



காதி கலிஹர்ஷ லிஹகாஹிடி  
விவசாய நவீனாபயமாக்கல் திட்டம்  
Agriculture Modernization Project



காதிஹர்ஷ அலாஹாஹடி  
Ministry of Agriculture  
கமத்தொழில் அமைச்சு

## Environmental Screening Report

### Improvement of Access Road to Wakkadahinna Potato Cluster 3 km Carpet Laying



Project Management Unit  
Agriculture Sector Modernization Project  
October 2021

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## Abbreviations

AI	Agriculture Instructor
ASMP	Agriculture Sector Modernization Project
ASC	Agrarian Service Center
ATDP	Agricultural Technology Demonstration Park
CBO	Community Based Organization
DDR	Due Diligence Report
DSD	Divisional Secretary Division
EMF	Environmental Management Framework
EMP	Environmental Management Plan
ESR	Environmental Screening Report
FO	Farmers Organization
FPO	Farmers' Production Organization
GAP	Good Agricultural Practices
GND	Grama Niladari Division
GoSL	Government of Sri Lanka
IDA	International Development Association
IEE	Initial Environmental Examination
IPM	Integrated Pest Management
LGA	Local Government Authority
MOA	Ministry of Agriculture
MOPI	Ministry of Primary Industries
NIRP	National Involuntary Resettlement Policy
NGO	Non-Governmental Organization
OP	Operational Policy
PAP	Project Affected Persons
PCR	Physical Cultural Resources
PMP	Pest Management Plan
PMU	Project Management Unit
SLRs	Sri Lanka Rupees

# Environmental Screening Report (ESR)

## A. The Project Identification

<b>Project Title</b>	Improvement of Access Road to Wakkadahinna Potato cluster 3 km carpet laying
<b>Project Proponent</b>	Agriculture Sector Modernization Project (ASMP)
<b>Purpose and scope of ESR</b>	The purpose of the ESR is to provide viable mitigation measures against all identified environmental impacts during the screening process of the subproject. This ESR includes the basic information of the subproject, justification of the subproject selection, anticipated impact, and socio-economic condition of the subproject area, and community concerns on subproject identification, designing, and implementations, the implementation plan of the viable mitigation measures against the identified environmental impacts. Field level screening checklist is annexed as Annex 1.

## B. Project Location

<b>Location</b>	The road section identified for rehabilitation is located Wakkadahinna Village in both Keppetipola and Vidurapola GNDs of Welimada DS division in Badulla district (belongs to Uva Province). The location map is annexed as Annex 2.
<b>Location (Google Map)</b> Start: N: 6°54'23.94" E: 80°50'55.01"  End: N: 6°53'35.29" E: 80°51'18.83"	 <p style="text-align: center;"><b>Figure 1: Location of the subproject</b></p>
<b>Definition of Project Area</b> <i>(The geographical extent of the project &amp; areas affected during construction)</i>	The approximate land extent of Welimada DSD is 18,800ha and per capita, land consumption is 0.2ha. There are 300 farmers who are planning to select for this Good Agricultural Practice (GAP) technology. The project area is a 3km long road. From the start to the top of the hill up to Wakkadahinna, either side of the road is Tea plantation. This proposed road falls within Malwatte Valley Plantation which starts at A005 Peradeniya-Badulla-Chenkaladi Road at Padinawala. This road is

been used both by Plantation workers and people who live and cultivate. People who cultivate in Wakkadahinna, daily use this road. Altogether 340 farmers will be directly involved to produce the seed potato on 260 acres extent farmlands under this subproject. All the farmers in the area usually cultivate vegetables during both seasons of the year on their uplands and paddy lands as well. Except for small scale farmlands, plantation company-owned land of the area is covered by plantation crop such as Tea (Botanical Name: *Camellia sinensis*).



Figure 2: A Tea cultivation of the area

The main food crop which is grown by the farmers in this area is potato (once a year). As for the vegetable crops, farmers grow carrots, cabbages, beans, radish, tomatoes, capsicum, etc... Farmers do the cultivations during both seasons but they have to irrigate the crops during Yala season since the rainfall is not enough for crop management. Farmers have cultivated especially fruit-bearing trees and timber trees as the perennial crops on their home gardens.



Figure 3: Existing Vegetable cultivation land in Wakkadahinna

**Adjacent land and features**

The predominant land use of the project area is Plantation. The road runs only through Malwatte Valley Plantation as the Wakkadahinna vegetable cultivation lands are located at the end of the road on the top of the hill. There are few buildings belonging to Malwatte Valley Plantation such as Stores, Buying Office, Weighing office, fertilizer stores, bungalow, etc. In

	addition, there are houses belonging to estate workers and a new housing scheme (Ch.: 1+700km) being constructed on the side of the road.
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## C. Project Justification

<p><b>Need for the project</b> (What problem is the project going to solve)</p>	<p>In terms of developing the seed potato clusters in Wakkadahinna, the rehabilitation of a 3km road has been identified as critical.</p> <p>The road users are living in both Keppetipola and Vidurapola GNDs and surrounding other areas and the majority of their lands where they cultivate are in Wakkadahinna. Wakkadahinna is located on a peak of a hill which is very difficult to access as the road is not fully constructed. The villagers who are living in Wakkadahinna are using the road to access the market and get their inputs for agricultural activities. The women, elderly persons, children, and especially other vulnerable persons use the road to access the market, government institutions, hospitals, and schools. The existing road is nearly 1.7km in dilapidated condition and road users face many difficulties when it uses.</p> <p>Therefore, urgent intervention is needed to rehabilitate the road otherwise it will directly impact the proposed seed potato cluster formation. The damaged road section is currently getting eroded during the heavy rainy period and creating many environmental issues. Hence, farmers have to pay an additional cost to transport the product. The residents of the area also face difficulties using the road to access the market, schools, hospitals, and other institutions. Especially, the elderly persons, children, and other vulnerable people face difficulties due to the existing conditions of the road.</p>
<p><b>Purpose of the project</b> (what is going to be achieved by carrying out the project)</p>	<p>Two hundred and sixty acres of highly suitable lands for potato seed production in higher elevations will be selected from the Boralanda and Keppetipola areas of Welimada Ds division in Badulla district. Farmers having 1/2 or above land extents in these areas who are willing to participate in a seed potato production program will be selected. Priority will be given to those farmers who are already in the potato seed production business. The expected number of farmers suitable for seed potato production is about 340. Two farmer organizations will be formed to organize effective production management and marketing management. Common storage facilities will be constructed in two places in Boralanda, and Keppetipola areas. Management of these stores will be done by proposed farmer producer organizations. Providing production and marketing infrastructure required for seed production cluster to improve access to the lands and facilitate marketing and storage of seed potato produced by a proposed project supported seed producers. Hence, having an improved infrastructure system will be very important. Rehabilitation of Wakkadahinna 3km road stretch will have the following benefits:</p>

	<p>The rehabilitation of this road will result in more social, environmental, and economic benefits to the people such as;</p> <ul style="list-style-type: none"> <li>▪ Improve the market access to the farmers indirectly increases their income</li> <li>▪ Reduce the vehicle maintenance cost for the farmers by improving road condition</li> <li>▪ Reduce the extra transportation cost</li> <li>▪ Improve the storm water drainage of the road section and reduce the soil erosion in both road and the nearby farmlands</li> <li>▪ Improve the accessibility for households</li> <li>▪ More benefits for elderly persons, children, and other vulnerable communities by improving the road</li> <li>▪ Enhance the road users' safety</li> </ul>
<p><b>Alternatives considered</b> (different ways to meet the project need and achieve the project purpose)</p>	<p>There are no other road sections that can be used instead of using this road. Hence, the availability of alternatives is NIL.</p>

## D. Project Description

<b>Proposed Start Date (Duration)</b>	October 2021 (07 Months)
<b>Proposed completion Date</b>	April 2022
<b>Estimated total cost</b>	SLRs 66.23MM
<b>Present Land Ownership</b>	<p>The Wakkadahinna road is owned and maintained by Welimada Pradeshiya Sabha. The identified road starts at Padinawala on A5 road and runs through steep hilly plantations up to the top of Wakkadahinna village. The total length of the road section identified to rehabilitate is nearly 3.0km. The existing width of the road is nearly 15 feet. The entire road stretch is restricted by Malwatta Valley Tea Plantation. On top of the hill at Wakkadahinna, all the lands where seed potato cultivation is planned. At present, these lands are also been vegetable cultivated. Potato has also been cultivated once a year. The entire road stretch won't be able to asphalt as nearly 1.3km out of 3km is asphalted and paved interlocked. The consent form from the Welimada Pradeshiya Sabha is annexed as Annex 5.</p>



Figure 4: Present condition of the road

**Description of the Project**

*(With supporting material such as maps, drawings etc. attached as required)*

Since the potato cluster is located in the higher elevation areas in the district, improvement of the highly degraded existing access road becomes very important to facilitate easy access to the cluster and material transportation. The total length of the existing Wakkadahinna road is 3km and out that nearly 1.3km is already asphalted and paved interlocked. Hence, asphalt laying will only be limited to 1.7km length and no road widening scope included as there is no space for widening. Further, upon completion of rehabilitation, it will smoothen the movement of people, goods, and transport services and improve access to markets. Improved road will contribute to access to village and markets. It will also enhance the quality of life of the village farmers as they will have better access to their farmland and houses. They will be able to save money due to less maintenance cost of their vehicles and decreases the additional transportation cost of their products.

