
**ARMENIA TRADE PROMOTION AND QUALITY
INFRASTRUCTURE PROJECT**

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

ENGINEERING CITY ACCELERATOR BUILDING CONSTRUCTION

Prepared by:

Alisa Savadyan, Environmental and Social Consultant of TPQI project

March 2022

PART A: GENERAL PROJECT AND SITE INFORMATION

INSTITUTIONAL & ADMINISTRATIVE	
Country	Republic of Armenia
Project title	Trade Promotion and Quality Infrastructure (TPQI) Project «Engineering City accelerator building construction»
Scope of site-specific activity	<p>TPQI project will finance physical works for accelerator building construction of Engineering City (EC) under the project subcomponent 2.3 - cluster PPP Development.</p> <p>Positive conclusion of environmental expertize for «Engineering City land improvement and infrastructure construction» project was provided by RA Ministry of Environment (dated by 15.07.2021)</p> <p>The Engineering City is planned to be located on approximately 3 hectares of land on Bagrevand street in Yerevan. Engineering Business Accelerator and 22 EC residents' buildings are part of the EC. The 22 EC residents' buildings will be constructed at the engineering companies' own expense. Engineering Business Accelerator and Co-Working Space will host facilities for incubation and acceleration activities, small office spaces for start-ups, co-working space for teams, administrative space for management and technical staff, meeting rooms, conference hall, training rooms, and shared labs. The 22 EC resident engineering companies will carry out the design and development of their products using measuring equipment, prototyping laboratories, and machine tooling.</p> <p>According to the master plan, the accelerator of the Engineering City is located in the south-eastern part of the City land. It is a 4-storey building with key dimensions of 70 m in length and 28 m in width. The main goal was to create an operational green roof area, which has a number of advantages: a comfortable connection between the floors, favorable microclimate and evacuation conditions, open-air work environment. The main materials of the exterior decoration of the building are concrete surfaces, large glazed surfaces and the use of wood and metal in some places. The glazing is designed with front non-frame structures (thermal bridge), sun-protective and energy-saving film. Sloping, usable green roof can be used as an amphitheater for large outdoor gatherings. Internal water removal and drainage system is organized. One elevator for 4 floors, the access from the lobby, which also serves people with disabilities. The area is not fenced.</p> <p>It is planned to build the following areas, per floors:</p> <p>4th floor: Production area 1384 m², Hall 308 m², Bathrooms, wardrobes 45,2 m² Boiler house 7,2 m² Electric panel area 11,3 m² Server room 48,5 m² Staircase, elevator, corridor etc. 163 m² Total usable area of the floor 1993 m²</p> <p>3rd floor: Offices 871,6 m², Conference room 76,3 m², Bathrooms, kitchen, cleaner's room 45,8 m², Co-working space, entrance hall, corridor etc. 423 m², Hall foyer 49,4 m², Cafeteria 76 m², Total usable area of the floor 1542 m²</p> <p>2nd floor: Offices 911 m², Conference room 76 m², Bathrooms, kitchen, cleaner's room 45,8 m², Co-working space, entrance hall, corridor etc. 400 m², Total usable area of the floor 1432 m²,</p> <p>1st floor: Offices 621 m², Conference room 86,2 m², Bathrooms, kitchen, cleaner's room 46,5 m², Co-working space, entrance hall, corridor etc. 402 m², Total usable area of the floor 1156 m²</p> <ul style="list-style-type: none"> ✓ Heating and cooling of the building is implemented by means of a centralized system ✓ Floor fan-coil units are planned to be used as heating devices, which are fed from condensing boilers installed in the boiler house. These fan-coils are also used to cool the building. ✓ Two chillers with a capacity of 500 kW, with air cooling of the condenser, are the source of cooling for the air conditioning and fan coil systems. ✓ Energy-saving solutions are envisaged ✓ It is planned to equip the building with electricity shield, from where the power supply of all lighting and power panels is carried out. ✓ The following types of lighting are designed: <ol style="list-style-type: none"> 1. worker - in all buildings 2. emergency – in evacuation and all special-purpose rooms using lamps with rechargeable batteries 3. alarm – at all exits ✓ Lighting control is provided on site centrally, and in large areas (workshops, staircases, halls). <p>According to national legislation (Law on Environmental Impact Assessment and Expertise of RoA (2014) accelerator building construction activity is subject of environmental expertize (construction building area more than 1500 m²). Environmental expertise of «Engineering City accelerator building construction» is in the process, second public consultation will be held on February 22. It is expected</p>

