

# GOVERNMENT OF THE PUNJAB PLANNING AND DEVELOPMENT BOARD (ROAD SECTION)

#### **WORKING PAPER**

#### PART A

Date of receipt of PC-I in P&D Board: 28-01-2025

#### **PROJECT PROFILE:**

1. Project Title: RECONSTRUCTION/ REHABILITATION OF GT ROAD

FROM QUAID-E-AZAM INTERCHANGE (LAHORE RING

**ROAD) TO WAHGA BORDER, DISTRICT LAHORE** 

2. Location: District Lahore

3. Sponsoring Agency: C&W Department, Government of the Punjab.

4. Executing Agency: Punjab Highways Department5. Operation & Maintenance Punjab Highways Department

6. Name of the RelevantCommunication & Works Department, Finance Department Department (s) /Pre-PDWP meeting was held on **03.02.2025** under the

Stakeholder(s) invited in Pre- chairmanship of Member (ID)

PDWP

7. Name of the Sector's specialistP&DB Road Sector, Economic Wing

/ consultants / advisor / expert / invited in Pre-PDWP

8. Cost:

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|---------|-----|------|---|------|
| <br>RS. | 111 | IAII |   | OH I |

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|--------------|--------------|--------------------|
| Original     | <b>1</b> st  | Increase           |
|              | Revised      |                    |
| Rs. 3282.450 | Rs. 8344.804 | 5062.354           |
| (29.07.2024) | (Proposed)   |                    |

9. Source of Financing Provincial ADP 2024-25 reflected at G. Sr. No. 1751.

10. ADP Allocation (2024-25) Rs. 2000.000 million

#### 11. **BRIEF DESCRIPTION OF THE PROJECT:**

This road starts from Quaid-e-Azam Interchange at Ring Road and terminates at India-Pakistan Wahga Border. The scheme is reflected in ADP 2024-25 at GS No.1751. The scheme was originally approved by PDWP in its 10<sup>th</sup> meeting held on 29.07.2024 and administrative approval was issued vide No.SOH-VI(C&W)6-4/2024 (VOL) dated 08.08.2024 amounting to Rs.3282.450 million. The total length of this road is 13-km which is in dilapidated condition. The scope of work includes rehabilitation/improvement of road, reconstruction of drain and facade wall.

Now, the C&W Department has submitted the revised PC-I / cost estimate amounting to **Rs. 8344.804 Million** for consideration of PDWP.

#### **REASONS OF REVISION:**

i. Due to increase in scope of work as per following details:

(Rs. in million)

|           | (RS. In million)   |                |  |
|-----------|--|----------------|--|
| Sr.<br>No | Reason of Revision   | Cost<br>Impact |  |
| 1.        | Due to provision for construction of 12.00 km façade wall on both sides of road (between the main carriageway and service road), along with paintwork and signage installation for existing buildings along the alignment.   | 2747.358       |  |
| 2.        | Due to provision of RCC drain instead of remodelling of existing brick masonry drain.  | 735.395        |  |
| 3.        | Due to provision of 8-ft wide coloured lane for motorbike/bicycle on both carriageways of road.  | 191.027        |  |
| 4.        | Due to provision of installation of street lights in centre median of road.  | 400.000        |  |
| 5.        | <ul> <li>Due to change in scope of road work as per following details: <ol> <li>Due to provision of milling and recarpeting on main carriageways at length of 1.25 Km (Wahga Border Side) instead of overlay.</li> <li>Due to provision of reconstruction of service road at length of 1.00 Km on both sides instead of overlay.</li> <li>Due to provision of 2" thick recambering layer on both main carriageways and 1.25" thick on service road.</li> <li>Due to increase in provision road work items for U-Turns.</li> </ol> </li></ul> | 453.560        |  |
| 6.        | •  | 281.228        |  |
| 7.        | Due to provision of shifting of electric poles (LESCO).  | 30.000         |  |
| 8.        | Due to increase in provisions of road furniture items (e.g. Sign Boards, Cateyes, Lane Marking, Inauguration Pillars etc.)   | 24.952         |  |
| 9.        | Due to provision for repair of existing bridge.  | 10.000         |  |
| 10        | horticulture charges as per estimate.  | 186.616        |  |
| 11        | Due to provision of RCC railing and expansion joints on existing bridge.   | 2.218          |  |
|           | Total  | 5062.354       |  |

