**ITEM NO. 11 (A-41)**

**1. Name of the Subject / Project :-**

 Name of work: - S/R of Roads in NDMC area.

 SH: - Riding Quality Improvement Programme (Phase-IV).

 Micro surfacing.

**2. Name of the Department : -**

 Civil Engineering Department, EE(RIP)

**3. Brief History of the Subject / Project :-**

* 1. 41 roads are proposed to be resurfaced under RIP (Phase-IV). CRRI has carried out functional evaluation of these 41 roads and given recommendation with the type of treatment to be carried out.
	2. Primarily three type of treatment have been recommended under the option depending upon the condition of these roads.
	3. Single layer of Micro Surfacing (Type-III)
	4. Two layer of Micro Surfacing (Type-III).
	5. 40mm Dense Bituminous Concrete.
	6. 40mm SMA
	7. (a) Micro Surfacing (Type –III) (Single Layer).
1. Arch Bishop Makarious Marg (Golf course Road).
2. Babar Road.
3. Bangla Sahib Road.
4. Bhai Veer Singh Marg.
5. Dr. S. Radha Krishnan Marg.
6. Dr. Zakir Hussain Marg.
	* 1. Subramanium Bharti Marg to Oberoi Flyover
		2. C. Hexagon to Subramanium Bharti Marg.
7. GRG Road.
8. Hailey Road.
9. Hanuman Road.
10. Hukmi Bai Marg.
11. Jantar Mantar Road.
12. Jor Bagh Road.
13. Madhulimay Marg.
14. Madhav Rao Scindia Marg (Feroze Shah Road to K G Marg).
15. Maulana Azad Road.
16. Pandara Road.
17. R.K. Ashram Marg.
18. Raisina Road.
19. Red Cross Road.
20. Safdar Hashmi Marg.
21. Safdarjung Road.
22. Sansad Marg.
23. Shershah Road.
24. South End Road (Rajesh Pilot Marg).
25. Tansen Marg.
26. Tilak Marg.
27. Tolstoy Marg.
28. Udyan Marg.
29. Vinay Marg.
30. **Two layer of Micro surfacing (Type-III)** or 40mm Dense bituminous concrete (BC).
31. Africa Avenue.
32. Aurbindo Marg (Safderjung Flyover to Yusuf Sarai)
33. Kasturba Gandhi Marg.
34. Pt. Uma Shankar Dixit Marg.
35. Shanti Path(Kautaliya Marg R/A to Satya Marg).
36. **Roads deferred** and to be provided treatment after one year.
	* 1. **Micro Surfacing (Type-III) (Single Layer)**
37. Mahadev Road.
38. Mother Teresa Crescent.
39. Old R K Ashram Marg
40. Teen Murti Marg.
41. Tees January Marg.
	* 1. **40mm SMA**
42. C Hexagon (Except Ashoka road to Akbar Road).
43. **Roads not required any treatment** :-
	1. Brassy Avenue. (The road is provided with mastic treatment and closed due to security reasons.)
	2. The summery of resurfacing of roads with priority option is as follows :-
44. Single layer of Micro Surfacing (Type-III) : 29 Nos.
45. 40mm Dense Bituminous Concrete : 05 Nos.
46. Deferred for one year : 06 Nos.
47. Not required any treatment : 01 No.

 Total 41 Nos

* 1. The competent authority has appointed CRRI as consulting agency for evaluation of the work. On the basis of the CRRI aforesaid recommendations received on dated : 15.11.2012, the estimate has been prepared for resurfacing with one or two layers of micro surfacing Type –III as on the following listed roads :-

