Rawalpindi Development Authority, Rawalpindi Pre-Feasibility Study, Strategic Development Plan & Detailed Feasibility for Urban Regeneration Plan along Lai-Nullah Expressway and Flood Channel Project:

Sr. No	ltem	Amount Rs.
A	Staff Cost	16,770,000.00
В	Direct Cost	3,700,000.00
	Sub Total	20,470,000.00
	Add 16% Tax	3,275,200.00
	Grand Total	23,745,200.00

SUMMARY OF COST

Rawalpindi Development Authority, Rawalpindi Pre-Feasibility Study, Strategic Development Plan & Detailed Feasibility for Urban Regeneration Plan along Lai-Nullah Expressway and Flood Channel Project:

S. No /	Designation	Man	Monthly Rate	Amount Rs.
Activity		month		
Key Staff				
1	Team Leader (Urban Planner	5	600,000.00	3,000,000.00
2	Spatial/Peri-urban Planning Specialist (Deputy Team Leader)	5	500,000.00	2,500,000.00
3	Community Mobilization and Resettlement Expert	5	300,000.00	1,500,000.00
4	Urban Design Specialist	5	400,000.00	2,000,000.00
5	Urban Infrastructure Engineer	5	400,000.00	2,000,000.00
6	Urban Economist /Financial Expert	4	300,000.00	1,200,000.00
7	Legal Expert	2	300,000.00	600,000.00
8	Structural Engineering	2	300,000.00	600,000.00
9	GIS Specialist	2	300,000.00	600,000.00
10	Urban Environmental Specialist	2	300,000.00	600,000.00
TECHNIC	AL / SUPPORT STAFF (Phase-I)			I
1	Quantity and other Surveyor	20	50,000.00	1,000,000.00
2	AUTOCAD/MIS STAFF (02 Nos)	8	50,000.00	400,000.00
3	Computer operator & other	22	35,000.00	770,000.00
	supporting Staff (02 Nos)			
			G. Total	16,770,000.00

A-STAFF OF COST



RAWALPINDI DEVELOPMENT AUTHORITY, RAWALPINDI

Pre-Feasibility Study, Strategic Development Plan & Detailed Feasibility for Urban Regeneration Plan along Lai Nullah Expressway and Flood Channel Project:

B- DIRECT COST

S. No	Description	Units	Qty	Rates Rs.	Amount Rs.
1	Office rent, Utilities and furnishing	Months	5	150,000	750,000
2	Communication - Telephone, Fax, Courier/Postage etc.	Months	5	20,000	100,000
3	Stationary, binding, printing and project consumable items	Months	5	40,000	200,000
4	Travelling	Days	20	20,000	400,000
5	Geotech & other Surveys	L.S			1,000,000
6	Laboratory & other testing charges	L.S			500,000
7	Transportation & Vehicles POL etc (3 Nos.)	Months	15	50,000	750,000
	Sub Total (B)			3,700,000	

RAWALPINDI DEVELOPMENT AUTHORITY, RAWALPINDI

Pre-Feasibility Study, Strategic Development Plan& Detailed Feasibility for Urban Regeneration Plan along Lai Nullah Expressway and Flood Channel Project

											V	leeks									
	DESCRIPTION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REPOR	T SUBMISSION																				
Act 1	Inception Report																				
Act 2	Prefeasibility Study Report																				
Act 3	Phase-II Report																				

Term of Reference

Project: <u>Pre-Feasibility Study, Strategic Development Plan & Detailed</u> <u>Feasibility for Urban Regeneration Plan along Lai Nullah</u> <u>Expressway and Flood Channel Project:</u>

1. BACKGROUND:

Lai Nullah Basin is located between 33° 33' and 33° 46' North and 72° 55' and 73° 07' East. It has a catchment area of 234.9 Km² that is administratively divided into Islamabad Capital Territory (ICT) in the upper reaches having 144.4 Km² and Rawalpindi City in the lower reaches having 90.5 Km². The ground elevation of the Lai Nullah Basin ranges from EL. 420 m at the downstream of the Basin (i.e., the confluence with Soan River in Rawalpindi City) to EL. 1,240 m at the upstream end (i.e., a mountain top in the Margalla Hill range in Islamabad City).

