

Format 1- Part I

Format for information to SQM for Inspection of PMGSY Work

PART I- Work Information (To be filled-up by PIU)

GENERAL:

Work is ☒ Ongoing ☐ Completed

- 1.1. Date of Inspection:
- 1.2. Name of State Quality Monitor:
- 1.3. District: Muzaffarpur Block: Bochaha
- 1.4. Name of Road:
- 1.5. Package No.: BR-232-439
- 1.6. LengthKm Flexible Pavement, 0.853Km. CC/other Pavement 0.200m.
- Total: 1.053Km
- 1.7. Estimated Cost (As cleared by GOI): Lakh
- 1.8. Technical Sanction Cost: Lakh
- 1.9. The Work is a Case of: ☒ New connectivity ☐ Up gradation
- 1.10. Terrain ☒ Plain ☐ Rolling ☐ Hilly
- 1.11. Date of Start of the Work:
- 1.12. Stipulated Date of Completion:
- 1.13. Actual Date of Completion (if work completed): *Physically Completed*

2. **PHYSICAL PROGRESS:** (In case of On going works only) Construction Programme and Physical Progress:

| Item | Completed percentage of Item | Dates for completion | Start Date | Completion Date | Delay in Months |
|-----------------------------|------------------------------|----------------------|------------|-----------------|-----------------|
| Earth Work | 100%. | Due | | | |
| | | Actual | | | |
| CD Works | 100%. | Due | | | |
| | | Actual | | | |
| Sub base & Shoulders | 100%. | Due | | | |
| | | Actual | | | |
| Base Course (Non Bitu.) | 100%. | Due | | | |
| | | Actual | | | |
| Base/Wearing Course (Bitu.) | 100%. | Due | | | |
| | | Actual | | | |
| CC Pavement | 100%. | Due | | | |
| | | Actual | | | |
| Signage etc. | 90%. | Due | | | |
| | | Actual | | | |

3. **QUALITY CONTROL:**

- 3.1. Location of Field Laboratory: *AF Ch. 0.300m*
 3.2. Quality Control Register Part-I is maintained by: *Contractor*
 3.3. Quality Control Register Part-II is maintained by: *AE/J.E*

4. **INSPECTIONS BY NQM, SQM or SENIOR OFFICERS AND ACTION TAKEN:**

Inspection by NQMs, SQMs and senior (i.e. SE or CE) departmental officers and action taken statement:

| Date of Visit | Inspected By | Observations | Action Taken by PIU with Date |
|---------------|---------------------------------|--------------|-------------------------------|
| 22.03.18 | NQM Mr. Mayhew Saxena | — | Satisfactory Date-22/03/18 |
| 24.05.18 | SQM En. Arun K. Singh | — | Satisfactory Date-24/05/18 |
| 25.09.18 | Sri Subodh K. Singh (SQM) | — | Satisfactory Date-25/09/18 |

[Signature]
 29.12.18
 Name and Signature of the Head of PIU, Date:

16. **Quality Grading of items and sub-items of work:** The grading of every sub-item and item of work is given below.

| # | Sub Item for Observation | Stage of Work | Awardable Grades | Awarded Grades |
|--|---|--|------------------|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Item 1 – Setting Out and Working Drawing | | | | |
| a | Bench Mark and Centre Line | All Stages | ✓ S/SR/U | S |
| b | Availability of Working Drawing | All Stages | ✓ S/SR/U | S |
| Item Grade | | | ✓ S/SR/U | S |
| Item 2 – Site Clearance and Grubbing | | | | |
| a | Site Clearance and Grubbing | Stage-I | ✓ S/SR/U | S |
| b | Re-use of Salvageable Material | Stage-I | ✓ S/SR/U | S |
| Item Grade | | | S/SR/U | S |
| Item 3 – Quality Arrangements | | | | |
| a | Quality Arrangements | All Stages | ✓ S/SR/U | S |
| b | Number of Mandatory Tests as per prescribed frequency | All Stages | ✓ S/SR/U | S |
| c | Maintenance of QC Registers | All Stages | ✓ S/SR/U | S |
| Item Grade | | | S/SR/U | S |
| Item 4 – Geometrics | | | | |
| a | Road way width | 2 per Km in every inspection | ✓ S/U | S |
| b | Carriageway width | 2 per Km in every inspection | ✓ S/U | S |
| c | Camber | 2 per km | ✓ S/U | S |
| d | Super-elevation & Extra Widening at Curves | 1 curve in each km | ✓ S/U | S |
| Item Grade | | | S/U | S |
| Item 5A – Earth Work and Sub-grade in Embankment/ Cutting | | | | |
| a | Quality of Material for Embankment/ Sub-grade | In Stage-I, 1 per km/ In Stage- II or III, 1 per km | ✓ S/U | S |
| b | Compaction | In Stage-I, 2 per km/ In Stage- II or III, 2 per km | ✓ S/U | S |
| c | Side Slopes and Profile | 2 per km in Stage III | ✓ S/U | S |