The civil works of sub project includes;

- Clearing and grubbing
- Road ROW excavation including Rock excavation
- Edge Treatment
- Embankment Construction
- Laying of Subgrade
- Improve the roadside drains to drain out storm water
- Shoulder filling
- Nearly Six culverts to be constructed/rehabilitated
- Laying of Asphalt (both Binder course and wearing course) for about 1.7km length

The designs of the proposed road rehabilitation are annexed as Annex 3 and 4. The subproject activities are planned to implement within the two

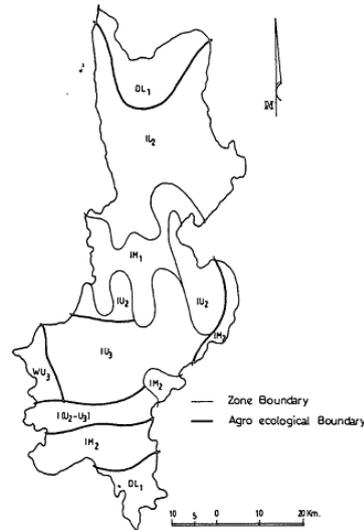
	cultivation seasons to avoid disturbances to the farmers' cultivation or any other livelihood activities.
<b>Project Management Team</b>	<p>A Project Management Unit (PMU) has been established under the Ministry of Agriculture to implement the proposed project activities. Contact Persons :</p> <p><b>Project Director</b> Agriculture Sector Modernization Project Ministry of Agriculture No. 123/2 Pannipitiya Road, Battaramulla Tel: +94 112 877 550, Fax: +94 112 877 546 Email: <a href="mailto:projectdirectorasmp2@hotmail.com">projectdirectorasmp2@hotmail.com</a> Web: <a href="https://www.asmp.lk/">https://www.asmp.lk/</a></p> <p><b>Environmental and Social Safeguards Specialist</b> Agriculture Sector Modernization Project Ministry of Agriculture No. 123/2 Pannipitiya Road, Battaramulla Tel: +94 112 877 550, Fax: +94 112 877 546 Email: <a href="mailto:sanjayadms@hotmail.com">sanjayadms@hotmail.com</a> Web: <a href="https://www.asmp.lk/">https://www.asmp.lk/</a></p> <p><b>Nature of Consultations and Inputs Received</b> Consultations with Environmental and Social Safeguard Specialist/ PMU and field visits to the project site.</p>

## E. Description of the existing environment

<b>1. Physical features – Ecosystem components</b>	
<b>Topography and terrain</b>	Generally, the project area covers a hilly and rolling terrain with a high slope (slope 40-60%). Geologically, the project area belongs to the highland Complex of Sri Lanka and the elevation is around 1,000m AMSL. Particularly, the Wakkadahinna area lies about 1200m MSL. Generally, the project site is having high elevated ridges and mountain ranges, plateau and undulating plains, and basinal structures. The project site falls into the upcountry intermediate of Sri Lanka and the features of this area are belongs to IU2 agro-ecological zone.
<b>Climate and Meteorology</b>	The average temperature is 18.9 °C and the maximum and minimum are 22.0°C and 15.0°C respectively. The average annual rainfall varies from 1,750mm to 2,500 mm and averages of 2,000mm. Relative Humidity varies from 75% during the day to 95% at night. The Uva Basin however lies in the rain shadow during this season. During the first inter-monsoon season (March to mid-May) the whole district receives about 300-500 mm of rainfall. The district lies in the lee of the Central mountain range during the Southwest monsoon season which extends from mid-May to September.

**Soil (type and quality)**

In the hilly area, the soil is dominated by Red Yellow Podzolic type and Mountain Regosols type could also be observed in few locations. Geology of the area could be classified as “Highland Sires” with garnet- sillimanite, schist and gneiss, quartz feldspar, granulite, charnokitic gneiss, pyriclasite, pyroxenes, and amphibolites, etc. The area belongs landslide-prone areas as per the Soil Conservation Act of Sri Lanka.



DL <sub>1</sub>	Dry Zone	Low Country	> 30	75% EXPECTANCY VALUE OF ANNUAL RAINFALL inches.
IL <sub>2</sub>	Intermediate Zone	Low Country	> 45	
IM <sub>1</sub>		Mid Country	> 55	
IM <sub>2</sub>			> 45	
IU <sub>2</sub>		Up Country	> 55	
IU <sub>3</sub>			> 45	
WU <sub>3</sub>	Wet Zone	Up Country	> 55	

**Figure 5: Agro-ecological Zones of Badulla District**

**Surface water**  
(sources, distance from the site, local uses and quality)

As the open water bodies, seasonal and perennial streams are located within the Welimada DSD. Meepilimaana Tank is located about 20 km away from this area and the main feeder canal is running through the Keppetipola and Boralanda area. However, the Wakkadahinna area is fed by Kande Ela (Ch.: 5+542km). Farmers mainly use this water source for cultivation. In addition, there are many springs are located in the area and it is identical features.

**Use:** The main surface water source of the area streams. The use of surface water for domestic purposes and agriculture is common.

**Quality:** The quality of surface water in the area in is good condition

	
<p><b>Ground water</b> (sources, distance from the site, local uses and quality)</p>	<p>The data on groundwater availability in the project area is very sketchy, and therefore it is not possible to exactly quantify the availability, yield, and capacity within the project area.</p> <p>However, the quality of ground water present in this area is moderate in condition and use for washing/ bathing activities.</p>
<p><b>Air quality</b> (any pollution issues)</p>	<p>Any major pollution source near the project area is not recorded</p>
<p><b>Noise</b></p>	<p>No any noise pollution sources in the vicinity of the project site.</p>
<p><b>2. Ecological features – Eco-system components</b></p>	
<p><b>Vegetation</b> (trees, ground cover, aquatic vegetation)</p>	<p>The predominant land use type of the project area is agriculture. Apart from vegetable cropping lands, the rest of the area consists of plantation crops and state-owned lands are being utilized for timber plantations. The identified farmlands are located within several habitat types including grassland, cultivated area, home gardens, and secondary vegetation.</p>
<p><b>Presence of wetlands</b></p>	<p>No wetlands present in the area proposed for the subproject</p>
<p><b>Fish and fish habitats</b></p>	<p>The open water bodies such as Kande Ela are waterbodies are ideal for fish habitat</p>
<p><b>Birds</b> (waterfowl, migratory birds, others)</p>	<p>The proposed project area is closer to the waterways and agricultural lands and there is a possibility of recording bird species in these habitat types.</p>
<p><b>Presence of special habitat areas</b> (special designations and identified sensitive zones)</p>	<p>The Hakgala strict reserve forest is located about 10km away from the sub-project area. It is highly enriched with diversified flora and fauna species. According to the sensitive area map produced by the Central Environment Authority (CEA), Welimada DSD is considered as sensitive as this particular locality is listed under landslide-prone as well as erosion-prone areas. But the proposed farmlands have been applied with good soil erosion control measures to avoid erosion.</p>
<p><b>3. Other features</b></p>	

<b>Residential/Sensitive Areas</b> (E.g., Hospitals, Schools)	The subproject activities will be undertaken at households' level privately owned by farmers.
<b>Traditional, economic and cultural activities</b>	<p>The total population of the selected two GNDs (Keppetipola and Vidurapola) is 4,903 comprises 49.9% males and 50.1% females. Per head land use is around 2.9 ha and per household land use is 9.8ha. Out of the total workforce, 28.2% is employed in agriculture sector activities, 14.3% is engaged with the manufacturing sector, 13.9% is employed in the industrial sector and 12.1% is engaged with skilled labor category. Another sector is a minor and has a low contribution to the economy. With compared to other areas selected for ASMP, this district shows a high percentage of occupants in manufacturing sector and skilled labor sector The average monthly household's income is SLRs. 32,580/= and the average monthly household expenditure is SLRs. 31,807/-. The community that lives below the poverty line is around 11.3 %-( Statics in 2012/13). With compared to other areas selected for ASMP, this district shows a high percentage of occupants in the agriculture sector. A high percentage of the community is poor (live below the poverty line). There are no major irrigation systems in this area and all farmers have converted their paddy cultivation land into vegetable growing sites. During both seasons, farmers cultivate vegetable crops on uplands and low lands. During Yala season; farmers are cultivating vegetable crops with irrigated water.</p> <p>The farmers have constructed their residential houses on upland and timber trees &amp; fruit-bearing trees are planted in balance parts of the land. The Traditional, economic and cultural activities not observed.</p>
<b>Archeological resources</b> (recorded or potential to exist)	The proposed subproject will be located on privately owned lands and there is no archeological or Physical Cultural Resource (PCR) to record or potential exists.

