













5. Environmental and Social Action Plan



The Action Plan has been prepared considering the initial ESAP agreed with the Concessionaire and the Lenders for the Financial Close, findings from the site visit, and information submitted by the Concessionaire up to December 20th, 2023. The Concessionaire should fulfill each action within the established deadlines in concordance with international standards and local legislation. The status of each action will be evaluated according to the next color code:






-  **Solved:** Indicates actions that have been addressed by the Concessionaire and Arup has confirmed that the criterion/indicators that monitor the action have been fulfilled.
-  **Pending or delayed:** Indicates actions that have remained opened for several consecutive periods. The significance of the pending deadline is assessed based on the risk that the action poses on the Project.
-  **On track:** Indicates open actions that have been updated periodically by the Concessionaire and are currently monitored by Arup.
-  **New action:** Indicates new actions that have been opened during the current monitoring period.

Action ID	Proposed Action:	Status (December 2023)	Original Proposed Deadline	Color Code
1	<p>Environmental Liabilities:</p> <p>In 2018, Via 40 received 2 environmental licenses with outstanding environmental and social liabilities from the previous operator of the road. In accordance with Appendix 6/Chapter VII of the CA, the Concessionaire must comply with the pending obligations of the environmental licenses and perform an official closure with ANLA.</p> <p>As of November 2022, the Concessionaire has 12 environmental liabilities pending closure in the LAM 1838 process and 7 liabilities in the LAM2370 process. Activities for 3 out of 12 liabilities of LAM1838 have finished, but V40 is waiting for the official closure act from ANLA. 4 out of 7</p>	<p>Evidence of Compliance: Summary of pending environmental liabilities and tentative dates of closure.</p> <p>Status: The Concessionaire only has 7 pending actions between the two files. Another 8 were already completed, but the Concessionaire was not able to present them at the ANLA follow-up meeting at the end of October. Arup considers that management continues to be adequate.</p> <p>This action is marked "on track" until the Concessionaire can confirm the closure of the 2 environmental license files with the ANLA.</p>	Summary of the first post-financial closure monitoring and periodic updates until official closure from the ANLA.	




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	<p>liabilities of LAM2370 are already finished, but V40 is waiting for the official closure act from ANLA. The Concessionaire commented that the Project team is prioritizing the closure of files to avoid ANLA incurring additional requirements retroactively, since at least 4 new items have arrived in 2022. V40 has accelerated the closure of these items by prioritizing the completion of the oldest actions and assigning specific responsible parties per UF and for the entire corridor. Responsibility is also clearly distributed between EPC and the Concessionaire for each of the liabilities.</p> <p>Arup recognizes that, while this could not be concluded before financial close, it is important to include this aspect in the ESAP as part of the periodic follow-up activities.</p> <p>UF: All</p> <p>PS/EP: PS1, PS3, PS4, PS5, PS6.</p>		First E&S monitoring report after the financial close.	
2	<p>Environmental Permits:</p> <p>Sections that require PAGAs must process all required permits with the environmental authorities. As of November 2022, Arup has identified at least 92 permits pending approval compared to 189 permits pending as of January 2022. To date, 10 permits have not been requested to the environmental authorities yet, but Arup does not identify a major risk for the Project's expected progress.</p> <p>The Concessionaire has already approved PAGAs for All UFs and permits for 8 ZODMEs. The UF2 environmental license modification is still pending. Because of this, a new Schedule (B9), was created, which has not been approved by the Owner's Supervisor or the Lenders. Arup recommends accelerating the processing of required approvals to avoid incurring new changes.</p> <p>Arup recognizes that, while this activity could not be concluded before financial close, it is important to include it in the ESAP as part of the periodic follow-up activities.</p> <p>UF: All</p> <p>PS/EP: PS1</p>	<p>Evidence of compliance: Periodic summary of the progress on environmental permits by UF.</p> <p>Status: The Concessionaire obtained 7 permits in the reporting period and requested 8 permits already included in the schedule. Arup identifies adequate management, and the Concessionaire already has a more stable estimate of permitting times.</p> <p>This action will continue to be permanently monitored until the end of the construction stage, which is why it will remain "on track."</p>	First E&S monitoring report after the financial close.	
			Periodic follow up for each E&S monitoring report until all permits are secured.	




