

BAKU METRO EXPANSION PROJECT GREEN LINE

Traffic Management Plan (TMP)

Prepared for Baku Metropolitan Closed JSC

Quality Information

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List of Acronyms

ABS	Anti-Lock Braking System
AETR	European Agreement Concerning the Work of Crews of Vehicles Engaged in International Road Transport
AIIB	Asian Infrastructure Investment Bank
BAC	Blood Alcohol Concentration
BCEA	Baku City Executive Authority
BM	Baku Metro
BMEP	Baku Metro Expansion Project
BOQ	Bill of Quantities
CAPEX	Capital Expenditure
CLO	Community Liaison Officer
E&S	Environment and Social
EHS	Environmental, Health and Safety
EPB	Earth Pressure Balance
ESAP	Environmental and Social Action Plan
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
FHWA	Federal Highway Administration
GPS	Global Positioning System
GRM	Grievance Redress Mechanism
H&S	Health and Safety
HSE	Health, Safety, and Environment
HGV	Heavy Goods Vehicle
HPMS	Highway Performance Monitoring System
IFC	International Finance Corporation
KPIs	Key Performance Indicators
NATM	New Austrian Tunneling Method

NCHRP	National Cooperative Highway Research Program
OHS	Occupational Health and Safety
OPEX	Operating Expenditure
PIU	Project Implementation Unit
PPE	Persons with Disabilities
PWD	Persons with Disabilities
SDMP	Spoil and Disposal Management Plan
SEP	Stakeholder Engagement Plan
SPS	Safeguard Policy Statement
SR1	Safeguard Requirement 1
TBM	Tunnel Boring Machine
TMP	Traffic Management Plan
UNECE	United Nations Economic Commission for Europe

1. INTRODUCTION

1.1 Project Description

The Government of the Republic of Azerbaijan, through Baku Metropolitan Closed Joint-Stock Company (“Baku Metro” or “BM”), is implementing Phase II of the Baku Metro Expansion Project (“BMEP”), which includes the extension of the Green Line within the urban area of Baku. The Green Line Extension is expected to be financed by the Asian Infrastructure Investment Bank (AIIB) and is being developed in accordance with applicable national legislation, the AIIB Environmental and Social Framework (ESF) 2024 and relevant international good practice.

The Green Line Extension comprises approximately 7.4 km of fully underground alignment and four new underground stations (Y-14, Y-15, Y-16 and Y-17), extending from Khatai to Hazi Aslanov. The alignment is intended to improve east–west connectivity across densely populated residential districts, enhance network resilience, and improve overall operational efficiency. Stations Y-15 and Y-17 include civil structures that were partially constructed during earlier project phases, which will be integrated, upgraded, and completed under the Project.

This Traffic Management Plan (TMP) for the Green Line forms part of the Project’s Environmental and Social Management Plan (ESMP) and applies to all permanent and temporary works and operational activities associated with the Green Line Extension. The TMP covers construction and operational phases, including tunnels, stations, shafts, construction compounds, ancillary facilities, access areas, and the upgrading of pre-existing structures. Project Location is shown in Figure 1-1.



Figure 1-1: Green Line Extension

1.2 Purpose of This Traffic Management Plan

This TMP provides the overarching framework for identifying, assessing, and managing traffic-related risks and impacts associated with the Project. The plan sets out the Project’s approach and commitments to ensure road user safety and to minimise disruption, congestion, and access constraints for all users of the transport network, including pedestrians, cyclists, public transport users, and other vulnerable road users.

The TMP defines the process for developing and implementing traffic management measures, including the selection of access and haul routes, traffic diversions, signage and marshal requirements, and arrangements to maintain safe local access (including for emergency services) throughout the construction and operational phases.

The purpose of this TMP is to:

- Outline the applicable legislative framework, requirements, and standards relevant to Project traffic activities;
- Define Project commitments and performance expectations in relation to traffic safety, incidents, and disruptions;
- Describe arrangements to manage traffic during construction and operation, with particular attention to vulnerable road users;
- Define implementation roles, responsibilities, and management interfaces for traffic events and incidents;
- Set out requirements for risk identification, assessment, and mitigation measures, and their integration into Project systems and culture;
- Define monitoring and reporting procedures, including Key Performance Indicators (KPIs) for traffic management; and
- Define training and competency requirements for personnel involved in traffic management.

The Contractor and Baku Metro shall comply with applicable national legislation and shall also conform to relevant international standards and industry good practice, including the requirements of the AIIB ESF 2024.

1.3 Scope

This TMP applies to all Project personnel and to any subcontractor, supplier, or third-party undertaking activities that may generate or influence traffic movements associated with the Project. The plan covers the management of pedestrian, vehicular, and machinery movements in and around Project sites, including construction compounds, access routes, and interfaces with public roads.

During the construction phase, the Contractor shall develop and implement a detailed, site-specific Construction TMP consistent with this overarching TMP, as construction methods are finalised and vehicle movement requirements are confirmed. During the operational phase, Baku Metro shall be responsible for maintaining, reviewing, and updating the TMP requirements relevant to operations and maintenance activities.

This TMP outlines the Project's commitments and approaches to minimise direct and indirect impacts arising from Project-related traffic, including impacts on safety, congestion, access, and community disturbance. The TMP is implemented under the Project's HSE and Social Management arrangements (under the responsibility of the Project HSE Manager) and forms part of the ESMP. The TMP interfaces with other management plans (e.g., Occupational Health and Safety, Emergency Preparedness and Response, Stakeholder Engagement/GRM, and Contractor Method Statements) and shall be applied in a coordinated manner.

2. NATIONAL LEGISLATION AND LENDER'S REQUIREMENTS

2.1 Overview

This chapter summarises the applicable national legislative requirements, the Lender's policy requirements, and relevant international good practice that have informed the structure, scope, and implementation approach of this TMP. Further details on the legal and institutional framework for the Project are provided in Chapter 4 (Legal and Institutional Framework) of the ESIA.

The Contractor and Baku Metro shall comply with all applicable national legal requirements. Where there is a difference between national requirements, the AIIB Environmental and Social Framework (ESF) 2024, and international good practice, the Project shall apply the more stringent requirement.

2.2 National Legislation

The key national requirements relevant to traffic management activities under the Project include, but are not limited to, the following:

The Law On Road Traffic of The Republic of Azerbaijan (03 July 1998, No. 517-IQ)¹: This law establishes the overarching framework for road user safety and requires that traffic safety be prioritised during road works and construction activities. In particular, it requires that any road closures, lane narrowing, temporary diversions, and other traffic arrangements are implemented with the approval of the competent traffic authorities and are clearly signed and communicated to road users.