## F. Socio-economic Environment

<b>1. Stakeholders and Public consultation</b>	
<b>Stakeholders engagements</b>	Welimada Pradeshiya Sabha is the main technical expert who assists to implement the subproject. Uva Province Engineering Service Department is also engaging with the subproject since they are directly mobilizing the technical services such as designing and construction supervision in the field. The GNs of particular GND represents the DS- Welimada for the subproject identification stage.
<b>Stakeholders consultation</b>	During the social and environmental screening process, the Provincial Project Management Unit- Uva Province of ASMP, Welimada Pradeshiya Sabha, Provincial Engineering Service Department, and the GNs were consulted. Meantime ASMP has taken actions to conduct the

	<p>stakeholders' consultation starting from the subproject identification stage up to finalizing the subproject's design. It was a good tool to maintain transparency within the stakeholders and the community as well. Due to the impact of the fruitful consultation process undertaken by the ASMP, all stakeholders actively get to participate in subproject monitoring activities.</p>									
<p><b>Community Consultation</b></p>	<p>The initial consultation meeting was conducted by ASMP with the participation of DOA and Farmers organizations and other stakeholders to explain the subproject at the GND level. The community presented their concerns on the subproject at the meeting and other stakeholders facilitated it. The identification of beneficiaries was also done at the community consultations in a transparent manner. The same procedure was applied during the subproject designing phase. During the social and environmental screening process, individual consultations had with the surrounding farmers.</p> <table border="1" data-bbox="483 824 1422 2049"> <thead> <tr> <th data-bbox="483 824 711 898">Name</th> <th data-bbox="711 824 1066 898">Detail</th> <th data-bbox="1066 824 1422 898">Matters Discussed/ Suggestions</th> </tr> </thead> <tbody> <tr> <td data-bbox="483 898 711 1218"> <p>P.S.K. Pathirana (Male, The Social Mobilizer of the EU Cluster Program deployed by ASMP)</p> </td> <td data-bbox="711 898 1066 1218"> <p>Has more than 20 years of experience in soil conservation activities of upland and good agricultural practices on vegetable cultivation in the area.</p> </td> <td data-bbox="1066 898 1422 1218"> <p>He mentioned that he visits often the Keppetipola and Vidurapola GNDs where the beneficiary farmers of the program live and creates awareness. He has maintained a good rapport with the beneficiary farmers.</p> </td> </tr> <tr> <td data-bbox="483 1218 711 2049"> <p>W.M. Podimanike (Female, 68 years old, widower),</p> </td> <td data-bbox="711 1218 1066 2049"> <p>She has no permanent income and depends on the social welfare scheme of the government.</p>  </td> <td data-bbox="1066 1218 1422 2049"> <p>She mentioned that she is not a beneficiary farmer of the cluster program but there will be available a labor requirement in the village by enhancing the potato farmers' activities. Then she will have a chance to earn by working on the potato farmlands. In addition, improving the existing road will decrease the transportation cost and the time. Currently, three-wheel taxis charge SLRs. 350/- to 450/- per one time from Keppetipola town to the village. If the road is in good condition the cost will be decreased up to SLRs. 250/- to 300/-. Therefore, it will be a positive gain for them.</p> </td> </tr> </tbody> </table>	Name	Detail	Matters Discussed/ Suggestions	<p>P.S.K. Pathirana (Male, The Social Mobilizer of the EU Cluster Program deployed by ASMP)</p>	<p>Has more than 20 years of experience in soil conservation activities of upland and good agricultural practices on vegetable cultivation in the area.</p>	<p>He mentioned that he visits often the Keppetipola and Vidurapola GNDs where the beneficiary farmers of the program live and creates awareness. He has maintained a good rapport with the beneficiary farmers.</p>	<p>W.M. Podimanike (Female, 68 years old, widower),</p>	<p>She has no permanent income and depends on the social welfare scheme of the government.</p> 	<p>She mentioned that she is not a beneficiary farmer of the cluster program but there will be available a labor requirement in the village by enhancing the potato farmers' activities. Then she will have a chance to earn by working on the potato farmlands. In addition, improving the existing road will decrease the transportation cost and the time. Currently, three-wheel taxis charge SLRs. 350/- to 450/- per one time from Keppetipola town to the village. If the road is in good condition the cost will be decreased up to SLRs. 250/- to 300/-. Therefore, it will be a positive gain for them.</p>
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	<p>S. Sivaneshvaran (Labour, 47 Yrs.)</p>	<p>He is working in Malwaththa-valley Plantation as a Labor and lives with his wife and a daughter.</p> 	<p>He has cultivated vegetables requires only for his daily consumption at his home garden. No land to grow the vegetables on a commercial scale. When we visited the site he was cleaning the roadside drain near his home garden. Due to absence of the road regular maintenance, the edge of his home garden is wash off during the rainy season. Therefore, road improvement is highly appreciated by him. He mentioned that poor road condition is one of the reasons for high transport cost and it will decrease definitely after the road improvement.</p>
	<p>V.Kanthini (47 Yrs., Female labor in Malwathhaweli Plantation)</p>	<p>Her husband is also a laborer of the estate. They have 3 children. Two of them are school leavers and seeking a job and one is still schooling. Has ¼ acre land for vegetable cultivation. They cultivate potatoes in January.</p> 	<p>They have requested to join the cluster program and they have been selected. She appreciates the cluster program since they have to spent the highest cost for the seed potato (SLRs. 18,000/- per 50kg of seed potato) and it is a high-risk investment. They have many bad experiences in low quality and low-yielding seed potatoes. The new program is highly appreciated. Road improvement is an additional benefit for them since it decreases the transportation cost of their yield to the market.</p>
	<p>R. Yamuna(32 Yrs., Female labor)</p>	<p>Lives with her parents and two brothers</p>	<p>Father is cultivating potatoes on about ¼ acre of land. They need 400kg of seed potato per season and its cost is about SLRs. 144,000. The return for the investment is low due to low-yielding varieties. There is a high risk in potato cultivation.</p>

	<p>W.B. Ekanayake (Farmer)</p>	<p>More than 30 years' experience in vegetable cultivation including potatoes. His family consists of a wife and 3 children. Lives in Keppetipola town. His farmland is located in Vidurapola GND and the extent of land is 3 acres (1.2ha).</p> 	<p>He is one of the beneficiary farmers of the program. All the farmers in the area cultivate potatoes one time per year starting in January. Regular water supply is available throughout the year from Kande Ela (irrigation canal). Currently, all the farmers are in trouble due to the increase in agricultural inputs prices. The banning of agrochemicals heavily affected vegetable cultivation since there is no proper crop management methods are introduced. He has participated in the awareness program conducted by ASMP. He mentioned that the seed potato program will be a remarkable achievement of their farming activities since it includes all the crop management activities. Once they produce the seed potato in the January season, the yield will be transported and stored in the cool room that is proposed to construct in Rahangala Farm until the next cultivation season is start to distribute among the farmers.</p>
	<p>W.M. Gunasinghe (Farmer)</p>	<p>More than 25 years' experience in vegetable cultivation including potatoes. His family consists of a wife and 2 children. Lives in Keppetipola town. His farmland is located in Vidurapola GND and the extent of land is 3 acres (1.2ha).</p>	<p>He is one of the beneficiary farmers. This season he has cultivated carrots in the farmland but the production cost is very high due to increases of the agrochemical by 40%. He hopefully waiting to start seed potato cultivation since it has integrated crop management practices with low application of agrochemicals. He has started the production of compost manure within his</p>

			<p>farmland to use during the next potato cultivation season.</p>
	<p>W.M. Ajith Kumara (Farmer)</p>	<p>More than 25 years' experience in vegetable cultivation including potatoes. His family consists of a wife and 2 children. Lives in Wakkadahinna village of Keppetipola GND. He owns 0.5 acres (0.2ha) extent of farm land in Wakkadahinna. He works as a laborer when there is free time.</p> 	<p>He is one of the beneficiary farmers identified for the cluster program. Currently, transportation time of the agricultural products from village to town is about 45-minute s and charges high rates due to bad conditions of the road. If the road is improved up to better level the travel time will be reduced up to 15 minute and the cost will also be reduced subsequently. Highly appreciated the whole program.</p>

## G. Environmental effects and mitigation measures

### 1. Screening of Potential Environmental Impacts

SN	Screening question	Yes	No	Significance of the effect (Low, moderate, high)	Remarks
1	Are there any asset(s) that would be affected or acquired due to proposed project interventions such as: Land, Physical structure (Dwelling or commercial), Fruit trees/crops, Community Resource Property etc.?		√		No disturbances to any existing land use, structures, crops, trees, or other resources as there is no need to widen the road
2	Is the sub-project area adjacent to (less than 500m) or goes through any of the following environmentally sensitive areas such as :Cultural heritage site, Protected area and/or of its buffer zone, Conservation forest, reserve or a sanctuary ,Mangrove, Estuarine, Wetland, including paddy fields, water bodies, PCRs, Landslide-prone areas etc.?		√		No such sensitive areas are located in the vicinity of the subproject area. The road stretch runs through a Tea Plantation belonging to Malwatte Valley Plantation. No Landslide prone areas are demarcated by NBRO within this area. However, the project area is falling under landslide-prone area as per the Soil Conservation Act of Sri Lanka.
3	Will the project activities involve with Encroachment on historical/cultural areas: disfiguration of landscape by road embankments, cuts, fills and quarries?		√		All the civil works activities pertaining to the subproject are limited to existing road stretch only
4	Will the project interventions involve with encroachment on or impact ecologically sensitive or protected areas?		√		All the civil works pertaining to the subproject are limited to existing road stretch only
5	Will the project interventions involve with alteration of surface water hydrology of waterways crossed by roads, resulting in increased sediment in streams affected by increased soil erosion at construction site?		√		There won't be activities that enhance soil erosion or alteration of surface water runoffs. However, the project has identified six locations to be improved as culverts to accommodate runoffs from the top of the hills.