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3	ZODMEs: <p>The Concessionaire received approval for 8 ZODMEs that are already in operations. There are also 4 other ZODMEs under study or assessment. Through the updated mass balance, it seems that the Project has the adequate ZODME capacity approved so far. Temporary disposals are no longer required, and the staff is already evaluating more potential zones to have as backups. This action must be monitored until the Concessionaire secures all the ZODMEs required for the Project.</p> <p>UF: All PS/EP: 3</p>	Evidence of compliance: <ul style="list-style-type: none"> • Approvals of the ZODMEs under study or assessment. • Updated mass balance for ZODMEs. <p>Status: To date, the Concessionaire has 5,021,200 m³ of estimated capacity. Currently, the Project would require 4,047,000 m³ of material to be disposed of, although this number may be lower as there is reuse of materials for construction uses, especially in UF6 and UF7. To date, the Project has disposed of 2,941,180 m³ of excavated material. Arup does not identify any major risk related to excavation material management.</p> <p>This action is classified as "on track" given that the Concessionaire has 4 additional zones in the pipeline.</p>	Periodic updates until all ZODMEs required for the Project are approved and closed.	
			First E&S monitoring report after the financial close.	
4	Environmental offset plans and 1% Investment Plan: <p>The Concessionaire should submit offset plan for each UF with information including size, type, and location of offsets including the 1% Investment Plan, associated activities, and the status of each one.</p> <p>As of December 2022, the Concessionaire reports a total of 523 Ha, equivalent to at least 553,500 individuals to be compensated between the requirements of the 7 UFs and the UF0. Progress is 3.8% of individuals planted, with higher advances in UFs 3, 6, 7 and 8. The 1% Investment Plan and the offsets associated with the UF2 license are on hold as the water concessions are not active yet. The 1% Investment Plan is a requirement to invest 1% of the Project's CAPEX in additional environmental programs that arises when a water concession is required under an environmental license. This could impact the original amounts to be offset, so Arup highlights this action as part of PS6 Compliance to monitor from financial close onwards.</p> <p>UF: All PS/EP: PS6</p>	<p>Evidence of compliance: Updated summary of the status of each environmental offset plan for the Project including location, type of offset, and advance percentage including the 1% Investment Plan, associated activities, and the status of each one.</p> <p>Status: The 1% plan does not apply to the Project at this time as UF2 is on hold.</p> <p>During this period, the Concessionaire designed an integrated offset plan for the obligations of UFs 1 through 7. Although Arup considers that this plan meets PS6 requirements of "equivalent or better," it is unclear on how this plan meets de principle of additionality. Furthermore, monitoring indicators to ensure the effectiveness of the measure must be established.</p> <p>Although the execution of these plans do not pose a risk to the Project at this time, this action remains "on track" as updates are expected for each monitoring report until all offsets are completed.</p>	First E&S monitoring report after the financial close	
			Updates for each monitoring period until all offsets are completed.	




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5	<p>Cultural assets identification and management: The Concessionaire has identified cultural assets with information given by Fusagasugá and Melgar authorities. Flandes to Girardot cultural authorities' response is pending. Since cultural assets are not always documented or legally protected, the Concessionaire should consult other sources such as the community, cultural institutes, and groups of interests about the presence and significance of these assets. In addition, the Concessionaire stated management of Cultural Heritage assets in UF 3 and 4 is not required. It is important to clarify the Project's impact on them to conclude if management strategies are needed.</p> <p>UF: All PS/EP: 8</p>	<p>Evidence of compliance:</p> <ul style="list-style-type: none"> Advances in the management of cultural assets aligned with PS8. Documents related to the Project's impact on Cultural Heritage assets in UFs 3 and 4. Consultation process with the community, cultural institutes, and groups of interests to identify the presence and significance of cultural assets. <p>Status: The Concessionaire defines assets impacted by the Project as those which are within the buffer of affectation. Thus, Orquídea, Cristo, Indio Sutagao, Mohán and Helicopter monuments were classified as impacted by the Project. During the current monitoring period, the Concessionaire completed the relocation and reception of the Sutagao Indian by the Fusagasuga Municipality. However, no update was provided on the Orquídea Mohan, Cristo and Helicopter monuments.</p> <p>The Concessionaire has adopted appropriate measure for their protection. For the following report, the Concessionaire must share evidence on:</p> <ul style="list-style-type: none"> Strategy or actions the Concessionaire is taking to protect Hacienda La Puerta y Hacienda Novillero sites and prevent damage caused by the Project, given their location next to construction works. Actions taken to protect Orquídea, Cristo and Mohán monuments. <p>This action is marked "on track."</p>	First E&S monitoring report after the financial close.	
			Updates for each monitoring period until all cultural heritage-related activities are finished.	