| Item 5B - Earth Work in Cutting in Hilly/ Rolling Terrain | | | | |
|---|---|---|-----|--|
| a | Stability and Workmanship of Cut Slopes | Stage I and II, at 2 critical locations with maximum height of cutting in each km | S/U | |
| b | Adequacy of Slope Protection | All Stages - In general | S/U | |
| c | Upon completion of formation cutting, dressing, traffic worthiness | At Stage III, at 2 critical locations with maximum height of cutting in each km | S/U | |
| d | Longitudinal Gradient | Stage II/III - 1 critical and fairly representative stretch of 200m in each Km | S/U | |
| Item Grade | | | S/U | |
| Item 6 - Sub-Base | | | | |
| | Quality of Material | Work Completed | | |
| a | Grain Size | In Stage- II or III, 1 per km | S/U | |
| b | Plasticity | NA | S/U | |
| c | Compaction | In Stage- II or III, 1 per km | S/U | |
| d | Total Thickness of Layer | 2 per Km | S/U | |
| Item Grade | | | S/U | |
| Item 7 - Base Course - Water Bound Macadam | | | | |
| a | Grain Size of Course Aggregate | In Stage- II or III, 1 per km | S/U | |
| b | Test for Liquid Limit and Plasticity Index in case fine aggregates are crushable type | NA | S/U | |
| c | Volumetric Analysis for assessment of compaction of WBM | In Stage- II or III, 1 per km | S/U | |
| d | Surface Evenness using straight edge | In completed WBM 2 tests per km | S/U | |
| e | Thickness of every layer of WBM. | 2 per Km | S/U | |
| Item Grade | | | S/U | |

| Item 8 - Bituminous Layer - Premix Carpet (PMC)/ Surface Dressing (SD) <i>Completed.</i> | | | | |
|--|---|--|-----------|---|
| a | Level of cleanliness of WBM surface prior to application of bituminous layer | 1 per Km | S/U | |
| b | Quality of Prime Coat/ Tack Coat with respect to quality of material and workmanship | 1 observation on the day of inspection | S/U | |
| c | Gradation Test for Course Aggregate (if the work in the item is ongoing)/visual observation in case of completed item of work | 1 test on the day of inspection | S/U | |
| d | Grade of bitumen and temperature at the time of mixing and laying (if the work in the item is ongoing) | 1 test on the day of inspection | S/U | |
| e | Bitumen Extraction Test if PMC is complete | 1 test per Km | S/U | |
| f | Thickness of layer | 2 per Km | S/U | |
| g | Surface Evenness in case of completed BT work | 2 per Km | S/U | |
| Item Grade | | | S/U | |
| Item 9 - Shoulders | | | | |
| a | Quality of material for shoulders | In Stage- II or III, 1 test per Km | ✓ S/SRI/U | S |
| b | Degree of compaction | In Stage- II or III, 1 test per Km | ✓ S/SRI/U | S |
| c | Thickness of layer | In Stage- II or III, 2 tests per km | ✓ S/SRI/U | S |
| Item Grade | | | ✓ S/SRI/U | S |
| Item 10 - Cross Drainage Works - Causeways of all spans and Culverts upto 6 m. span. | | | | |
| a | Quality of Material - Concrete, Stone/ brick masonry, Hume pipes including size etc. | All Stages | ✓ S/SRI/U | S |
| b | Quality of Workmanship such as positioning of pipes, wing walls, cushion over H Pipes etc. | All Stages | ✓ S/SRI/U | S |

| Item 11 - Side Drain and Catch Water Drain | | | | |
|--|--|--|--------------------|---|
| a | General quality of Side Drains/ Catch Water Drains and their integration with CDs. | All Stages | S/SRI/U | |
| Item Grade | | | S/SRI/U | |
| Item 12 - CC/ Semi Rigid Pavements and Associated Pukka Drains | | | | |
| a | Quality of Material – Concrete, Stone/ Concrete Block Pavement etc. | In Stage- II or III, 1 per 100 m. Length of Pavement | ✓ S/U | S |
| b | Strength of CC in Concrete Pavement/ Concrete Block Pavement | In Stage- II or III, 1 per 100 m. Length of Pavement | ✓ S/U | S |
| c | Quality of Workmanship – Wearing surface texture, Adequacy of setting of concrete, Joints, Edges etc. | In Stage- II or III | ✓ S/U | S |
| d | Thickness of Layer | In Stage- II or III, 1 per 100 m. Length of Pavement | ✓ S/U | S |
| Item Grade | | | S/U | |
| Item 13 - Road Furniture and Markings | | | | |
| a | Citizen Information Board, Main Informatory Board, Quality and whether fixed during construction. | Stage-I | ✓ S/U | S |
| b | Logo boards, 200 m stones and Km stones, quality and whether fixed after completion. | Stage-III | ✓ S/U | S |
| c | Whether the information in boards is given in local language. | Stage-I and III | ✓ S/U | S |
| Item Grade | | | S/U | S |

1' Overall Grading of Work: The overall grading calculated on the basis of item and sub-item wise grading is given below:

| Item No. | Sub Item for Observation | Awarded Grade |
|-----------------|---|---------------|
| Item No 1 | Setting Out and Working Drawing | S |
| Item No 2 | Site Clearance and Grubbing | S |
| Item No 3 | Quality Arrangements | S |
| Item No 4 | Geometrics | S |
| Item No 5 A | Earth Work and Sub-grade in Embankment/ Cutting | S |
| Item No 5 B | Earth Work in Cutting in Hilly/ Rolling Terrain | NA |
| Item No 6 | Sub-Base | S |
| Item No 7 | Base Course – Water Bound Macadam | S |
| Item No 8 | Bituminous Layer – Premix Carpet (PMC)/ Surface Dressing (SD) | S |
| Item No 9 | Shoulders | S |
| Item No 10 | Cross Drainage Works Causeways of all Spans and Culverts up to 6 m. span. | S |
| Item No 11 | Side Drain and Catch Water Drain | NA |
| Item No 12 | CC/ Semi Rigid Pavements and Associated Pukka Drains | S |
| Item No 13 | Road Furniture and Markings | S |
| Overall Grading | | S |

Signature :

Name:

Date:

[Signature]
27/12