Lai Nullah is a permanent physical feature of the Rawalpindi City that originates from the Margalla Hills Islamabad and enters into the densely populated areas of Rawalpindi at the IJP Road, the administrative boundary between the twin cities of Rawalpindi and Islamabad while joining Soan River in the south. In Rawalpindi City area, number of main drains and tributaries such as Saidpur Kasi, Kanitwali, Badarwali Kasi and Tenawali Kasi, Nikki Lai, Dhoke Hassu Nullah, Dhoke Ellahi Bakhash and PAF Colony Nullah join the main stream Lai Nullah within Rawalpindi City.

Rawalpindi/Islamabad receives heavy rains in monsoon season that discharge flashily flows into Lai Nullah with eroded sediments causing colossal damages to the lives and properties of the people. Besides, Nullah Lai is heavily polluted by virtue of throwing garbage and untreated wastewater of both Cities which are creating severe environmental hazards. Sporadic and haphazard development has taken place along both banks of the Lai Nullah. The streets in these areas are narrow and infrastructure is deficient. Overall, the areas surrounding Lai Nullah are highly unhygienic with worst slum area living conditions. The land values are comparatively lower due to unhygienic living conditions in the area.

Mixed land use is predominant in the central areas of the City along Lai Nullah consisting of Raja Bazar, Circular Road, Iqbal Road, Liaquat road, Ganjmandi road, Kashmir Road etc, which are the main shopping areas of the City. The concentration of the commercial activity and its linear growth has created complex problems, such as inadequate parking places, poor accessibility due to encroachments on roads, foot paths and presence of vendors/ hawkers. The area between the main streets forming pockets, are filled with residential use. These bazaars have developed in the present shape over the years and would continue to extend further by the process of invasion and succession in the future as well, unless some to curb this trend. The Vegetable and Fruit Market, Sarafa Bazar, Bara Market, Grain Market and other main markets are also located thereby and create their attendant issues compounding the issue of congestion and thus are holding back the attainment of real economic potential of these locations. In addition constraining economic growth the congestion due to mixed use of these neighborhoods leads to ungainly civic outcomes for residents, businesses & visitors of these businesses. Mixed land use therefore needs to be revisited in way so as to maximize economic gains while minimizing negative civic outcomes. The other uses such as restaurants, hotels, wagon / Suzuki stands and some offices are located in this area, which create serious traffic problems during peak hours.

The areas towards the north have also mixed land uses. The shopping facilities, mainly in the shape of bazaars, are scattered in this part of City. The institutions like Government Degree College and Government Hospital are also located in this area. Further to the north are planned housing schemes, namely, Saidpur Road Scheme, Satellite Town and Khayaban-e-Sir Syed.

To address above stated issues, a 16.5-km-long Lai Expressway from Soan River Bridge to Kattarian Bridge was conceived by RDA to create alternative traffic route between the twin cities of Rawalpindi and Islamabad and eliminate environmental pollution caused by open sewage in Lai Nullah and also construct a flood channel for saving the citizens of Rawalpindi from the flash floods. For achieving these objectives, a mega project namely Lai Expressway & Flood Channel Project is currently undergoing approval processes from relevant provincial & federal fora and is at an advanced stage of its commencement.

Execution of the above-described project is expected to become a catalyst of transformation of areas along Nullah Lai leading to gainfully impact the fortunes of public & private properties falling in these areas. From a layman's perspective this project may appear to be merely an expressway along a flood channel. From City Planners perspective however it can become an Urban Regeneration Corridor if its area of influence is appropriately mapped and planned, and if a road map of development as per this plan is also agreed upon by all the relevant stake holders. Civic issues and economic growth constraints emanating from the question of mixed use discussed above can also be optimally addressed via an integrated plan along this Urban Regeneration Corridor. In a nutshell Lai Expressway & Flood Channel Project offers a planning opportunity for smartly, sustainably and wealth-creatingly transforms congested neighborhoods as well as slum areas along Lai Nullah.

In this Regard, RDA intends to conduct a prefeasibility study to prepare a proposal to develop Urban Regeneration Land Use Plan on both sides of Lai Nullah for leveraging the opportunity which coming up because of the construction of Lai Expressway Project.

RDA has proposed this Urban Regeneration Plan Project. Both the construction of Lai Expressway & Flood Channel Project (LEFC) Project and Urban Regeneration Initiative Along Lai (URIAL) Project will supplement and complement each other's economic & civic outcomes and are expected to lead to overall development of the area with improved living conditions in Rawalpindi City.

