



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

**WORKING PAPER**

**PART A**

**Date of receipt of PC-I in P&D Board: 18-02-2025**

**PROJECT PROFILE:**

1. Project Title: **REHABILITATION OF THAT PAIL ROAD KM NO.167 TO 172 & FROM KM NO.193-228.**
2. Location: District Talagang
3. Sponsoring Agency: Communication & Works Department
4. Executing Agency: Punjab Highway Department
5. Operation & Maintenance Punjab Highway Department
6. Name of the Relevant Department (s) /Pre-PDWP meetings were held on **19.03.2025** & Stakeholder(s) invited in **18.04.2025** under the chairmanship of Member (ID) Pre-PDWP
7. Name of the Sector's specialist / consultants / advisor / expert / invited in Pre-PDWP
8. Cost:

<b>(Rs. in million)</b>		
<b>Original</b>	<b>1<sup>st</sup> Revised</b>	<b>Increase</b>
Rs. 1647.120 (02.08.2024)	<b>2139.305</b> <b>Proposed</b>	<b>492.185</b>

9. Source of Financing Provincial ADP 2024-25 reflected at G. Sr. No. 1768 Road Rehabilitation Program (Phase-II)
10. Allocation (2024-25) Rs. 925.000 million

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

The road serves as a major inter-district arterial route connecting three key districts of North Punjab: Khushab, Talagang, and Attock. The section from Dhoke Pathan (KM 167-172), originally constructed in 2007 with a 24-foot width over a 5.00 km stretch (2 km TST and 3 km carpet), has suffered significant deterioration due to continuous heavy traffic movement from southern Punjab to northern regions. The carpeted portion has developed settlement, cracks, and deep ruts, while the TST surface has almost eroded, and the 4-foot-wide shoulders on both sides of the 2 km TST section are completely damaged. To address this, rehabilitation has been proposed by removing the damaged TST and asphalt surface and replacing it with a 10-inch thick rigid concrete pavement over KM 167-172. Additionally, the section from Zakria Chowk to the Khushab district boundary (KM 194-228), spanning 34.75 km with a 20-foot width, was originally constructed about 50 years ago and is now in a severely deteriorated

condition due to excessive heavy traffic. The road surface has become bumpy and unserviceable.

The scheme was initially approved by PDWP in its 1st meeting held on 03.07.2024, with cost clearance at Rs. 1,647.120 million on 02.08.2024. Administrative approval was issued vide No. SOH-II (C&W) 2-16/2023 dated 02.08.2024 for Rs. 1,647.120 million, and technical sanction was granted by Chief Engineer North Punjab Highway Department, Memo No. Rehabilitation/2024-25/Talagang/307/Plg, dated 06.08.2024, for Rs. 1,345.093 million.

Given the current traffic load and based on design recommendations from the Road Research & Material Testing Institute (RR&MTI), a revised PC-I cost estimate has been framed, for provision of asphalt surfacing (2.5" ABC + 2" AWC) instead of the previously approved TST surfacing. This revision aims to enhance riding quality, reduce travel time, and achieve significant savings in fuel and vehicle operation costs. Furthermore, to improve the geometric alignment of the road, the cutting of unstable slopes has been included in a specific section. The rehabilitation of this road will significantly uplift the socio-economic conditions of the region, facilitating the smooth transportation of goods across multiple districts and improving travel conditions for the residents of Khushab, Talagang, and Attock.

Now, the C&W Department has submitted the 1<sup>st</sup> revised PC-I / cost estimate amounting to **Rs. 2,139.305 Million** for consideration of PDWP.

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

- i. Due to change in scope from TST to carpet.
- ii. Due to increase in reconstruction portion from 02 Km to 06 Km.
- iii. Due to provision of 06 No PCC approaches (Cumulative Length = 1208 Rft).
- iv. Due to increase in provision of Breast Wall from 2000 Rft to 4000 Rft.

