

# Environmental and Social Review Summary (ESRS) PPP Vial Circuito 6 - URUGUAY

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## 1. General Project information and scope of IDB Invest's environmental and social review

The Ministry of Transport and Public Works of Uruguay ("MTO", for its acronym in Spanish), acting as Executing Unit of the National Roads Directorate ("DNR", for its acronym in Spanish), called for bids for the construction, operation (exploitation and maintenance) and financing of the 73.5-kilometer road infrastructure within the public domain strip of Route 6 from its intersection with Avenida Belloni (marker 16k879) and Route 12 (marker 90k442) to the north of the town of Chamizo, Department of Florida, Uruguay (the "Project"). Once the competitive bidding process concluded, the agreement was pregranted to Concesionario Circuito Seis Cuchilla Grande S.A. made up by the Spanish company Rover Infraestructura S.A. and the Uruguayan company Construcciones Viales y Civiles (CVC) S.A. (the "Client", the "Company" or the "Consortium").

The Project works include widening and refurbishing the structure of the existing road surface, junctions in the intersections with crossing roads, secondary roads and accesses to the main road, two-lane expansion in each direction (between the intersections of Route 6 and Avenida Belloni and Route 74), the construction of bike lanes, refurbishing of the 11 existing bridges<sup>1</sup>, the construction of 5 new bridges, rain water drainage and animal crossings, and the installation of metal guardrails, lighting and signaling elements. The Project also entails building a bypass to the City of San Ramón (about 6 kilometers long and requiring the expropriation of 26 private plots) and a new bridge over the Tala brook located 3 kilometers south of San Ramón.

The works will be carried out on one side of the road at a time to allow for traffic. The Project establishes the installation of a main construction camp on km 27 of Route 102 (which will include the asphalt plant), a secondary construction camp (where the concrete plant will be installed) at a location yet to be determined and additional camps with worker facilities. It will also have a gravel and stone quarry located in the Department of Canelones (Cantera Piedritas) and a gravel quarry located in the Department of Canelones (Cantera Tomás Aldabalde – La Paz), in addition to a chippings quarry (2) in the San Bautista area and a gravel quarry in Chamizo. More secondary working camps will be potentially set up and additional quarries will be exploited. The Consortium will thus request the related permits. Electric power will be obtained from the public grid or generated locally (diesel oil generators).

The Project term will be 36 months and at its busiest time it will require about 160 workers.

The environmental licenses have been requested from the National Environmental Agency ("DINAMA", for its acronym in Spanish) for different areas, as follows: i) Toledo bridge and Canelón Grande bridge

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<sup>1</sup> The refurbishing of bridges will entail improving the surface course, widening and reinforcing the existing foundations or installing new foundations.

<sup>2</sup> "CHIPPINGS" shall be understood to be the material from the Asencio Formation: well selected sandstones with secondary ferrification and silicification processes of a rusty color. From a structural standpoint, the performance of the road surface is similar to or better than that of gravel.

(both classified under Uruguayan legislation as Category A, with minimal environmental complexity) regarding which a Prior Environmental Authorization (“AAP”, for its acronym in Spanish) certificate was obtained; ii) bypass San Ramón and Tala bridge (Category B), whose APP certificate was requested and is pending; and iii) Chamizo, Santa Lucía Paso Viejo and Santa Lucía Route 6 bridges, whose related AAP certificates are still pending as well. The status of the quarries environmental licensing is as follows: i) Piedritas quarry, the AAP certificate and the environmental operation authorization (“AAO”, for its acronym in Spanish) have already been granted and ii) Aldabalde quarry, license is still pending.

Owing to the mobility restrictions adopted by the Uruguayan government as a result of the COVID-19 pandemic, the Environmental and Social Due Diligence (ESDD) process carried out virtually in October 2020 and February 2021. During such a process, IDB Invest held online meetings with the personnel in charge from the Construction Consortium and personnel from the Land Topography Office of the MTOP to discuss issues related to expropriations.

## **2. Environmental and Social Classification, and Rationale**

In conformity with IDB Invest’s Environmental and Social Sustainability Policy, the Project was classified as a Category B project since the environmental and social impacts, as well as the occupational risks related to the construction and operation phases, are deemed medium, reversible and manageable through management plans and programs that are well-known in the sector.

