |                              |   |        |        |                              |                                |        |        |                              |
| 23.1  | 8 mm Dia                                  | IS:1786                 | Physical &Chemical Properties<br>(1) Test on first lot.<br>(2) Further supply will be provided with mtc.<br>(3) As required by engineer. | 21                                 | 21     | 0      | 12                           | 1   | 1      | 0      | 1                            | 22                             | 22     | 0      | 13                           |
| 23.2  | 10 mm Dia                                 | IS:1786                 |  | 23                                 | 23     | 0      | 15                           | 1   | 1      | 0      | 1                            | 24                             | 24     | 0      | 16                           |
| 23.3  | 12 mm Dia                                 | IS:1786                 |  | 27                                 | 27     | 0      | 18                           | 0   | 0      | 0      | 0                            | 27                             | 27     | 0      | 18                           |
| 23.4  | 16 mm Dia                                 | IS:1786                 |  | 30                                 | 30     | 0      | 18                           | 1   | 1      | 0      | 1                            | 31                             | 31     | 0      | 19                           |
| 23.5  | 20 mm Dia                                 | IS:1786                 |  | 23                                 | 23     | 0      | 11                           | 1   | 1      | 0      | 1                            | 24                             | 24     | 0      | 12                           |
| 23.6  | 25 mm Dia                                 | IS:1786                 |  | 25                                 | 24     | 0      | 14                           | 0   | 0      | 0      | 0                            | 25                             | 24     | 0      | 14                           |
| 23.7  | 32 mm Dia                                 | IS:1786                 |  | 10                                 | 10     | 0      | 5                            | 0   | 0      | 0      | 0                            | 10                             | 10     | 0      | 5                            |

## 7. Weather Report

| Date       | Temperature (Celsius) |      | Humidity (%) |     | Rainfall (mm) | Remarks |
|------------|-----------------------|------|--------------|-----|---------------|---------|
|            | Min                   | Max  | Min          | Max |               |         |
| 01-03-2023 | 19.9                  | 24.4 | 31           | 83  | 0.00          | Sunny   |
| 02-03-2023 | 19.9                  | 35.6 | 31           | 71  | 0.00          | Sunny   |
| 03-03-2023 | 20.6                  | 34.9 | 32           | 73  | 0.00          | Sunny   |
| 04-03-2023 | 25.4                  | 35.6 | 37           | 73  | 0.00          | Sunny   |
| 05-03-2023 | 19.9                  | 36.8 | 31           | 88  | 0.00          | Sunny   |
| 06-03-2023 | 23.2                  | 35.7 | 37           | 78  | 0.00          | Sunny   |
| 07-03-2023 | 25.8                  | 35.7 | 38           | 82  | 0.00          | Sunny   |
| 08-03-2023 | 24.8                  | 35.7 | 36           | 85  | 0.00          | Sunny   |
| 09-03-2023 | 24.2                  | 33.5 | 37           | 84  | 0.00          | Sunny   |
| 10-03-2023 | 24.8                  | 35.7 | 33           | 85  | 0.00          | Sunny   |
| 11-03-2023 | 25.2                  | 35.7 | 31           | 85  | 0.00          | Sunny   |
| 12-03-2023 | 21.4                  | 35.5 | 34           | 86  | 0.00          | Sunny   |
| 13-03-2023 | 25.9                  | 35.2 | 35           | 84  | 0.00          | Sunny   |
| 14-03-2023 | 25.2                  | 36.4 | 32           | 84  | 0.00          | Sunny   |
| 15-03-2023 | 26.4                  | 36.4 | 34           | 84  | 0.00          | Sunny   |
| 16-03-2023 | 27.2                  | 36.4 | 33           | 85  | 0.00          | Sunny   |
| 17-03-2023 | 26.1                  | 37.0 | 31           | 85  | 0.00          | Sunny   |
| 18-03-2023 | 25.4                  | 37.0 | 36           | 87  | 5.00          | Rainy   |
| 19-03-2023 | 27.6                  | 38.0 | 37           | 89  | 8.00          | Rainy   |
| 20-03-2023 | 27.6                  | 37.5 | 34           | 85  | 0.00          | Sunny   |
| 21-03-2023 | 27.9                  | 37.5 | 39           | 80  | 0.00          | Sunny   |
| 22-03-2023 | 27.9                  | 34.4 | 37           | 78  | 0.00          | Sunny   |
| 23-03-2023 | 23.9                  | 37.4 | 35           | 87  | 0.00          | Sunny   |
| 24-03-2023 | 26.9                  | 36.4 | 44           | 83  | 0.00          | Sunny   |
| 25-03-2023 | 25.5                  | 36.8 | 43           | 84  | 0.00          | Sunny   |
| 26-03-2023 | 25.8                  | 36.9 | 42           | 82  | 0.00          | Sunny   |
| 27-03-2023 | 26.2                  | 36.9 | 37           | 82  | 0.00          | Sunny   |
| 28-03-2023 | 28.2                  | 37.5 | 39           | 81  | 0.00          | Sunny   |
| 29-03-2023 | 27.9                  | 37.9 | 35           | 82  | 0.00          | Sunny   |
| 30-03-2023 | 28.4                  | 37.6 | 35           | 82  | 0.00          | Sunny   |
| 31-03-2023 | 25.1                  | 37.9 | 31           | 83  | 0.00          | Sunny   |

## 8. Safety

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Various issues related to environment and safety, such as 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 construction work in the project.