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

Total Length	= 39.75 Km
<b><u>EXISTING FEATURES</u></b>	
Metaled Width	= 20 ft and 24 ft
Flexible Pavement (Length)	= 39.75 Km
Type of Flexible Pavement	= TST & Asphalt
<b><u>PROPOSED FEATURES</u></b>	
Metaled Width	= 20 ft and 24 ft
Sub Base Course (Reconstruction)	= 8"
Base Course (Reconstruction)	= 10"
Base Course (Overlay Portion)	= 6"
Asphalt (ABC + AWC)	= 4.5 " (2.5" + 2" )
Rigid Pavement	= 10"
Construction/Reconst. of 4' & 10' Span Culvert	= 15 Nos
Construction/Reconst. of R/ Walls	= 5500 Rft
Construction/Reconst. of B/ Walls	= 4000 Rft
Construction of Drain	= 12000 Rft
Construction of PCC Shoulders	= 262400 Sft

## **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.**

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**

- i. REHABILITATION OF THAT PAIL ROAD FROM KM NO. 167 TO 172 & FROM KM NO. 193 TO 228, DISTRICT TALAGANG (1<sup>ST</sup> REVISED).

**16. BREAK DOWN OF THE CAPITAL COST**

(Rs. in Millions)				
Sr. #.	Items	As per Approved PC-I	As per 1 <sup>st</sup> Revised PC-I	Difference
1.	Road Work	1197.206	1642.372	445.166
2.	Road Structure	231.027	232.306	1.279
3.	Road Furniture	30.139	30.139	0.000
4.	Survey & Mapping	0.930	0.930	0.000
5.	EIA Report	0.300	0.300	0.000
6.	Renovation / Rehabilitation of Dhoke Pathhan Rest House	35.000	35.000	0.000
7.	D/d of Old Material	-7.118	-10.156	-3.038
8.	3% Contingency:	43.537	56.840	13.302
9.	2% Consultancy:	29.025	37.894	8.870
10.	5% PST Charges	72.563	94.734	22.172
11.	Horticulture Charges	14.513	18.946	4.434
	<b>Total</b>	<b>1647.122</b>	<b>2139.305</b>	<b>492.185</b>

**17. UNIT COST**

Rs. 47.695 Million

**18. PERIOD OF IMPLEMENTATION**

24 Months (Till June 2026) (Approved Gestation Period)

12 Months (Till June 2025) (As proposed in instant revised PC-I)

**19. ANNUAL RECURRING EXPENDITURE**

Rs. 16.790 million per annum

**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 meetings were held on **19.03.2025 & 18.04.2025** 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:-

<b>Sr. No.</b>	<b>Observation</b>	<b>Reply of the Department</b>	<b>Recommendations of pre-PDWP</b>
1.	Significance of the proposed road in terms of its connectivity, geographic importance and socio-economic benefits to the public may be highlighted and discussed in detail.	<p>The said road is a arterial inter-district road that connects three major districts of North Punjab, namely Khushab, Talagang and Attock. The Rehabilitation of this road will uplift the socio-economic parameters of the whole area, resulting easy transportation of all kinds of goods and products across various districts of the country. Moreover, improvement of said road would cause considerable saving in terms of time and fuel (vehicle operation cost).</p> <p>As the subject road portion is key corridor therefore number of populations like Malikwal, Jhatla, Thoa Mehram Khan, Chinji, Kotehra, Bilomar, Khichlian, Jaba, Dhok Phatan &amp; other suburbs of three districts would be facilitated after completion of this project as these populations use subject route in routine to access basic Health, Educational &amp; daily life facilities.</p> <p>Moreover, the subject road also shares huge quantum of HTV traffic, being portion of Karachi trade route.</p>	Noted
2.	RD wise pictorial evidences of existing condition 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 (Drone footage video should include starting point and ending point)	Pictorial evidence & Drone Video of existing road showing deteriorated condition of road and work already completed in this running scheme (Rigid Concrete & Base Course Overlay) is attached.	Noted
3.	The sponsor is requested to provide the current	Due to continuous plying of heavy traffic from southern	Noted