The proposed Urban Regeneration Initiative Along Lai (URIAL) Project aims to develop a unique model of slum transformation & wealth creation corridor which is initially expected to fire up the construction boom eventually leading to the eventual emergence of a high rise Coaxial Central Business District (CCBD), Along Lai waterfront urban regeneration along the Lai Nullah Expressway through well-planned business & commercial activities on the reclaimed and adjoining land to make it an Axis of Wealth Creation for an urban agglomeration of around 3.0 million people and to entailing overall economic growth in Pothohar region and improved living conditions in Rawalpindi City.

A Town Planning Consulting Firm having valid registration with Pakistan Council of Architects and Town Planners (PCATP) and relevant experiences will be engaged through competitive bidding process as per PPRA rules for conducting the detailed study of the area to explore the possibilities and feasible options for an Urban Regeneration Plan for the areas on both sides of Lai Nullah which shall be significantly influenced by the Lai Nullah Expressway & Flood Channel Project. Such plan should prioritize new wealth creation and asset value maximization of existing public & private assets and should also stimulate growth in the Pothohar regional economy. The plan should attract investments both, domestic & foreign, and should attract investors in high rise construction to fire up construction boom in Rawalpindi City. Simultaneously this plan should lead to emergence of an aesthetically endowed ambiance attracting corporate culture & luxury living in the target area and should enrich life of the denizens of twin cities. This plan may take its inspirations from around the world for creating a water front experience for domestic and foreign visitors & tourists. Water front experience should also include cultural, family entertainment, youth culture, night-life for the residents and tourists alike. The plan however must ensure that significant share of the wealth created in the implementation cycle flows to the residents and private property holders in the target area and entails not only higher income levels generally but especially leads to significant reduction in the levels of poverty.

2. OBJECTIVES:

Urban Regeneration Initiative Along Lai (URIAL) project aims to leverage the benefits of Lai Expressway & Flood Channel Project with well-planned urban development containing commercial activities along Nullah Lai to stimulate economic growth, attract local and foreign and lead to wealth creation and poverty reduction. The assumption is that land value enhancement, realized through smart and well-planned urban regeneration of the project area, should be enough to finance the necessary as well supplemental infrastructure to fully leverage the urban regeneration potential of the upcoming Lai Expressway & Flood Channel Project (LEFC). URIAL Project is essentially for complementing, supplementing & leveraging the gainful outcomes of LEFC Project. URIAL Project is not merely a land use plan but is also expected to be a road map as well as investment plan for developing the infrastructural elements necessary to realize the objectives of URIAL and to make it attractive enough for the private investments in not only private infrastructure but also in the public infrastructure. Achieving this vision would require a sound legal & institutional framework, with some kind of special legislation to ensure effectiveness & efficiency of management of urban regeneration on both sides of the Lai waterfront.

- 1. Regeneration and redevelopment along both banks of the Lai Expressway project.
- Promote economic densification and in-fill of existing urban areas with urban regeneration of built-up areas to address housing demand in twin cities and also create economic opportunities do so that regenerated areas are not merely living for residential purpose but also revenue creators, job creators, wealth creators for a broader range of education and skills.
- 3. Promote High Rise living and make high rise living cost effective yet economically gainful thus arresting the trend of horizontal sprawl eating up Greenfield areas, agri-lands, forests, and wildernesses in Pothohar region.
- Create IT infrastructure for promoting work from home and also settings spaces for setting up corporate offices and intellectual property centric R&D enterprises, creating white collar management and executive jobs.
- Envisage 4th Generation Industrial Estates, Vertical Industrial Estates, Vertical Fruits & Vegetable Markets, Vertical Commodity Markets, Vertical Laari Addas, Vertical Truck Addas, Vertical Re-Packaging Centers etc
- 6. Improve services network and densify the existing areas with high rise buildings while simultaneously add green spaces open areas, parks, playgrounds as well as sports and entertainment spaces.
- 7. Taking examples from the Muslim World envisage High Rise grave yards supported with Fatawas of Prestigious Islamic Scholars.
- 8. Create a model of urban slum regeneration with healthy, planned and sustainable areas and maximize the socio-economic potential of existing slum areas through the most feasible and viable options for constructing

the multistory buildings along and in the surrounding areas of the LEFC Project.