	to receive final conclusion of the project till end of the March 2022.		
Institutional arrangements (WB)	Task Team Leaders: Yeraly Beksultan Karen Grigorian	Safeguards Specialists: Adrian Mihailescu, Environment Sophia V. Georgieva, Social	
Implementation arrangements (RoA)	Implementing entity: PMU under Office of Prime Minister	Works supervisor: (TBD)	Works contractor: (TBD)
SITE DESCRIPTION			
Name of institution whose premises are to be rehabilitated/constructed	Ministry of High-Tech Industry of RA		
Address and site location of institution whose premises are to be rehabilitated	Nor-Nork Bagrevand street, 74 land plot, Yerevan, Republic of Armenia		
Who uses the land (formal/informal)?	<p>The land for the establishment of the Engineering City is owned by the Republic of Armenia. The document confirming the real estate acquisition right is the Certificate of State Registration of the Rights over Real Estate N 05042019-01-0170, issued 01.04.2019 and provided on the basis of the Donation agreement 01.04.2019 No. 2752. The agreement was signed between the Yerevan Municipality and the RA Ministry of High Tech Industry. No involuntary resettlement or loss (of land, buildings, structures, assets, economic, etc.) occurred. An agreement in Armenian with notary translation is attached (Annex 2).</p> <p>There are large piles of stones and concrete fragments on a land plot that are subject to demolition.</p>		
Description of physical and natural environment around the site	<p>The EC site is located in the Nor-Nork district of Yerevan, in a newly constructed residential area close to the road. The roads leading to the land plot have asphalt pavement. Being located in a developed area, there is no wildlife within the area of construction activities. No trees and bushes are hindering the construction works. There are large piles of stones and fragments of concrete structures on the construction site, which will be demolished. The project will reuse the mentioned wastes during the leveling of the area after crushing. The crushed and sorted gravel will be temporarily stored in the area adjacent to the crushing unit. The land is partly covered by topsoil, which will be removed and temporarily stored in a specified area within the construction site and be used for landscaping of the area.</p> <p>The access of construction vehicles and machinery is carried out through the routes across Bagrevand, N. Stepanyan, and Moldovakan streets. Engineering City will have 3 entrances/exit gates: (i) entrance/exit for machinery and vehicles from Bagrevand street, (ii) entrance/exit for the parking lot, and (iii) entrance/exit from Moldovakan/N. Stepanyan streets. There is enough space for parking construction vehicles and machinery on the construction site within a fenced area and to establish temporary storage for building materials and construction waste. Transportation of construction materials and structures and construction and demolition waste will be carried out through allowed roads in Yerevan and truckloads will be confined and protected with lining. The construction contractor will ensure the safe and continuous operation of public roads during the construction and keep the requirements of the state authorized body. Road and transportation schemes for EC operation will be approved by the state authority. The nearest residential building is 22 m far from the EC area fencing.</p> <p>The 1400 m route for underground sewage and rainwater drainage pipelines lies along the roadside of public road from the construction site to Moldovakan street. The 22m route of the underground drinking water pipeline will lie along the roadside of a public road. Public land will be used for 1500 m underground power cabling and construction of a 30 m natural gas main pipeline to the EC area. All trenches will be delineated with barriers and promptly reinstated upon closure. All construction machinery and equipment will be parked inside the fencing area.</p> <p>The project implementation will not have any temporary or permanent impacts on neighboring businesses.</p>		
Locations and distance for material sourcing, especially aggregates, water, stones?	<p>The necessary aggregates and other construction materials are available from nearby vendors or wholesale trade centers.</p> <p>Water required for construction works is available at the construction site and supplied by “Veolia Jur” CJSC. The technical conditions document were provided in the frame of «Engineering City land improvement and infrastructure construction» (project ESMP has approved by WB 27.06.2021)</p>		

LEGISLATION	
National & local legislation & permits that apply to sub-project activity	<p>The following Armenian legislation defines a legal framework applicable to project activities:</p> <ul style="list-style-type: none"> - Law on Atmospheric Air Protection of RoA (1994) <p>The purpose of the Law on Atmospheric Air Protection is to define the main principles of the RoA, directed to the provision of purity of atmospheric air and improvement of air quality, prevention and mitigation of the chemical, physical, biological and other impacts on air quality and regulation of public relation. This Law also regulates the emission licenses and provides maximum allowed loads/concentrations for atmospheric air pollution, etc.</p> <p>According to this law, the contractor shall undertake construction activities as well as transportation and temporary storage of waste the way to minimize dust and other emissions.</p> <ul style="list-style-type: none"> - Law on Waste of RoA (2004) <p>The law provides the legal and economic basis for the collection, transportation, disposal, treatment, re-use of wastes as well as prevention of negative impacts of waste on natural resources, human life and health. The law defines the roles and responsibilities of the state authorized bodies as well as of waste generator organizations in waste management operations.</p> <p>According to this law, the waste generated from construction activities should be recycled as appropriate or disposed of in designated locations.</p> <p>Disposal of the construction waste and excess material in selected locations must be approved by the Yerevan municipality in writing.</p> <ul style="list-style-type: none"> - Law on Environmental Impact Assessment and Expertise of RoA (2014) <p>The law defines the type of activities that are subject to environmental impact assessment and environmental expertise.</p> <p>According to this law, the proposed construction works are subject to environmental impact assessment and expert examination.</p> <ul style="list-style-type: none"> - Law on Urban Development of RoA (1998) <p>According to this law, planned works require obtaining a construction permit.</p>
PUBLIC CONSULTATION	
When / where the public consultation process will take /took place	<p>Draft ESMP in Armenian and English languages will be disclosed through the FB page of TPQI (https://www.facebook.com/TPQIProject) and EDF web page (https://eif.am/) upon clearance by the World Bank. Public consultation meeting will be organized in the end of March 2022 and final ESMP will presented to the main stakeholders and public.</p> <p>Brief information on the planned works and contact information for addressing questions and grievances will be placed on the information board at the worksite, and/or in its immediate surroundings.</p>
ATTACHMENTS	
<p>Attachment 1: EC land location map</p> <p>Attachment 2: Land ownership certificate</p> <p>Attachment 3: Photos of the construction site</p> <p>Attachment 4: Minutes of the public consultation meeting on the draft ESMP and announcement-invitation – will be provided</p> <p>Attachment 5: List of participants of the public consultation meeting and photos – will be provided</p> <p>Attachment 6: Waste disposal agreement – will be provided</p> <p>Attachment 7: Construction Permit – will be provided</p> <p>Attachment 8: State Environmental Impact Expertise Conclusion</p>	