	status of existing pavement condition for which instant restoration work is proposed.	parts of the province to northern areas, settlement, cracks and deep ruts developed in the carpeted portion (KM 169-172) whereas TST surface (KM 167-169) has almost washed away. In specific reach 2 Meter wide shoulder on either side of TST road have also been completely damaged. The Rigid Concrete work is in progress in particular reach. The remaining portion having length 34.75 Km is 20' wide TST road is suffering from different type of distresses i.e. settlement, Disintegration, washed off portions, cracking & Pot Holes etc. Moreover, being an old construction, the road is having serious concerns regarding its functional performance i.e. riding quality. The undulations in existing road are needed to be addressed on mandatory basis therefore provision of Overlay 6" thick has been adopted in certain reaches with carpet 4.5" thick as recommended by RR&MTI pavement design depending upon road pavement evaluation & commercial Traffic count. The Base Course / Overlay in this section is in Progress and 18.00 Km of it is Completed till date.	
4.	Sponsor to provide copy of TS estimate of scheme.	Noted for Compliance	Variation in TS estimate due to change in quantities or specification incorporated in instant revised estimate is not accepted and be deleted from instant estimate.
5.	Sponsor to provide latest traffic count along with distribution of vehicle classification duly vetted by P&DD of CWD.	Traffic Count showing Vehicle classification along with Traffic Summary is attached.	It has been observed that a Special Traffic Count (STC) was conducted on 01.12.2022 at

	<p>Comparison of traffic data with Traffic Summary book may also be provided.</p>		<p>Sadiqabad Chowk, based on which pavement design recommendations were subsequently issued on 13.02.2023. The sponsor is required to justify the non-inclusion of the corresponding scope in the original PC-I, despite the availability of both the traffic count data and pavement design recommendations at the time of submission.</p> <p>Moreover, it is noted that the STC was conducted specifically for purpose of dualization, and also included assessment of projected Origin/Destination (O/D) traffic additionally expected on route. However, the incorporation of the same projected traffic volumes into the pavement design for the rehabilitation of the existing single carriageway is not technically justified. Pavement design for rehabilitation purposes must be based on the projected traffic volumes of existing traffic count over the design life.</p> <p>It is further recommended that the latest available traffic count data, as reported in the Traffic Summary 2023—indicating a motorized traffic volume of 7,940 VPD at Talagang—be utilized</p>
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			for accurate pavement design and scope justification.
6.	Sponsor shall provide a justification for the proposed change in the scope of work, specifically the change of pavement type from TST to an asphaltic course at this stage of the scheme. The justification should include a detailed technical rationale and site assessments that necessitate this revision.	<p>Given the current traffic load and based on pavement design issued by the Road Research &amp; Material Testing Institute (RR&amp;MTI), the revised PC-I / cost estimate has been framed, reinstating asphalt surfacing (2.5" ABC + 2" AWC) instead of the previously approved TST surfacing. This revision aims to enhance riding quality, reduce travel time, and achieve significant savings in fuel and vehicle operation costs.</p> <p>Moreover, pavement type of subject road (THAT PAIL Road) from KM 172-193 (Not taken up in this scheme) Falling in District Talagang is already Asphaltic course as well as subject Road section connecting from both District boundaries i.e. Attock boundary (Before KM 167) and District Khushab Boundary (Beyond KM 228) simultaneously are already approved with Asphalt provision. Therefore, for uniformity and better connectivity, Asphalt has been proposed for the remaining section (KM 193-228), excluding Built-up areas for Rigid Concrete.</p>	<p>After detailed deliberations, it was concurred that schemes under RRP-II were considered and approved during the 1st, 2nd, 3rd, 4th, and 5th PDWP meetings of FY 2024-25. During these meetings, in the context of certain schemes, the concerned Chief Engineers apprised the house that the submitted PC-I/estimates had been prepared based on observations and field experience of the respective field staff and requested incorporation of pavement design recommended by RR&amp;MTI.</p> <p>After thorough deliberations, it was decided by the house that sponsor may proceed with the scope of work as outlined in original PC-I in a staged manner for rehabilitation work. Department agreed with the submitted PC-I/ scope of work and stated that, if necessary, department will improve the specification through an independent scheme at later stage.</p> <p>In view of the above, the proposed change in pavement type from TST to Asphalt in the instant scheme falls within the purview of the matter</p>