The Law on Road Transport of The Republic of Azerbaijan (01 April 2008, No.556-IIQ)²: This law sets requirements related to the organisation and safety of road transport operations and emphasises the need for effective coordination between relevant authorities. Project-related construction and logistics activities shall be planned and implemented in compliance with traffic safety criteria and in coordination with local authorities in urban areas.

State Program of Azerbaijan Republic on Road Safety (2019–2023)³: The State Program promotes a systematic approach to improving road safety, including during road works. It emphasises the need for temporary traffic arrangements that protect pedestrians and other vulnerable road users (including cyclists) and encourages the integration of traffic safety considerations into project design and implementation to minimise accident risks and adverse impacts on urban mobility.

2.3 Lender's Requirements

The Project and this TMP have been developed in accordance with the Asian Infrastructure Investment Bank (AIIB) Environmental and Social Framework (ESF, 2024), in particular Environmental and Social Standard 1 (ESS 1): Environmental and Social Assessment and Management, Section E (Health and Safety), and also draw on IFC Performance Standard 4 and the IFC Environmental, Health and Safety (EHS) General Guidelines as international good practice.

AIIB ESS 1, Section E (Health and Safety) requires the Client to assess and manage health and safety risks to both Project workers and Project-affected communities, and to implement measures to prevent

¹ https://www.stat.gov.az/menu/3/decrees/Doc_AZ_en.pdf

² <https://cis-legislation.com/document.fwx?rgn=25026>

³ State Program of Azerbaijan Republic on Road Safety (2019–2023) Approved by the Decree of the President of the Republic of Azerbaijan dated December 27, 2018

accidents, injuries and disease, applying internationally recognised standards such as the World Bank Group EHS Guidelines. In particular, paragraph 55 (Traffic and Road Safety) requires the Client to identify, evaluate and monitor traffic and road safety risks throughout the Project life cycle, incorporate technically and financially feasible road safety components into Project design, and — where construction or other moving equipment operates on public roads — implement measures to avoid incidents and injuries to workers and the public, supported by road safety audits, driver and vehicle safety training, and regular maintenance of all Project vehicles.

IFC Performance Standard 4 addresses community health, safety, and security risks associated with project infrastructure and activities. It requires that project proponents evaluate and mitigate risks with particular attention to vulnerable groups, including pedestrians, children, and elderly persons, and establish measures to manage construction-related traffic hazards in densely populated areas.

The IFC EHS General Guidelines provide good practice guidance on traffic safety (Section 3.4), transport of hazardous materials (Section 3.5), and community health and safety during construction and decommissioning (Section 4.3). These guidelines address vehicle and driver standards, traffic control measures and signage, management of interactions with vulnerable road users, and emergency preparedness and response arrangements for traffic-related incidents.

The Contractor and Baku Metro shall implement this TMP in a manner consistent with AIIB ESF requirements, including monitoring, reporting, and adaptive management as necessary to address changing site conditions, construction methodologies, and operational needs.

2.4 International Best Practices

UNECE International Framework: Traffic management activities for the Project shall be aligned with the international road safety and sustainable transport principles promoted under the United Nations Economic Commission for Europe (UNECE) framework, to which the Republic of Azerbaijan actively adheres.

In accordance with the Sustainable Transport Action Plan for Azerbaijan developed under UNECE, traffic management during construction shall:

- prioritize road safety and continuity of traffic flow,
- minimize disruptions to urban mobility,
- ensure safe conditions for all road users, including pedestrians and other vulnerable groups, and
- and provide clearly defined and well-communicated alternative routes where temporary road closures or traffic diversions are required.

Project-related traffic arrangements shall be planned, implemented and monitored in line with the “safe traffic system” approach promoted by UNECE, considering the interaction between road users, road infrastructure and vehicles, and aiming to reduce traffic risks and negative impacts during all phases of construction and operation.

AETR (European Agreement Concerning the Work of Crews of Vehicles Engaged in International Road Transport):

The Project shall consider the provisions of AETR, a UNECE-administered international agreement regulating driving times, rest periods, and working conditions of drivers engaged in international road transport. Where applicable, transport activities related to the Project, particularly those involving the international carriage of construction materials and equipment shall be organized and monitored in line with AETR requirements in order to prevent driver fatigue, enhance road safety, and reduce traffic-related risks during construction and operation phases.

3. ROLES AND RESPONSIBILITIES

3.1 Overview

An integrated approach to traffic management involves a range of stakeholders, including Baku Metro (PIU), the Contractor (and their subcontractors), government ministries, local governorships and municipalities, and members of the public. It also requires robust processes regarding information dissemination, training, roles and responsibilities, management actions, monitoring, control, and corrective actions to ensure continual improvement.

3.2 Key Roles and Responsibilities

The key roles and responsibilities for the implementation of the TMP for the PIU and contractor during construction and Baku Metro during operation are outlined below in Table 3-1.

Table 3-1: Key Roles and Responsibilities

Role	Responsibilities
Baku Metro Project Implementation Unit (PIU)	- Responsible for the approval of TMP and resources required for its implementation, including provision of Accountability in Governance structure, Policy, Systems, Procedures, and Corporate safety culture. - Responsible for overseeing the construction and operation phases of the Project. - Ensure roles and responsibilities are clearly identified and allocated within the PIU. - Ensure reporting to AIIB.
PIU Health and Safety Specialist	- Overall responsibility for the elaboration and implementation of the TMP. - Ensure Project compliance with Project standards and other requirements set out in this TMP. Development, monitoring and revision of the TMP during the construction and operation stages. - Assurance of the Contractor's preparation and implementation of the Construction TMP, as outlined in the ESMP. Monitoring of the Contractor's TMP implementation to ensure that it continues to be suitable and sufficient. The PIU Health and Safety Specialist will approve the Construction TMP prior to construction.
PIU Environmental Specialist	Ensure Project compliance with Project standards and other requirements set out in this TMP during the construction and operation stages.
PIU Community Liaison Officers (CLOs)	Responsible for conducting regular consultation with affected communities on any concern regarding the Project during the construction and operation stages.
Supervision Contract Manager	Responsible for supervising the construction Contractor to ensure that recommendations and requirements are met, as set out in the Construction TMP.
Contractor's Project Manager	- Responsible for overseeing the construction of the Project, including planning and delivery. The Contractor's Project Manager will approve the Construction TMP prior to construction. - Allocate all necessary and required resources to traffic management.