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6	<p>National Authority (ICANH) Requirements: During the mid 2022 ICANH visited the Project and gave different suggestions and improvements related to team capacity, technical procedures, and administrative answers for archaeology matters. During the last semester the Concessionaire changed the previous archeological contractors, including an increase in their staff from 7 to 13 archeologists. Nonetheless, night-time monitoring is being performed against the procedure established, and requests for including additional areas in the Archeological Management Programs were not approved. There is pending information on the specialized qualifications of current staff, considering that ICANH noted the importance of having adequate professional profiles for managing rock art contexts in “Hacienda Tequendama”.</p> <p>UF: All PS/EP: 8</p>	<p>Evidence of compliance:</p> <ul style="list-style-type: none"> CVs of the staff hired during the reporting period. Records/minutes for all survey, monitoring, excavation, chance finds and find processing activities carried out during the reporting period. Progress reports on all Preventive Archeology Programs and ICANH's responses that took place during the reporting period. Public archeology records for the activities developed during the reporting period. Records/ minutes on the procedures related to the final tenancy of archeological finds. Records on ICANH's visits performed during the reporting period and responses given by the Concessionaire during the same period. <p>Status: The Concessionaire shared the CVs of the archaeologists that are performing the excavations in the HT. They also shared a report regarding the activities carried out from October to December 2023. Evidence regarding the final tenancy of findings from UF 1 and 4, the closure of activities in UF4, and public archeology activities was shared. The Concessionaire also shared minutes from a meeting with ICANH from October 13th, 2023. For upcoming periods, it is expected that the Concessionaire shares all evidence required for this action, including that from the activities performed.</p> <p>This action is marked “on track.”</p>	First E&S monitoring report after the financial close.	
			Updates for each monitoring period until all archeological heritage-related activities are finished.	
7	Internal grievance mechanism	Status: Solved during the June-September 2023 period.	First E&S monitoring report after the financial close.	
8	Working conditions by third parties	Status: Solved during the April-March 2023 period.	First E&S monitoring report after the financial close.	
9	Retrenchment Plan	Status: Solved during the June-September 2023 period.	Second E&S monitoring report after the financial close.	

Action ID	Proposed Action:	Status (December 2023)	Original Proposed Deadline	Color Code
10	Noise pollution monitoring and mitigation measures: Arup identifies that the noise monitoring results in the baseline conducted in 2017 for the Project already have values that exceed the limits of the national and international standards. Considering this, the Concessionaire should ensure that these values are not further exceeded. Arup considers it appropriate that the Concessionaire and the EPC conduct at least an intermediate monitoring campaign for the construction stage and a monitoring campaign when the construction stage concludes. This action will allow to validate that the work activities do not contribute to these values and improve or at least maintain the baseline conditions. Arup is expecting the Concessionaire to submit evidence of the noise monitoring and comparisons with the baseline data. If the increase is not clearly attributable to the Project, the justifications, and the prevention and/or corrective actions taken should be also submitted. UF: All PS/EP: PS3	Evidence of compliance: Follow-up plans for noise monitoring considering the baseline measurements in each UF of the Project. Status: The Project completed acoustic barriers at UF4 and baseline monitoring up to UF4. Monitoring from UF5 to UF7 is scheduled for the next period. Arup evidenced that significant progress has occurred and that both the Concessionaire and EPC follow good practices in this area.	First E&S monitoring report after the financial close.	●
			Updates for each monitoring period until the construction phase is completed.	●
11	Water and energy consumption data	Status: Action solved in the April-June 2023 period.	First E&S monitoring report after the financial close.	●
12	H&S Management System – Review and implementation of the action plan	Status: Solved during the June-September 2023 period.	Follow-up H&S reports and continuous adjustments from lessons learned for each monitoring report after the financial close until the implementation is completed.	●
13	Archaeological Management Plan “Hacienda Tequendama”: Arup required the Archaeology Preventive	Evidence of compliance:	First E&S monitoring report after the financial close.	●