PART B: SAFEGUARDS INFORMATION

ENVIRONMENTAL /SOCIAL SCREENING			
	Activity/Issue	Status	Triggered Actions
Will the site activity include/involve any of the following?	A. Building rehabilitation	[] Yes [✓] No	If “Yes”, see Section A below
	B. New construction	[✓] Yes [] No	If “Yes”, see Section A below
	C. Individual wastewater treatment system	[] Yes [✓] No	If “Yes”, see Section B below
	D. Historic building(s) and districts	[] Yes [✓] No	If “Yes”, see Section C below
	E. Acquisition of land ¹	[] Yes [✓] No	If “Yes”, see Section D below
	F. Hazardous or toxic materials ²	[] Yes [✓] No	If “Yes”, see Section E below
	G. Impacts on forests and/or protected areas	[] Yes [✓] No	If “Yes”, see Section A below
	H. Handling / management of medical waste	[] Yes [✓] No	If “Yes”, see Section G below
	I. Traffic and Pedestrian Safety	[✓] Yes [] No	If “Yes”, see Section F below

¹ Land acquisitions includes displacement of people, change of livelihood encroachment on private property this is to land that is purchased/transferred and affects people who are living and/or squatters and/or operate a business (kiosks) on land that is being acquired.

² Toxic / hazardous material includes but is not limited to asbestos, toxic paints, noxious solvents, removal of lead paint, etc.

PART C: MITIGATION MEASURES

ACTIVITY	PARAMETER	MITIGATION MEASURES CHECKLIST
0. General Conditions	Notification and Worker Safety	<ul style="list-style-type: none"> (a) Notify local construction and environment inspectorates and communities on the upcoming activities (b) Notify public on the works through appropriate notification in the media and/or at publicly accessible sites (including the site of the works) (c) Acquire all legally required permits for construction and/or rehabilitation (d) Formally agree with Employer that all work will be carried out in a safe and disciplined manner designed to minimize impacts on neighboring residents and environment. (e) Ensure that workers' PPE complies with international good practice (always hardhats, as needed masks and safety glasses, harnesses and safety boots) (f) Appropriately signpost construction site to inform workers on key rules and regulations.
A. General Rehabilitation and /or Construction Activities	Air Quality	<ul style="list-style-type: none"> (a) Use debris-chutes during interior demolition above the first floor (b) Keep demolition debris in controlled area and sprayed with water mist to reduce debris dust (c) Suppress dust during pneumatic drilling/wall destruction by ongoing water spraying and/or installing dust screen enclosures at site (d) Keep the surrounding environment (sidewalks, roads) free of debris to minimize dust (e) Disallow open burning of construction / waste material at the site (f) Disallow excessive idling of construction vehicles at sites
	Noise	<ul style="list-style-type: none"> (a) Limit construction noise to daytime unless extreme urgency. Notify local communities on the works schedule if it deviates from standard working hours (b) Ensure that during operation, engine covers of generators, air compressors and other powered mechanical equipment are closed, and equipment placed as far away from residential areas as possible
	Water Quality	<ul style="list-style-type: none"> (a) Establish appropriate erosion and sediment control measures such as e.g. hay bales and / or silt fences to prevent sediment from moving off site and causing excessive turbidity in nearby streams and rivers.
	Waste management	<ul style="list-style-type: none"> (a) Identify waste collection and disposal pathways for all major waste types expected from demolition and construction activities (b) Separate mineral construction and demolition wastes from general refuse, organic, I2Quid and chemical wastes by on-site sorting and stored in appropriate containers. (c) Collect construction waste and dispose properly to the designated locations (d) Whenever feasible, reuse and recycle appropriate and viable materials (except asbestos)
B. Individual wastewater treatment system	Water Quality	<ul style="list-style-type: none"> (a) Ensure that the approach of handling sanitary wastes and wastewater and the design of the treatment system is approved by relevant authorities (b) Ensure that before discharging into receiving waters, effluents from individual wastewater systems are treated in order to meet the minimal quality criteria set out by national guidelines on effluent quality and wastewater treatment (c) Undertake monitoring of newly established wastewater treatment systems and report to Employer on the monitoring outcome (d) Wash construction vehicles and machinery only in designated areas where runoff will not pollute natural surface water bodies.
C. Historic building(s)	Cultural Heritage	<ul style="list-style-type: none"> (a) If the building is a designated historic structure, very close to such a structure, or located in a designated historic district, do not commence works without receiving a notice that the design is agreed with the Ministry of Culture and Monument Protection, and all construction activities are planned and carried out in line with local and national legislation.