 **Two Layer of Micro Surfacing**

1. Africa Avenue.
2. Kasturba Gandhi Marg
3. Shanti Path (Kautaliya Marg roundabout to Satya Marg)

 **One Layer of Micro Surfacing**

1. Arch Bishop Makarious Marg (Golf course Road).
2. Babar Road.
3. Bangla Sahib Lane.
4. Bhai Veer Singh Marg.
5. Dr S Radha Krishnan Marg.
6. Dr. Zakir Hussain Marg.
	* 1. Subramanium Bharti Marg to Oberoi Flyover
		2. C. Hexagon to Subramanium Bharti Marg.
7. Gurudwara Rakab Ganj Road.
8. Hailey Road.
9. Hanuman Road.
10. Hukmi Bai Marg.
11. Jantar Mantar Road.
12. Jor Bagh Road.
13. Madhulimay Marg.
14. Madhav Rao Scindia Marg (Feroze Shah Road to K G Marg).
15. Maulana Azad Road.
16. Pandara Road.
17. R.K. Ashram Marg.
18. Raisina Road.
19. Red Cross Road.
20. Safdar Hashmi Marg.
21. Safdarjung Road.
22. Sansad Marg.
23. Shershah Road.
24. South End Road (Rajesh Pilot Marg).
25. Tansen Marg.
26. Tilak Marg.
27. Tolstoy Marg.
28. Udyan Marg.
29. Vinay Marg.

**4. Detailed proposal on the subject / project.**

 The brief details of the project are as follows:-

(a) 50 mm thick Dense Bituminous Macadam (DBM) for filling depressions.

 (b) Micro surfacing confirming to Type-III grading.

 (c) Road marking with Retro-reflective thermoplastic paint applied mechanically.

Accordingly Preliminary Estimate has been prepared for above roads amounting to `11,58,57,400/-. The Preliminary Estimate has been checked by the planning division and concurred by the finance department.

**5. Financial implications of the proposed subject / project.**

Financial implications of the proposed subject / project work out to `11,58,57,400/-

**6. Implementation schedule with timelines for each stage including internal processing.**

* Accord of A/A & E/S Feb. 2013
* Preparation of Detailed Estimate/ NIT Mar. 2013
* Call of tender Apr. 2013
* Award of work June. 2013
* Execution of work July. 2013 to Apr.2014

**7. Comments of finance department on the subject.**

1. In the CRRI recommendation, on the 5 roads namely (i) Africa Avenue (ii) Aurbindo Marg ( Safderjung Flyover to Yusuf Sarai) (iii) K. G. Marg (iv) Pt. Uma Shankar Dixit Marg and (v) Shanti Path ( Kautaliya Marg R/A to Satya Marg), on option either two layer of micro surfacing (Type-III) or 40mm dense bituminous concrete (BC) has been given. In this proposal, two layers of micro surfacing has been taken for 3 roads and in a separate proposal 40mm dense BC has been taken for remaining 2 roads. The reasons on the basis of which this has been proposed may be brought on record. It may also be brought on record, as to what is the economical option either two layers of micro surfacing or 40 mm dense BC.

 2. It appears from record that CRRI was engaged to evaluation 41 roads while department has processed the estimate for 32 roads for micro surfacing and two roads were separately taken under separate estimate through hot mix technology (i.e. laying of 40mm bituminous concrete). Estimate of 34 roads have been processed against the total 41 nos roads. Department may bring on record as to why estimate has not been prepared for all the roads bringing on record the names of such roads.

 3. It reveals from RHR that some roads were resurfaced in 2008 or thereafter, as such, department may bring on record the year of last resurfacing of each of these roads and certify that all roads proposed for resurfacing in the proposal have outlived prescribed life and is not covered in any defect liability period and also not included in the earlier RIP’s Plan or in any other estimate.

 4. Complete information has not been furnished in the Detail Project Report. Brief history of the case alongwith the names of the roads where resurfacing has proposed needs to be brought on DPR. HOA also not been mentioned, the same may be clearly brought on DPR.

 5. Department may ensure and certify that estimate is prepared based on the recommendation of the CRRI and in case of any variation, same may be brought on record with justification.

 6. As per DPR, Estimate has been recommended for `.13,37,98,300/- prepared based on DSR-2012 + 8% cost index whereas estimate processed for approval has been received for `11,58,57,400/- worked out on 14% cost index. The reasons for the same may be brought on record.

 7. Detailed head code is mentioned as 00 against the HOA : 21-412-40-00. The same may corrected as per respective description of item i.e. Roads & Bridge.