Periodic Safety meetings being conducted on a regular basis and the details of the photographs for the same along with action taken are given below:-



### 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.
3. NOC from PWD/WRO, Govt. of Tamil Nadu for construction of project highways in the existing ponds (in a length of 1.667 Kms).
4. Additional land acquisition for Bus bays, Turning radius at Minor & Major junctions.
5. Removal of Religious structures of 03 Nos. and Bus stand from the proposed ROW.
6. Required State Support Agreement between NHAI & Govt. of Tamil Nadu as due priority will be given to NH Projects by the State Govt. officials.
7. Estimate for shifting of water supply utilities in Missing locations-Request Authority for earlier Approval.
8. With reference to our several correspondence time to time vide which we intimated the matter of enforced nationwide lockdown as well as its impact on the Project Highway, the World Health Organization (WHO) on 11th March' 2020 had characterized the Novel Coronavirus Disease (COVID-19) outbreak as a global Pandemic. In view of the WHO's announcement and over all prevailing condition of the nation, the Union Government of India (GOI) had invoked section 2 of Epidemic Disease Act 1897 on 12.03.2020 to prevent the spread of novel coronavirus in India. Accordingly, the State Government of Tamilnadu has enforced complete lockdown of the entire state from 24.03.2020 to 31.03.2020 to avoid the spread of COVID-19. Subsequently, The Ministry of Home Affairs (MHA) vide Order No. 40-3/2020-DM-I(A), dated 24.03.2020 directed to enforce complete nationwide lockdown for the period of 21 days from 25.03.2020 to 14.04.2020.

Further, based on the outcome of COVID-19 spread containment during 1st nationwide lockdown till 14<sup>th</sup> April' 2020 & condition of country as a whole, Ministry of Home Affairs (MHA), Govt. of India in exercise of powers conferred under Section 10(2)(I) of Disaster Management Act 2005, has issued an Order bearing no. 40-3/2020-DM-I(A), dated 15.04.2020 that the nationwide lockdown will remain continue till 3rd May' 2020 to contain the spread of COVID-19 in the country. However, to mitigate hardship of the public select additional activities will be allowed with effect from 20th April' 2020 including Road Construction Activities as per sr. no. 16 of Consolidated Revised Guidelines on the measures to be taken by Ministries / Departments of GOI, State/ UT Govt. and State/ UT Authorities incorporating these guidelines are enclosed with the MHA order.

Accordingly, we have submitted the detailed work program during the extended lock down period up to 03.05.2020 along with the list of Manpower & Machineries to be involved in the Construction work to take suitable action for the issuance of necessary permission from District Administration in this regard.

Further, vide our letter no. 12 dated 23.04.2020 we informed that Press released no. 280 dated 20.04.2020 issued by Government of Tamilnadu that Government of Tamilnadu had instructed to continue to enforce all the existing restrictions issued by MHA order dated 24.03.2020 during extended lock down period i.e. up to 03.05.2020.

After that, a notification issued by Revenue and Disaster Management (D-II) Department, Govt. of Tamilnadu bearing no. 203 dated 23.04.2020 vide which it is informed that resumption of construction of road & bridge project can be done with taking all precaution as per Standard Operating Procedure (SOPs) for social distancing and obtain permission from District Administration.

Further, vide our letter no. 16 dated 08.05.2020 & 19 dated 20.05.2020 we informed that Government of Tamilnadu had instructed to continue to enforce all the existing restrictions issued by MHA order dated 24.03.2020 during extended lock down period i.e. up to 31.05.2020.

Furthermore, we also notified in our earlier correspondence that Ministry of Home Affairs, Govt. of India vide their order dated 29.04.2020 allowed the movement of stranded migrant workers to their home town and subsequently, Local officials of District Administration are now approaching to our staff/ labours directly & taking their willingness for movement to their home town; Due to this and havoc of spreading of coronavirus, our workers and labours are putting their voice/desire for roaming to their home town. Based on prevailing situation and circumstances thereto & on human ground we could not restrict them from going to their home town and many migrant labours/ staffs have registered their name for the movement to their home town.

Further, Concessionaire has also reported that order dated 31.05.2020 issued by Health and Family Welfare (P1) Department, Government of Tamilnadu vide which they notified that state of Tamilnadu has been divided into 8 zones and issued additional guidelines for strict adherence on movement of person/ vehicle, testing & quarantine strategies for management of COVID-19 in the state.