		(b) Acquaint personnel with the procedures for handling chance finds. Take all physical activity on hold if a change find is suspected or reported by staff and immediately notify Employer in writing. Do not resume work until formal notice from the Employer.
D. Acquisition of land	Land Acquisition Plan/Framework	<p>(a) If expropriation of land was not expected but is required, or if loss of access to income of legal or illegal users of land was not expected but may occur, immediately consult the World Bank's Task Team Leader</p> <p>(b) Make sure not to enter a subproject site and not to start any physical activity in it prior to receiving formal notice on the completion of resettlement and full delivery of compensation to the affected people</p>
E. Toxic Materials	Asbestos management	<p>(a) If asbestos is located on the subproject site, mark it clearly as hazardous material</p> <p>(b) When possible, appropriately contain and seal asbestos to minimize exposure</p> <p>(c) Treat asbestos prior to removal (if removal is necessary) with a wetting agent to minimize asbestos dust</p> <p>(d) Handle and disposed asbestos using skilled & experienced professionals</p> <p>(e) If asbestos material is being stored temporarily, securely enclosed it inside closed containments and mark appropriately. Take security measures against unauthorized removal from the site</p> <p>(f) Do not reuse the removed asbestos</p>
	Toxic / hazardous waste management	<p>(a) Temporarily store all hazardous or toxic substances on site in safe containers labeled with details of composition, properties and handling information</p> <p>(b) Place containers of hazardous substances in leak-proof containers to prevent spillage and leaching</p> <p>(c) Transport waste to official landfills and dispose excess excavated material at sites agreed with the local authorities.</p> <p>(d) Do not use paints with toxic ingredients or solvents, or lead-based paints</p>
F. Traffic and Pedestrian Safety	Direct or indirect hazards to public traffic and pedestrians by construction activities	<p>(a) In compliance with national regulations, the Contractor will ensure that the construction site is properly secured and construction-related traffic regulated. This includes but is not limited to:</p> <ul style="list-style-type: none"> ▪ Signposting, warning signs, barriers and traffic diversions: site will be clearly visible and the public warned of all potential hazards, ▪ Traffic management system and staff training, especially for site access and near-site heavy traffic. Provision of safe passages and crossings for pedestrians where construction traffic interferes, ▪ Adjustment of working hours to local traffic patterns, e.g. avoiding major transport activities during rush hours or times of livestock movement, ▪ If required, active traffic management by trained and visible staff at the site for safe passage for the public, ▪ If school children are in the vicinity, include traffic safety personnel to direct traffic during school hours ▪ Ensuring safe and continuous access to all adjacent office facilities, shops and residences during construction.
G. Social Risk Management	Public relationship management	<p>(b) Ensure that all arrangements related to continuation of school and learning process have been made (e.g., temporary accommodation for students, transport, etc.)</p> <p>(c) Assign local liaison person within Contractor's team to be in charge of communication with and receiving requests/ complaints from local population</p> <p>(d) Consult local communities to identify and proactively manage potential conflicts between an external workforce and local people</p> <p>(e) Raise local community awareness about transmittable disease risks associated with the presence of an external workforce and include local communities in awareness activities.</p> <p>(f) Inform the population about construction and work schedules, interruption of services, traffic detour routes and provisional bus routes, blasting and demolition, as appropriate.</p>

		<ul style="list-style-type: none"> (g) Limit construction activities at night. When necessary ensure that night work is carefully scheduled, and the community is properly informed, so they can take necessary measures. (h) At least five days in advance of any service interruption (including water, electricity, telephone, bus routes), advice community through postings at the work site, at bus stops, and in affected homes/businesses. (i) Address concerns raised through Grievance Redress Mechanism established by the Employer within the designated timeline within the scope of Contractor's liability (j) To the extent possible, work camps should not be located in close proximity to local communities (i) Siting and operation of worker camps should be undertaken in consultation with neighboring communities
	Labor management	<ul style="list-style-type: none"> (a) Recruit unskilled or semi-skilled workers from local communities to the extent possible. Where and when feasible, worker skills training, should be provided to enhance participation of local people. (b) Provide adequate lavatory facilities (toilets and washing areas) in the work site with adequate supplies of hot and cold running water, soap, and hand drying devices. A temporary septic tank system should be established for any residential labor camp and without causing pollution of nearby watercourses (c) Raise awareness of workers on overall relationship management with local population, establish the code of conduct in line with international practice and strictly enforce them, including the dismissal of workers and financial penalties of adequate scale