SN	Screening question	Yes	No	Significance of the effect (Low, moderate, high)	Remarks
6	Will the project interventions involve with deterioration of surface water quality due to silt runoff and sanitary wastes from work-based camps and chemicals used in construction?		√		No Surface runoff will be facilitated by civil works
7	Will the project intervention involve with Increased local air pollution due to rock crushing, cutting and filling works, and chemicals from asphalt processing?		√		There won't be Asphalt processing activities on the site. But, Asphalt will be transported from the approved batching plant and laying will be there.
8	Will the project interventions involve with noise and vibration due to blasting and other civil works?	√		Low	No blasting activities are required for the subproject. But, there will be localized noise and vibration level increases due to compaction and machinery movements. This will be temporary in nature.
9	Is there any possibility to create poor sanitation and solid waste disposal in construction camps and work sites, and possible transmission of communicable diseases from workers to local populations due project interventions?	√		Low	Solid waste will be generated during construction such as asphalt leftovers, polythene, and other rubbish. No construction camps will have to be erected on site.
10	Will be possible to creation of temporary breeding habitats for mosquito vectors of disease?		√		No excavation activities or storage of construction material as not much space along with the road.
11	Will there be risk of accidents associated with the increased vehicular traffic due to project interventions?	√		Low	The movement of machinery and vehicle during construction will be disturbed the daily users of the road
12	Will the project activities increase the risk of water pollution from oil, greases and fuel spills, and other materials?	√		Low	There will be chances of oil, grease, and fuel leakages from vehicles, machinery, and disposal of asphalt.
13	Will the project activities involve with additional waste in water canals that may increase floods and waterlogs?		√		No wastewater is generated as a result of the subproject

SN	Screening question	Yes	No	Significance of the effect (Low, moderate, high)	Remarks
14	Will the project activities involve with new/restored public areas/spaces that can be inundated in case of floods?		✓		Civil works of the subproject are limited to existing road stretch only
15	Project interventions proposed to include Green infrastructure: Does sub-project include any of the following design aspects such as: Sri Lankan Guidelines of Green and Environmentally Friendly Building for the State Institutions (2016), Low energy materials, Reduced water use options, Energy optimization for lights, A/C etc. , Recycling and waste management, Increased human comfort, Enhanced landscaping, exterior or interior design, Site selection considering conservation of vegetation and wildlife?		✓		Under this subproject, improvement of the existing road surface and its side drain will be done
16	Will the project interventions increase disaster Risk Management (DRM): such as: Floods, including coastal, Storm surges, Coastal erosion, Landslides, Land subsidence, Soil erosion and sedimentation, Rock falls, Cyclones, Droughts ,Earthquakes, Salinization, salinity intrusion into drinking water sources, Forest fires, High winds, tornadoes etc., Epidemic and hazards related to environmental pollution, Vector borne diseases?		✓		No such impacts will result from this subproject. Instead, erosion potentials will be decreased due to interventions.
17	Will construction and operation of the Project involve actions which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.?)		✓		Existing land use will not be changed. Only a rehabilitation of the existing road
18	Will the Project involve use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health?		✓		No such substances are involved with this subproject
19	Will the Project produce solid wastes during construction and/ or operation?	✓		Low	Waste asphalt and construction-related solid waste will be generated during construction. However, no solid waste will be generated during operations.

SN	Screening question	Yes	No	Significance of the effect (Low, moderate, high)	Remarks
20	Will the Project release pollutants or any hazardous, toxic or noxious substances to air?	√		Low	There will be dust and fume emissions due to construction activities
21	Will the Project cause noise and vibration or release of light, heat energy or electromagnetic radiation?	√		Low	There will be localized noise, vibration, and heat generation during construction
22	Will the Project lead to risks of contamination of land or water from releases of pollutants onto the ground or into surface waters, groundwater or coastal waters?		√		No such impacts are anticipated
23	Will the project cause localized flooding and poor drainage during construction Is the project area located in a flooding location?		√		No flooding events will be created as a result of the civil works of the subproject
24	Will there be any risks and vulnerabilities to public safety due to physical hazards during construction or operation of the Project?	√		Low	During construction, there will be risks, vulnerabilities to public safety during construction activities including vehicle movements, machinery, etc.
25	Are there any transport routes on or around the location which are susceptible to congestion or which cause environmental problems, which could be affected by the project?		√		Civil works are very minor scale hence no such impacts will be resulted
26	Are there any routes or facilities on or around the location, which are used by the public for access to recreation or other facilities, which could be affected by the project?		√		No public accesses will be disturbed by the civil works
27	Are there any areas or features of high landscape or scenic value on or around the location, which could be affected by the project?		√		The existing condition will only be improved. No such negative impacts will result
28	Are there any other areas on or around the location, which are important or sensitive for reasons of their ecology e.g. wetlands, watercourses or other water bodies, the coastal zone, mountains, forests, which could be affected by the project?		√		No such sensitive areas are located in the surrounding area, meantime such impacts will not result
29	Are there any areas on or around the location, which are used by protected, important or sensitive species of fauna or flora e.g. for		√		No protected, important or sensitive species of flora and fauna are recorded within the subproject impact area

SN	Screening question	Yes	No	Significance of the effect (Low, moderate, high)	Remarks
	breeding, nesting, foraging, resting, migration, which could be affected by the project?				
30	Is the project located in a previously undeveloped area, where there will be loss of green field land		✓		For many decades, the land use of the area is agriculture
31	Will the project cause the removal of trees in the locality?		✓		Tree removal is not required
32	Are there any areas or features of historic or cultural importance on or around the location, which could be affected by the project?		✓		No cultural or historical monuments are reported within the subproject area.
33	Are there existing land uses in or around the location e.g. home gardens, other private property, industry, commerce, recreation, public open space, community facilities, agriculture, forestry, tourism, mining or quarrying which could be affected by the project?	✓		Low	The proposed road fell within a tea plantation owned by Malwatte Valley Plantation. The road also belongs to the same and there will be disturbances to people who engage in plantation works
34	Are there any areas in or around the location which are densely populated or built-up, which could be affected by the project?		✓		The surrounding area is bounded by the cultivation lands.
35	Are there any areas in or around the location, which is occupied by sensitive land uses e.g. hospitals, schools, places of worship, community facilities, which could be affected by the project?	✓		Low	There are a Kovil and a Temple along this road but civil works will not result in any impacts on those.
36	Are there any areas in or around the location, which contain important, high quality or scarce resources e.g. groundwater, surface waters, forestry, agriculture, fisheries, tourism, minerals, which could be affected by the project?		✓		No impacts to the natural resources by the subproject
37	Are there any areas in or around the location, which are already subject to pollution or environmental damage e.g. where existing legal environmental standards are exceeded, which could be affected by the project?		✓		No such pollutants are generated by the subproject

## 2. Environmental Management Plan

### Contractor's Responsibility for Mitigating Adverse Environmental Issues

SN	Potential Environmental Impacts and Risk Level	Key project activities causing the impact	Proposed Mitigation Measures
1	Public complaints and lack of community support for the project implementation	Information Disclosure among Stakeholders	<ol style="list-style-type: none"> <li>1. Discussions should be conducted with the surrounding community.</li> <li>2. Residents in the area should be briefed about the project, purpose, and design, and outcomes via a documented community consultation session -<b>This should be done immediately upon the contractor is mobilized.</b></li> <li>3. The contractor should take note of all impacts, especially access issues and safety hazards that will be of concern to the residents, and take necessary measures as stipulated in the EMP to mitigate them.</li> <li>4. The contractor will maintain a log of any grievances/complaints and actions are taken to resolve them.</li> <li>5. Display signage/notices to make public aware to use of alternative road</li> <li>6. A copy of the EMP should be available at all times at the project supervision office on site.</li> <li>7. Sufficient sign boards, movement controllers, etc should be mobilized as proactive measures</li> </ol>
2	Over extraction of natural resources	Material Sourcing	<ol style="list-style-type: none"> <li>1. The contractor is required to ensure that sand, aggregates, and other quarry material are sourced from licensed sources. The contractor is required to maintain the necessary licenses and environmental clearances for all burrow and quarry material they are sourcing –including soil, fine aggregate, and coarse aggregate.</li> <li>2. Asphalt for Binder and wearing course should be purchased from a licensed industry agent</li> <li>3. Sourcing of any material from protected areas and/or designated natural areas, including tank beds, is strictly prohibited.</li> <li>4. If the contractor uses non-commercial burrow/quarry sites, the sites should be</li> </ol>