- 9. Envisage framework for reducing Carbon Foot print from the target area and also for creating Pothohari Flora based Carbon Sequestration Plan. Also Ensure that not a single inspiration should entail introduction of exotic flora in the target area. Also envisage how True To Type Pothohari Flora & Fuana can be maximized in the target area as well in its adjacent areas. Also envisage how exotic flora species in the target area can be replaced with Pothohari Flora.
- 10. Envisage Solarization, Waste Recycling, Waste Water Re-Cycling, Solid Waste Re-Cycling for the target area. Also envisage energy conservation strategies so as to minimize net energy consumption in the target area.
- 11. Develop Strategic Development Plan including detailed master planning for the Project Area; with clear policies, strategies, regulations and other project management measures.
- 12. Develop a sound business model for the Project, with assessment of various financing options pitched for private investments;
- 13. A sound institutional framework for the development & management of whole project.
- 14. Develop a policy and strategy.
- 15. Develop a strategy for media engagement, public awareness, community mobilization and meaningful public participation for effective and efficient implementation of the project.
- 16. Develop mechanisms and methods for increasing economic opportunities in the area with improved public access and mobility among various parts of the twin cities.
- 17. Develop a comprehensive and cohesive plan for public amenities that adequately meet the needs of current and future residents and complements those amenities available in neighboring areas.
- 18. Support in developing detailed designs and procurement documents for public infrastructure development;

To explore all possible supporting components to make the project sustainable.

3. THE ASSIGNMENT:

The RDA intends to hire the services of an experienced Firm /Consortium)/Consultant to carry out pre-feasibility study, strategic development plan and feasibility studies for preparation of urban regeneration plan along Lai Nullah Expressway & Flood Channel Project.

The assignment will consist of following two phases:

✓ Phase-I: Pre-Feasibility Study

✓ Phase-II: Strategic Development Plan & Detailed Feasibilities

4. SCOPE OF ASSIGNMENT

PHASE-I: PRE-FEASIBILITY STUDY:

Specific objective of this phase is to assess the existing situation and develop, evaluate, and prioritize various options to achieve the objectives of the Project and to boost economic growth of the city beside providing a clear-cut way forward to RDA to launch this project, with regard to institutional arrangement, financial model, and socio-economic & environmental viability of the proposed urban regeneration development.

Task 1.1: Inception Report:

The consultant shall be required to study previous feasibilities carried out by JAICA and M/s NESPAK and others to formulate a detailed methodology for carrying out pre-feasibility. In addition, the Consultant would be required to provide Work Breakdown Structure, work schedule, team details, logistics plan, requirements from the Client, and anticipated issues pertaining to the initiation of work.

Task 1.2: Public Consultation and Engagement

The consultant shall be required to undertake public consultation process in the project area for properly documenting the suggestions and concerns of the people residing in the area to be incorporated in project related policies and strategies. The Consultant shall also assess options of resettlement and/or relocation and phasing of multi-story building construction work in the area. For this, the Consultant shall undertake focus group discussions and socio-economic survey of households with by taking 5% sample of the Project Area within 500meter belt on both side of the Project Area.

Task 1.3: Land Acquisition and Resettlement Policy and Strategy

Based on the public consultation process and international best practices, the consultant shall be required to develop feasible land acquisition and resettlement policy and strategy aligned with the national resettlement policy of Pakistan, Land Acquisition Act and other laws so that investors and builders are facilitated for acquisition of land and phase-wise resettlement of population to vacate the land for construction of multi-story buildings with private investment.

Task 1.4: Market Study for Land Development:

The channelization of Lai Nullah will reclaim land along banks. The consultant shall identify free & reclaimable land along both banks of Lai for commercial development and the remaining land to be acquired for the project by private investors. Further, the consultant shall conduct a Market Study for working out proper rationale for land development/ urban regeneration along Lai Nullah which shall contain the following activities:

- 1. Identify the major real-estate projects / housing schemes/commercial centers in the vicinity of Lai Nullah Expressway Rawalpindi.
- 2. Carry out the pricing analysis of real estate projects identified above.