The Performance Standards (“PS”) of the International Finance Corporation (IFC) triggered by the Project are: PS 1: Assessment and Management of Environmental and Social Risks and Impacts; PS 2: Labor and Working Conditions; PS 3: Resource Efficiency and Pollution Prevention; PS 4: Community Health, Safety and Security; PS 5: Land Acquisition and Involuntary Resettlement; PS 6: Biodiversity Conservation and Sustainable Management of Living Natural Resources; and PS 8: Cultural Heritage.

## **3. Environmental and Social Context**

### **3.1 Project Area Overview**

Most Project activities relate to refurbishing and constructing a new road on the existing public domain strip of Route 6. The route runs through the Departments of Canelones and Florida and south- north across areas close to the cities of Toledo, Sauce, Santa Rosa, San Bautista, Castellanos, San Ramón and Chamizo.

The population of the Departments of Canelones and Florida is 520,187 and 67,048 inhabitants, respectively. The mean annual temperature in the Project area is 16.5°C, whereas the mean annual precipitation stands at 1,098 mm; the main winds blow south-east and east-north east.

Route 6 landscape shows a high degree of anthropization owing to the agriculture and dairy production activities carried out in the region. The San Ramón bypass runs across a rural area mainly characterized by crops and natural grasslands, two sections of native forest extending along 280 meters (located north of the Santa Lucía river) and the riparian ecosystem of the Santa Lucía river.

## **4. Environmental Risks and Impacts and Proposed Mitigation and Compensation Measures**

### **4.1 Assessment and Management of E&S Risks and Impacts**

#### **4.1.a Environmental and Social Management System**

The Consortium companies have in place environmental and social management systems (ESMS) certified under the ISO 9001 (quality system), ISO 14.001 (environmental management system) and OHSAS 18.001 (occupational health and safety system) standards.

Based on the integrated management system prepared by the CVC, the Consortium will design and implement an Integrated Environmental, Social, and Health and Safety System (IMS) applicable to work fronts, quarries and surplus material storage sites, including: i) the Environmental Management Plans approved by the DINAMA; ii) the Health and Safety Plan approved by the Ministry of Labor and Social Security (“MTSS”, for its acronym in Spanish) for each Project component; and iii) the requirements of the Project’s Environmental and Social Action Plan (ESAP).

The IMS will be led by the Environmental, Social, and Health and Safety Manager, who will directly report to the Technical Management Area and the Executive Management Area of the Consortium. Their duties will include representing the Consortium before local authorities, financing institutions and third-party representatives. The Consortium will also hire a Health and Safety professional, who will lead the team of Health and Safety technicians and supervisors and will report to the IMS Manager. In addition, the Consortium will have a social specialist to manage the social aspects of the Project and will provide for the potential hiring of an archeologist to act in the event of chance finds.

#### **4.1.b Policy**

CVC’s IMS includes an integrated management policy prepared for the execution of road infrastructure works. However, the Consortium will prepare and adopt an Environmental, Social, and Health and Safety Policy for the Project, whose objectives will explicitly incorporate the legal and PS requirements applicable to the Project regarding labor and working conditions, resource efficiency and pollution prevention, community health and safety, and biodiversity conservation and cultural heritage.

#### **4.1.c Identification of Risks and Impacts**

CVC’s IMS includes a procedure to identify and assess environmental issues. However, the Consortium will prepare an E&S aspects identification and assessment matrix for the Project, which will consider all its facilities and activities. Likewise, the Consortium will prepare an occupational hazards identification and assessment matrix for all the planned activities.

##### **4.1.c.1 Direct and Indirect Impacts and Risks**

Some of the main expected impacts and risks during the Project’s construction phase include generation of noise and dust, the potential impact on third parties of quarry activities (mainly explosions and truck traffic), vegetation loss (in the San Ramón bypass area with a slight impact on the native forest), potential

impact on archeological heritage (due to excavations) and the potential impact on the water quality of superficial water bodies and soil due to potential spills of polluting substances.