SN	Potential Environmental Impacts and Risk Level	Key project activities causing the impact	Proposed Mitigation Measures
			remediated accordingly once material sourcing has been completed. 5. The contractor should submit in writing all the relevant numbers and relevant details of all pre-requisite licenses etc. and report of their status accordingly.
3	Soil Erosion	Land preparation including clearing	<ol style="list-style-type: none"> <li>1. Shoes drains should be proposed as side drains to avoid water flow on the road surface which will enable to use as carriageway as the road width is low</li> <li>2. Slope areas should be protected</li> <li>3. Proper culvert arrangement should be there places where potential water draining over the road</li> <li>4. Land clearing/preparation should be avoided during the rainy season and at a time maximum of 250m stretch should be worked and no more than that</li> </ol>
4	Spreading of Invasive Alien Species	Vegetation clearing Material transportation (Specially such as <i>Lantana</i> )	<ol style="list-style-type: none"> <li>1. Close monitoring of transportation, storage of borrowing material for the spread of any invasive species must be done.</li> <li>2. Invasive plants species removed should be destructed onsite without transporting to another place.</li> <li>3. Vehicles should be covered during transportation of cleared vegetation to and from the construction site.</li> <li>4. Borrow material to be brought from properly identified borrow pits and quarry sites, the sites should be inspected in order to ensure that no invasive plant species are being carried with the burrowing material.</li> <li>5. Washing the vehicles should be conducted periodically to prevent carrying any invasive species</li> <li>6. The construction site should be inspected periodically to ensure that no invasive species are establishing</li> </ol>
5	Air Pollution including dust generation that can affect nearby	Setting up of material storage yards, and removal of vegetation	<ol style="list-style-type: none"> <li>1. In the construction method statement, the contractor should clearly designate areas for maintaining material stockpiles, waste stockpiles, and vehicle maintenance yards. These dust-emitting sources should be located away from human activity and natural</li> </ol>

SN	Potential Environmental Impacts and Risk Level	Key project activities causing the impact	Proposed Mitigation Measures
	plantation and households	Transport of construction material and storage on site	<p>drainage paths as much as possible.</p> <ol style="list-style-type: none"> <li>2. All heavy equipment and machinery shall be fitted in full compliance with the national and local regulations.</li> <li>3. Stockpiled soil and sand shall be covered with tarpaulin during rain and wind.</li> <li>4. The site should be water sprinkled at least 2-3 times a day during dry weather to suppress dust emission.</li> <li>5. Vehicles transporting soil, sand, and other construction materials shall be covered. Limitations to the speeds of such vehicles are necessary. Transport through densely populated areas should be avoided.</li> <li>6. Regular and proper maintenance of construction vehicles and machinery to avoid air emissions.</li> </ol>
6	High Noise & Vibration levels that can affect nearby structures and wildlife	Operation of equipment and machinery. Material storage and transport	<ol style="list-style-type: none"> <li>1. Working time for noise/vibration generation activities should be restricted and carried out only from 6.00 am to 6.00 pm.</li> <li>2. All equipment and machinery should be operated of noise not to exceed 75 dB (during construction) as practical as possible. Regularly maintenance of all construction vehicles and machinery to meet noise control regulations stipulated by the CEA in 1996 (Gazette Extra Ordinary, No 924/12). If the construction activities happen during the nighttime, it is necessary to maintain the noise level at below 50 dB.</li> <li>3. The use of mechanically driven saw blades for tree felling will make the noise levels restricted to only a short period of time.</li> <li>4. Construction equipment and machinery should be maintained in good condition. The contractor shall submit the list of high noise/vibration generating machinery &amp; equipment to the PE for approval.</li> </ol>
7	Solid Waste Disposal	<ul style="list-style-type: none"> <li>▪ Asphalt waste</li> <li>▪ Site clearing</li> </ul>	<ol style="list-style-type: none"> <li>1. The contractor shall make a list of all types of waste resulting from the construction activity, and obtain direction from the LA on possible disposal sites for each waste</li> </ol>

SN	Potential Environmental Impacts and Risk Level	Key project activities causing the impact	Proposed Mitigation Measures
		<ul style="list-style-type: none"> <li>▪ Waste from labour camps</li> </ul>	<p>type.</p> <ol style="list-style-type: none"> <li>2. Any hazardous type of waste shall be dealt with special care and instructions from the LA.</li> <li>3. Waste Asphalt should be reused as much as possible. Any leftovers should be taken back by the Contractor to the batching plant. Asphalt waste should not be disposed of on-site</li> <li>4. The contractor shall document all types and quantities of waste generated and removed from the site and the disposal locations.</li> <li>5. The contractor shall remove waste from the site each day and dispose of the waste in the LA approved site/s.</li> </ol>
8	Public/occupational safety hazard	<p>Site clearing, storage of equipment, material etc.  Increased traffic of heavy vehicles for material transportation  Noise and vibration of construction machinery</p> <p>Prevention of COVID19 Pandemic spread</p>	<p><b>Training</b></p> <ol style="list-style-type: none"> <li>1. The contractor must ensure that all workers, including managers, are trained on occupational health and public safety risks and mitigation measures for the site, prior to commencement of construction.</li> </ol> <p><b>Personal Protective Equipment</b></p> <ol style="list-style-type: none"> <li>2. All workers will be provided with necessary PPEs (basic should include safety helmets, protective footwear, and high visibility jackets).</li> <li>3. Gloves, ear muffs, goggles, dust masks, safety harnesses, and any other equipment considered necessary should be maintained in stock at the site office.</li> <li>4. A safety inspection checklist should be prepared to take into consideration what the workers are supposed to be wearing and monitored</li> <li>5. Necessary COVID19 safety measures and protocols will be implemented as per Government, WHO, and WB guidelines by all construction workers.</li> <li>6. Proactive measures should be taken to mitigate fall from height, edge collapse, excavation and machinery related hazards during construction</li> </ol>

SN	Potential Environmental Impacts and Risk Level	Key project activities causing the impact	Proposed Mitigation Measures
			<p><b>Construction camps</b></p> <p>7. Construction camps should have adequate sanitation facilities for construction workers to control the transmission of infectious diseases.</p> <p>8. Avoid housing workers in camps and provide socio-economic benefits locally by employing local people. If there is no alternative to employing workers from elsewhere, locate accommodation camps away from communities on land acquired from willing sellers. Provide labor camps with adequate sanitation, waste disposal, and health facilities according to labor laws. Clear work campsites after use and reinstate vegetation. Conduct programs to raise worker awareness of HIV/AIDS.</p>
9	Exposing and damaging of physical cultural resources	Site preparation work	<p>Upon discovery of physical cultural material during project implementation work, the following should be carried out;</p> <ol style="list-style-type: none"> <li>2. Immediately stop construction activities.</li> <li>3. With the approval of the resident engineer delineate the discovered site area.</li> <li>4. Secure the site to prevent any damage or loss of removable objects. In case of removable antiquities or sensitive remains, a night guard should be present until the responsible authority takes over.</li> <li>5. Through the Resident Engineer, notify the responsible authorities, the Department of Archaeology, and local authorities within 24 hours.</li> <li>6. Submit a brief chance to find the report, within a specified time period, with date and time of discovery, location of discovery, description of finding, estimated weight and dimension of PCR, and temporary protection implemented.</li> <li>7. Responsible authorities would be in charge of protecting and preserving the site before deciding on the proper procedures to be carried out.</li> <li>8. An evaluation of the finding will be performed by the Department of Archaeology who may decide to either remove the PCR deemed to be of significance, further excavate within a specified distance of the discovery point and conserve on-site,</li> </ol>