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	<p>Management Plan for Hacienda Tequendama as well as the ICANH's approvals from the Concessionaire.</p> <p>UF: 7</p> <p>PS/EP: PS8</p>	<ul style="list-style-type: none"> Monthly progress reports on the HT Conservation Plan and ICANH's responses that occurred during the reporting period. ICANH's final approval for the final report of HT Conservation Plan and all Preventive Archeology Programs. CVs of the staff hired during the reporting period for HT activities. Records on ICANH's visits performed during the reporting period and responses given by the Concessionaire during the same period. <p>Status: During this reporting period, the Concessionaire reported that they performed seven (7) excavations in UF7 next to HT where ceramics and lithics were found. In one of them, human dental pieces were found as well as features related to graves. In such cut, the activities expanded to inquiring and rescuing the potential findings. The Concessionaire shared the monthly reports with ICANH regarding the Preservation Plan, whose elaboration started in December. During the site visit, the Concessionaire informed that they were visited by the ICANH on October 13th, 2023, and this was shared with Arup.</p> <p>For the upcoming quarters the Concessionaire should share evidence of all activities reported on and that took place during the reporting period.</p> <ul style="list-style-type: none"> The action is mark "on track." 	Updates for each monitoring period until all cultural heritage-related activities are finished.	
14	Resettlement Plan Update	Status: Solved during the June-September 2023 period.	Review of progress in framework, methodologies, schedules, functions, and responsible parties for the first E&S monitoring report after the financial close.	
15	Resettlement Plan – monitoring site visits:	Status: Solved during the June-September 2023 period.	Review of the Resettlement Plan for the second E&S monitoring report after the financial close.	

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16	Resettlement Plan – vulnerable groups identification	Status: Solved during the June-September 2023 period.	Review of the Resettlement Plan for the second E&S monitoring report after the financial close	
17	Resettlement Plan: Compensations to third parties: <ul style="list-style-type: none"> Evaluation of the socioeconomic impacts caused by the project to workers and employees in Economic Units. Propose management strategies to reduce the impacts caused to informal workers without legally recognize/property ownership that could not continue to the previous work. This could include identifying a socio-economic baseline of this population (to the best extent possible) and an estimate of the proposed size of the compensation required to compensate informal workers under PS5, in line with any eligibility and entitlements set out in a IFC PS5-compliant RAP. Include in the Resettlement Plan the strategy, methodology and actions to tackle the RAP objectives of those employees of Economic Units who are unable to maintain their activities, even if the contractual requirements do not consider it, and ensure that they are able to re-establish their access to assets of income sources or other means of livelihood and receive the necessary support. UF: All PS/EP: PS5	Evidence of compliance: <ul style="list-style-type: none"> Results and analysis of socio-economic impacts assessment caused to third parties. Definition of the methodology required to guarantee the registration and traceability of the actions implemented during the development of the Resettlement Plan that will make it possible to demonstrate that the objective of guaranteeing that each Social Unit affected by the project is able to reestablish its livelihood and/or is adequately compensated has been achieved. Status: An Assistance to Affected Third Parties Program was included within the RAP. This is the strategy the Concessionaire is going to implement to tackle PS 5 objectives for those employees of Economic Units who are unable to maintain their activities.	Review of progress in framework, methodologies, schedules, functions, and responsible parties for the first E&S monitoring report after the financial close.	
		<p>The first activity to implement under the umbrella of the Program is setting a baseline. Such study will be performed during the first semester of 2024 to obtain primary information about the third parties of PSU. A socioeconomic characterization and identification of vulnerable conditions will be survey during the process. The study is planned for 12 weeks and will begin midst February 2024, meaning it will be complete around the second week of May 2024. Arup will perform a monthly monitoring of its progress and inform about it to the Lenders in the Project Monthly progress reports.</p> <p>Once the baseline is set, it should be used to Concessionaire to inform the planning of the Program and, if required, adjust it according with the needs and expectations of the population.</p> <p>This action is marked as “solved.”</p>	Review of the Resettlement Plan for the second E&S monitoring report after the financial close.	