After that Government of India has announced "Unlock 1.0" in entire country except containment zones but Government of Tamilnadu has instructed to extended all restrictions issued vide additional guidelines for strict adherence on movement of person/ vehicle, testing & quarantine strategies for management of COVID-19 in the state.

In addition to that due to surge of cases of COVID-19 in State of Tamilndau, Government of these states has given instruction to compulsory quarantine period of 14 days for passenger/ people who are coming in the state from another state.

Thus, Concessionaire started construction activities in Project Highway after getting permission from District Administration as well as tried to get momentum of the Progress of work as like they have on 20.03.2020 but they are facing lots of challenges like non-availability of desired nos. of skilled labours, non-availability of desired staff for operation of our machineries, non-availability of spare parts in local market due to disturbance of supply chain, due to enforcement of 14 days Quarantine as per Govt. norms labours are also not willing to come back to work considering upcoming Monsoon season, etc. which are beyond of control of Concessionaire.

9. The second wave of COVID-19 in India appears to be ascending faster than the first wave that peaked in mid-September last year. Nevertheless, India is already leading the world in terms of average daily cases detected and registers the third-highest average daily deaths. The whole country is facing big difficulties and struggling for the survival of human life. The impact of this event is an extremely painful and great loss to the nation. Looking to such an uncontrolled situation, Supreme Court intervened on 22.04.2021 and asked for the national plan for COVID-19 with the central Government and took own cognizance of what it called a national health emergency situation. The Health System has been collapsed due to the severe scarcity of oxygen. The spread of Coronavirus cases in Tamil Nadu right now is so fast, that it took only half the duration to overtake the daily infection peak number reported in the first wave.

Due to many restrictions in persisting conditions arise due to occurring of 2nd wave of extra ordinary event COVID-19, the supply chain of required material is being disturbed and not in smooth shape



which leads to hampering the work progress during this valuable working season. Due to surge in cases of 2nd wave of COVID-19 drastically day by day and additional lockdown like restriction imposing by State Government, migrants labours are leaving the state and going to their native place under the fear of prevailing situation. Further migrants labours who were gone to their home at Holi Festival are not returning back due to fear and precarious situation of the spike of COVID-19 pandemic. Due to this condition, we are facing acute shortage of labour/operator/driver for the construction activities in Project Highway and work is being affected because of the impediments beyond the control of the Concessionaire. It is also pertaining to mention that despite taking all necessary precaution and follow the safety guidelines of COVID-19, unfortunately, our many manpower including senior-level deployed at Project i.e. have been infected by COVID-19.

10. COVID-19 cases due to 3<sup>rd</sup> wave is being drastically increased and occurring never-seen before spikes in infected cases of COVID-19 day by day. You may also aware that in our country 3.47 Lakh new cases in a day have been recorded on 20.01.2022, which is already bigger than the peak of the first wave of this pandemic in India and continuously increasing day by day.

It clearly shows that the 3<sup>rd</sup> wave of COVID-19 is spreading rapidly. It is also pertinent to mention that in Tamil Nadu 28,561 cases in a day have been recorded on 20.01.2022 (for reference, the highest number of cases per day in Tamil Nadu during the peak of 2<sup>nd</sup> wave was 36,184 cases per day on 21<sup>st</sup> May 2021) and continuously increasing day by day

In view of rising daily cases of the coronavirus disease (Covid-19), the Tamil Nadu government has imposed a complete lockdown in the state on Sunday (January 16, 2022) in view of the rising Covid-19 cases. The state government has been reimposing a Sunday lockdown in the state since January 9. The Tamil Nadu government had also extended the existing Covid-19 lockdown restrictions, including night curfew and imposed fresh restrictions around the Pongal festival till January 31. The city of Thanjavur has been continuing to report majority of cases in Tiruchirapalli region along with Tiruchi. This is the first time such a high number has been reported after the second wave in May 2021.

11. Unprecedented heavy rain affected the construction activities in the project highway due to the occurrence & effect of severe cyclonic storm MANDOUS on dated 09.12.2022.