PART D: MONITORING PLAN

Activity	What (Is the parameter to be monitored?)	Where (Is the parameter to be monitored?)	How (Is the parameter to be monitored?)	When (Define the frequency / or continuous?)	Why (Is the parameter being monitored?)	Who (Is responsible for monitoring?)
CONSTRUCTION PHASE						
Provision of construction materials	Purchase of construction materials from the registered providers	Provider's office or warehouse	Verification of labels of the materials and/or certificates	During conclusion of supply contracts	Ensure reliability of construction materials and their safety for human health	PMU Technical Supervision Company
Transportation of construction materials and waste Movement of construction equipment	- Technical condition of vehicles and machinery; - Confinement and protection of truckloads with lining; - Respect of the established hours and routes of transportation; - Movement of construction vehicles and machinery along pre-defined routes.	- Construction site - Routes of transportation of construction materials and wastes	Inspection of roads adjacent to the construction object in the direction of the movement route	Selective inspections during work hours	- Limit pollution of soil and air from emissions; - Limit nuisance to local communities from noise and vibration; - Minimize traffic disruption.	PMU Technical Supervision Company Traffic Police
Maintenance of construction equipment	- Washing of cars and construction equipment outside the construction site or on maximum distance from natural streams; - Refueling or lubrication of construction equipment outside the construction site or at the predetermined confined area.	Construction site	Inspection of activities	Selective inspections during work hours	- Avoid pollution of water and soil with oil products due to operation of equipment; - Timely localize and decrease expected damage in case of fire.	PMU Technical Supervision Company
Generation of liquid wastes	- Arrangement and maintenance of toilets in compliance with	Construction site and construction	Visual observation	Total period of works	- Prevent flooding of construction site and	PMU Technical

	sanitation norms at the construction site and construction base; - Arrangement and regular cleaning of drainage system for rainwater collection and drain; - Arrangement of sedimentation pond for water used for domestic and machinery washing purposes.	base			disruption of works due to waterlogging; - Reduce pollution of surface and groundwaters	Supervision Company
Generation of noise and dust	- Observance of working hours 9AM-6PM; - Air condition on-site; - Noise levels (in case of complaints). - instrumental measurements of dust level” in case of complaints).	Construction site and access roads	- Visual inspection; - Instrumental measurement of noise and dust levels (in case of complaints)	- Recurrent - Within 2 weeks following a complaint	Reduce risks for the staff and neighboring communities	PMU Technical Supervision Company
Earthworks	- Topsoil removal and temporary storage at a separate place at the beginning of works; - Temporary storage of excavated soil at determined and allowed places in compliance with ground piling parameters. - Backfilling of the excavated material as needed and disposal of the excess mass to the places, approved in writing.	Construction site	Inspection of activities	During earth works	- Limit loss of vegetations due to ground piling; - Limit pollution with contaminated soil of surface and groundwaters	PMU Technical Supervision Company
Production of domestic waste	Trash bins placement and arrangement on timely transportation of waste	Construction site	Visual inspection	Total period of works	- Prevent pollution of soil, surface water and groundwater;	PMU Technical Supervision

					- Retain esthetic appearance of the construction site and its surroundings	Company Yerevan Municipality
Generation of construction waste	<ul style="list-style-type: none"> - Temporary storage of construction waste in especially allocated areas; - Timely disposal of wastes to the formally designated locations 	<p>Worksite</p> <p>Waste disposal site</p>	Inspection of activities	Periodically during construction and upon its completion	<ul style="list-style-type: none"> - Prevent pollution of soil, surface water and groundwater; - Avoid accidents at the construction site due to scattered fragments of construction materials and debris; - Retain esthetic appearance of the construction site and its surroundings. 	PMU Technical Supervision Company Yerevan Municipality
Operation of concrete plant	<ul style="list-style-type: none"> - Provision of concrete from licensed producers; - No concrete production at the construction site or neighboring areas 	Construction site, construction base, and neighboring areas	<p>Inspection of documents</p> <p>Inspection of activities</p>	Total period of construction	<ul style="list-style-type: none"> - Limit population disturbance near the construction site; - Limit air and surface water pollution 	<p>PMU Technical Supervision Company</p> <p>Inspectorate for Nature Protection and Mineral Resources</p>
Workers' health and safety	<ul style="list-style-type: none"> - Provision of constructors with working clothes and PPE; - Strict compliance with the rules of construction equipment operation and usage of PPE; - Strict compliance with the national regulations for 	Construction site	<p>Inspection of activities</p> <p>Checking of OHS records</p>	Entire period of works	Reduce the probability of traumas and accidents to constructors	PMU Technical Supervision Company

	<p>construction works;</p> <ul style="list-style-type: none"> - Presence of fire extinguishing and medical aid kits at work site; - Availability of labor safety training and instruction records. 					
Traffic and road safety	<ul style="list-style-type: none"> - Signposting, warning signs, barriers and traffic diversions: construction site visible and the public warned of all potential hazards; - Traffic management by trained and visible staff at the site for safe passage for the public, - Provision of safe passages and crossings for pedestrians where construction traffic interferes; - Adjustment of working hours to local traffic patterns to avoid major transport activities during rush hours; - Safe and continuous access to nearby office facilities, shops and residences during construction works. 	<p>Access roads</p> <p>Neighboring public areas</p>	Visual inspection	Entire period of works	<ul style="list-style-type: none"> - Minimize direct or indirect hazards to public traffic and pedestrians by construction activities; - Minimize traffic disruption. 	<p>PMU</p> <p>Technical Supervision Company</p> <p>Traffic Police</p>
Undertaking works in the vicinity of residential buildings	<p>Observation of working hours (9AM-6PM).</p> <ul style="list-style-type: none"> - Demarcation and fencing of worksite; - Warning signs are installed and clearly visible to warn public/residents of all potential hazards; - Access to construction site is restricted to only authorized 	Construction site	Visual inspection	Monthly visits during construction	Ensure public safety	<p>PMU</p> <p>Technical Supervision Company</p>