- 3. Determine actual utilization / occupancies of these projects to identify the demand of housing schemes/commercial centers in the area.
- 4. Identify the housing schemes/commercial centers launched in the last 10 years along with the pattern of its sales based on the data available online as well gathered through discussions with the real estate agents in the area.
- 5. Comment on the major housing projects/commercial hubs in the pipeline along with the status of their completion.
- 6. After analyzing, conclude the pricing analysis of commercial and residential plots in the area along with the pattern of increase in prices during the last three years.
- 7. Identify the major commercial projects / mix use building projects completed in the city of Rawalpindi during last 5 years.
- 8. Comment on the actual utilization of the identified commercial projects.
- 9. Carry out the pricing analysis for sale as well as for rent in these commercial projects.
- 10. Comment on the pipeline of major commercial projects / mix use building in the area along with the tentative time for its completion.
- 11. Comment on the prevailing model for the sale of plots, houses, shops in the real estate projects (Installments, Upfront sales etc.)
- 12. Carry out the desktop research for the major real-estate as well as commercial / mix use building currently under construction in other major cities of Punjab like Lahore and Faisalabad.

The Consultant shall assess and analyze the geographical scope of this Project Area, keeping in view the socioeconomic, demographic and transportrelated factors that would determine the feasibility of this development from a financial and urban development perspective. Particular focus needs to be given to the land value enhancement and the scope for its capture in order to finance the infrastructure development. The Consultant shall study various international models and best practices, in order to come up with practical & viable options. The consultant shall prepare resettlement plan for peoples and businessman which will be dislocated from the project area in an appropriate manner. The consultant will provide assessment of the approximate value that could be potentially generated.

Task 1.5: GIS Based Map of the Area:

Consultant shall prepare a base map of the area more than 1-Km belt on both side of the Project Area through Geographic Information System (GIS) based applications and field survey. These GIS maps will be used to determine the

locations and extents that are found in the earth's space time and recorded through the date and time of occurrence, along with x, y, and z coordinates; representing, longitude (x), latitude (y), and elevation (z). The consultant is expected to perform following tasks:

- 1. Downloading the satellite imagery through Universal Map Downloader.
- 2. Digitization of the surrounding area by using ArcMap 10.8.
- 3. Survey of the area by using digitized satellite imagery and online form.
- 4. Data Entry and attribute filling in ArcMap.
- 5. Preparation of Land Use Map by using ArcMap.
- 6. Analysis of potential areas for future development.
- 7. Preparation of plans for future development.

Task 1.6: Assessment of Existing Infrastructure Services:

The Consultant shall undertake assessments of the existing conditions of public services networks that include but not limited to road/street, sewerage, drainage, waste water systems, electricity and gas. The Consultant would be required to study the available data on the historic flows and the current availability of water in the Lai Nullah and to develop options to reduce contamination & foul smell so that the urban development would be attractive to the investors. In addition to this, the consultant may review the treatment option of city waste water and also calculate the additional inflows from tributaries of Lai Nullah. The Consultant shall search out various options to construct small Sewage Treatment Plants to treat waste water along Lai nullah based on the topography of the area and the sewage flow of trunk sewer disposing into nullah. This assessment of infrastructure services is critical to the success of whole Project and hence needs to be carefully evaluated, with estimated costs and design options.

Task 1.7: Typical Multistorey Building Design and Cost Estimates

The Consultant shall prepare at least three options of typical design of various size buildings and undertake cost-benefit analysis with investors' point of view as per prevailing market rates.

Task 1.8: Financial Analysis

The Consultant shall evaluate various options of financial models of the proposed multistory buildings and revenue generation for the RDA in terms of fee for commercialization, building plan approval and betterment fee. The consultant shall also recommend various zones of fee standards for such activities. Moreover, Consultant shall develop a partnership model that ensures a solid financial foundation, manages financial risk and secures revenue that fund requisite infrastructural addition / development required by this urban regeneration plan

Task 1.9: Institutional & Regulatory Framework

The Consultant shall evaluate the existing legal & institutional setup relevant to the Project, assess gaps and suggest key reform areas, if any. Options for institutional structure required to manage and develop the Project

also need to be studied and presented. Moreover, the Consultant shall prepare draft Building and Zoning Regulations specific to the urban regeneration project area and present a difference between the existing and proposed Building and Zoning Regulations.

Task 1.10: Conceptual Framework:

Based on the above-mentioned assessments and a review of the international best practices, the Consultant shall prepare an overall conceptual framework aimed at addressing all the opportunities and constraints. The framework should cover all the key components of the Project.