Table 10.1. Details of Important Events

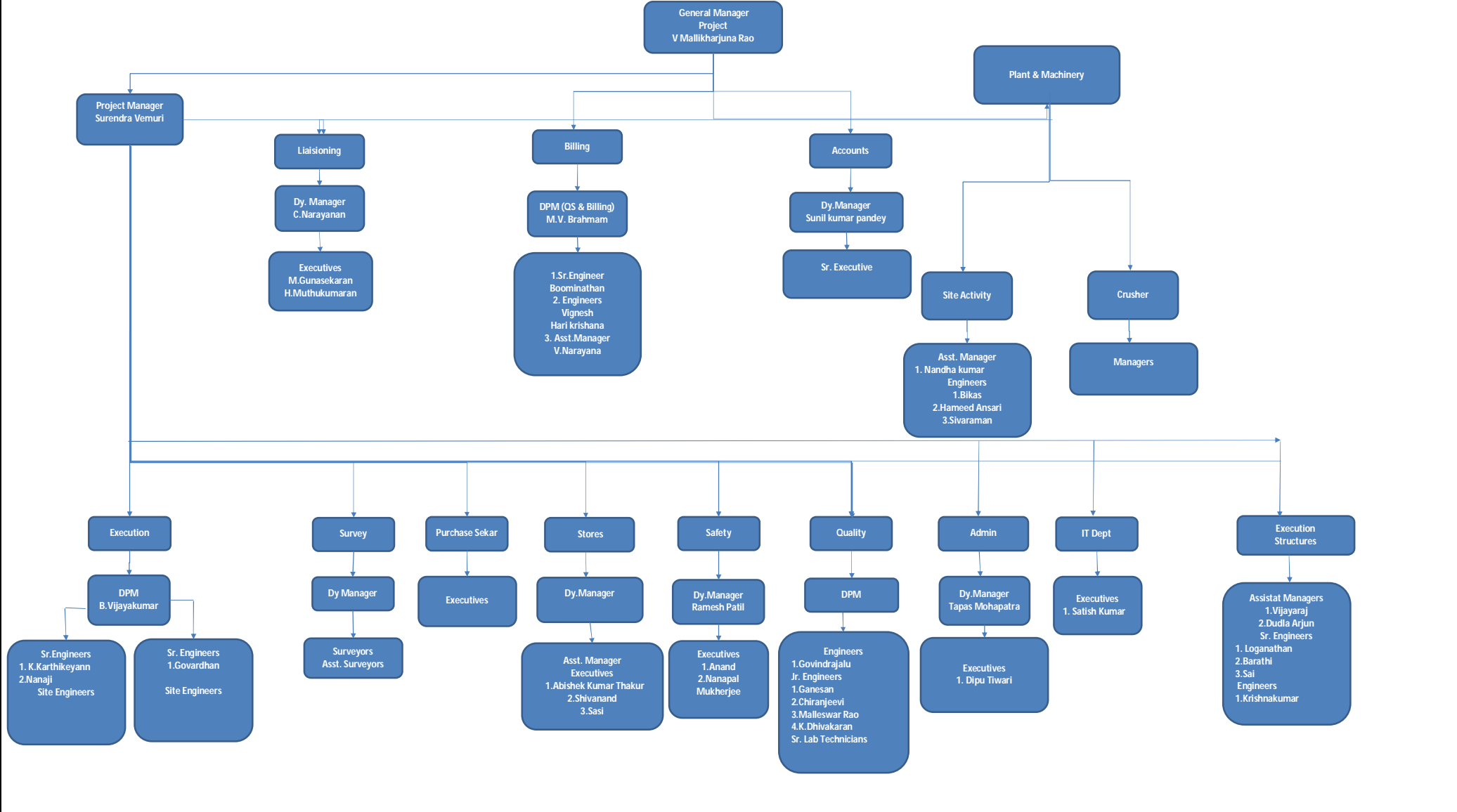
| Sl. No | Date of Events | Description of Events                                       | Remarks |
|--------|----------------|---|---------|
| 1      | 20.03.2023     | Meeting with Chairman, NHAI in Chennai                      |         |
| 2      | 20.03.2023     | Settlement Agreement signed between NHAI and Concessionaire |         |