Considering the results of the hydrodynamic studies performed, it is possible to conclude that building the bridges and the new stretch in the Tala brook and San Ramón bypass will not entail any significant disruption in the area's hydrodynamics; consequently, implementing specific management measures will not be necessary.

Some of the main positive impacts of the Project include a reduction in commute time, an increase in road safety and connectivity by ensuring that the Santa Lucía river may be crossed even during floods.

#### 4.1.c.2 Cumulative Impacts

The Consortium has not analyzed the cumulative impacts for the Project.

#### 4.1.c.3 Analysis of Alternatives

The Consortium has not performed an analysis of alternatives for the Project.

#### 4.1.c.4 Gender Risks

As advised, the Consortium, as part of its values, does not discriminate based on gender upon hiring its personnel. Personnel is hired without any sort of discrimination due to gender or race, but prioritizing only the skills and expertise for the position to be filled. If the skills assessed by a third-party are equal, the Consortium will promote the participation of women and will periodically monitor the proportion of women among the labor force.

#### 4.1.c.5 Climatic Change Risks

The Project is moderately exposed to natural hazards such as droughts (including chronic droughts) and moderate to high exposure to river flooding. It is estimated that the Project's financial risks related to the transition to a low-carbon economy are low since no carbon taxes are applied to the engineering and construction sector in Uruguay.

#### 4.1.d Identification of Legal Aspects

On the basis of CVC's current procedure used to identify the legal aspects inherent to its ventures, the Consortium will develop and implement a legal aspects identification and assessment matrix for the Project including the requirements established in: i) the Project's Environmental Management Plans approved by the DINAMA (including quarry environmental management plans); ii) the Health and Safety Plans approved by the MTSS ; iii) IDB Invest's Loan Agreement; iv) the PS and IFC guidelines applicable to the Project<sup>2</sup>; and v) any other additional requirement to be determined by the related enforcement authorities.

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<sup>2</sup> Environmental Health and Safety General Guidelines, IFC, April 2007. Environmental Health and Safety General Guidelines for Toll Roads, IFC, April 2007.

#### 4.1.e Management Programs

The procedures set forth for the Consortium in the Project's Environmental Management Plan include managing the following aspects: i) air emissions (particulate matter and emissions from concrete and asphalt plants); ii) solid waste (common, from the construction works, and special or hazardous) and liquid waste (sewage effluents, machinery and mixer truck washing, etc.); iii) stormwater effluents ; iv) noise emissions; v) hazardous substances; vi) inputs (aggregate, concrete and asphalt, among others); vii) cutting and embankments; viii) excavation surplus material; ix) vegetation cover and trees; x) archeological or paleontological heritage; xi) preventive maintenance of machinery; and xii) management of concrete and asphalt. In the case of the San Ramón bypass and the Tala brook bridge, the Project expects to manage invasive flora. Moreover, procedures were prepared to address emergency situations (fire, spills, floods, traffic accidents, fallen trees, interference with services, etc.), as well as E&S training and monitoring activities.

Some of the main components of the Health and Safety Plan during the Project's construction stage include: i) identification and assessment of occupational risks classified by task; ii) use of PPE; iii) first aid management; iv) safety instructions related to pedestrian traffic at the work site, handling vehicles and road machinery, road safety during the construction works, management of asphalt plant, explosions and diverse operations at quarries, electric power risk, landslides, ergonomic and mechanical risk, fire and explosion risk; v) training plan; vi) occupational health management; vii) lighting installation safety plan; and viii) bridge construction safety plan.

Each of the plans, programs and specific instructions in the Environmental Management Plan, Health and Safety Plan and any other required plan or procedure will be incorporated into the IMS as operational procedures. The procedures will at least include the following elements: i) purpose of the procedure; ii) scope; iii) references (to related applicable standards and documentation); iv) responsibilities; v) management methodologies (specifying the training if required); vi) records; and vii) annexes (including formats of procedure application records and a copy of any other relevant document to be included).

#### 4.1.f Organizational Capacity and Competency

CVC's IMS includes a procedure for EHS training management for its own employees as well as for outsourced personnel.