SN	Potential Environmental Impacts and Risk Level	Key project activities causing the impact	Proposed Mitigation Measures
			<p>and/or extend/reduce the areas demarcated by the contractor, etc. This should ideally take place within about 7 days.</p> <p>9. Construction work could resume only when permission is given from the Department of Archaeology after the decision concerning the safeguard of the heritage is fully executed.</p>
10	Mosquito breeding places and spreading vector borne diseases	Temporary water ponding due to construction	<ol style="list-style-type: none"> <li>1. Water pocketing should be avoided especially during the rainy season</li> <li>2. The temporary pond should be filled as soon as possible</li> <li>3. Construction equipment and tanks should be emptied immediately after the construction concluded for the day</li> </ol>
<b>Post construction</b>			
11	Clearing/Closure of Construction Site/ Labor Camps		<ol style="list-style-type: none"> <li>1. Contractor to prepare site restoration plans for approval by the engineer. The plan is to be implemented by the contractor prior to demobilization. This includes burrowing sites and storage yards as well</li> <li>2. On completion of the works, all temporary structures will be cleared away, all rubbish cleared, excreta or other disposal pits or trenches filled in and effectively sealed off and the site left clean and tidy, at the contractor's expenses, to the entire satisfaction of the engineer.</li> </ol>
12	Environmental Enhancement/ Landscaping		<ol style="list-style-type: none"> <li>1. Landscape plantation, including turfing, shall be taken up as per either detailed design or typical design guidelines given as part of the Bid Documents.</li> <li>2. The contractor also shall remove all debris, piles of unwanted earth, spoil material, away from the site and dispose at locations designated or acceptable to the Engineer or as per the stipulated waste management criteria of this EMP.</li> </ol>

### 3. Cost of mitigation

	<b>Environmental mitigation measure</b>	<b>Cost (SLRs)</b>	<b>Remarks</b>
1	Information Boards, leaflets (also on GRM)	100,000.00	Diversion of roads, Safety signage, awareness leaflets
2	Safety equipment (also to safeguard from COVID19)	100,000.00	Basic should include safety helmet, protective footwear and high visibility jackets, sanitizers, face shields, masks., washing facilities
3	Site delineation and barricading material and equipment	250,000.00	Barricading tape, Cone, GI pipes, etc.
4	On-site first aid facilities & hand washing stations	75,000.00	
5	Dust suppression and Erosion control measures	100,000.00	Watering, dust barriers (if require), silt-traps & catch pits

## H. Conclusion and Screening Decision Summary of environmental effects:

Assuming that all mitigation measures are implemented as proposed, the following effects can be predicted

Key project activities	Potential Environmental Effects	Significance of environmental effect with mitigation in place <sup>1</sup>
Site clearing	Clearing of the site will collect a significant amount of waste which will lead to several environmental issues such as blockage of drainage, siltation of downstream, damage to habitats, spreading of invasive species, etc.	SN
Material transportation and storage	Emission of dust, generation of noise, disturbance to natural drainage, traffic congestion, public inconvenience	SN
Embankment Construction	Emission of dust, generation of noise and vibration, disturbances/blockage of natural drainage paths, public inconvenience	SN
Disposal of waste	Pollution of waterways, blockage of drainage, siltation of downstream and damage to habitats	NS
Wastewater	The proposed agricultural activities will be undertaken using only organic fertilizer and IPM practices. Therefore, the application of chemical fertilizer, pesticides, and insecticides will be minimized. Hence the soil and ground/surface water will not be polluted.	NS

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<sup>1</sup> NS - Effect not significant, or can be rendered insignificant with mitigation, SP - Significant positive effect, SN - Significant negative effect, U - Outcome unknown or cannot be predicted, even with mitigation

## I. EMP implementation responsibilities and cost

The overall responsibility of ensuring compliance with safeguard requirements rests with the PMU while the contractor will be responsible for implementing the provisions of the EMP. In addition, the PMU will be directly responsible for reviewing the proposed design to ensure that all design-related mitigation measures mentioned herein are implemented. The overall supervision will be carried out by the in-house staff of the PMU supported by the Provincial Project Engineer, who is responsible for the overall design and supervision of the proposed project. Any consequent design modification will be reflected in the project cost.

Environmental monitoring will be carried out largely through visual observations and compliance monitoring using the checklist provided in the EMF & RPF by the Provincial Project Engineer of the PMU and the contractor jointly. The Environmental and Social Safeguards Specialist will need to visit the site quarterly and report on issues and performance on ESMP implementation to the PMU.

## J. Detail of person responsible for the environmental screening

This project does not require environmental clearance under national environmental regulations. No other approval is required due to the spread and magnitude of the project. The project will have negligible environmental impacts, mostly limited to the construction period. The impacts on the physical and biological environments are virtually none. The majority of the potential adverse effects can be classified as general construction-related impacts and can be mitigated on-site with proper engineering interventions. These potential impacts are temporary in nature. It is recommended to start the project work in the off-season for paddy cultivation and avoid nighttime work. Implementation of the Environmental Management Plan is sufficient to mitigate the identified impacts. Maximum of 250m stretch should be open during construction to avoid movement difficulties.

## K. Details of Persons Responsible for the Environmental Screening

<b>Screening conducted and reviewed</b>  <b>D.M. Sanjaya Bandara</b> Environment and Social Safeguard Specialist Agriculture Sector Modernization Project  <b>Name/Designation/Contact information</b>	<b>Date</b> October 2021   <b>Signature</b>
<b>Screening report approved by</b>  <b>Dr. Rohan Wijekoon</b> Project Director Agriculture Sector Modernization Project  <b>Name/Designation/Contact information</b>	<b>Date</b> October 2021   <b>Signature</b>

## L. Annexes

### 1. Field Environmental Screening Checklist

No	Item	Details								
<b>Introduction</b>										
1	Name of the Site	Improvement of Access Road to Wakkadahinna Potato cluster 3 km carpet laying								
2	Province	Uva								
3	District	Badulla								
4	Divisional Secretary Division	Welimada								
5	Local Authority	Welimada								
6	Grama Niladari Division (s)	Keppetipola and Vidurapola								
7	Brief description of the project (Be as brief as possible, confining to main elements only, provide a 1:10,000 scaled site map inclusive of area within 500m radius from the project site)	<p>Since potato cluster is located in the higher elevation areas in the district, improvement of highly degraded existing access road become very important to facilitate easy access to the cluster and material transportation. Total length of the existing Wakkadahinna road is 3km and out that nearly 1.3km is already asphalted and paved interlocked.</p> <p>Further, upon completion of rehabilitation it will smoothen the movement of people, goods and transport services and improved access to markets. Improved road will contribute to access to village and markets. It will also enhance the quality of life of the village farmers as they will have better access to their farmland and houses. They will be able to save money due to less maintenance cost of their vehicles and decreases the additional transportation cost of their products.</p> <p>The civil works of sub project includes;</p> <ul style="list-style-type: none"> <li>• Clearing and grubbing</li> <li>• Road ROW excavation including Rock excavation</li> <li>• Edge Treatment</li> <li>• Embankment Construction</li> <li>• Laying of Subgrade</li> <li>• Improve the roadside drains to drain out storm water</li> <li>• Shoulder filling</li> <li>• Nearly Six culverts to be constructed/rehabilitated</li> <li>• Laying of Asphalt (both Binder course and wearing course) for about 1.7km length</li> </ul> <p>Google Map- Attached Annex 02            Start:            N: 6°54'23.94"            E: 80°50'55.01"             End:            N: 6°53'35.29"            E: 80°51'18.83"</p>								
8	Does the site /project require any;	<table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> <th>If yes give the extent (in ha)</th> </tr> </thead> <tbody> <tr> <td>Reclamation of land, wetlands</td> <td></td> <td>X</td> <td></td> </tr> </tbody> </table>		Yes	No	If yes give the extent (in ha)	Reclamation of land, wetlands		X	
	Yes	No	If yes give the extent (in ha)							
Reclamation of land, wetlands		X								

		Clearing of forest		X		
9	Distance from Coast line	Approximately more than 100km from the both eastern and western coastal line				
10	Minimum land area required for the proposed development (based on urban guidelines) (ha)	Total extent of proposed development area is 18,000 m <sup>2</sup> (2,000m total length of the road x 6m flat form width) The Road is owned and maintained by Welimada Pradeshiya Sabha				
11	Available total land area within the identified location (ha)	Approximately width of the present cat rack is 6.5m width and proposed improvement length is 3,000m and available land area within the area is - 18,000m <sup>2</sup> (6mx3000m)				
12	Expected construction period	04 Months				
13	Responsible contact person with contact Information	Deputy Project Director (Uva Province). Agriculture Modernization Project (ASMP), Siyambalanduwa Road, Monaragala. 0777512013 <a href="mailto:updpdasmp@hotmail.com">Email-updpdasmp@hotmail.com</a> , Web www.asmp.lk				
14	Present Land Ownership	State	X	Private		Other (specify)
15	Total Cost of the Project	SLRs 66.23MM				
16	Anticipated Date of Completion	April 2022				
17	Beneficiaries of the Project	More than 400 farmers and Estate Workers will be benefitted to bring their crops by using this improved road to the marketing.				
<b>DESCRIPTION OF THE ENVIRONMENT</b>						
<b>PHYSICAL</b>						
18	Topography & Landforms (map)	Annex 02				
19	Relief (difference in elevation)	Low <20m	Medium 20-40m	High 40-60m	X	>60m
Geologically, the project area belongs to the highland Complex of Sri Lanka.						
20	Slope	Low <30%	Medium 30-40 %	High 40-60%	X	Very High > 60%
Generally the project site is an undulating terrain with a gentle slope (high slope 40-60%)						
21	Position on Slope	Bottom	Mid-slope	Upper- Slope	X	
The elevation of project site is around 1200m AMSL						
22	Soil type	Red Yellow Podzolic type and Mountain Regosols type				
23	Depth of top soil	Shallow <20cm	Moderate 20-100cm	Deep >100cm	X	
24	Soil Erosion	Low	Medium	High	X	
Generally the land are hilly and slope higher 40-60%						
25	Climate	Wet Zone	x	Intermediate Zone		Dry Zone/ Semi-Arid Zone
Average temperature is 18.9 °C and maximum and minimum are 22.0°C and 15.0°C respectively. The average annual rainfall varies from 1,750mm to 2,500 mm and average 2,000mm. Relative Humidity varies from 75% during the day to 95% at night.						