Role	Responsibilities
Contractor's HSE Team	- Place Traffic Management matters high on the agenda of meetings, - Communicate that all traffic rules are an important Project requirement throughout all levels of the organization. The HSE Team is responsible for; - Developing and implementing a project-specific TMP as well as monitoring its outcomes in line with Project Requirements, - Ensuring that its Subcontractors are working in compliance with the requirements of the TMP, - Assisting Permitting Manager and/or Social Lead and Community Liaison Team when consulting with government agencies and local communities prior to identifying routes in order to complement existing road development plans and to define hotspots where intense traffic can be observed, - Justifying in cases where sensitive areas need to be passed and defining the measures to minimize possible risks as well as to ensure community safety while applying measures, - Assisting in the identification of the deficiencies of existing local infrastructure to develop upgrading plans.
Contractor's Line Managers/ Site Chiefs	- Support the Project Manager/Site Manager(s) ensuring that Traffic management plan targets and goals are achieved. - Ensure that the works under their control are planned and undertaken in such a way as to give foremost regard to traffic safety, as well as fulfilling the requirements. - Ensure that risk assessments and method statements are produced for the works under their control and the details of these are communicated to the relevant people. - To arrange for all levels of staff under their immediate control to receive, where necessary, adequate and appropriate training in traffic safety - Monitor Traffic management plan performance in their areas/sections and carry out regular site area/section inspections. - Direct line supervisors to ensure requirements for their roles and responsibilities for traffic safety - Coordinating the investigation of serious or potentially serious accidents/incidents, near misses, - Reviewing TMP performance information, results of incident investigations and scope of upcoming work phases in order to identify required adjustments to the Management Plan, - Seeking assurance that procedures are known, understood and complied with, - Ensuring corrective action is taken in the event of non-compliance with the Traffic Management Plan, - Promoting and sharing traffic HS lessons learned inside and outside the Asset, - Updating procedure in consultation with the HS team, - Monitoring of Subcontractor's TMP implementations, - The HSE Manager will be responsible for the performance of all subcontractors concerning the project- specific traffic plans and shall

Role	Responsibilities
	ensure compliance with all relevant Project standards, statutory requirements, permit and license conditions. - Identifying the traffic routes that will be utilized (including number of traffic movements, access roads, types of transportation, speed limits etc.) and avoiding sensitive residential areas, historical and cultural road infrastructure during the identification of traffic routes, - Assisting in ensuring minimal damage to existing roads and infrastructure and communicating with local authority and/or government agencies in case of damage, - Assisting in tracking and recording all damages caused by Project-related traffic in line with the Grievance mechanism, and compensating/repairing these damages, - Assisting in preparing restoration measures for roads that need to be repaired post-construction, - Preparing and facilitating training courses for drivers and assisting in holding informative meetings for the local community for the awareness of traffic impacts and measures taken. - Auditing if the records of vehicle maintenance, servicing, driver training, driver medicals, journey management forms, vehicle checklists, are carried out on a weekly and monthly basis, - To ensure these audits take place efficiently and in the specified periods, - To keep the records of the audits to be used as part of the HS assurance process. - To ensure safe loading and unloading. - To ensure that all kinds of loads are securely loaded and transported until the final destination, and also safely unloaded as well.
Contractor's Health and Safety Manager	- Responsible for the preparation and implementation of the Construction TMP, on behalf of the Contractor, prior to and during construction. The Construction TMP will set out the systems, processes and procedures, resources, roles and responsibilities of the Contractor, and their sub-contractors, in relation to traffic management. - Responsible for evaluating the risk associated with traffic events and incidents, and must have appropriate training.
Contractor's H&S Specialist	- To ensure all safety measures are implemented at the site, - To control if the necessary signs and signals are properly inserted on pipe stock sites, the roads used for the transportation of pipes, heavy vehicles and personnel, - To give tool-box training to the personnel every morning, - To monitor the traffic movements on our routes, - Report the activities daily to the H&S manager
Contractor's Social Lead/CLO	Social Lead will; - Ensure compliance with this Plan - Prepare social sections of the monthly reports (report for social requirement and register) which will include information on the implementation of this plan. - Inform, investigate and report community relation incidents

Role	Responsibilities
	• Ensure community complaints are registered and followed by Project requirements. • Undertake community/social risk assessments for all access roads. CLOs will; • Responsible for community safety issues of this Traffic Management Plan, • Deliver and/or participate in safety awareness training for local children and adults, • Raise community awareness of safety issues through village meetings and classroom lessons, • Meet local communities in advance of significant traffic impact occurring to describe activities and explain risks, • Advise local communities of what routes will be used by construction vehicles, • Ensure grievances received are registered and followed up by Project requirements.
Contractor's Environmental Lead	• Implementing and monitoring the Environmental Plans, • Auditing and inspecting the subcontractors in the environmental point of view, • Keeping the environmental records, • To monitor the noise and vibration records
Contractor's Environmental Specialist	• To do daily environmental inspections, • Warning people who do not comply with the environmental instructions, • Ensuring to take the environmental precautions at the construction site, • Reporting the activities daily to the Environmental Lead.
Sub-Contractors	• Subcontractors are bound to apply all procedures and measures specified by Contractor in TMP and Project Requirements. Contractor will make sure that the subcontractors are working in compliance with the requirements of the TMP and will be controlling the performance of all Subcontractors with regard to TMP and project-specific TMP and procedures. • Contractor will comply and make sure all Subcontractors also comply with National Laws and will also conform to international standards and practices generally prevailing in the industry, including relevant Standards of the Lenders.
Contractor's Flagmen	• The responsibilities of the flagmen are as follows: • Giving signals to the driver-operator to ensure the safe movement of vehicle equipment in work areas, • Making directions to prevent drivers and operators from hitting people and other equipment, • Supervising the operation of vehicles and equipment in the field and ensuring their safe parking, • Guiding vehicles and equipment to reverse maneuver, when necessary, • Guiding to reduce pedestrian and vehicle interaction in areas where vehicles and equipment are busy,