	<p>personnel involved in the implementation of construction works;</p> <ul style="list-style-type: none"> - Access to construction site is strictly monitored; - The dust is suppressed at site. 					
COVID-19 preparedness in the work site	<ul style="list-style-type: none"> - Provision of handwash facilities in the work site with adequate supplies of running water, hand soap, alcohol-based hand sanitizer and hand drying devices; - Worksite entrance procedure and medical checks; - Regular disinfection of rooms, equipment, tools, and waste; - Work practices to reduce or minimize contact between workers; - Provision of face masks and other relevant PPE to all project workers at the entrance to the project site. 	Construction site	Inspection of activities	Total period of works	Reduce the COVID-19 infection risk at worksites	PMU Technical Supervision Company
Construction site re-cultivation and landscaping	<ul style="list-style-type: none"> - Area around the construction site cleared of any residual waste and reinstated; - Final cleaning of permanent access roads and landscaping-greening of the area. 	Construction site and access roads	Visual inspection	Final stage of works	Reduce loss of aesthetical value of the landscape due to construction activities	PMU Technical Supervision Company
Operation of Grievance Redress Mechanism	Public right to complaints or questions about the project. Appeal to the head of local government (community authorities)	Construction site	Inspection of activities	Entire period of construction	<ul style="list-style-type: none"> -Monitor compliance with project aspects; -Timely resolve questions and 	PMU Technical Supervision Company

	<p>The appointment by the authorities of the Coordinator for the consideration of complaints (receiving complaints, reviewing and explaining, registering complaints in the logbook and trying to resolve them on the spot. Appeal to PMU by hot-line (010515580), postal letter (Yerevan 0010, Republic square 26/1 Vazgen Sargsyan), official FB page (https://m.facebook.com/https://www.facebook.com/TPQIPProject), e-mail (s.darbinyan@tpqi.am). Appeal to Enterprise Incubator Foundation by phone 011219727, email: Marina.minasyan@eif.am or official web page. http://eif.am/</p>				complaints in the field.	
OPERATION PHASE						
Maintenance of utility systems	Electric power lines, water/sewage pipelines maintained in good operating condition	EC construction area	Periodic check-ups	Total period of operation of the EC	<ul style="list-style-type: none"> - Exclude risks of electric shocks, short circuits, and leakage of pipes - Avoid disruption of EC's operation and nuisance to staff and visitors; 	PMU Contractors Administration of EC
Solid waste management	Trash bins placement and arrangement on periodical transportation of waste	Park area	Inspection of activities	Solid waste management	Trash bins placement and arrangement on periodical transportation of	Administration of EC Municipality of Yerevan

					waste	
Exploitation and maintenance of road	<ul style="list-style-type: none"> - Cleaning road surface from litter deposited out of moving vehicles; - Timely confinement, deactivation, and removal of liquid or powder spills of cargo in case of road accidents; - Collection and timely disposal of waste from road maintenance works to a designated landfill. 	Carriageway of the road	Visual inspection	<p>As required in response to an accident</p> <p>Regular, to be determined by local municipality</p>	<ul style="list-style-type: none"> -Ensure safety of traffic and prevent environmental pollution; -Ensure aesthetic appearance of the road 	PMU Administration of EC Contractors Municipality of Yerevan
Maintenance of rainwater drainage system	Keeping drainage system operational	EC construction area	Visual inspection	Regular, to be determined by PMU	Ensure the safety of traffic and decrease frequency and costs of area rehabilitation	PMU Contractors Administration of EC
Maintenance of the green areas of the EC and accelerator building roof	<ul style="list-style-type: none"> - Regular watering of trees; - Timely removal of fallen leaves; - Application of smart water conservation, retention, and irrigation methods; - Develop and apply landscape management plan. 	Green areas of EC	Inspection of activities	Total period of operation	Prevent the loss of aesthetic and recreational value of the green areas	Contractors Administration of EC

Monthly Field Environmental Monitoring Checklist

Site location					
Name of contractor					
Name of supervisor					
Date of site visit					
Status of civil works					
Documents and activities to be examined	Status				Comments
	Yes	Partially	No	N/A	
Contractor holds license for extraction of natural resources					
Contractor holds agreement for final disposal of waste					
Contractor holds agreement with service provider for removal of household waste from site					
Work site is fenced and warning signs installed					
Works do not impede pedestrian access and motor traffic, or temporary alternative access is provided					
Working hours are observed					
Construction machinery and equipment is in standard technical condition (no excessive exhaust and noise, no leakage of fuels and lubricants)					