26	Annual dry period	October - February									
27	Source of fresh Surface Water	Spring/canal	x	Tank/Reservoir	x	Perennial Stream	Seasonal Stream	None			
Kande Ela Canal provides water for irrigation from Kande Ela tank											
28	Surface Water Use	Domestic	x	Washing/Bathing	x	Irrigation	x	Animal use			
29	Surface Water Quality	Poor		Moderate		Good	X				
30	Ground Water Availability	Dug Well		Tube Well		Other (Specify)					
No ground water use. Ground water levels will be very deep											
31	Ground Water Use	Domestic		Washing/Bathing		Irrigation		Animal use			
Not applicable											
32	Ground Water Quality	Poor		Moderate		Good					
Not Applicable											
33	Incidence of Natural Disasters	Floods		Prolonged droughts		Cyclones/tidal waves		Other			
No any disaster records											
34	Geological Hazards	Landslides	X	Rock falls	X	Subsidence		Other			
The area is under landslide prone area as per the Soil Conservation Act											
<b>Ecological</b>											
35	Habitat Types in the Project Site (indicate the % of each habitat type)	Natural Forest-0%	Degraded Forest-0%	Natural Scrubland-0%	Degraded Scrubland-0%	Riverine forest-0%					
		Grassland-0%	Abandoned agricultural land-0%	Marsh-0%	Lagoon-0%	Estuary-0%					
		Coastal Scrub-0%	Mangrove-0%	Salt marsh-0%	Home-gardens-0%	Cart track with scrubs-100%					
<p><b>Vegetation of the project site-</b> Proposed Improvement area already functioning as a road with some sort of improved condition. The project will undertake only rehabilitation works. Hence, no expansion or disturbances to vegetation required. However, the road traces fallen within a Tea Plantation and few Pinus Trees, and a Banyan tree can be recognized</p> <p><b>Fauna of the site-</b> Very few numbers of domesticated (Buffalo, Cats and Dogs) and very common taxonomical group species such as Monkeys, Lizards, Frogs, Butterflies were recorded during the rapid study. In addition, there are possibilities of wild bow, etc. in these plantations</p>											
36	Habitat types within 500m radius from the site periphery (indicate the % of each habitat type)	Natural Forest-0%	Degraded Forest-0%	Natural Scrubland-0%	Degraded Scrubland-0%	Riverine forest-0%					
		Grassland-0%	Abandoned agricultural land-10%	Marsh-0%	Lagoon-0%	Estuary-0%					
		Coastal Scrub-0%	Mangrove-0%	Salt marsh	Home-Gardens-40%	Other field crops and highland-50%					
The road traces fallen within a Tea Plantation. Within a radius of 500m from the proposed site, predominantly Tea Plantation and few vegetable cultivation areas can be seen.											

37	Are there any environmentally and Culturally sensitive areas within 250m?	Protected Areas	Migratory pathways of animals	Archeological sites	Wetlands	Mangroves strands	
		No environmentally and cultural sensitive areas within 250m radius from the proposed development site.					
38	<b>Screening Questions</b>	Yes	No	<b>Scale of Impact</b>			<b>Remarks</b>
A	<b>Siting of the activity</b>			High	Moderate	Low	
a.	Are there any environmentally and Culturally sensitive areas within the project site and 500 meters from the project boundary?		X				
b.	Protected Areas / Forest Reserve		X				
c.	Migratory pathways of animals		X				
d.	Archeological sites		X				
e.	Wetlands		X				
f.	Mangroves strands		X				
g.	Estuarine		X				
h.	Buffer zone of PAs/FRs		X				
i.	Special area for protecting Biodiversity		X				
j.	Are there any plants (endemic and threatened species) of conservation importance within the project site and 500 meters from the project boundary?		X				Not recorded
k.	Are there any animals (endemic and threatened species) of conservation importance within the project site and 500 meters from the project boundary?		X				Not recorded
B	<b>Potential Environmental Impacts</b> <b>Will the activity / sub-project cause</b>						
a.	Land disturbance or site clearance?		X				
b.	Negative effects on rare (vulnerable), threatened or endangered species of		X				

	flora or fauna or their habitat?					
c.	Negative effects on designated wetlands?	X				
d.	Spread of invasive plants or animals?	X				
e.	Negative effects on wildlife habitat, populations, corridors or movement?	X				
f.	Destruction of trees and vegetation?	X				
g.	Impact on fish migration and navigation?	X				
h.	Obstruction of natural connection between river and wetlands inside project area or natural drainage system?	X				
i.	Water logging due to inadequate drainage?	X				
j.	Insufficient drainage leading to salinity intrusion?	X				
k.	Negative effects on surface water quality, quantities or flow?	X				
l.	Negative effects on groundwater quality, quantity or movement?	X				
m.	Increased demand of water requirements leading to reduction of water supply for competing uses?	X				
n.	Increase probability of spread of diseases and parasites?	X				
o.	Significant sedimentation or soil erosion or shoreline or riverbank erosion on or off site?	X				
p.	Loss of existing buildings, property, economic livelihood?	x				
q.	Negative impact on soil stability and compactness?	X				
r.	Impacts on sustainability of associated	X				

	construction waste disposal?					
s.	Changes to the land due to material extraction?	X				Low and mitigated by EMP
t.	Traffic disturbances due to construction material transport and wastes?	x			x	Low and mitigated by EMP
u.	Increased noise due to transportation of equipment and construction materials?	x			x	Low and mitigated by EMP
v.	Increased noise due to day-to-day construction activities?	x			x	Low and mitigated by EMP
w.	Increased wind-blown dust from material (e.g. fine aggregate) storage areas?	x			x	
x.	Degradation or disturbance of historical or culturally important sites?		X			
y.	Health and safety issues?	x			x	All the safety measures deployed in "Best Engineering Practices" need to be adopted.
<b>Will the activity / sub-project require</b>						
a.	Setting up of ancillary production Facilities		X			
b.	Significant demands on utilities and services?		X			
c.	Accommodation or service amenities to support the workforce during construction		x			Day workers will be deployed by the contractor
<b>CONTACT DETAILS OF OFFICIALS AND RECOMMENDATIONS</b>						
39	Name of the officer completed the form (From the Developer)	Mr.D.M. Sanjaya Bandara				
40	Designation and contact Information	Environmental and Social Safeguards Specialist				
41	List of team members	N/A				
42	Overall observation and Recommendation	Impact are identified during the environmental screening are not significant and limited to the construction phase of the proposed project. The construction impact could be mitigated by implementing the EMP given below				
43	Signature and date					
<b>43. FINAL OBSERVATIONS &amp; RECOMMENDATIONS</b>						