Role	Responsibilities
	• To act in line with the direction and administration of the Traffic Safety Officer, • To use and maintain the PPE provided to him, indicating that he is the Flagman. • The duties and responsibilities of the employees who will serve as the flagman are notified against signature. • To regulate construction site traffic and third-party vehicle traffic at points where third-party vehicle traffic inevitably intersects.
Contractor's Drivers and Operators	• The responsibilities of drivers and operators are as follows: • Knowing the traffic rules in and out of the field (areas in interaction with third parties), • To ensure that the vehicle or equipment used is maintained and in good condition, • Wearing the seat belt while using the vehicle or equipment, ensuring that all other passengers wear seat belts, not moving until the other passengers are wearing their seat belts, • To comply with the speed limits determined on and off the field, • Complying with all traffic signs, signals and mandatory directions on and off the field, • To use the vehicle or equipment with its headlights on, motion signals and alarms (reverse gear alarm, beacon lamp and alarms that work with the movement of pallets in tracked work machines), • Vehicle – not to disable the safety equipment of the equipment, • Not reversing where the flagman is not present, • To comply with the flags' signs and warnings, • Parking in designated places only. • Not to close or block in-field transition routes unplanned, • Not to carry any unauthorized person in the vehicle or equipment, • To make pre-use checks before using all vehicles and equipment, • To use all PPE required by the project when going out of the cabin in the field, • Not smoking in vehicle or equipment cabins, • Keeping vehicle and equipment cabins clean and tidy, • Not to consume food or drink in vehicle and equipment cabins, • Not using materials that will reduce the field of view on vehicle and equipment cabin windows (curtains, paper, cardboard, etc.) • Not to leave the cabin while the vehicle or equipment is in operation, • Stopping the engine of the vehicle or equipment when not in use, • Not to use mobile phones and other communication tools while the vehicle or equipment is in operation or operation, • Not using headphones while driving a vehicle or equipment or while operating, • Stopping the operation as soon as eye contact with the flagger is lost, • Not to move unless the transported load is safely loaded, • Not to smoke during refuelling and to obey the warnings of the refuelling officer, • To report all accidents and incidents.

Role	Responsibilities
Employees	- S/he is responsible for the implementation of the topics covered by the training by participating in the training related to the plan. - Complying with the Traffic Management Plan/instructions - Following the instructions prepared by the inspectors regarding Traffic management requirements.

3.3 Key Interfaces

Key interfaces in the implementation of this TMP include:

- AIIB will be the financier and monitoring reports will be submitted to AIIB as part of the environmental, social, health and safety (EHSS) performance of the Project, including traffic management during construction and operation,
- PIU CLOs will ensure that the Construction TMP identifies local communities that may be affected by a traffic event and incident associated with the Project. The Construction TMP will include how potentially affected communities will be informed of any traffic events and incidents in a timely manner. Specific community safety related activities are in the Health and Safety Plan (described in the ESMP). This role will be undertaken by the Baku Metro's Environmental and Social Manager during operation,
- For the construction phase the Contractor's Health and Safety Lead will liaise with the Contractor's Project Manager in relation to the implementation of construction phase traffic activities to manage sources of potential events and incidents. For the operational phase Baku Metro's Health and Safety Lead will liaise with Baku Metro's Project Manager to manage sources of potential traffic events and incidents, and
- Baku Metro's Health and Safety Lead will liaise with the Baku Metro's Training Team who will be accountable for implementing the health and safety training required as described in the Health, Safety and Security Plan (described in the ESMP).
- **External Stakeholder Interfaces**
- In addition to the internal interfaces described above, the implementation of this TMP requires coordination with external authorities and institutions. Table 3-2 summarises the key external interfaces, contact protocols, and consultation cadence.

Table 3-2: External Stakeholder Interfaces for Traffic Management

External Stakeholder	Interface Purpose	Contact Protocol	Minimum Consultation Cadence
BCEA Traffic Department	Approval of traffic diversion plans, signal timing adjustments, haul route agreements, network-level traffic capacity assessment	Formal written submission by Contractor through PIU; technical meetings as required	Prior to construction commencement at each station; at minimum quarterly during construction
State Traffic Police	Coordination of special/abnormal load movements, traffic enforcement at diversion points, incident response	Formal notification by Contractor through PIU; direct coordination for escort	Prior to each special load movement; at minimum monthly during active construction

External Stakeholder	Interface Purpose	Contact Protocol	Minimum Consultation Cadence
		requirements and incident response	
Khatai District Executive Authority (Stations Y-14, Y-15, Y-16, Y-17)	Local coordination for traffic diversions, access arrangements, and community notification	Written notification through PIU; CLO liaison for community-level coordination	At minimum monthly during active construction
Affected Schools	Identification of safe pedestrian routes for students, notification of changes to traffic arrangements, scheduling of HGV movements to avoid school drop-off and pick-up times	CLO engagement with school administrations; advance written notification of changes	Prior to construction commencement near each school; as needed when traffic arrangements change
Affected Hospitals and Health Centres	Maintenance of emergency vehicle access, notification of diversions affecting ambulance routes	Contractor coordination through PIU with hospital/health centre administrations; emergency services liaison	Prior to construction commencement; immediately upon any change to access or diversion arrangements

4. TRAFFIC MANAGEMENT

The Project involves construction activities at four (4) metro stations. Each station site will be securely fenced and demarcated to prevent unauthorised access and to ensure the safety of workers and the public. Access and egress routes for construction vehicles entering and exiting the station sites have been carefully planned in order to minimise disruption to surrounding communities and existing traffic flows.

Traffic diversion plans have been prepared for each station identifying temporary traffic arrangements and the relocation of affected vehicular roads, bicycle lanes, public transport routes, and pedestrian pathways. These plans include the installation of appropriate traffic signage, road markings, barriers, lighting, and traffic marshals where required, in accordance with national regulations and international good practice. Special consideration has been given to vulnerable road users, including pedestrians, cyclists, and public transport users, to ensure continued safe access and mobility throughout the construction period.

Temporary traffic projects have been prepared for Stations Y-14, Y-15, Y-16, and Y-17 for Stage 1 and given in Appendix A. The Stage 1 projects identify station entrance and exit areas, as well as the types and locations of traffic signs and traffic controllers. The Contractor shall implement these draft projects during construction. In addition, Stage 2 temporary traffic projects for Stations Y-15 and Y-14 are provided in Appendix B. Due to anticipated operational changes, a two-stage temporary traffic management scheme has been developed for Stations Y-15 and Y-14.

Excavated material generated from station construction works will be transported to the designated disposal site. The transport routes for spoil removal shall be defined to minimise traffic congestion, reduce community disturbance, and avoid sensitive receptors where feasible.

In addition, construction materials such as concrete, reinforcement steel, TBM segments, elevators, escalators, and E&M equipment will be delivered to the station sites and shafts via designated haulage routes. These logistics movements shall be incorporated into the traffic diversion planning to ensure coordinated management of all construction-related traffic.

Traffic diversion projects have been developed for each station, taking into account the cumulative traffic movements associated with construction vehicles, spoil transportation, and material deliveries.

The Contractor shall implement the approved Traffic Management Plan (TMP) and, where required due to evolving construction needs or site conditions, shall update the TMP accordingly. Any proposed revisions shall be submitted for review and approval by the Engineer, Baku Metro, and the competent local traffic authority prior to implementation.