Task 1.11: Schematic Design

The Consultant shall develop a schematic design of the Project, including a programmatic framework of design, development & interventions, and prioritizing the project components as the locations of interest for initiation. This framework shall also identify the different line agencies / departments that are to collaborate on the specific components. The Consultant shall also present a 3-D models of the area showing existing and proposed conditions of the project area.

Task 1.12: Strategic Development and Master Planning of the Area

The Consultant shall develop Strategic and Master Plans of the area having detailed phasing and implementation schedule and identify priorities for actions. The Master Plan will also have a framework for regeneration and attract private sector investment with options of public, semiprivate, and private spaces, public amenities, extent of mix land uses, and engagement of local community.

Deliverables:

Pre-feasibility Report.

The Prefeasibility Report should have a comprehensive data compilation, analysis and recommendations covering all aspects and options analysis, opportunities, constraints and risks. Some of the data sets required are mentioned below.

- 19. Assessment of existing socio-economic level of the population and public consultation process with recommended measures.
- 20. Assessment of market values of land and phase-wise resettlement of population to vacate the land for construction of multi-story buildings with private investment.
- 21. Detailed GIS based existing and proposed land use maps including proposed transport network and attribute data;
- 22. Assessment of Existing Infrastructure Services Networks in the area.
- 23. Typical design of Multistory Buildings with cost-benefit analysis
- 24. Institutional & Regulatory Framework that include Building and Zoning Regulations.

- 25. overall conceptual framework aimed at addressing all the opportunities and constraints.
- 26. A schematic design of the Project, including a development framework, prioritized interventions, and 3-D models of the area.
- 27. Strategic Development and Master Planning of the Area

The consultant is also expected to carry out and report on the following as well as all other necessary studies to achieve the deliverables:

- Propose the potential limits of the project (physical limits and design horizon in time)
- Identify lacking information, which will be necessary for the Feasibility Study.
- Identify legal, institutional and regulatory framework.
- Assess the legal and regulatory framework for PPP with respect to urban regeneration projects and suggest the appropriate options for the Project.
- Identify potential financial sources for the project.
- All matters related to above mentioned tasks.

Timelines: 08 weeks from the signing of the Contract

PHASE- II: STRATEGIC DEVELOPMENT PLAN & DETAILED FEASIBILITIES

Specific Objectives: Assuming that the prefeasibility was a 'Blunt data, Sharp Tools' exercise, the 2nd phase is going to be 'sharp data, sharp tools' activity, with primary data collection and resulting in a Strategic Development Plan for the whole Project area and a sound & bankable feasibility Reports of the most preferred options for each of the key components / sub project.

The consultant will work in close coordination with the consultants of following ongoing consultancies to ensure synergies.

- Transaction Advisory Services for Lai Expressway and Flood Channel Project.
- Punjab Intermediate Cities Improvement Investment Program preparing Master Plan of Rawalpindi city.
- Regional Plan for District Rawalpindi & Peri-Urban Structural Plans for Tehsil Headquarters of Rawalpindi District (Excluding Rawalpindi Tehsil).
- All Government Agencies working in the area.

Task 2.1: Public Consultation and Resettlement Plan

Considering all the previous work done on the subject, the consultant shall develop public consultation and Resettlement Plan that will be disclosed in the project area to seek overall feedback of the local population. The consultant shall develop feasible land acquisition and resettlement strategy and entitlement matrix aligned with the national resettlement policy of Pakistan so that investors and builders are facilitated for acquisition of land and phase-wise resettlement of population to vacate the land for construction of multi-story buildings.

Task 2.2: Topographic Survey & Geo-tech and other Information:

The Topographic survey of Right of Way (ROW) of Lai Nullah is available with RDA. However, the other topography survey includes but is not limited to the following:

- All buildings/structures, settlements (location and names) in the vicinity of Lai Nullah along with detail of population settled, types of business, utility services, land detail/superimposition of Khasra maps and other relevant data.
- Archeological/historical and religious sites (including graveyards, churches, tombs, minarets, temples and other sites of anthropogenic and cultural importance)
- Open spaces to be available for commercial activities,
- Access roads, Drains/ nullahs, WASA pumping/disposal stations, industrial effluents points,
- Infrastructure and other features of the site.
- Geotech information of the area.