#### **DESIGN & SCOPE:**

# **Existing Features**

Length = 13.00 Km

Existing Metalled Width = 34' + 34' (Dual Carriageway)

Existing Service Roads = 20' each on both sides

Centre Median = 20' wide

Side Drain =  $2.5' \times 3'$  each on both sides

# **Proposed Scope on Main Carriageway**

Cold Milling + Recarpeting = 1.25 Km

Overlay + Recarpeting = 11.75 Km

Overlay = 4" thick

Recambering Layer = 2" thick

Carpet (Milling Portion) = 7'' thick (5'' ABC + 2'' AWC) Carpet (Overlay Portion) = 5'' thick (3'' ABC + 2'' AWC)

# **Proposed Scope on Service Roads**

Total Length = 12.50 Km each on both sides

Overlay Length = 11.50 KmReconstruction Length = 1.00 KmOverlay = 4'' thickRecambering Layer = 1.25'' thick Sub Base = 06'' thick Base Course = 06'' thick Carpet = 2'' thick

#### **Others**

RCC Drain = 12.50 Km each on both sides

Tuff Pavers = 5' wide on both sides

Pedestrian Bridge = 01 No (In front of Indus Cancer Hospital)

#### 12. a) Sector Issues

Insufficient availability of funds against the ever-increasing demand of road infrastructure, resulting in generation of excessive throw forward.

# b) Sector Strategy

The provincial sectoral strategy envisages construction of a high quality infrastructure as planning, constructing and maintaining road network in public sector under need driven and cost effective regimes aiming at providing best possible means of communication to the general public.

# 13. Relationship of the project with the Sectoral policy / Growth Strategy, 2023.

There are potential locations for construction of new cement factories in the vicinity of this road causing uplifted burst of socio-economic activities for whole region. Project is aligned with the growth strategy, 2023.

# 14. Alignment with the Punjab Spatial Strategy, 2047(Comments of urban unit) (N/A)

# 15. Other major ongoing projects in the Sector

 RECONSTRUCTION / REHABLITATION OF G.T ROAD FROM QUAID E AZAM INTERCHANGE (LAHORE RING ROAD) TO WAHGA BORDER IN DISTRICT LAHORE (REVISED).

#### 16. BREAK DOWN OF THE CAPITAL COST (INCLUDING YEAR)

(Rs. in Million)

| Sr.  |   | As per          | As per   | Difference |
|------|---|-----------------|----------|------------|
| No.  | Items   | <b>Approved</b> | Revised  |            |
| 140. |   | PC-I            | PC-I     |            |
| 1.   | Road Work   | 2529.473        | 3012.410 | 482.937    |
| 2.   | Road Structure                                    | 342.890         | 1361.730 | 1018.840   |
| 3.   | Road Furniture                                    | 38.731          | 262.950  | 224.219    |
| 4.   | Credit of old material                            | -1.303          | -30.789  | -29.486    |
| 5.   | Provision of overhead pedestrian bridge           | 50.000          | 50.000   | 0.000      |
| 6.   | Construction of façade wall (Building Department) | 0.000           | 2747.358 | 2747.358   |
| 7.   | Installation of Street Lights (MCL)               | 0.000           | 400.000  | 400.000    |
| 8.   | Shifting of Poles (LESCO)                         | 0.00            | 30.000   | 30.000     |
| 9.   | Survey and Mapping                                | 0.392           | 0.392    | 0.000      |
| 10.  | Utility Charges                                   | 2.000           | 2.000    | 0.000      |
| 11.  | EIA Report  | 0.300           | 0.300    | 0.000      |
| 12.  | Inauguration Pillar                               | 0.000           | 1.760    | 1.760      |
| 13.  | 3% Contingency                                    | 87.263          | 138.189  | 50.926     |
| 14.  | 2% Consultancy                                    | 58.176          | 92.126   | 33.950     |
| 15.  | 5% P.S.T Charges                                  | 145.440         | 230.315  | 84.875     |
| 16.  | Horticulture Charges                              | 29.088          | 46.063   | 16.975     |
|      | Total   | 3282.450        | 8344.804 | 5062.354   |