Continuous monitoring of traffic conditions and community safety shall be undertaken during the construction phase, and corrective measures shall be implemented as necessary to maintain road user safety, minimise disruption, and ensure compliance with applicable legal and regulatory requirements as well as the AIIB's ESF.

The mitigation measures are summarised in detail in the following sections.

4.1 Minimizing Impact and Hazards

A pre-transportation road survey for special/abnormal loads will be done for the project site and records, and the results of such survey will be reported before the start of transportation for such loads, identifying routes for routine delivery items and mitigations required to take on these roads to minimize the impact and hazards.

Prior to the commencement of construction, the Contractor shall engage with the Baku City Executive Authority (BCEA), in coordination with Baku Metro, to assess network-level traffic capacity on routes

affected by the Project. Based on this assessment, haul routes for construction vehicles and spoil transport shall be agreed with BCEA. Where construction traffic is expected to affect intersection performance, signal timing adjustments shall be coordinated with BCEA to maintain acceptable levels of service on the surrounding road network.

4.1.1 For Vehicle Operations

- A detailed method statement of special/abnormal delivery works with adequate journey road risk assessment will be prepared and approved before the activity starts satisfying the requirements of this plan.
- Approved heavy vehicle routes for each construction site, covering product delivery (segments, cement, fuel, construction equipment) and waste/spoil removal to designated disposal sites, shall be identified and formally approved prior to construction. Where routes are not yet confirmed, the Contractor shall establish and submit approved routes as part of the Construction TMP.
- Compliance with all statutory vehicle limits such as width, height, axle loading, and gross weight will be ensured.
- Traffic flows will be timed to avoid periods of heavy traffic along main access roads.
- All heavy goods vehicles will be equipped with audible reversing alarms.
- Clear signs, flagman and signals will be set up and maintained where necessary.
- Appropriate supervision will be provided by the Subcontractors/Suppliers to control the flow of traffic when machinery needs to crossroads.
- Traffic Police and other authorities before moving any special/abnormal loads (precast concrete, steel structures etc.) will be informed.
- Usage of fuel will be minimized during the transportation as much as possible in conjunction with safety assessments, using route selection.
- Where necessary flagman will be provided for reversing heavy vehicles.
- Where applicable one-way systems will be considered particularly where heavy traffic flow is considered to be high.
- Vehicle loads must not exceed the weight limitations indicated on the vehicle registration document.
- Vehicle loads must not extend over the sides of the vehicle.
- Any load, which extends beyond the rear of the vehicle, must be marked with a red flag and/or a red light.
- Vehicle loads must be properly secured. Loose tools or equipment must not be carried inside the passenger compartment. They must be placed behind a protective screen or lashed down.
- Enforce speed limits of:
 - 20km/h on construction site traffic routes,
 - The maximum speed limit allowed by law in the cities and villages,
 - The maximum speed limit allowed by law on motorways and highways.

4.1.2 For Access Roads

Contractor will maximize its efforts to utilize existing roads to provide access to the construction areas. The access roads are used on a temporary basis to transport personnel, equipment, vehicles, heavy trucks, and materials to project work areas. Some of these roads may not support heavy construction equipment and, therefore, would be used only for light truck traffic (e.g., pickup trucks).

New access roads may be required in some areas, and these roads will be designed with adequate slope and cross-fall drainage to channel storm water safely to offroad soakaways, thereby preventing

erosion or siltation. When new access roads are required, the Contractor will perform all the permitting and Environmental and Social Impact Assessment studies for the new roads.

Road condition surveys shall be conducted on all designated haulage routes (product delivery and spoil disposal) prior to commencement of construction and repeated at minimum quarterly thereafter. Survey results shall be recorded and used to inform route selection and maintenance requirements.

4.1.3 For Parking Facilities

- Parking of construction vehicles on foot-ways, and double parking will be prohibited.
- A place for emergency service vehicles will be allocated.
- Parking area for private vehicles of construction staff will be allocated.
- Reverse parking policy will be strictly enforced at all times.
- Parking of any project or visitor vehicle in undesignated parking areas will not be allowed.

4.1.4 Pedestrian routes

- Pedestrian routes will be established on the Project site to provide safe access to and from the parking, lay down and work areas for all staff.
- These pedestrian routes will:
 - Be located at a reasonable distance away from areas of vehicle activity.
 - Be clearly separated from vehicle routes with different colour fencing, temporary barricades, or other suitable means, excluding flagging.
 - Be wide enough to safely accommodate the volume of employees likely to use them during peak times.
 - Be free from obstructions and have safe and even footing.
 - Be clearly signed.
 - Have safe crossings (in case the crossing intersects with the motorway, a flagman will be provided to control the traffic).

External Pedestrian Access and Safety

Where construction activities require the temporary closure or narrowing of public sidewalks, the Contractor shall provide alternative pedestrian routes that are clearly signed, adequately lit, physically separated from construction traffic, and accessible to persons with disabilities and reduced mobility, including through the provision of temporary ramps and dropped kerbs. Adequate lighting shall be maintained along all temporary pedestrian routes, particularly where night-time construction works are undertaken or existing street lighting is relocated. Night-time work fronts, traffic diversions and temporary pedestrian routes shall also be provided with appropriate CCTV coverage and security patrols.

Where station construction sites are located in proximity to schools, the Contractor shall engage with school administrations to identify safe pedestrian routes for students and shall avoid scheduling heavy vehicle movements during school drop-off and pick-up times where practicable. Advance notification of sidewalk closures and pedestrian route changes shall be provided to affected communities in accordance with the Stakeholder Engagement Plan (SEP).

4.1.5 Loading and Laydown Areas

Construction activities will be planned to minimize vehicle operations and to avoid unnecessary deliveries and double handling of materials. The location of lay down and storage areas will be operated to provide the following conditions including but not limited to;

- Be located away from pedestrian-only areas and main pedestrian routes.
- Exclude pedestrians as far as reasonably practicable.
- Have one-way systems and safe entrance/exit points.
- Have sufficient place for vehicle movements.
- Have adequate lighting if operating at night or in adverse weather, clear signs, and appropriate visibility aids for drivers.

4.1.6 For Maintaining City Roads and Highways

Contractor will;

- Keep highways free from mud and dust and ensure that no vehicle or other items of equipment leaving the construction site or working with deposit soil, debris or rock on public highways or public right of way,
- Ensure that the transport of mud and dust from the site onto public highways and roads is limited. Measures will include:
 - Using hard-core surfaces on access roads,
 - Providing an easily cleaned hard-standing area within for vehicles entering, parking and leaving the construction base,
 - Providing wheel-washing facilities adjacent to the egress points to be used by vehicles leaving the construction base,
 - Appointing site staff to clean the construction base hard-standing area and remove any mud or debris deposited on the public highways,
 - Providing mechanical road sweepers to clean hard-standing areas and to clean any mud or debris deposited by work vehicles on roads or footways,
 - Fully sheeting all works vehicles carrying potentially dusty material or likely to deposit loose materials on the public highway,
 - Cleaning and maintaining temporary and permanent roads and removing mud and debris.