All data must be shown using Digital State of Art/total station, GPS, Cross sections as required with contours, including transfer of entire data to computer system in different geo referenced layers /themes using features of standard software and compatible with System Design Software packages such as AutoCAD, including supply of soft copies and hard copies in appropriate scale.

- 1. Contour intervals be shown at 02 m
- 2. Elevations be shown in meters

Task 2.3: Infrastructure Services Development Plan:

The Consultant shall finalize the assessments of the existing conditions of public services networks that include but not limited to road/street, sewerage, drainage, waste water systems, electricity and gas. The Consultant would be required finalize the assessment of existing infrastructure and develop plan for future development of these services in the area.

Task 2.4: Investors' Friendly Cost-Benefit Analysis for Multi-storey Buildings

The Consultant shall finalize the options of typical design of various size buildings and undertake cost-benefit analysis with investors' point of view as per prevailing market rates. The Consultant shall provide various financial models for construction of multistory buildings and revenue generation for the RDA in terms of fee for commercialization, building plan approval and betterment fee. The consultant shall also recommend various zones of fee standards and a draft of building and zoning regulations for various zones. Overall, Consultant shall develop financial models that secure revenue to funds construction of Lai Expressway and Up-gradation of the surrounding areas.

Task 2.5: Pilot Implementation of Proposed Mechanisms

The Consultant shall undertake pilot implementation of the proposed mechanism and strategies in the selected zones of the project area. Such pilot will include engagement of at least two private investors with approval of at least two multistory building plans as per proposed building regulations. Based on these pilot initiatives, the proposed mechanism for social and resettlement impacts, construction of multistory buildings and infrastructure services will be modified and provided in the strategic and Master Development Plan.

Task 2.6: Strategic & Master Development Plan

Considering all the previous work done on the subject and by collecting requisite primary data, the Consultant shall finalize all the components of the prefeasibility study and develop a Strategic Development and Master Plan that shall include existing and proposed land use maps, proposed plans for land use, transportation & infrastructure network coupled with comprehensive institutional design, financing mechanisms, and public engagement and resettlement mechanism. Consultant shall also develop sector-wise guidelines for land development, development control, building control, water supply & sewerage, waste disposal, transport and communication network, power infrastructure, etc.

Deliverables:

The deliverables of this phase shall be the final documents that were initially developed in prefeasibility stage while covering the following aspects.

Tasks 2.1 to 2.6:

Strategic Development Plan of the Project Area consisting of:

- Overall goals and objectives of the Strategic Development Plan;
- AutoCAD file of topographic surveys with all data of 3-D coordinates with clearly marked topographical features, contour plan/map and physical features.
- Plans for land use, transportation & public infrastructure network with proposed framework for development in phases;
- Sector-wise guidelines would be with reference to the existing & proposed land use plan for land development, development control, building control, water supply & sewerage, waste disposal, transport and communication network, infrastructure, etc;
- Detailed institutional framework, including but not limited to legal and regulatory framework, organizational structure and human resource requirement, to manage and implement the Strategic Development Plan including roles and responsibilities of the government and private sector; and

• Financing strategies and options to manage & implement the Strategic Development Plan.

Detailed feasibility reports on each selected infrastructure component and proposed development blocks would be developed sufficiently for them to be taken to the market for sale, lease or private partnership. Each report would consist of the following (when appropriate):

• Preliminary design based on primary & secondary data and backup calculation

- Market sounding
- Financial model
- Institutional responsibility
- Assumptions and risks
- Sensitivity analysis
- Other related studies, such as EIA, IEE, RAP, SIA, etc.

Time lines: The tasks in this phase would be conducted in parallel, and are expected to be completed within 12-week period, after the approval of Prefeasibility Report.