The Consortium will prepare environmental, social, health and safety bi-yearly training plans including the issues set forth in the Environmental and Social Management Plan, the Project's Health and Safety Plan and those necessary to meet the requirements of the PS and the IFC's Guidelines applicable to the Project. Special importance will be granted to safety when driving vehicles and machinery inside and outside the work fronts, quarries and borrow areas.

#### 4.1.g Emergency Preparedness and Response

The Environmental Management Plan for the Project's construction phase includes a general procedure to tackle contingencies, with specific response mechanisms in the event of different emergency scenarios (spills, fire, traffic accidents, nuclear densometer events, fallen trees, floods and interference with services), and it includes training activities and emergency drill guidelines.

Although the documentation prepared for emergency preparedness and response is deemed valid to address general situations, the Consortium will prepare an Emergency Preparedness and Response Plan for each operating unit (work front, construction site, quarry, etc.) identifying: i) site-specific emergency scenarios (spills in the soil or water, fire, floods and landslides in the event of intense precipitation, riots, etc.); ii) actions to prevent and address the emergency; iii) specific responsibilities of site personnel (including those related to holidays and weekends); iv) identification of external players potentially involved during an emergency (hospital, firefighters, police, civil defense, etc.); and v) communications and decision-making authority flow chart. When applicable, it will also include an evacuation plan indicating in a chart: i) meeting points; ii) emergency exits; and iii) the location of equipment and facilities for fire extinction, flammable materials storage rooms, energy cut points, among others. Drills will be carried out periodically and randomly to assess the personnel's involvement in the light of the determined scenarios.

#### 4.1.h Accident Management

CVC's health and safety management establishes compliance with the legal action in the event of accidents or the detection of occupational illnesses. However, it does not have in place any specific accident management procedure. In this sense, the Consortium will prepare and implement a specific procedure to such end applicable to its own employees as well as for outsourced personnel. Its contents should: i) ensure compliance with the legal requirements included in the Health and Safety Plan; ii) identify the actions to be immediately applied in the event of an accident; and iii) include instructions to record the nature and severity of the accident, undertake the necessary actions to comply with the legal formalities, the format of the accident investigation report and the identification of the preventive and corrective measures adopted to prevent them from happening again.

#### 4.1.i Suppliers and Contractors Management

The Consortium plans to hire companies to provide the following services: i) laboratory; ii) transportation; iii) earth works; iv) manufacturing and laying the pavement; v) signaling; vi) construction of structures, bridges and drainage; and vii) provision of assorted materials, such as corrugated steel, aggregate, asphaltic cement, geotextile, concrete pipes, construction sheds, cranes, etc. To this end, CVC has prepared a specific management procedure for subcontractors and service providers establishing the EHS requirements to be met by contractors and suppliers in performing their activities in connection with CVC's works.

However, the Consortium will prepare and adopt Goods and Services Providers Rules including: i) the obligation of those operating quarries to manage all the E&S impacts and occupational risks in accordance with effective legislation and the Consortium's IMS; ii) the obligation to meet the Environmental, Social,

and Health and Safety Policy and the Human Resources Policy of the Consortium; ii) the minimum personnel requirements that the provider should meet to manage environmental, social, and health and safety issues; iii) the list of all programs, plans and procedures in the Consortium's IMS applicable to the provider; iv) the specific environmental, social, and health and safety training requirements; v) the Road Safety Plan; vi) the Stakeholder Engagement Plan; and vii) grievance and claim mechanisms for outsourced workers.

#### 4.1.j Monitoring and Evaluation

The implementation of the Environmental Management Plan for the construction phase will be controlled by the DINAMA while the execution of the Health and Safety Plan will be overseen by the General Labor and Social Security Office of the MTSS.

The Environmental Management Plan for the construction stage does not provide for an Environmental Monitoring Plan indicating the variables to be monitored or the procedures to be followed to such end. In this sense, the Consortium will prepare an Environmental, Social, and Health and Safety Monitoring Plan to follow up on the monitoring requirements under the Environmental Management Plan and the Health and Safety Plan. In addition to such requirements, the Consortium will monitor the following parameters: i) labor noise and air quality levels at critical work positions; ii) quality of water for human consumption (by-yearly); iii) frequency and severity rates of accidents occurred to payroll and outsourced personnel (monthly); iv) electric power panels earthing resistance values (by-yearly); v) incident and unsafe working conditions records (monthly); vi) records of occupational illnesses and COVID-19 cases (monthly); vii) community claims received and resolved (monthly); viii) amounts of water, energy and inputs used and waste generated (monthly); and ix) contents and number of training courses taught (monthly). The limit values of the parameters measured will be the statutory ones or those of the applicable IFC Guidelines (whichever more demanding).