4.1.7 Vehicle Safety Equipment Standards

Vehicle safety equipment standards must comply with the mandatory requirements specified below.

- In addition to compliance with equipment standards required by Local Laws and Regulations, all Project vehicles will be equipped with the mandatory safety equipment listed below:
 - Seat belts (for the driver and all passengers riding in vehicles used to transport multiple individuals).
 - Rear-view mirrors (internal and external – both sides).
 - Lights (head & tail, stop, turn signal, and emergency warning).
 - Reflective warning triangle (portable emergency warning).
 - Signage: Maximum number of passengers (buses and other similar vehicles only).
 - Reverse alarm signal.
 - Inspection and Drug and Alcohol Warning Decal,

The warning stickers (safe driving instructions) will be posted on the driver's side front windshield/screen at the bottom corner, so as not to restrict the driver's view.

- Additional Equipment Considerations:
 - Light and high-visibility colors for vehicles
 - Daytime running lights
 - ABS brakes (where appropriate)
 - Fire extinguishers

- Flashing lights (construction vehicles)
 - Spare light bulb kit
 - Fog lights, side repeated lights along the length of the vehicle
 - Beacon lamps at the top of the trucks and heavy vehicles working inside the Project site.
- Vehicles (buses, vans, cars etc.), that transport multiple individuals, shall ensure that adequate seat belts (based on each vehicle's maximum passenger load as established by the manufacturer) are installed.

4.2 Transportation of Heavy Loads

The weight of transported cargo and distribution of load on vehicle axles must not exceed the limits specified by the manufacturer and the plated weight of the vehicle's local Traffic Law as well. The requirements of the Traffic Rules of local Legislation for the transport of long or large vehicles must be complied with. Before any heavy load transportation, conditions of the road, weather, and any other contingency situations are considered in the logistics plan. The logistics plan will reflect all details of relevant transportation e.g. Road conditions, bridge calculations, weather conditions, statutory permission for transportation, liaison with police and other parties.

Reflective signs will be attached to the load to give a warning to other road users of load length and width. Consideration must be given to involving the local police in the movement of heavy loads. Drivers of carrying load- carrying vehicles have been properly trained in securing the load and ensure at all times that loads are properly secured before starting on a movement to or in the Project site.

4.3 Delivery Logistics and Handling

The loading and unloading of plants and equipment on site is a high-risk activity. To minimize the risk of an accident or injury the following should be put in place. Before loading the vehicle, consideration should be given to how the vehicle will be unloaded later, the positioning of the materials, plant or equipment etc.

The following are some of the key items that need to be considered for any loading/unloading process:

- Deliveries will be timed to avoid the busiest rush hour periods whenever practicable.
- Contractor Traffic Safety Supervisor, delivery driver and sub-contractor responsible for coordinating the delivery.
- Journey Road Risk assessment and control measures to be put in place to address/reduce the risk.
- Proof of training of operatives and delivery drivers is required to demonstrate competence in the operation of a particular piece of plant or to provide evidence of training for the loading/unloading of the particular plant, machinery or equipment.
- Safe access onto the vehicle body or onto the load to unload the lorry.
- The load needs to be stacked/loaded in a manner that will allow a safe means (lifting plan will be in place as per lifting procedure) of unloading i.e. on pallets for a forklift, skids for a crane etc. The receiver of the delivery needs to be aware of the resources to be in place to unload the vehicle.
- All drivers when collecting and after loading the particular machine, piece of plant or any other type of load need to ensure the load is secured and any restraints that are required to be in place are in place even where the vehicle is moving a short distance.
- When an enclosed delivery vehicle arrives at the site the driver must exercise due caution and care when the driver is opening any curtains etc. as parts of the load may have moved or been dislodged during transport.

- When arriving on the site, all delivery drivers are to report to the site security guard or report to the Site Management Office and those will inform the Traffic Safety Supervisor to coordinate the issue. No exceptions even for regular drivers. Where the driver is delivering to a subcontractor, the driver will need to have a contact name and number for a person from that subcontractor's management team to oversee the loading or unloading of the delivery.
- All delivery drivers are required to comply with the site rules at their delivery destination, in the main this will be to comply with the PPE requirements.

Contractor and other related parties, subcontractors and security are responsible for controlling all traffic movements arriving at and leaving the site and must coordinate traffic movements to reduce the potential for congestion as a result of these traffic movements.

4.4 Traffic Movement Volume

The traffic volumes generated by the scheme during construction will include:

- Contractor staff vehicles and site workers' vehicles.
- Subcontractors' vehicles.
- Loader, tractor etc.
- Bulk supply trucks for delivery of concrete, aggregate, precast concrete, steel, TBM segments and process equipment.
- Bulk earthmoving trucks for removal of unsuitable material, rubble, and surplus clay offsite.
- Plant and Tool deliveries.
- Operating equipment deliveries.
- Truck for waste handling.
- Visitors to the site.

The movement of trucks on site causing intense traffic movements will be controlled by the site supervision to minimize impacts on the site staff and environment. Particular attention will be given to the following points:

- Trucks will travel below the speed limit.
- Trucks will adhere strictly to the designated route.
- Trucks will not be allowed to leave the site in convoys
- Flagman will be positioned at key intersections as required to help the flow of traffic during intense heavy vehicular movement. They will only intervene where necessary.

The emergency services including an ambulance and fire will be consulted when the construction site route has been designated and advised them in case of the need to use the designated route with the drawing plan of the construction site.

The Contractor shall implement a fleet management system incorporating GPS tracking for all heavy vehicles operating on Project haulage routes. Speed limiter compliance shall be verified for all heavy vehicles prior to deployment and documented in the vehicle inspection records.

4.5 Quantitative Spoil Transport and Traffic Impact Assessment

This section presents a quantitative assessment of the construction traffic generated by the transport of excavated material (spoil) from the Green Line station and tunnel works to the designated disposal site. The assessment estimates the number of haulage truck movements generated by each station, the resulting hourly traffic on the haul routes, and the significance of this additional traffic relative to the available capacity of the surrounding road network. The purpose is to demonstrate that spoil haulage has been planned in a manner that keeps its impact on the local road network within acceptable limits.