5. KEY PROFESSIONAL STAFF

S.	Position	Man-
No		Months
1	Team Leader (BSc degree in City& Regional /Town/ Urban Planning with 20 years or above experience in Housing and Regional /Peri-urban/ Structure Planning/Zoning or MSc degree	5 (Full Time)
	in City & Regional /Town/ Urban Planning with 15 years of experience.) (01 Post Full Time)	
2	Spatial/Peri-urban Planning Specialist (Deputy Team Leader) (BSc degree in City& Regional /Town/ Urban Planning with 15 years or above experience in Regional/Peri-urban/ Structure Plans, Control/Regulation/Zoning by laws or MSc degree in City& Regional /Town/ Urban Planning with 10 years of experience). (01 Post Full Time)	5 (Full Time)
3	Community Mobilization and Resettlement Expert (M. Sc/ M.A in	5 (Full
	Social Sciences with 15 years or above experience in Urban	Time)
	Regeneration or resettlement of affected population or slum area upgradation (01 Post)	
4	Urban Design Specialist (BSc/B. A degree in Architecture with 15	5 (Full
	years or above experience in Urban Regeneration Design or slum	Time)
	area upgradation or MSc degree in Architecture/Urban Design with 10 years of experience). (01 Post)	
5	Urban Infrastructure Engineer (B Sc Civil Engg with 20 years or	5 (Full
	M.Sc in Construction Management with 08 years' experience in	Time)
	the slum area upgradation and design of buildings and allied works). (01 Post)	
6	Urban Economist or Financial Expert (MBA in Finance and	4-months
	Management or Economic Development with at least 10 years'	Intermitte
	experience in valuation of public sector projects and Finance &	nt

	Revenue generation). (01 Post)	
7	Legal Expert (LLB with minimum Five (05) years' experience of dealing with business/corporate laws, firms and company laws/ordinances, and also thorough knowledge on PPP Act 2019, as amended or M. Sc in Contract Management with 05 years' experience in relevant field). (01 Post)	2-months Intermitte nt
8	Structural Engineer (B Sc Civil Engg with 12 years or M. Sc Structural Engineering with 08 years' experience in the slum area upgradation and design of buildings and allied works for wastewater facilities). (01 Post)	2-months Intermitte nt
9	GIS Specialist (BSc GIS/City & Regional Planning with 10 years' experience in GIS Mapping of Urban/ Peri Urban areas or Master's degree in Spatial Planning /Sciences with 07 years' experience.) (01 Post)	2-months Intermitte nt
10	Urban Environmental Specialist (BSc Engg or Architecture or City & Regional Planning with 10 years or M. Sc in Environmental / science with 07 years relevant experience in slum area upgradation and preparation of EIA/IEE reports). (01 Post)	2-months Intermitte nt

Note: Team Leader, Deputy Team Leader, Community Mobilization and Resettlement Expert, Urban Design Specialist, and Urban Infrastructure Engineer shall be engaged full time for the project activities. They will not work/be engaged for any other assignment during the project period without formal approval from RDA.

6. **REQUIRED DOCUMENTATION/OUT PUT:**

The submission of the consultant shall include:

- 10 copies of Inception Report (submission in 2 weeks after signing of contract).
- 10 Copies of Physical & Engineering Survey of whole scope of project work (submission in last month).
- 10 Copies of Pre- feasibility reports (submission in 2nd month)
- 10 Copies of Phase-II reports (submission in 5th month).
- 05 copies of Monthly progress report (submission in every month). (The consultant will also provide soft copy of all these reports)

8. Payment Schedule:

Sr. No.	Deliverable/ Submission	Payment (percentage of contract amount)
1	Inception Report	10%
2.	Prefeasibility Report	30%
3	Successful completion of pilot initiatives field surveys, and field work	30%
4.	Phase-II Reports	30%

9. TIME PERIOD.

The TA/consultants shall undertake to complete the services as stated in the scope of work in all respects in 05 months.

The consultant, however, will provide the necessary assistance to RDA Rawalpindi / Govt. of Punjab for the aforementioned projects till the finalization / approval of the project.

Back up data composed on computer and original tracing of drawings & shape files will be handed over to RDA for its record.

8. <u>MISCELLANEOUS.</u>

- 1. The presentations, as and when required during the whole period of assignment will be made by the consultants on Multimedia, fully prepared to the satisfaction of RDA.
- 2. No additional boarding, lodging, transport and office facilities will be provided by RDA to the consultants other than included in financial proposal.
- 3. All documents shall be prepared in English and submitted on electronic media in original file format with copy as Adobe PDF files.
- 4. All documents produced / software used in the consultancy service shall be the property of the RDA and consultant shall not use for any other purpose without the permission of the DG RDA.
- 5. All Drawings and Maps shall be submitted in hard & soft formats (compatible with AutoCAD and ESRI's ArcGIS respectively)
- 6. The consultants may be required to perform any other services deemed necessary by the Client during the execution of this Contract towards the achievement of general objectives as given above.