			already deliberated and decided by the PDWP. Therefore, the sponsor is advised to proceed in line with the PDWP's earlier decision.
7.	It has been observed that the pavement design recommendations of RR&MTI attached with the PC-I do not pertain to the instant scheme. The sponsor must provide the pavement design report specific to the instant scheme to justify the change in scope in the revised estimate.	Pavement design and recommendations already issued by RR&MTI attached with the PC-I is specific to Talagang Khushab Sargodha Road Section from Talagang to District Talagang-Khushab Bounday which is same section of THAT PAIL Road (KM 193-228) part of the subject scheme.	Noted
8.	The sponsor must provide a detailed justification for proposing TST instead of the pavement design recommendations in the original PC-I, considering that RR&MTI recommendations were already issued in 2023.	The Pavement design provided / recommendation by RR&MTI was incorporated up to the extent of overlay 6" thick under as per policy so as to provide saving to P&D Department for accommodating restoration program.	Same as Sr. No 06
9.	Sponsor to justify the increase in provision of reconstruction from 02 Km to 06 Km.  Recommendations of RR&MTI in lieu of making this provision is to be provided.	The certain portion of road from Km 223 to 226 is aligned along pure hilly terrain where there is utter need of profile improvement so as to facilitate road commuters. The reconstruction has been proposed for raising purposes so as to improve road drainage. Moreover, the reconstruction has also been proposed to address certain pavement settlements which have been occurred due to uncontrolled carriage of construction material especially water bound carriage from Pail quarry.	Sponsor must have initially assessed the requirement of reconstruction as per site requirement.
10.	Sponsor to justify the provision of 06 No PCC approaches (Cumulative Length = 1208 Rft) in instant revised estimate.	The approaches have been incorporated in this Revised PC-I for connecting subject Road with the various Villages Link Roads, Built-up Areas (Local Markets) and	Not Accepted



	RD wise pictorial evidence along with location plan duly marked on google image in-lieu of making this provision is to be provided.	Basic Health Unit (BHU) at the connection points, therefore, PCC approaches are proposed to facilitate access purposes. Pictorial evidence is attached.	
11.	Justification for increase in length provision of B/Wall taken in estimate from 2000 Rft to 4000 Rft is to be provided.  RD wise pictorial evidence along with location plan duly marked on google image in-lieu of making this provision is to be provided.	The certain portion of road from Km 167 to 172 & Km 223 to 226 is aligned along pure hilly terrain where land sliding happens in routine therefore, the provision of Breast wall has been increased so as to provide stability to the unstable/loose soils for specific sections. Pictorial Evidence is attached.	-do-
12.	Horticulture charges taken in estimate based on lump sum basis is not justified and must be based on actual estimate/DN of concerned Forrest Division for tree plantation on or along instant road as per PDWP decision.  Additionally, the sponsor must provide comments on whether the ROW is available for tree plantation along this road or not.	1 % Horticulture charges are taken however provision of Actual estimate/DN is Noted for Compliance. ROW is available for tree plantation along this road	Not Accepted Horticulture charges taken in estimate based on lump sum basis is not justified and must be based on actual estimate/DN of concerned Forrest Division for tree plantation on or along instant road as per PDWP decision.  Sponsor must have incorporated the provision as per actual estimate of Tree Plantation by concerned Forrest Division at this stage of scheme.
13.	Sponsor to share financial and physical progress of scheme.	<b><u>Financial Progress</u></b> Administrative Approval =1647.120 Million Funds Allocation =725.000 Million Revised Allocation =825.000 Million Funds Released =825.000 Million Funds Utilised =401.970 Million (49%) <b><u>Physical Progress</u></b> Road Dismantling =1.00 / 2.00 KM Cold Milling =3.00 / 3.00 KM	Noted

		Rigid Concrete =5.50 / 7.00 KM Base Course (Overlay) =18.00 / 30.75 KM PCC Shoulders =3500 RFT	
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#### **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 1<sup>st</sup> revised approval at a cost of **Rs.2,139.305 Million.**

#### **27. RECOMMENDATIONS**

The scheme is placed before PDWP for consideration.