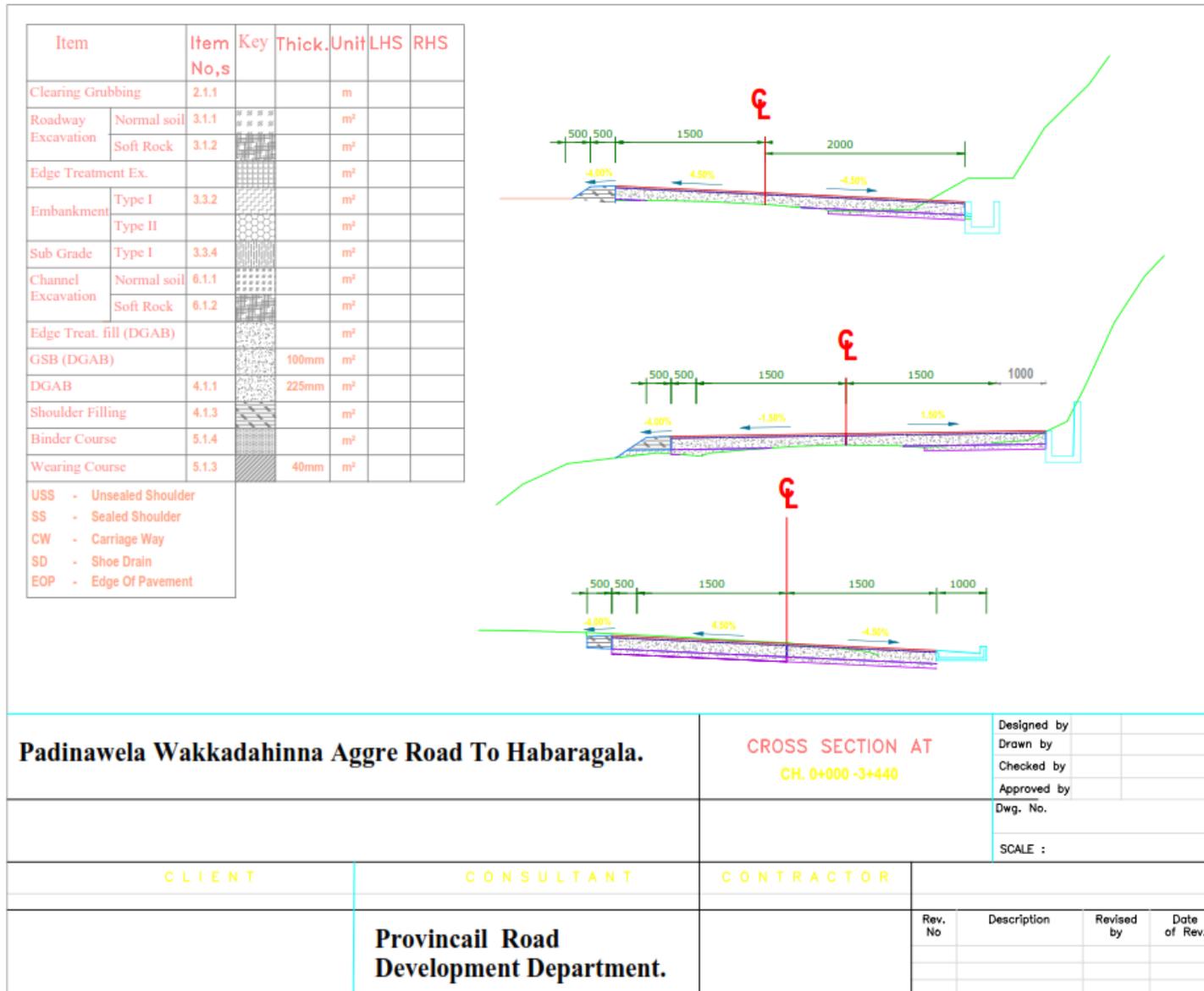
A	Does this site require an Initial Environmental Examination/Environmental Impact Assessment (IEE/EIA) or any other Environmental Assessments (EA) under the national regulations and please state the reasons?	No	The impacts that are anticipated during the environmental screening are not significant and low in magnitude considering the scale of rehabilitation work anticipated by the proposed activity and limited to the construction phase.
B	Although national regulations may not require IEE/EIA at this Site, are there environmental issues which need to be addressed through further environmental investigations and/or EA based on the guidance provided in EAMF? If the answer is "Yes" briefly describe the issues and type of investigations that need to be undertaken.	Yes	During the construction phase the Information disclosure and Grievance Readdressed Mechanism (GRM), construction material transport, solid waste, and noise and vibration impact to be mitigated by addressing the Best construction practices implemented by recommendation suggested by the EMP below.
C	Will this site be abandoned based on the current observations? If yes, please state the reasons.	No	
D	Does the proposed site meet the national urban planning requirements (only applicable for activities outside PAs)? If the answer is "No", what needs to be done to meet these requirements; if the answer is "Yes", has the project site obtained the necessary approvals?	No	Urban planning are not required due the proposed project area belongs to the PS are and owned by the Welimada Pradeshiya Sabha
E	In addition to the above issues, please indicate any additional observations, recommendations if any	N/A	

## 2. Google Map/ Location Map

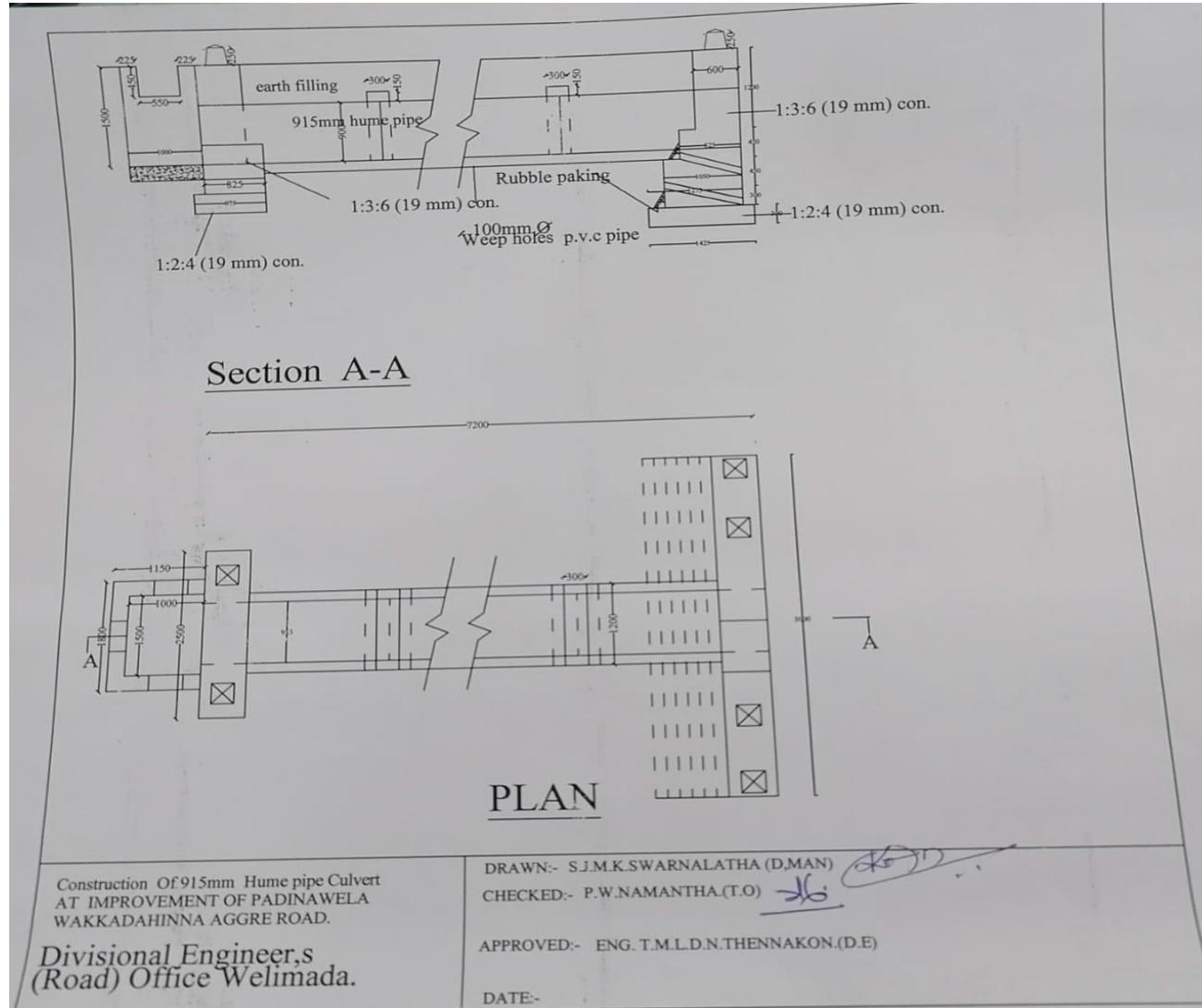


Source: Google Map

### 3. Design for Carriageway Construction



## 4. Culvert Designs



# 5. Consent from Pradeshiya Sabha - Welimada



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**PRADESHIYA SABHA WELIMADA**



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 My No. } 27/23/16

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 Your No. }

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 திகதி }  
 Date } 2021.10.25

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වැලිමඩ ප්‍රාදේශීය සභාවට අයත් සාදිනාවෙල, හබරලල වත්කම්වලින් කෘෂි මාර්ගය  
ඇස්පෝල්ට් කොන්ක්‍රීට් (කාසට්) යොදා වැඩි දියුණු කිරීම සඳහා අනුමැතිය ඉල්ලීම.

දැක්වූ කාරුණික ඔබගේ දාන ASMP/PMU/PPMU/02 හා 2021/10/04 දිනැති ලිපිය හා බැඳේ.

(2.වී අනුව ඉහත මාර්ගයේ සංවර්ධන කටයුතු සඳහා මූල්‍ය ප්‍රතිපාදන වෙන්කිරීම සම්බන්ධව ඔබට මාගේ  
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(එස්.ඒ. අර්. බන්දුගේ)  
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ප්‍රා.ස.උ. කාර්යාලය : මොරලුමුල්ල - 057-2280518  
 ප්‍රා.ස.උ. කාර්යාලය : මොරලුමුල්ල - 057-3570518  
 ප්‍රා.ස.උ. කාර්යාලය : කැපවෙට්ටිකොල - 057-3570489  
 ප්‍රා.ස.උ. කාර්යාලය : පුළුම්පේ - 057-4933749