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

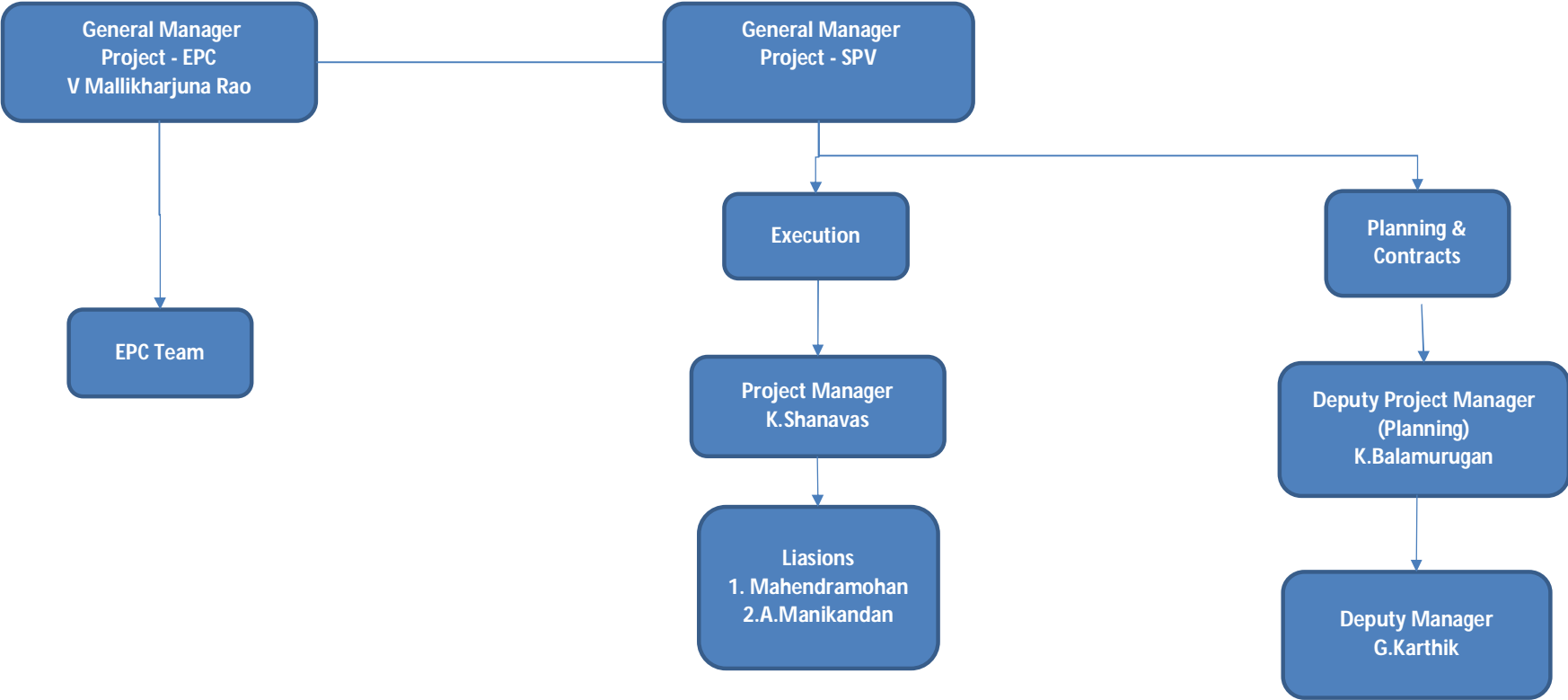
1. Fig. 4 - Organization Chart - EPC Team

2. Fig. 5 - Organization Chart - SPV Team

Figure - 4 Organization Chart of EPC



**Figure - 5 Organization Chart of Concessionaire**



12. List of Plants, Machinery and Equipment's and Man power

Table 12.1 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            | 3                 |         |
| 3    | PT Roller                       |                    | 1                 |         |
| 4    | Soil Compactor                  | HAMM 311           | 7                 |         |
| 5    | Backhoe Loader                  | JCB 3DX            | 4                 |         |
| 6    | Tipper                          | Bharat Benz- 3128C | 21                |         |
| 7    | Transit Mixer                   | 2523C              | 06                |         |
| 8    | Loader                          | 455 ZX             | 10                |         |
| 9    | Trailer                         |                    | 2                 |         |
| 10   | Water Tanker                    |                    | 9                 |         |
| 11   | Diesel Tanker                   |                    | 2                 |         |
| 12   | Tandem Roller                   |                    | 3                 |         |
| 13   | Tractor                         | 5036 D V-2         | 4                 |         |
| 14   | Mobile Service Van              |                    | 1                 |         |
| 15   | Tower Light                     | AJASKY             | 7                 |         |
| 16   | Hydra Crane                     |                    | 2                 |         |
| 17   | Asphalt Batch Mix Plant         |                    | 1                 |         |
| 18   | Wet Mix Plant                   | 250 TPH            | 1                 |         |
| 14   | Concrete Batch Mix Plant 45 cum | 45 cum             | 2                 |         |
| 15   | Bitumen sprayer                 |                    | 2                 |         |
| 16   | Crusher Plant (3 Stage)         | 250 TPH            | 2                 |         |
| 17   | Weigh Bridge for Camp 100MT     | 100MT              | 4                 |         |
| 18   | Weigh Bridge for Crusher 100MT  | 100MT              | 3                 |         |
| 19   | Genset Base Camp                | 25KV               | 2                 |         |
| 20   | Genset (Crusher) 63KVA          | 63KVA              | 1                 |         |
| 21   | Genset (H.M & B/P)              | 82.50KV            | 2                 |         |
| 22   | Genset (B/P-CP-45)              | 125KV              | 2                 |         |
| 23   | Genset 650 KVA                  | 650 KVA            | 1                 |         |
| 26   | Genset (Crusher)                | 500KVA             | 2                 |         |

|    |                                      |       |    |  |
|----|--------------------------------------|-------|----|--|
| 27 | Genset 15KVA                         | 45KVA | 1  |  |
| 28 | Light moving vehicles-car, Jeep, Van |       | 21 |  |
| 29 | Paver                                |       | 3  |  |
| 30 | Kerb laying Machine                  |       | 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       | Approval obtained from the Authority.   | 3.76 Cr.     | 06.02.2020              |
| 2       | Upgradation strengthening the Incident Management services. | 10.05.2019       | IE recommended to Authority vide ref. 148 for issuance under COS and is under scrutiny with Authority | NA           | NA                      |
| 3       | Comprehensive Change of Scope proposal                      | 19.03.2019       | Approval obtained from the Authority.   | 9.37 Cr.     | 23.03.2022              |
| 4       | Interchanging of Structures                                 | 26.09.2020       | IE recommended to Authority for approval.   | (-) 2.99 Cr. | NA                      |



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

Four laning of Cholapuram to Thanjavur from Km 116+440 to 164+275 section of NH-45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode.