Construction materials and waste are transported under the covered hood					
Construction site is watered in case of excessively dusty works					
Contractor's camp or work base is fenced; sites for temporary storage of waste and for vehicle/equipment servicing are designated					
Contractor's camp is supplied with water and sanitation is provided					
Contractor's camp or work base is equipped with first medical aid and fire fighting kits					
Workers wear uniforms and protective gear adequate for technological processes (gloves, helmets, respirators, eye-glasses, etc.)					
Servicing and fueling of vehicles and machinery is undertaken on an impermeable surface in a confined space which can contain operational and emergency spills					
Vehicles and machinery are washed away from natural water bodies in the way preventing direct discharge of runoff into the water bodies					
Construction waste is being disposed exclusively in the designated locations					

Excess material and topsoil generated from soil excavation are stored separately and used for backfilling / site reinstatement as required					
Works taken on hold if chance find encountered and communication made to the State agencies responsible for cultural heritage preservation					
Upon completion of physical activity on site, the site and contractor's camp/base cleared of any remaining left-over from works and harmonized with the surrounding landscape					

Attachment 1. Map and layout of EC land plot and location of accelerator building



[illegible]



**REPUBLIC OF ARMENIA
CERTIFICATE**

OF STATE REGISTRATION OF RIGHTS TO REAL PROPERTY

This Certificate certifies the state registration of rights to real property, made in the unified registration-book for the state registration of rights to real property on "5" April 2019 with the following data:

1. SUBJECT(S) OF THE REGISTERED RIGHT

Republic of Armenia

2. LOCATION AND NAME OF THE REAL PROPERTY

Yerevn, Nor-Nork, Bagrevand str., land 74

3. DOCUMENTS MAKING BASIS FOR THE REGISTRATION

Donation contract 01.04.2019 number 2752

4. DESCRIPTION OF THE LAND

Cadastral code: 01-008-0506-0108

Area (hectares): 3

Purpose: settlements

Functionality and lands: public construction

Type of the registered right: Ownership

1. DESCRIPTION OF THE CONSTRUCTIONS

1) Purpose: Public

2) Description as per separate constructions:

<i>Nº</i>	<i>Cadastral Code</i>	<i>Type</i>	<i>Area</i>	<i>Type of the registered right</i>

Additional notes and information

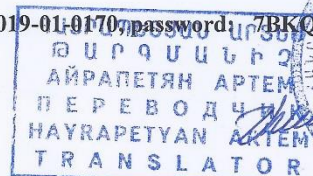
There is an unfinished building on the land.

Surname, name of the official, who made the registration: Miskaryan Nakhshun

Occupied position: register of real estate of unified subdivision of real estate

OFFICIAL SEAL

Certificate # 05042019-01-0170, password: 7BK0Q3XVFNZ6



DONATION CONTRACT OF LAND N. 20/1-183-A

Yerevan city

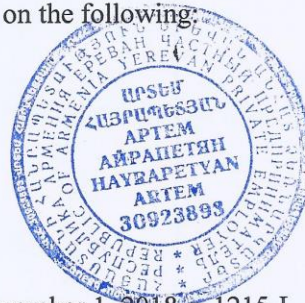
04 February 2019

The City Community of Yerevan (hereinafter □ Donor) represented by the Mayor of Yerevan Hayk Marutyan (residence: Yerevan city, Argishti city n.1) on behalf of the Mayor of Yerevan on the basis of decision 183-A as of February 4, 2019 acts Head of the Real Estate Management Department of the Yerevan Municipality Office Arsen Amyan, on the one part, and the Republic of Armenia (hereinafter: Donee), on behalf of the Ministry of Transport, Communications and Information Technologies of the Republic of Armenia acts, on the other part (the Parties, when jointly mentioned), have concluded this contract (hereinafter: Contract) on the following:

1. GENERAL PROVISIONS

The contract is signed on the basis of:

- 1.1. Civil Code of the Republic of Armenia,
- 1.2. Decisions of the Government of the Republic of Armenia dated November 1, 2018 n. 1215-L and January 10, 2019 n. 6A,
- 1.3 Decision of the Yerevan Council of Elders November 13, 2018 n. 23-A,
- 1.4. Decision of the Mayor of Yerevan, February 4, 2019 n. 183-A,



2. SUBJECT AND PRICE OF THE CONTRACT

2.1 By this Contract, the Donor transfers the property of the Donee, which is the property of the community of Yerevan, free of charge (state registration of rights to real estate dated 02.07.2018 certificate n. 02072018-01-0248) land with an area of 3.0 he /three he/ at the address Nor-Nork administrative district, Bagrevand street n. 74, the purpose of the settlement, the functional significance of public development.

3. OWNERSHIP RIGHTS

3.1 The right of ownership of the land is transferred to the Donor from the moment of registration with the state authorized body of the right arising from this Contract.

4. RIGHTS AND OBLIGATIONS OF THE PARTIES

4.1 the Donor must:

4.1.1 use the land in accordance with its intended purpose

4.1.2 provide payments for notarized ratification of this Contract

4.1.3. to ensure the payments and fees established by law related to the state registration of property rights arising from this Contract

4.2. the Donor has the right to:

4.2.1 own and use the land plot, using it in accordance with its intended purpose and the terms of this Contract.

5. LIABILITY OF THE PARTIES

5.1 This Contract may be declared invalid in accordance with the procedure established by the legislation of the Republic of Armenia.