 8. CE(C)-I may sign the abstract of estimate.

**8. Comments of the department on comments of finance department.**

 1 : Out of the five roads given in the CRRI recommendation with option of treatment, two roads has been proposed to be treated with 40mm dense BC. After inspection and observed site requirements, it is felt necessary to provide 40mm dense BC over two roads namely Aurbindo Marg (Safderjung Flyover to Yusuf Sarai) and Pt Uma Shankar Dixit Marg by keeping in view the intensity of the traffic movement over these roads and site requirement as well as surface distress. Further, it is to brought on record that two layer of micro surfacing is slightly economical out of the two options given by the CRRI but the durability of 40mm dense BC is more which is required as per site conditions. The comparison of two treatments is as under :-

* 1. 40mm BC : `443/- per Sqm.
	2. Two layer of Micro surfacing : `392/- per Sqm.

 with filling depression as required.

2 : Out of the 41 roads evaluated by CRRI, 6 roads has been deferred for one year and 1 road requires no treatment since it was already treated with mastic and closed for vehicular movement, as such the estimate has been processed for 34 roads out of 41 roads and estimate for 32 roads for providing Micro surfacing treatment.

3 : The roads to be resurfaced under RIP (Phase-IV) taken in the preliminary estimate were lastly resurfaced under RIP (Phase-I) work with date of start as 28.08.2006 and date of completion as 22.05.2008. The roads resurfaced in the last under (Phase-I) were C-Hexagon and Mahadev Road which were completed on 11.04.2008, and rest of the roads were resurfaced in RIP (Phase-I) were completed by mid of January 2008. The defect liability period of the work was one year in RIP (Phase-I) as per terms and condition of the agreement. further it is clarified that resurfacing of all proposed roads either outlived or going to outlived its performance life span at the time of execution of the proposed work on these roads under the estimate after award of the work which will take approx. six months time. The details of the roads with date of resurfacing in (Phase-I) is already enclosed at CP-108 / 109.

4 : The complete information including brief history of the case is annexed as a Annexure with the DPR at CP 112 to 116 alongwith the list of roads to be undertaken against the proposed estimate. In regard to the HOA, it is to put on record that there was neither any provision exists at the time of processing of the estimate nor HOA was available in the budget book. Now in the budget book for 2013-14 budget has been kept for RIP(Phase-IV) as `20.00 Lacs under budget head 21-412-40-52-2. The same has been incorporated in the DPR.

5 : This is to certified that the estimate has been framed based on the CRRI recommendations only.

6 : At the time of the processing of the DPR and estimate the prevailing cost index issued by the competent authority was 8% on the DSR 2012 which was subsequently enhanced to 14% while estimate was in the process of scrutiny and was accordingly adopted. Moreover, the difference in the cost worked out by the planning from the estimated cost prepared by the division is due to the clerical mistake which was corrected while checking.

7 : The necessary corrections has been made in the detail head mentioned in.

8 : CE(C)-I has now signed the abstract of the estimate.

**9. Final view of the Finance Department.**

In view of clarification brought on record, the competent authority, FD has no objection to the Preliminary Estimate to `11,58,57,400/- (Rupees Eleven Crore Fifty Eight Lacs Fifty Seven Thousand Four Hundred Only) duly checked by planning against the proposed HOA : 21-412-40-0-52-2. However, availability of funds may be ensured by the department before incurring any liability. It is observed that some roads taken in the estimate have still not completed their prescribed life, as such, department is advised that resurfacing on those roads may be taken up after prescribed life is over.

**10. Legal implications of the subject / project**

No legal issues are involved in this project.

**11. Details of previous council resolution / existing law of parliament and assembly on the subject.**

Nil

**12. Comments of Law Department on the subject.**

No comments

**13. Comments of the department on comments of Law Department.**

No comments

**14. Certification by the department that all central vigilance commission (CVC) guidelines have been followed while processing the case.**

 Certified that all relevant CVC guidelines would be followed.

**15. Recommendations.**

 The case is placed before the council for consideration for Accord of A/A & E/S to the Preliminary Estimate amounting to `11,58,57,400/- for the work “Strengthening and resurfacing of roads in NDMC area. SH :- Riding Quality Improvement Programme Phase – IV (Micro surfacing).

**COUNCIL’S DECISION**

Resolved by the Council to accord administrative approval and expenditure sanction to the Preliminary Estimate amounting to `11,58,57,400/- for the work “Strengthening and resurfacing of roads in NDMC area. SH :- Riding Quality Improvement Programme Phase – IV (Micro surfacing).

It was also decided that members may forward list of roads, if any, which they feel needs improvement, to C.E. (C-I), who would have the same examined.