#### 17. UNIT COST

Rs. 356.699 million

# 18. PERIOD OF IMPLEMENTATION

36 Months till June 2027 (As proposed in PC-I)

# 19. ANNUAL RECURRING EXPENDITURE

Rs. 16.000 million

# 20. ANNUAL INCOME AFTER COMPLETION

N/A

# 21. REQUIREMENT OF VEHICLES/STAFF/CONSULTANCY (WITH JUSTIFICATION) N/A

# 22. EXISTING FACILITIES

# PART – B

# 23. TECHNICAL APPRAISAL

(Comments of R&B)

Pre-PDWP meeting was held on **03.02.2025** under the chairmanship of Member (ID), wherein project's salient features, design & scope was discussed. Imperative discussion was made on reasons of revision of this PC-1, Physical & financial progress of the scheme and details of price variations. Point wise discussion is listed as under:-

| Sr.<br>No. | Observation   | Reply of the Department  | Recommendations of Pre-PDWP  |
|------------|---|--|--|
| 1.         | RD wise pictorial evidences of road and drone video may be provided in view of guidelines issued by P&D Board vide No. 12(14)PO(COORD-II)P&D/2022 dated 11.09.2023.         | Compliance made in response to P&D Board guide line issued vide No. 12(14)PO(COORD-II)P&D/2022 dated 11.09.2024. | Noted  |
| 2.         | Sponsor to provide details regarding available ROW of instant road.   | Report for available ROW attached  | Noted  |
| 3.         | Sponsor to provide a cross-section of the road incorporating the proposed new provisions, including the façade wall, footpath, motorcycle lane etc to be annexed with PC-I. | Cross-section of road as desired is already attached.  | It has been observed that new provision of façade wall, along with sidewalk on side drain and 8' wide tuff tile area, affects the proposed width and position of service road within the available Right of Way (ROW), making it unjustified. The sponsor is required to review and provide justification for the proposed service road alignment. |
| 4.         | Sponsor to justify the provision for  | Facade wall on both sides of road (between the main  |  |
|            | construction of 12.00 km façade wall on both  | carriageway and service road) has been taken to achieve  | deliberations, it was  |

|    | sides of road (between<br>the main carriageway<br>and service road) taken<br>in estimate in light of<br>scheme's objectives<br>outlined in PC-I.   | hustle free and aesthetically pleasing corridor from Wahga Border to Lahore Ring Road for international dignitaries' movement.   | components of façade wall, paintwork, and signage installation on existing buildings should not be considered in this PC-I. These works may be taken up separately through a dedicated/ separate PC-I.   |
|----|--|--|--|
| 5. | Sponsor must justify the provision of paintwork and signage installation on existing buildings along both sides of alignment in accordance with scheme's objectives outlined in PC-I and in light of prevailing rules, law and policy, if any.   | Paint work and signage included for 572 shops on left side and 562 Shops on right side of road to improve the overall outlook of the area in line with the mandate of the prevailing Government of Punjab campaign "Saaf Suthra Punjab". | -do-   |
| 6. | Justification for provision of 8-ft wide coloured lane for motorbike/bicycle on both carriageways of road is to be provided.  Sponsor to provide vehicular traffic count of motorcycles and bicycles along with design standard/practice based on which instant provision is proposed. |  | Not Accepted The referenced standards pertain to the specifications for ready-mix traffic paints and thermoplastic marking materials. The sponsor is required to provide the applicable design standards for the provision of a dedicated motorcycle/bicycle lane.   |
|    |  |  | Furthermore, the allocation of a designated lane may reduce the effective capacity of the carriageway for main traffic volume, potentially leading to delays and congestion. The sponsor is advised to conduct a capacity analysis of the carriageway to assess its ability to accommodate the expected traffic volume |

