

Annex 1.1

PROJECT BRIEF

Project ID and title	23455	Afghanistan Community Resilience and Livelihood Project
Sub Project Name	Upgrading of Footpath of Right Side of Hashemi Main Road with a Total Length of 1353m in District #9 of Herat City	
Sub Project ID	HRT/DIS#9/SP04	
Date	November 2024	

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1 INTRODUCTION

This project was initiated by the UNOPS after consultation with the local community and developed through bottom up sub project planning which has resulted in the current Design. The basis of the design document has been prepared by the UNOPS in order to define the basic design requirements for all sub project works to be carried out within urban environments under component-2 of the project.

1.1 Contract Description and Scope of Work

Upgrading of Footpath of Right Side of Hashemi Main Road with a Total Length of 1353m in District #9 of Herat City. The sub-project scope of work is Rehabilitation of a sidewalk with precast concrete interlock with a total length of 1353m located along an existing asphalt paved road.

The Rehabilitation work will include: furnishing and installation of precast concrete interlocking paver units of specified shape, colour, and size, placing of 50 mm thick sand bedding layer, placing and compaction of 100 mm thick base course layer, subgrade preparation and compaction, construction and installation of 2706 linear metre of precast concrete edge curbs, laying of 13cm plum concrete layer over a layer of 13cm sub-base across sub-streets and across houses main entrances located along the footpath at 19 locations, providing, laying, & levelling of agricultural soil with a thickness 30 cm over a width of 1.7m, providing and plantation of grass for greenery purposes.

The project scope doesn't include site remediation, the affected sites will be refurbished as stated above and the facilities will be handed over to the local community. Full description of the project works are available in the project documents.



Picture No.1: Site Plan, for Start & end Point coordinates refer to the location map in the drawing package.

1.2 Major Activities

The major activities included within the scope of works include:

- General Excavation
- Filling
- Subgrade preparation & Compaction
- Base Course work
- Sand bedding
- Placing of interlocking pavement
- Sub Base Course work
- Plum concrete work
- PCC Work
- Providing, laying and levelling of agricultural soil
- Providing and plantation of grass
- Carry out any additional labour intensive works as may be instructed by the UNOPS Representative on site utilising any labour not engaged on the scope of works described in the Design and quantified within the Bills of Quantities. Such additional works may include ditch cleaning, street cleaning, litter picking etc.

1.3 Project Information

- Contract ID: HRT/DIS#9/SP04
- Province: Herat
- District: 9
- Total length of sidewalk: 1353m
- Start point & end Point coordinates refer to the location map in the drawing package.

2 TECHNICAL DETAILS

The sub project scope is to construct the sidewalks with precast concrete interlocking paver, the purpose of this sub project is to improve the existing sidewalk, improve the aesthetics, safety, and comfort of the sidewalk user.

The interlocking construction should be performed in strict compliance of the Technical Specification of the project, and according to general and global specification and manuals of concrete interlocking pavement construction. Green areas have been considered beside the proposed sidewalks, a proper slope of 0.5% will be provided to the sidewalk in order to direct the surface runoff to the existing side drains.

In order to limit the horizontal side movement of the precast concrete interlocking units, precast edge curbs will be installed on one side of the proposed footpath.

The strength of the concrete interlocking paving units should be 40 Mpa, and that of the edge curbs' should be 25Mpa.

Herat province is located in a moderate seismic risk zone, as per the USGS Open-File Report 2007-1137 Preliminary Earthquake Hazard Map for Afghanistan, the Peak Ground Acceleration for Herat province is 0.28g based on a 2% probability of exceedance in 50 years.

3 SUB-PROJECT SURVEY INFORMATION

3.1 SITE INITIAL SURVEY

The UNOPS site team has done the initial survey from the site. The proposed sidewalk is laid in a flat area with a relief of around 1 - 1.5%. The maximum & minimum altitude along the proposed sidewalk are 929m & 922m respectively.

The land on which the project is implemented belongs to the public, and it has been confirmed with local communities and local authorities. There are private properties on one and a public road on the other side of the proposed sidewalk, but there are no private infrastructures (e.g. irregular stores, street selling, etc.) in the proposed alignment of the sidewalk to be refurbished and/or removed.

According to information from the local community there are underground utilities at a depth of around 80 - 100 cm below the existing ground level, which is not expected to be disturbed by the construction, and doesn't need any relocation.

The project sites are located within congested residential areas in the cities, therefore the existence of unexploded ordnance (UXO) and landmines issues are not considered to pose a risk for the projects, however for complete information about the landmines and UXO refer to section 1123 of Technical Specification.

The existing site shown in the below pictures:



Picture No.2 : Existing site, 0+720

3.2 CLIMATE STUDY

The climate of Herat in summer is hot, reaching up to 40°C. The winter season is very cold and it will snow and rain during winter. The temperature gets as cold as -9°C. The working season is from February to November.

Herat experiences some seasonal variation in monthly rainfall. The rainy period of the year lasts for 5.2 months, from November 27 to May 1, with a sliding 31-day rainfall of at least 0.5 inches. The month with the most rain in Herat is February, with an average rainfall of 1.3 inches. The rainless period of the year lasts for 6.9 months, from May 1 to November 27. The month with the least rain in Herat is August, with an average rainfall of 0.0 inches. The average rainfall intensity for Herat province is 0.9 inch per month. The below table shows the average monthly rainfall intensity for the Herat province:

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Rainfall	0.8"	1.3"	1.3"	0.8"	0.3"	0.0"	0.0"	0.0"	0.0"	0.2"	0.4"	0.6"

Table No.1: Monthly Average rainfall data for Herat

The snowy period of the year lasts for 3.5 months, from November 29 to March 12, with a sliding 31-day snowfall of at least 1.0 inches. The month with the most snow in Herāt is January, with an average snowfall of 2.5 inches.