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18	Resettlement Plan: Depreciation costs. The Concessionaire must estimate the depreciation costs for the affected buildings/houses and how this could be practically remedied, linked to the monitoring process to ensure that all parties have been able to re-establish their livelihood standards. If the analysis shows that this item does affect any of the SU, the Concessionaire must propose a remediation plan with actions to correct the situation. UF: All PS/EP: PS5	Evidence of compliance: Resettlement Plan. Including this condition. Status: A calculation of the depreciation costs to 13 properties was made by the Concessionaire. Through an analysis and decisions matrix the Concessionaire will demonstrate if depreciation costs applied to the valuation of lost assets where determinant to acquire a reposition housing in the same or better conditions. In the RAP there is a Program for supporting SU in the case they may have difficulties for acquiring a reposition property in same or better conditions, because of depreciation. the Matrix will support the analysis of such cases. A committee will analyze and take decisions regarding such SU. If required, affected households will receive assistance and accompaniment, or receive exceptional measures, under the umbrella of the LAPRP. The action is marked as “solved.”	Review of progress in framework, methodologies, schedules, functions, and responsible parties for the first E&S monitoring report after the financial close.	
			Review of the Resettlement Plan for the second E&S monitoring report after the financial close.	
19	Resettlement Plan: The Concessionaire must consider an independent third-party consultant to support the RAP completion audit to certify PS5 compliance. The completion audit report should contain recommendation from the PS5 Guidance Note "Annex B Completion Audit Table of Contents". UF: All PS/EP: PS5	Evidence of compliance: <ul style="list-style-type: none"> Resettlement Plan. Definition of the methodology required to guarantee the registration and traceability of the actions implemented (application of the different compensation factors) during the development of the Resettlement Plan. The completion audit will evaluate the effectiveness in achieving the objective of guaranteeing that each SU affected by the project manages to re-establish or improve housing conditions and/or means of subsistence. Definition of the conditions to guarantee that the completion audit is carried out by an independent consultant specialized in the application of ND5 in these types of projects. A Supplementary Resettlement Action Plan in case PS5 gaps are not closed. Status: According to the RAP, the Concessionaire will monitor resettlement activities through two instruments: i) the Socio-economic Compensation Matrix, to evidence the progress in the identification of social units, the compensation factors applied, the compensation agreement, payments, contribution of documents, among others; and ii) the Monitoring and Accompaniment Matrix to Social Units which records the visits made to each SU, the	Second E&S monitoring report after the financial close.	
			Execution of the final audit: Within 6 months after the completion of the implementation of the Resettlement Plan.	