|    |   |  | implementing a dedicated motorcycle/bicycle  |
|----|---|--|--|
| 7. | Justification for provision of RCC drain in instant revised estimate instead of remodeling of existing drain (already approved) is to be provided.  Sponsor to provide technical rationale along with drainage plan, invert levels, cross-section, catchment area and design surface runoff in order to justify this provision.                                   | In PC-I, provision of remodelling of existing drain was approved in terms of raising only.  Whereas, longitudinal profile of existing drain shows certain depression / dips due to old / existing 16 No.s culverts which have been choked / closed due to urbanization. Furthermore at certain points the brick masonry drain is partially/completely collapsed. Drainage profile has been provided by M/S NESPAK with average 6.5ft depth amounting to 2.3 Billion. Whereas, the field formation has also framed drain profile with average 4.5ft depth as incorporated in revised PC-I with excess of 735.395 Million to cater surface drainage. | lane.  Chief Engineer (Concerned) shall review and revalidate the provision with respect to invert levels at disposal point keeping in view of applicable longitudinal profile for self-cleaning velocity. |
| 8. | It has been observed that the provision for 60mm tuff tiles on the drain has been included as a separate item in the estimate. However, the same provision is also accounted for in the estimate for façade wall work provided by the Building Department. Given the proposed location of the wall, this appears to be a duplication which needs to be clarified. | Building Department has taken the provision of 60 mm tuff tile on cart area behind the wall Whereas, provision of 60 mm also been kept on top of road side drain. Hence, no duplicity is made.   | Noted  |
| 9. | Further, it has been observed that provision for kerb stone is taken in estimate as separate item of work at throughout the length on 06 No sides i.e. 2 No along center median and 04 No along side medians between service roads and main carriageways. However, the same item is also taken in estimate for  | road as well as building estimate depending upon the approval of revise PC-I. if facade wall is allowed the same will be corrected as per  | Noted  |

|     | ı   |  |   |
|-----|---|--|---|
|     | façade wall work provided by Building Department which requires clarification in order to avoid duplication.  |  |   |
| 10. | It has been noted that the existing kerb stones designated for dismantling have neither been credited nor proposed for reuse. The sponsor is required to reuse existing kerb stones which are available in good condition.  | , ,  | Noted   |
| 11. | Sponsor to justify the lump sum provision of installation of street lights in centre median of road.  Sponsor should provide an implementation plan for the execution, operation, and maintenance of the street lights. If the installation is proposed to be carried out by the concerned local government entity, a demand notice/ detailed estimate from the agency should be provided to substantiate the cost provision. Additionally, MOU between the Highway Division and the concerned local government entity for the future operation and maintenance of the street lights should be annexed with revised PC-I. | No lump sum provision has been taken instead street light estimate has been prepared by MCL to which funds will be deposited if provision is approved who will also be responsible for operation and maintains of these street lights.                       | Noted MOU between the Highway Division and the concerned local government entity for the future operation and maintenance of the street lights should be made. Furthermore, cost of provision is to be rationalized keeping in view the standard C/c distance between adjacent poles. |
| 12. | Justification for provision of steel railing on median proposed in instant estimate is to be provided.  Rate for item described in the estimate is Rs. 7605.07/Rft, while the   | The total length of road is 13km. Whereas, railing have been taken in 7Km i.e. in urban area only. Further, out of 7km, 2.6km is existing railing on which repainting has been taken. Whereas, on balance 4.4km new provision of railing has been taken. The | Noted Chief Engineer (Concerned) shall revalidate the rate of instant provision made in instant estimate.   |

|     | standard rate for GI pipe railing, as per MRS, is Rs. 2430.60/Rft. The sponsor is required to justify the cost provision for the item, explaining the discrepancy between the estimated rate and the standard rate.  Layout plan duly marked on google image along with proposed drawing may be provided in lieu of making this provision. | design adopted is as per 2.6km existing railing which is different from mention G.I. pipe railing whose rate has already been approved. Lay out plan of railing marked on google map is attached.  |  |
|-----|--|--|--|
| 13. | Provision of cold milling with recarpeting on main carriageways at length of 1.25 Km (Wahga Border Side) instead of overlay (already approved) proposed in instant revised estimate is to be justified.  | Last 1.25Km is dedicated for parade/sensitive area after parking of public vehicle, having frequent pedestrian movement. Where, It is not possible to overlay due to time taking process and minute undulations on road edge only. Therefore, cold milling and re-carpeting has been taken as per pavement design provided by Director RR & MTI as an option instead of overlay.                               | Provision of asphalt thickness i.e. 7" thick in cold milling area is to be rationalized to 5" as per pavement design adopted on balance stretch of road. |
| 14. | Provision for reconstruction instead of overlay of service road at length of 1.00 Km on both sides is to be justified.   | The service road is badly damaged in length of 1 Km due to stagnant water and buffalo manure/waste in certain reaches, where reconstruction is required inevitably.  | Chief Engineer (Concerned) shall revalidate the provision as per site requirement.   |
| 15. | Sponsor to justify the provision of 2" thick recambering layer on both main carriageways and 1.25 "thick on service road.  | After dismantling of road metaling, road levels have been read jointly with consultant staff for existing surface where it has been observed that longitudinal and one sided slope is not possible to maintain with 4" thick approved base course in 34 ft wide carriageway. Moreover, Executive VP of M/S NESPAK, gave instructions vide letter no. 4834/10A/MDR/01/1177,dated 23.12.2024 for said provision. | Noted  |
| 16. | Justification increase in road work items quantities for U-Turns is to be provided.  | 16 no's of U-Turns exist in main carriage way, wherein actual quanties of base course / overlay and asphalt has  | Noted  |