The snowless period of the year lasts for 8.5 months, from March 12 to November 29. The least snow falls around July 22, with an average total accumulation of 0.0 inches. The below table presents the average snowfall data for Herat province.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Snowfall	2.5"	2.3"	0.8"	0.0"	0.0"	0.0"	0.0"	0.0"	0.0"	0.0"	0.6"	1.8"

Table No.2: Monthly Average snowfall data for Herat

The source for the weather data is www.weatherspark.com.

3.3 TRAFFIC ASSESSMENT

The traffic assessment data is not required, since the proposed sidewalk is being constructed for pedestrians.

3.4 TEMPORARY WORKS

As the nature of the project is labour intensive, and the sizes of the project are small, hence no significant temporary works which need design are expected. During the construction of the sidewalk the residents could access their houses, but it is agreed with the community that they will park their vehicles in parking areas during the course of the construction, without any charging and claims.

4 MATERIAL INFORMATION

This information has been compiled based on visual visits and also through interviews with local authorities and their interventions in the area. The area where the project is implemented is flat. The material on which the foundation is to be based is medium dense, moist, light brown silty sand with gravel.



Picture No.3: Existing surface of sidewalk (0+260)

5 ACCESSIBILITY TO THE PROJECT SITE

There is no crucial access limitation to the project site during construction. The construction material like cement, aggregate base course, sub base course, stone and equipment like PPEs, shovels, etc, and other machinery are available at some distances from the project site. The proposed materials are available in the site as follow:

- The required construction materials are available nearby the project site.

6 HAND OVER OF SITE

The project site shall be handed over in full to the contractor after issuing of Notice to Proceed (NTP).

7 RISK ASSESSMENT

ER 1: Effect of failure on direct population served– 2 Points

The sub project scope is the construction of a sidewalk, the effect of the failure has a minor impact, affecting less than 5000 users/day.

No impact and/or affecting less than 250 vehicles or 500 users/day	1 Point
Minor impact and/or affecting 250-2500 vehicles/day or 501- 5,000 users/day	2 Points
Moderate impact and/or affecting 2500-5000 vehicles/day or 5,001-10,000 users/day	3 Points
Severe impact and/or affecting more than 5000 vehicles/day or 10,000 users/day	4 Points

ER 2: Complexity of design 2a: Complexity with Design Traffic – 1 Point

The sub project is the construction of sidewalks in an urban area with no complexity involved in terms of structure and geometric designing of the sub project.

Simple Design (Single lane road paved or unpaved)	1 point
Average Design (Double lane road paved or unpaved primary or secondary roads with simple intersections)	2 points
Complex Design (Multi lane paved primary roads with substantial intersections)	3 points
Very Complex (Multi lane paved highway standard)	4 points

ER3: Element 2b: Complexity of Terrain - 1 Point

The project is located in flat terrain.

Simple Design (Flat terrain with sweeping curves)	1 point
Average Design (Flat or undulating with medium radius curves)	2 points
Complex Design (Undulating to hilly with medium ascent/descent slopes and tight radius curves)	3 points
Very Complex (Mountainous with steep ascent/descent and sharp radius curves)	4 points

ER 4: Social Impact Assessment - 1 Point

Since the project works is the construction of a sidewalk, therefore there would be positive impact on the local population, no displacement, ethnic impact and negative social impact involved in the sub project.

Positive, little or no impact on local population, no threat to ethnic minorities or cultural aspects, historic or archaeological features	1 point
Some displacement, loss of livelihood and impact on future employment, disproportionate ethnic impact, gender equality impact	2 points
Moderate negative social impact, loss of livelihood, displacement and other negative factors, some loss of cultural heritage	3 points
Substantial to severe negative social impact, loss of livelihood for substantial population, loss of cultural heritage, displacement of substantial population	4 points

ER 5: Environmental Impact Assessment - 2 Points

Construction of the sidewalk will leave a positive impact on the area specially during winter and spring season.

Minor impact, acceptable risk to ecosystems	2 points
Moderate impact with moderate risk to ecosystems	3 points
Substantial to severe negative environmental impact	4 points

ER 6: Natural Phenomena - 2 Points

The project site is located in a moderate level seismic-risk area.

Minimal natural phenomena and/or comprehensive relevant design codes in place; low-level seismic risk zone	1 point
Moderate natural phenomena and/or some relevant design codes in place; moderate-level seismic risk zone	2 points
Some natural hazards acting together and/or very limited relevant design codes; moderate to severe level seismic risk zone	3 points
Severe natural hazards acting together and/or no design codes in place; severe level seismic risk zone	4 points

ER 7: Estimated total construction cost - 1 Point *

The total estimated construction cost is less than US\$ 500,000.

Up to US\$500,000	1 point
From US\$500,001 to US\$2,500,000	2 points
From US\$2,500,001 to \$5,000,000	3 points
More than US\$5,000,001	4 points

Total Number of Points – 10 Points

Classification of Risk Level

Project classification – **Low Risk**

Since the nature of the project is cash for work (CFW), therefore the type of the design and construction is so simple, the new infrastructure project is supposed to be design or constructed with no significant issues of the design complexity, environmental, and no natural vulnerability have been involved in this sub project, based on the assessment the sub project has been classified as Low Risk.