6. FINAL PROVISIONS

6.1 This Contract comes into force from the moment of its conclusion.

6.2. The right of ownership of the land plot arises from the moment of state registration of this Contract.

6.3 Disputes arising between the parties to the Contract shall be resolved in accordance with the procedure established by the legislation of the Republic of Armenia.

6.4. The contract is subject to state registration in the relevant subdivision of the State Committee of Real Estate Cadastre under the Government of the Republic of Armenia within 30 days from the date of notarization.

6.5. The Contract consists of 4 copies in the Armenian language, which have equal legal force.

SIGNATURES OF THE PARTIES

DONOR

Head of the Real Estate Management

Department of the Yerevan Municipality Office

Arsen Amyan

/SIGNATURE/



/SEAL/

DONEE

**Ministry of Transport, Communications and
Information Technologies of the Republic of Armenia
Head of legal Department
Artashes Hovsepyan
/SIGNATURE/**

Notarial act code: 453-20190401-4-3700969

Notarial act password: LAZLWN

On this day of first of April, two thousand and nineteen, the present contract is verified by me, Gasparyan Nona, notary public of Yerevan Notary office of the Republic of Armenia. The parties signed the contract in my presence. The identity, capacity of the parties, as well as the rights to the real estate are checked.

In accordance with the Article 596 of Civil Code, the rights arising from the present contract are subject to registration at the corresponding subdivision of Republican State Body of Public Administration directing the Real Estate State Common Cadastre within the term of thirty working days.

Registration № 2752

State duty five thousand AMD and service fee fifteen thousand AMD is paid in accordance with RA Laws "On State Duty" and "On the Notary".

Notary Public: /SIGNED/ Gasparyan Nona d/o Khazhak

OFFICIAL SEAL

EMBOSSED SEAL



Attachment 3. Photos of construction site



Area for construction of accelerator building



Total area for construction of Engineering City

Attachment 4. Minutes of public consultation on the draft ESMP

Attachment 5. List of Participants of public consultation meeting and photos

Attachment 9. Waste disposal permit – pending

Attachment 10. Construction Permit – pending

Attachment 11. Conclusion of State Environmental Impact Expertise

10.03.2022

STATE EXPERTISE CONCLUSION

ENVIRONMENTAL IMPACT ASSESSMENT

ԲՓ 0017-22

Initiator: ***“Haynakhagits” (Armproject) OJSC***
1 Charents str., Yerevan

Activity ***Application for initial environmental impact assessment of construction of the engineering business building at the Engineering City to be implemented at 52/16 Bagrevand str. in Nor Norq administrative district, Yerevan city***

Acting Director
Center of Expertise for Environmental Impact Assessment SNCO

Kh. Martirosyan,
signature/seal

Conclusion in the annex – 6 pages

STATE EXPERTISE CONCLUSION
Environmental Impact Assessment
ԲՓ 0017-22
10.03.2022

Application for initial environmental impact assessment of construction of the engineering business building at the Engineering City to be implemented at 52/16 Bagrevand str. in Nor Norq administrative district, Yerevan city

Introduction

Initiator	“Haynakhagits” (Armproject) OJSC
Document type	Application for initial environmental impact assessment
Activity category	Category “G”
Location	52/16 Bagrevand str., Nor Norq administrative district, Yerevan city

According to the clause 14 of the RA Law “On Environmental Impact Assessment and State Expertise” the envisaged activity falls under the “G” category.

Description. The construction project of the building for engineering business accelerator at the Engineering City is envisaged at 74 Bagrevand street in Nor Norq administrative district, Yerevan city.

Technical-economic data of the structure are:

- Area of the land located at 52/16 Bagrevand str: 2556.6 m²
- Area to be developed: 2105.0 m²
- Total area of the structure including operated roofs: 9450.0 m²
- Useful area of the structure: 6160.0 m²
- Construction volume of the structure: 26520.0 m³

The target purpose of the land: for residence, for use and the purpose – for social construction.

Expertise requirements

- Before starting operations, all approvals and permissions forced by the RA legislation should be obtained.
- During works implementation, sanitary rules and requirements stipulated by the RA Minister of Health order 15-Ն dated 19 September, 2012, should be observed.
- During planned works, all urban planning norms and requirements should be observed.
- Tires of all vehicles driving out of the construction site should be washed.
- Transportation of concrete should be implemented in the way provided for by the application which excludes production of concrete at the construction site or nearby areas.
- During planned works, all emergency and work safety norms should be observed.

- Ensure necessary conditions for safe movement of pedestrians, including a separate path and temporary illumination
- Abiding the requirement of the RA Government decision N438 as of 20 April, 2002, in case of revealing any layers of archaeological or historical-cultural value, works should be ceased and the authorized regulating body should be contacted and informed. Works can be re-started upon permission by the authorized body.

Conclusion part

The application for initial environmental impact assessment of infrastructure construction of the Engineering City to be implemented at 52/16 Bagrevand street in Nor Norq administrative district, Yerevan city, submitted by “Haynakhagits” (Armproject) OJSC is granted a positive conclusion, provided mandatory observance of the expertise requirements.

Specialist
Center of Expertise for Environmental Impact Assessment SNCO

S. Sargsyan
signature/seal