4.5.1 Methodology and Assumptions

The assessment is based on the excavation volumes and construction programme dates derived from the Preliminary Schedule. Excavation has been separated into two construction methods: Tunnel Boring Machine (TBM, EPB type) excavation for the running tunnels, and New Austrian Tunnelling Method (NATM) and cut-and-cover excavation for the stations and associated structures. The following assumptions have been applied:

All TBM excavation spoil is transported via the Y15 station. Spoil from the NATM station excavations has likewise been assessed as being removed in the vicinity of the respective stations, which are located close to one another along the alignment.

A haulage truck capacity of 16 m³ per trip has been adopted. In Azerbaijan, truck capacities for this type of haulage typically range between 16 and 20 m³; the lower bound of 16 m³ has been selected as a conservative assumption, as it results in the highest estimated number of truck movements.

For each section, the number of loaded truck trips was first calculated by dividing the total excavation volume by the adopted truck capacity of 16 m³. This represents the number of loaded outbound haulage trips required to remove the excavated material from the work site.

For traffic assessment purposes, loaded outbound trips were then converted into two-way truck movements by applying a factor of two, to account for the empty return journey from the disposal site back to the work site. The daily truck movement figures therefore represent both the loaded outbound movement and the empty return movement.

Although the Project holds a 24-hour working permit, excavation haulage trucks are assumed not to operate during night-time hours. An effective working period of 15 hours per day has therefore been adopted, and the hourly truck movements have been calculated by dividing the daily two-way truck movements by 15.

Accordingly, the daily and hourly values presented in the assessment reflect two-way truck movements, rather than loaded outbound trips only.

It should be noted that the TBM and NATM station excavation activities do not all occur simultaneously according to the construction programme. The hourly truck movements are therefore presented separately for each section and construction phase, so that the actual concurrent traffic load on the haul routes is not overstated.

4.5.2 Excavation Volumes and Estimated Truck Movements

Table 4-1 summarises, for each station and construction method, the total excavation volume, the construction duration, and the resulting estimated truck movements per day and per hour. Volumes and dates are taken directly from the Preliminary Schedule.

Table 4-1 Excavation Volumes and Estimated Spoil Haulage Truck Movements by Station

Section / Component	Method	Stations	Duration (days)	Excavation Volume (m ³)	Truck Capacity (m ³ /trip)*	Total Truck Trips	Truck Trips per Day	Trucks per Hour (veh/hr)
Xatai Station Intersection	NATM	Y14	214	26,085	16	1,630	7.6	1.0
Y14 Station	Cut & Cover	Y14	214	92,683	16	5,793	27.1	3.6
Y15 Station	(completed)*	Y15	214	120,375	16	7,523	35.2	4.7

Section / Component	Method	Stations	Duration (days)	Excavation Volume (m ³)	Truck Capacity (m ³ /trip)*	Total Truck Trips	Truck Trips per Day	Trucks per Hour (veh/hr)
Y15–Y16 link	TBM (EPB)-1	Y15	310	86,943	16	5,434	17.5	2.3
Y15–Y16 link	TBM (EPB)-2	Y15	310	86,943	16	5,434	17.5	2.3
Y15–Y16 link	TBM (EPB)-3	Y15	336	97,976	16	6,123	18.2	2.4
Y15–Y16 link	TBM (EPB)-4	Y15	336	97,976	16	6,123	18.2	2.4
Y16 Station	Cut & Cover	Y16	214	158,259	16	9,891	46.2	6.2
Y17 Station	(completed)*	Y17	214	111,992	16	6,999	32.7	4.4

*For dewatered TBM paste and wet-matrix spoil, truck loading must be contractually restricted to a maximum of 65% of the vehicle's physical volumetric capacity (or a pre-calculated weight threshold) to prevent axle-load exceedances and completely eliminate the risk of liquid sloshing and spillage onto public roads.

The spoil-haulage assessment accounts for the relevant excavation activities associated with the station works (cut-and-cover and NATM) and the TBM running-tunnel drives. The highest hourly two-way truck movement from any single section is approximately 6.2 vehicles/hour during the Y16 Station cut-and-cover excavation, while the highest hourly two-way truck movement from any TBM drive is approximately 2.4 vehicles/hour on the Y15–Y16 running-tunnel drives. Since these peaks do not all coincide in the construction programme, the combined spoil-haulage traffic on the network at any one time remains limited.

4.5.3 Construction Material Deliveries

In addition to the removal of excavated spoil, the construction of the Green Line generates inbound deliveries of construction materials, principally concrete, reinforcement steel, and fill/aggregate materials. The estimated number of truck trips associated with the main quantified material types is summarised in Table 4-2. Quantities are taken from the bill of quantities or, where necessary, converted into the corresponding volume or weight used for truck-trip estimation. Truck trips have been derived using representative vehicle capacities for each material type: 16 m³ for bulk fill and aggregate, 9 m³ for ready-mix concrete, and 20 tonnes for steel and similar materials delivered on flatbed trailers.

The estimated truck trips presented in Table 4-2 are based on the total material quantities identified in the bill of quantities and therefore represent cumulative truck movements over the construction period, rather than daily truck traffic.

Table 4-2: Estimated Truck Trips for Main Construction Material Deliveries (Green Line)

Material	Quantity	Vehicle Type / Capacity	Estimated Truck Trips
Crushing works	4,389 m ³	Tipper truck, 16 m ³	274
Gravel fill	3,565 m ³	Tipper truck, 16 m ³	223
Concrete C16	6,688 m ³	Concrete mixer, 9 m ³	743
Concrete C30	135,890 m ³	Concrete mixer, 9 m ³	15,099

Material	Quantity	Vehicle Type / Capacity	Estimated Truck Trips
Diaphragm wall concrete	26,389 m ³	Concrete mixer, 9 m ³	2,932
Reinforcement steel	25,943 t	Flatbed trailer, 20–25 t	1,297
Steel mesh	154 t	Flatbed trailer, 20–25 t	8
Steel fabrication	147 t	Flatbed trailer, 20–25 t	7
Steel strut and waling	11,338 t	Flatbed trailer, 20–25 t	567

Note: Some bill of quantities items, such as diaphragm wall concrete and steel strut and waling, are measured in area or other non-transport units in the source quantity schedule. For the purpose of estimating truck trips, these quantities were converted into the corresponding transportable volume or weight used in the calculation. The original bill of quantities units have been retained in the table to remain consistent with the source quantities.