#### 4.1.k Disclosure of Information and Consultation. Stakeholder Engagement.

In December 2019, the Consortium engaged in disclosure and consultation activities related to the Project and addressed to the neighbors potentially affected by the construction of the San Ramón bypass<sup>3</sup>. In addition, from March 10 to 20, 2020, the Consortium held 14 interviews with key stakeholders from San Ramón to find out how they felt about the Project. The results of these interviews showed moderate expectations regarding the positive impacts of the Project (such as an increase in connectivity between San Ramón and Chamizo since the new bridges will not be affected by floods) and a negative impression related to the potential decrease in commercial activity in the City of San Ramón and agricultural activities due to future expropriations. Also, before breaking ground in the bypass works, the Consortium will launch an information campaign for the inhabitants potentially affected by expropriations, will keep them abreast of the planned progress of the work fronts and will involve local authorities<sup>4</sup> in these activities.

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<sup>3</sup> <https://www.youtube.com/watch?v=ovFZM8X1g2k>

<sup>4</sup> Response to the Request for Supplementary Information made ("SIC", for its acronym in Spanish) by the DINAMA to the DNV-MTOP dated August 14, 2020.

On February 10, 2021, a new event was held with the local stakeholders, which was also attended by the Mayor of San Ramón and local representatives, and the Road Infrastructure Director and advisory technicians from the MTOP.

Upon being classified as a Category B project by the DINAMA, the San Ramón bypass is the only Project component which required an Environmental Impact Assessment (EIA). As part of the Prior Environmental Authorization procedure, the Consortium (through the DNV) published the related Summary Environmental Report (SER). No EIA was required for the rest of the Project components since they were classified under Category A (minimum environmental risk).

For the San Ramón bypass and the Tala bridge, the Consortium has submitted the Active Communication Plan to the DINAMA as guide for the disclosure, consultation and grievance processes related to the Project. Such plan includes a social perception study and it was prepared following the guidelines in PS 1.

For the Project, the Consortium will prepare and implement a Stakeholder Engagement Plan covering: i) preparation and maintenance of an assessment procedure including mapping the Project's stakeholders; ii) Project dissemination activities addressed to members of the community; iii) social management procedures for quarry blasting events; iv) prior technical review of the dwelling homes potentially affected by quarry blastings considering their proximity to the epicenter of the explosions; and v) application of the grievance and claims mechanism. The responsibility for implementing this plan will be shared by the companies managing the Project quarries.

#### 4.1.k.1 Indigenous People

The Project will not affect any indigenous population.

#### 4.1.k.2 External Communication and Grievance Mechanisms

The Consortium will develop and implement a third-party Grievance Mechanism including the possibility to receive grievances and claims anonymously. The mechanism will clearly establish the responsibilities assigned and the assessment and response times for the statements made.

#### 4.1.k.3 Provisions to address vulnerable group grievances

No vulnerable groups that could be affected by the Project have been identified.

## 4.2 Labor and Working Conditions

### 4.2.a Working Conditions and Terms of Employment

In its Human Resources Policy, CVC declares that it has in place transparent recruiting processes and it promotes the development of workers providing them with growth and development opportunities. Contracts are formalized and registered with the Government's social security and enforcement agencies including temporary workers (for specific works) and permanent workers (at the construction site or at

the offices). The work week accumulates 44 hours for the construction personnel and 48 hours for the administrative staff. Overtime may be worked on Saturdays or Sundays or even within weekdays, which is paid for in compliance with the construction workers collective bargaining agreement. Annual vacation is 20 days per year.

The Sindicato Único Nacional de la Construcción y Anexos, SUNCA (single construction and related tasks union) works at a national level to obtain salary increases (through collective bargaining agreements), benefits for its enrollees, and labor health and safety improvements. CVC's Human Resources Policy sets forth its observance of the freedom of association of its employees and the effective recognition of the right to bargain collectively.