TABLE 14.1 - CORRESPONDANCE - CONCESSIONAIRE TO NHAI

| Sr. No. | Date       | Letter No                   | Subject   | Remarks |
|---------|------------|-----------------------------|---|---------|
| 1       | 09.03.2023 | PCTHPL/CTP/NHAI/2023/1826   | Reimbursement of 50% cost & expenditure of IE's payment for the month of December 2022-reg              |         |
| 2       | 09.03.2023 | PCTHPL/CTP/NHAI/2023/1827   | Submission of GST payment Auditor certificate return and request to release the withheld GST Amount-reg |         |
| 3       | 12.03.2023 | PCTHPL/CTP/NHAI/2023/1834   | Recording of Drone video for the month of February 2023-reg   |         |
| 4       | 20.03.2023 | PCTHPL/CTP/NHAI/2023/1849   | Request for release of advance payment with respect to Settlement agreement dated 20.03.2023            |         |
| 5       | 21.03.2023 | PCTHPL/CTP/NHAI/2023/1853   | Request for release of advance payment 1st installment against BG with respect to SA dated 20.03.2023   |         |
| 6       | 22.03.2023 | PCTHPL-HO-CTP-PIU-010-2023  | Confirmation of Extended Bank Gaurantee Reg.  |         |
| 7       | 29.03.2023 | PCTHPL/CTP/NHAI/2023/1865   | Submission of EPF and ESIC paid challan-Request to release the withheld from the utility shifting bills |         |
| 8       | 31.03.2023 | PCTHPL-HO-CTP-NHAI-015-2023 | Deposition of 50% Sole Conciliator Fee in NHAI Account  |         |

Four laning of Cholapuram to Thanjavur from Km 116+440 to 164+275 section of NH-45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode.

TABLE 14.2 - CORRESPONDANCE - NHAI TO CONCESSIONAIRE

| Sr. No. | Date       | Letter No                               | Subject  | Remarks |
|---------|------------|---|--|---------|
| 1       | 03.03.2023 | NHAI/PIU/Thanj/11026/43/2009/574        | Inspection notes of JA (E&P)-Compliance called for-reg   |         |
| 2       | 07.03.2023 | NHAI/PIU/Thanj/11026/15/2019/589        | Payment of IPC 08 of PMS 4 against monthly executed works upto 31.12.2022-payment intimation   |         |
| 3       | 07.03.2023 | NHAI/GHD/02/02/23/2016/188              | Availability of quality saplings in the nurseries of National seeds corporation Ltd. For annual plantation action plan 2023-24   |         |
| 4       | 07.03.2023 | NHAI/GHD/02/02/23/2016/189              | Guidelines for implementation of Annual Action plan 2023-24  |         |
| 5       | 07.03.2023 | NHAI/14013/32/2022/RO Madurai/372       | Supply of flyash from thermal power plants (TPPs) for on going NHAI likely to be completed by March,2024-Reg   |         |
| 6       | 08.03.2023 | NHAI/PIU/Thanj/11025/17/2018/600        | Supply of flyash from thermal power plants (TPPs) for on going NHAI likely to be completed by March,2024-Reg- MoU to be signed for lifting pond ash- Requested-reg                       |         |
| 7       | 14.03.2023 | NHAI/PIU/Thanj/11026/05/2009/660        | Road safety meeting on 13.03.2023 Agenda points from Superintendent of police, Thanjavur-reg   |         |
| 8       | 15.03.2023 | NHAI/11013/40/2023/RO Madurai/418       | Review meeting with contractors concessionaires consultants at chennai on 20.03.2023-reg   |         |
| 9       | 16.03.2023 | NHAI/PIU/Thanj/11019/56/2018/684        | Additional requirement of pond ash for NHAI  |         |
| 10      | 17.03.2023 | NHAI/11013/40/2023/RO Madurai/444       | Visit of Chairman- Communication of venue and meeting  |         |
| 11      | 21.03.2023 | NHAI/PIU/Thanj/11026/15/2018/731        | Recommendation of IE for release of 1st installment of 2nd year Biannual O&M payment as per CI.23.7 of CA and as per provisions of SA -Requested for Approval of Competent Authority-reg |         |
| 12      | 21.03.2023 | NHAI/PIU/Thanj/11026/06/2018/739        | Soolamangalam village, Papanasam taluk-Provided pathway-reg  |         |
| 13      | 21.03.2023 | NHAI/PIU/Thanj/11026/06/2018/740        | Soolamangalam village, Papanasam taluk-Provided pathway-reg  |         |
| 14      | 22.03.2023 | NHAI/PIU/Thanj/11026/15/2018/753        | Concessionaire requested to release advance payment with respect to SA dated 20.03.2023 Remarks called for   |         |
| 15      | 22.03.2023 | NHAI/PIU/Thanj/11026/15/2018/754        | Concessionaire requested for release advance payment (1st installment) against BG with respect to SA dated 20.03.2023-Remarks called for-reg   |         |
| 16      | 23.03.2023 | NHAI/PIU/Thanj/11026/15/2018/770        | Concessionaire request for release of interest bearing advance payment against BG with respect to SA dated 20.03.2023-Approval requested-reg   |         |
| 17      | 23.03.2023 | NHAI/PIU/Thanj/11026/15/2018/772        | Concessionaire requested for release advance payment with respect to SA-Approval requested   |         |
| 18      | 24.03.2023 | NHAI/PIU/Thanj/11026/15/2018/796        | Concessionaire request for release of escalation payment for the interim payments of PMS-04 with respect to SA dated 20.03.2023 - Approval requested-reg                                 |         |
| 19      | 24.03.2023 | NHAI/PIU/Thanj/11021/117/NH45C/2009/787 | Request to lay underground OFC-Proposal returned-reg   |         |
| 20      | 31.03.2023 | NHAI/PIU/Thanj/11026/15/2019/876        | Payment of IPC-09 of PMS-04-Payment Intimation   |         |
| 21      | 31.03.2023 | NHAI/PIU/Thanj/11026/15/2019/877        | Release of withheld amounts in IPC of PMS-04-Payment intimation  |         |
| 22      | 31.03.2023 | NHAI/PIU/Thanj/11026/15/2019/878        | Release of Interest bearing advance payment against BG-Payment intimation-reg  |         |