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		<p>socioeconomic characterization made as a baseline, and data obtained from the follow-up visits.</p> <p>Arup recommends that the Concessionaire uses the second matrix to plan the additional actions, strategies and programs tailored to needs and vulnerabilities to close gaps between the management programs and plans set by the national normativity and the CA within PS5.</p> <p>The Concessionaire should design a methodology to guarantee the registration and traceability of the actions, programs and strategies that could be created in the future as part of the RAP, therefore, this action is marked “on track.”</p>		
20	<p>Climate Change Risk Assessment - CCRA: For the ESDD, V40E sent support for the semi-annual CCRA that it was developing during the bridge loan monitoring and as part of its compliance with the EP and PS1. However, in this period, there is no evidence of the development of this study for the Project in 2023; therefore, Arup requests the Concessionaire to confirm the reactivation of the periodic CCRA for the following period and the frequency in which they will be carried out.</p> <p>UF: All</p> <p>PS/EP: PS1, EP2</p>	<p>Evidence of compliance: Climate Change Risk Assessment report.</p> <p>Status: The Concessionaire has provided a revised CCRA report that outlines the activities and variables for the 2023 period. The report underscores the significant climate-related risks to the Project, especially the heightened frequency of landslides and flooding events. Although this matter has been marked as "solved," it is crucial to keep in mind that an annual update is necessary.</p>	<p>Monitoring Period October-December 2023</p> <p>(VDR deadline: January 10th, 2024)</p>	
21	Emergency Preparedness and Response – disclosure and training	Status: Solved in the July-September 2023 period.	October 2023	
22	Evidence of protocols to improve Traffic Management Plans	Status: Solved in the July-September 2023 period.	October 2023	
23	<p>Involuntary resettlement: For the upcoming reports, the Concessionaire should share updated information and evidence on:</p> <ul style="list-style-type: none"> Number of Social Units (USR and USP) that are impacted by displacement. Socioeconomic compensations’ payment progress. Number of SU to be relocated and relocated. 	<p>Status: The information requested was provided by the Concessionaire. There has been progress in both compensation payments and relocation (displacement of SU). For upcoming periods Arup requests the following information:</p> <ul style="list-style-type: none"> Updated information on the identified social units subject to displacement (Table 14 from PAR) Socioeconomic compensations matrix Number of SU to be displaced and displaced. 	<p>Updates for each monitoring period.</p>	

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	<ul style="list-style-type: none"> Number of properties to be acquired by expropriation processes and number of SU in them as well as the Socioeconomic Compensations that are identified for them. <p>UF: All PS/EP: PS5</p>	This action is marked “on track.”		
24	<p>Potential impacts to Azafranal community: Vereda Azafranal (Silvania municipality) members have blocked the road in UF6 on two occasions: November 2022 and April 2023. The community presented claims about cracking in their housing alleging it was caused by Project’s work. Several grievances have been raised on this matter by the community and the Concessionaire has concluded that it is not responsible for the alleged damages using <i>Actas de vecindad</i>. However, it is important to technically assess and determine the causes of the problem.</p> <p>Since August 2022, work on some fronts have been stopped due to an increase in land movements. Land movement in Silvania could pose risks to the communities.</p> <p>For the upcoming periods the Concessionaire should share:</p> <ul style="list-style-type: none"> The report about the threads to the community. The study to determine the cause of cracking issues. Grievances received on this matter and management made by the Concessionaire. Evidence on the periodic reports and information given to the community. Evidence on the working tables with other stakeholders. <p>UF: All PS/EP: PS1, PS4</p>	<p>The Concessionaire agreed to do a study to determine the cause of the cracking, which was originally scheduled for July 2023, with a report about the threats to the community scheduled for August 2023. However, it was not delivered by this date. In September 2023, the community blocked the road again given that studies were not finished nor shared with them. In addition, the community is requesting that the stakeholders responsible for the Project respond to the cracking in the housing, stabilize the ground, and adjust the crossing to Azafranal Alto vereda.</p> <p>During this monitoring period, activities with azafranal community were carried out. Before-works and follow-ups <i>actas</i> were recorded in the communities’ assets; 278 <i>actas</i> were recorded in total. On October 19th, 2023, the Concessionaire also disclosed the study to determine the causes of the cracks. Communities were also informed that there were prior geological conditions unrelated to the project, and the community agreed to cease the blockades under four conditions related to monitoring, meetings, and socialization. Two other meetings were held with the community on November 2nd and 20th, 2023 to inform the community on the stability of the slopes and to begin follow-ups on <i>actas</i> that requested on November 2nd, 2023.</p> <p>It is recommended that the Concessionaire reinforces the message to the community that the Project is not responsible for land movement and clarifies the purpose of <i>Actas de Vecindad</i> records. For the upcoming periods, the Concessionaire should continue giving information to Arup about activities with the community pertaining to this situation along with the report on threats to the community.</p> <p>The action is marked “on track.”</p>	Updates for each monitoring period.	