CVC's Specific Medical Surveillance Protocol is applicable to all payroll and outsourced employees (the latter in all matters related to the identification of hazardous working conditions and requirement that the contractor follow up on its exposed personnel's health). Construction personnel is insured by Banco de Previsión Social (BPS) acquiring the right to healthcare and workers' compensation and occupational illnesses coverage (through a mutual health organization chosen by the worker). Management workers are covered by a private accidents insurance policy contracted by CVC.

According to CVC, its personnel's satisfaction will be measured at least every two years through an internal satisfaction survey determining the labor satisfaction and climate. It will be carried out by a hired company and it will be anonymous. The results will be assessed and submitted to Management so that they may take any actions deemed appropriate.

#### 4.2.a.1 Human Resources Policies and Procedures

CVC has a Human Resource Policy in place. Based on it, the Consortium will prepare a similar policy for the Project, which will meet all the requirements in PS 2 and will be applicable to payroll and outsourced personnel as well as workers in the supply chain (quarries).

#### 4.2.a.2 Non-discrimination and Equal Opportunity

In its Human Resources Policy, the Consortium declares that it established open and transparent recruiting procedures prioritizing personal values and professional skills to meet the objectives established by the Company. Likewise, such policy fosters employee promotion by providing growth and development opportunities.

#### 4.2.a.3 Retrenchment

The Consortium's Retrenchment Plan establishes that, in order to mitigate any adverse impacts, whether due to the simple payment of severance pay or for claims related to "litigious" items such as overtime, the Consortium will pay the applicable amounts through a voluntary agreement signed by the parties and their legal counsel.

Before the end of the construction phase, the Consortium will analyze the retrenchment alternatives and will develop and implement a personnel demobilization plan meeting all the related legal and contractual requirements and mitigating any adverse impacts which may arise from worker dismissals.

#### 4.2.a.4 Internal Grievance Mechanism

The Consortium will prepare and implement a specific procedure to receive and resolve grievances and claims from its payroll and outsourced workers which also includes the possibility of receiving anonymous grievances or claims. The procedure will clearly establish the responsibilities assigned and the assessment and response times for the personnel's statements.

#### 4.2.b Occupational Health and Safety

The occupational health and safety conditions will be supervised and monitored by the Consortium at the working fronts, quarries, borrow areas, maintenance workshops and administrative facilities covering the payroll and outsourced personnel activities. The activity of the personnel from other construction material suppliers (such as iron, concrete, etc.) will also be supervised by the Consortium in a programed and ongoing manner so as to ensure compliance with the health and safety conditions in the Project's IMS.

The Consortium will make sure that all significant risks detected in the health and safety identification and assessment matrixes are managed through a specific procedure.

In compliance with local legislation, the Consortium will have an in-house occupational safety service incorporated to the Company's structure with presence during the whole workday. Workers will choose at least one Health and Safety delegate at the work site to represent them, whose tasks will be focused on collaborating with the Company's Health and Safety Service promoting personnel awareness, cooperating in risk identification, inspections and recording in the Work Site Book<sup>5</sup> any suggestions or comments that they may deem appropriate.

In Uruguay, workers compensation insurance is compulsory and it is provided by the State Insurance Bank (BSE for its acronym in Spanish). Thus, when an accident is reported to the healthcare provider chosen by the worker, it is BSE's representative who approves the leave of the person suffering the accident and the type of medical treatment to be followed. On the other hand, the employer is criminally liable if their company fails to adopt any prevention measures to safeguard life from grave danger, the physical integrity and health of the workers. The penalty to be imposed on such person is from 3 to 24 months in prison.

#### 4.2.c Supply Chain

Quarries are the most important components of the supply chain due to the significance of the potential environmental and social impacts, as well as the occupational risks related to their operation. In this sense, the Consortium will ensure that the health and safety plans and procedures in the IMS are applied at the quarries by the related contractor companies, and their development will be included in the E&S Compliance Reports to be periodically prepared.

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<sup>5</sup> The Work Site Book is the log recording the daily events at the work front in particular.