Four laning of Cholapuram to Thanjavur from Km 116+440 to 164+275 section of NH-45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode.

TABLE 14.3 - CORRESPONDANCE - CONCESSIONAIRE TO INDEPENDENT ENGINEER

| Sr. No. | Date       | Letter No               | Subject   | Remarks |
|---------|------------|-------------------------|---|---------|
| 1       | 06.03.2023 | PCTHPL/CTP/IE/2023/1822 | Submission of monthly progress report for the month of February 2023-reg  |         |
| 2       | 09.03.2023 | PCTHPL/CTP/IE/2023/1828 | Request to release 1st installment of 2nd year O&M payment as per Cl.23.7 of CA-reg   |         |
| 3       | 10.03.2023 | PCTHPL/CTP/IE/2023/1831 | Submission of Monthly status & Management (O&M) report for the month of February 2023-reg   |         |
| 4       | 15.03.2023 | PCTHPL/CTP/IE/2023/1838 | Submission of Plate load test for RE wall foundation of MJB located at Km. 156+586 (LHS A2 side)-reg                                |         |
| 5       | 16.03.2022 | PCTHPL/CTP/IE/2023/1840 | Submission of tentative cost estimate for the proposed additional works as per public demand with respect to GM(Tech) RO site visit |         |
| 6       | 18.03.2023 | PCTHPL/CTP/IE/2023/1846 | Submission of Design & Drawings for Bridge load test for superstructure of VUP located at Ch- 131+492-reg                           |         |
| 7       | 18.03.2023 | PCTHPL/CTP/IE/2023/1847 | Compliance report-Review of monthly progress report for the month of February 2023-reg  |         |
| 8       | 20.03.2023 | PCTHPL/CTP/IE/2023/1850 | Request for release of withheld amounts in the interim payments against damages-reg   |         |
| 9       | 21.03.2023 | PCTHPL/CTP/IE/2023/1852 | Submission of request to release the escalation payment as per the provisions of CA along with Construction support payment         |         |
| 10      | 21.03.2023 | PCTHPL/CTP/IE/2023/1854 | Submission of design & drawings of 2 No.s of MNB located at Km. 139+105 and 139+299-reg   |         |
| 11      | 27.03.2023 | PCTHPL/CTP/IE/2023/1861 | Submission of drawings for bridge load test for superstructure of MNB located at Km. 155+522  |         |
| 12      | 27.03.2023 | PCTHPL/CTP/IE/2023/1862 | Submission of drawing for Bridge load test for superstructure of MJB at Ch.161+019  |         |
| 13      | 29.03.2023 | PCTHPL/CTP/IE/2023/1866 | Submission of design & drawing for MNB at Km. 138+935-reg   |         |
| 14      | 29.03.2023 | PCTHPL/CTP/IE/2023/1867 | Submission of D&D of Rest area located at Km.140+550 RHS  |         |
| 15      | 31.03.2023 | PCTHPL/CTP/IE/2023/1870 | Concessioanires compliance-Review of Monthly status & management report O&M for the month of February 2023-reply                    |         |
| 16      | 31.03.2023 | PCTHPL/CTP/IE/2023/1871 | Compliance report-Inspection report of IE for the month of February 2023-reg  |         |

Four laning of Cholapuram to Thanjavur from Km 116+440 to 164+275 section of NH-45C in the state of Tamilnadu under NHDP-IV on Hybrid Annuity Mode.