|     |   | been actualized in estimate  |  |
|-----|---|--|--|
|     | Sponsor to provide location plan of U-Turns in lieu of making this provision in estimate.   | been actualized in estimate whose location plan is attached.   |  |
| 17. | Addition of extra quantities of road work items taken in estimate @ 2% is not justified and is to be deleted.   | To cater the curves on zero point and widen carriageway near Quaid-e-azam interchange, approach roads to different villages & additional width of parade area, the provision has been taken.   | Provision of roadwork items on said RD is to be actualized based on DOQ rather than taking lump sum provision. |
| 18. | Lump sum provision for the shifting of electric poles (LESCO), amounting to Rs. 30.00 million in the current estimate, should be justified by providing the demand notice received from LESCO. Additionally, the necessity for shifting the poles should be explained, and a layout plan of the existing poles that require shifting must be submitted. | Preparation of demand notice is in progress. Site visit has been made by LESCO officials. Approximately 30 Million for shifting of electric poles has been taken to shift the poles near BRB Canal due to electrical poles standing at edge of road side drain. Layout Plan of critical poles is attached. | Sponsor to provide copy of demand notice of concerned agency to justify the cost provision.                    |
| 19. | Further, it has been noted that provision for shifting of electric poles amounting to Rs. 30.000 million is taken as separate item of work and also included in estimate of building division for construction of façade work at cost of Rs. 10.000 million which is to be clarified.   | of Rs.10 M in building portion   | -do-   |
| 20. | Increase in provisions of road furniture items may be justified.  RD wise linear plan depicting location of proposed traffic informatory, regulatory and directional sign boards may be shared and annexed with PC-I.   | Road furniture has been taken as per U-turns, abbadis, different infrastructural features i.e. Quaid-e-azam interchange, BRB canal, ranger check post, parade area etc. Layout Plan.   | Noted  |
| 21. | Sponsor to justify the provision for repair of existing pedestrian bridge taken in estimate   | bridge include the replacement of broken fibre   | Noted  |

|     | at cost of Rs. 10.000 million.  Furthermore, lump sum provision of instant provision is not accepted. Sponsor to provide estimate of proposed work for repair of bridge.  Recommendations of bridge directorate is to be provided in lieu of justifying this provision. | bridge repainting etc. Estimate provided by Highway Mechanical Division Lahore for mentioned work. Therefore, no need for bridge Directorate recommendations. |  |
|-----|---|---|--|
| 22. | Justification for provision of RCC railing and expansion joints on existing bridge is to be provided.  Pictorial evidence of existing bridge may also be provided in lieu of  | Repair of RCC railing and expansion joint have been taken for BRB Canal Bridge for damaged potions only. Pictorial evidence attached.                         | Noted  |
| 23. | justifying this provision.  Provision of horticulture charges at the rate of 1% is to be deleted and estimated charges of concerned forest division for roadside tree plantation on this road be incorporated in the estimate as per decision of PDWP.                  | Demand Notice from PHA Lahore obtained for central median plantation vide no. Inch(Z-III)PHA/12-24/443, dated 24-12-2024 amounting to Rs. 54.082 M.           | Noted Sponsor to also share horticulture plan for proposed plantation work in centre median. |
| 24. | Revised economic analysis of the project is not attached with PC-I which may be provided and to be got vetted from Economic Section of P&D board.   | Noted for compliance.   | Noted  |

# PART - C

# 24. ECONOMIC / FINANCIAL APPRAISAL

(Comments of Economic Appraisal Section and Finance Department)

#### PART - D

# 25. **ENVIRONMENTAL APPRAISAL.**

(Comments of Environment Department)

# 26. CONSIDERATION BY PRE-PDWP

The scheme is submitted by the C&W Department for revised approval at a cost of **Rs. 8344.804 Million** 

# 27. RECOMMENDATIONS

The scheme is placed before PDWP for consideration.