### 4.3 Resource Efficiency and Pollution Prevention

#### 4.3.a Resource Efficiency

The Consortium will implement awareness programs addressed to payroll and outsourced personnel aiming at the rational use of water and electric power. It will also incorporate to the waste management procedures, waste segregation practices at origin based on its type and promoting if possible, its recycling and reuse.

The Consortium will generate for the whole Project records on monthly water and energy consumption (UTE [Uruguayan government-owned electricity company] grid and work site generators) of the consumption of aggregate, asphalt, and the amount and disposal of the generated or recycled waste (part of this information will be necessary to prepare the Final Environmental Performance Report required by the DINAMA).

##### 4.3.a.1 Greenhouse Gases

On an annual basis, the Consortium will prepare a GHG inventory for the year ending and will submit estimations of these emissions for the following year.

##### 4.3.a.2 Waste, Pesticides and Hazardous Materials, and Pollution Prevention.

The Environmental Management System for the construction phase includes measures to manage solid and liquid waste, civil works waste (debris, waste materials, metal scrap, wood, etc.), waste similar to domestic waste and workshop hazardous waste. Such measures provide, among others, for the reuse of wood and recycling of metal scrap. Used batteries and tires no longer used are expected to be managed by licensed waste managers. However, the Consortium will prepare and implement a specific procedure to manage waste in accordance with current regulations and the IFC's Environmental, Health and Safety General Guidelines of April 2007. Such procedure will include record formats allowing quantifying and recording the amount and type of waste managed per month or applicable period.

Likewise, the Environmental Management Plan for the Project's construction phase provides for specific instructions to store and manage fuels and hazardous substances. However, the Consortium will prepare a specific procedure to manage hazardous substances in accordance with current legal requirements in effect and those resulting from applying the IFC's Environmental, Health and Safety General Guidelines of April 2007. Such procedure will expressly indicate that the Consortium will not use pesticides or chemical substances including any Class Ia (extremely hazardous) or Ib (highly hazardous) components as classified by the World Health Organization (WHO).

The bridge construction and refurbishing tasks will be carried out using specific Consortium procedures which will prevent or minimize sediment dragging to the river bed, the risk of floods in areas adjacent to the works and the risk of pollution from potential spills of pollutants.

The Constructor Consortium has prepared an Environmental Restructuring Plan in order to leave the areas in which the construction works took place in their original state. Such plan also covers the public domain

strip , quarry areas, materials stockpiling and cofferdams in water courses, as well as in camps and construction sites.

#### **4.4 Community Health and Safety**

##### **4.4.a Community Health and Safety**

For the operations phase, the projected noise levels for the San Ramón bypass area are under the maximum allowed limits. Therefore, no mitigation measures will be required. However, any potential grievances or claims related to noise will be channeled through the mechanism provided, and the implementation and record of potential corrective actions will be recorded as provided for in the Environmental, Social, and Health and Safety Monitoring Plan.

The Consortium will prepare and implement a Road Safety Plan applicable to the whole Project construction and mandatory for both payroll and outsourced personnel. Such plan should include the following: i) compulsory defensive driving courses for all truck or machinery drivers, whether owned or rented; ii) random alcohol and drug screening tests to truck and owned or rented machinery drivers; iii) identification of sensitive sites along the routes of trucks and owned or hired light vehicles personnel (e.g., schools, hospitals and tourist sites with large concentrations of public) establishing specific driving guidelines in certain sites (such as maximum speeds in certain stretches); iv) good behavior standards when dealing with members of the community; and v) coordination activities with local authorities and road police (to implement detours and the increase in road safety at night or in the event of bad weather conditions).

##### **4.4.b Security personnel**

The Consortium will hire unarmed security personnel to safeguard its facilities.

#### **4.5 Land Acquisition and Involuntary Resettlement**

##### **4.5.a General**

The release of the right of way (expropriation process) by the Topography Office of the MTOP, is based on the Project planimetry approved by the DNV.

The expropriations will not give rise to any physical displacement. The potential economic displacement related to the expropriations in the San Ramón bypass area will be compensated in each particular case by the MTOP upon making the payments for the value of the plots, for the improvements made and for the damages or losses potentially caused, as provided for in the expropriation process.