TABLE 14.4 - CORRESPONDANCE - INDEPENDENT ENGINEER TO CONCESSIONAIRE / NHAI

| Sr. No. | Date       | Letter No                         | Subject   | Remarks |
|---------|------------|-----------------------------------|---|---------|
| 1       | 10.03.2023 | THEME/NHAI/CHO-TNJR/CON/0323/1355 | Review of monthly progress report for the month of february 2023-reg  |         |
| 2       | 11.03.2023 | THEME/NHAI/CHO-TNJR/ATH/0323/1000 | Concessionaires submission for release 1st installment of 2nd year biannual O&M payment as per cl.23.7 of CA-recommendation of IE for payment -reg    |         |
| 3       | 11.03.2023 | THEME/NHAI/CHO-TNJR/CON/0323/1356 | Submission of design & drawings of reinforced earth wall-reg  |         |
| 4       | 17.03.2023 | THEME/NHAI/CHO-TNJR/ATH/0323/1003 | Submission of tentative cost estimate for the proposed additional works as per public demand with respect to GM (Tech) RO site visit instructions-reg |         |
| 5       | 18.03.2023 | THEME/NHAI/CHO-TNJR/ATH/0323/1004 | Inspection report for the month of February 2023-reg  |         |
| 6       | 18.03.2023 | THEME/NHAI/CHO-TNJR/ATH/0323/1005 | O&M Inspection report for the month of February 2023 for PCC-1  |         |
| 7       | 18.03.2023 | THEME/NHAI/CHO-TNJR/CON/0323/1359 | Review of Monthly Status & Management Report (O&M) for the month of February 2023   |         |
| 8       | 23.03.2023 | THEME/NHAI/CHO-TNJR/ATH/0323/1008 | Concessionaire request for release of advance payment with respect to the SA dated 20.03.2023   |         |
| 9       | 23.03.2023 | THEME/NHAI/CHO-TNJR/ATH/0323/1009 | Concessionaire request for release of interest bearing advance payment against BG with respect to SA dated 20.03.2023                                 |         |
| 10      | 23.03.2023 | THEME/NHAI/CHO-TNJR/ATH/0323/1010 | Concessionaire request for release of withheld amounts in the interim payments of PMS-04 against damages with respect to SA dated 20.03.2023-reg      |         |
| 11      | 23.03.2023 | THEME/NHAI/CHO-TNJR/ATH/0323/1011 | Concessionaire request for release of Escalation payment for the interim payment of PMS-04 with respect to SA dated 20.03.2023                        |         |
| 12      | 29.03.2023 | THEME/NHAI/CHO-TNJR/ATH/0323/1014 | Drainage system adequacy of drain work in the ongoing project and finalization of drainage plan for the balance length                                |         |

15. Progress Photographs

| Sr. No | Description                         | Location | Side | Remarks       |
|--------|-------------------------------------|----------|------|---------------|
| 1.     | RE Wall Embankment work in Progress | 130+130  | LHS  | Existing Road |
| 2.     | RE Wall Embankment work in Progress | 149+955  | LHS  | Bypass        |



| Sr. No | Description                     | Location | Side | Remarks       |
|--------|---------------------------------|----------|------|---------------|
| 3.     | Subgrade Layer work in progress | 130+660  | LHS  | Existing Road |
| 4.     | Subgrade Layer work in progress | 155+200  | LHS  | Bypass        |



| Sr. No | Description                         | Location | Side | Remarks       |
|--------|-------------------------------------|----------|------|---------------|
| 5.     | CTSB Layer Work in progress         | 147+430  | RHS  | Bypass        |
| 6.     | CTSB Layer Rolling Work in progress | 133+270  | RHS  | Existing Road |



| Sr. No | Description                       | Location | Side | Remarks |
|--------|-----------------------------------|----------|------|---------|
| 7.     | WMM Layer Rolling Work in process | 155+220  | RHS  | Bypass  |
| 8.     | WMM Layer Work in process         | 141+130  | LHS  | Bypass  |



| Sr. No | Description                | Location | Side | Remarks       |
|--------|----------------------------|----------|------|---------------|
| 9.     | DBM Layer Work in progress | 125+500  | RHS  | Existing Road |
| 10.    | DBM Layer Work in progress | 125+500  | RHS  | Existing Road |



| Sr. No | Description                 | Location | Side | Remarks |
|--------|-----------------------------|----------|------|---------|
| 11.    | BC Laying work in progress  | 153+985  | RHS  | Bypass  |
| 12.    | BC Rolling work in progress | 153+670  | RHS  | Bypass  |





| Sr. No | Description   | Location | Side | Remarks      |
|--------|---|----------|------|--------------|
| 13.    | MJB- A1 Abutment Pile Cap Concrete Pouring Work in Progress | 149+355  | LHS  | Major Bridge |
| 14.    | Girder Launching in progress                                | 149+355  | RHS  | Major Bridge |