In the tranches where the road running across urban areas will be widened, the expropriations will only affect the service roads to build bus stops (8 properties) and a part of the Ministry of Defense facilities. A total of 8 properties are affected in these first two stretches.

Part of the private properties along which the proposed route runs need to be expropriated to implement the San Ramón bypass. The total number of affected properties amounts to 26: 5 urban and 15 rural are located in Canelones; and 6 are rural in Florida.

#### 4.5.a.1 Compensation and Benefits for Displaced Persons

The Consortium will register and monitor the expropriation and reestablishment of means of livelihood carried out by the MTOP and will collaborate with the authorities, should it be allowed to do so, to ensure that the results of this process are consistent with PS 5.

## 4.6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

### 4.6.a Protection and Conservation of Biodiversity

The Project is not located in any of the areas included in the National Protected Areas System (the closest protected area is the Santa Lucía Wetlands located 68 km downstream the intersection of Santa Lucía river and the future San Ramón bypass). It does not intersect any critical habitats or unique, highly-threatened ecosystems or areas related to key evolution processes. Most of its area (almost 60%) is made up by crops and pasture.

The natural ecosystems identified in the San Ramón bypass area are natural, mesophilic and hydrophilic grasslands, native forest and riparian forest .

The riparian ecosystems of the Santa Lucía river considered critical habitats related to biological connectivity (evolutionary process deemed key) which work as biodiversity connectors will not be significantly impacted by the Project. The mountainous ecoregion Cuchilla Grande, located upstream from the Project's intervention sites, will not be impacted either.

In order to minimize habitat fragmentation, enable fauna movements along the projected road and reduce any risks of collision, animal crossings will be installed under the road. To such end, oversized drainage works will be used with side curbs and access ramps to enable animal crossings even during floods.

To minimize the entrance of public to the natural ecosystems related to the Santa Lucía river and thus make it more difficult for poachers to access flora and fauna, a safety hedge with guardrails on both sides of the road will be installed along the 2.1 km of the floodplain. Parking will be prohibited on both sides of the road in that area.

### 4.6.b Invasive Alien Species

The Project's Environmental Management Plan for the construction phase prepared by the Consortium includes an Invasive Forest Flora Control Program. A mix of fast-growing and densely-covering quickgrass and other herbs will be sown in removed or disturbed soil areas trying not to include any invasive species. Once the first phase is concluded, bushes and trees will be planted considering the sowing calendars and

the relative positions of each species based on the hydric slope within the future forest area. The eradication of invasive flora will continue for 5 years through manual methods or use of herbicides.

#### **4.7 Cultural Heritage**

##### **4.7.a Cultural Heritage Protection in the Project Design**

Since the bridge over the Toledo brook has heritage value, it will be widened (from 10.10 m to 21.86 m) considering its original design. This expansion, which will be carried out on the southern side, consists in the construction of premanufactured reinforced concrete blocks which will be placed on reinforced concrete abutments.

###### **4.7.a.1 Chance Find Procedures**

Major archeological and paleontological finds occurred on the beaches of the Pilatos brook (called Vejiga brook in one of its sections) located in the San Ramón bypass implementation area. The paleontological materials found belong to the late Pleistocene. The morphological analysis of the archeological materials (215 lithic artifacts) allows for concluding that there are clear elements of its relation to the oldest archeological expression of the region. Therefore, and as a preventive measure, the Consortium has surveyed the rest of the area related to the San Ramón bypass, and it did not identify any archeological record.

However, the Consortium will prepare and implement a procedure to manage chance finds, which will be applied to any tasks implying removing or manipulating the soil (construction of slopes, drainages, foundations and quarry explosions).

#### **5. Local Access of Project Documentation**

The documentation related to the Project is available at:

[https://www.dinama.gub.uy/bir/manifiestos/attachments/IAR\\_Bypass\\_San\\_Ram%C3%B3n.pdf](https://www.dinama.gub.uy/bir/manifiestos/attachments/IAR_Bypass_San_Ram%C3%B3n.pdf)  
<https://idbinvest.org/en/projects/ppp-vial-circuito-6>