Ready-mix concrete deliveries, particularly C30 concrete, represent the largest source of material-delivery truck movements due to the substantial volume of in-situ concrete required for the stations, tunnels, and supporting structures. These deliveries will take place progressively over the construction programme and will be linked to the sequencing of concrete pours, rather than occurring as a continuous daily flow. Individual pours will therefore need to be planned and coordinated to avoid unnecessary concentration of mixer truck movements across multiple work sites. On this basis, material deliveries are not expected to materially change the overall traffic impact findings, provided that delivery scheduling and site access controls are implemented as part of the TMP.

Several work items, including formwork, vertical and horizontal waterproofing, waterstops, shoring works, bored piles, plastic piles, landscaping, and station plazas, have not been separately quantified as truck trips. These items are generally delivered periodically in relatively small quantities, reused on site, constructed in situ, or measured in units that cannot be directly converted into truck movements. Compared with the transport of excavated spoil, fill materials, concrete, and steel, their contribution to overall construction traffic is expected to be limited and is not considered to materially affect the findings of this assessment.

4.5.4 Haul Routes and Disposal Site

Excavated material generated from station construction works will be transported to the disposal site operated by Tullantıları İdarəetmə Mərkəzi MMC (Waste Management Center Limited Liability Company, WMC LLC), the relevant waste management authority, located to the north-west of the city. Two separate haul routes have been defined: an outbound route to the disposal site and a return route. Since trucks will be loaded on the outbound journey, the outbound route has been selected to minimise travel through densely populated residential areas as far as practicable. The return journey, when trucks are empty, uses an alternative route. The outbound and return routes are shown in Figure 4-1 and Figure 4-2 respectively.



Figure 4-1: Haul Route to the Disposal Site (Loaded Trucks)

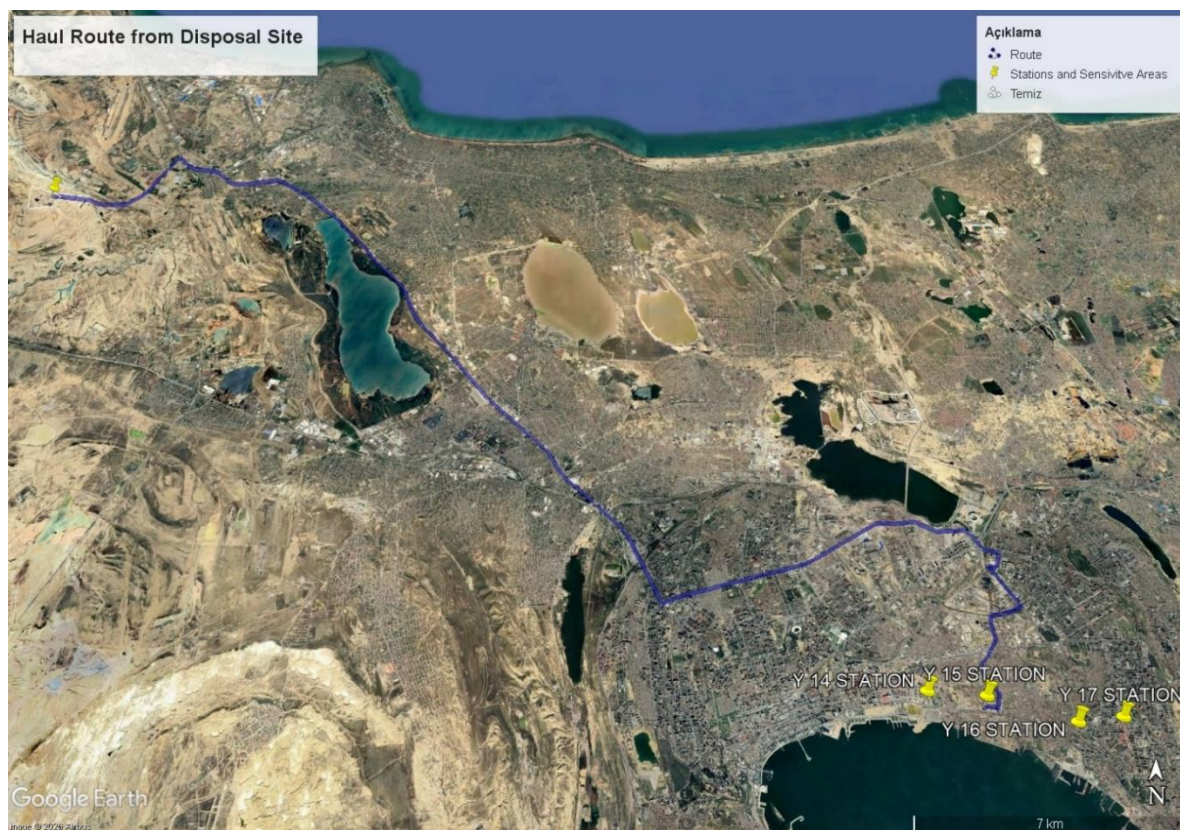


Figure 4-2: Return Haul Route from the Disposal Site (Empty Trucks)

4.5.5 Sensitive Receptors Along the Haul Routes

The haul routes pass through an urban environment that contains a number of sensitive receptors, including schools, kindergartens, hospitals, and clinics. These receptors have been identified and mapped along the routes so that route selection and time-of-day restrictions can take account of their presence. The locations of the identified sensitive receptors relative to the haul routes and stations are shown in Figure 4-3 and Table 4-3.



Figure 4-3: Sensitive Receptors Identified Along the Haul Routes

Where the haul routes pass in proximity to these receptors, the traffic management and community safety measures set out elsewhere in this Plan – including speed restrictions, signage, marshalling, and time-of-day restrictions on heavy vehicle movements near schools – shall be applied. Heavy construction truck movements within 200 m of schools and polyclinics shall be prohibited during drop-off (07:30–09:00) and pick-up (13:00–14:30) hours and shall be continuously monitored by the Traffic Safety Supervisor. Additional traffic marshals shall be deployed at these locations during the restricted periods, where necessary.

Table 4-3: Sensitive Receptors Identified Along the Haul Routes

No	Receptor	Type
1	Baku Medical Plaza Mərkəz Filialı	Hospital / Clinic
2	German Hospital	Hospital
3	Harmony Health Hospital	Hospital
4	Respublika Diaqnostika Mərkəzi	Hospital / Diagnostic Centre

No	Receptor	Type
5	Abşeron Rayon Mərkəzi Xəstəxanası	Hospital
6	Medera Hospital	Hospital / Medical Centre
7	FeRaMed Clinic	Clinic
8	Trauma Center Hospital	Hospital
9	Nizami Tibb Mərkəzi	Hospital / Medical Centre
10	Mərcan Medicare Klinik	Clinic
11	Olimp Hospital	Hospital
12	Mərkəzi Gömrük Hospitalı	Hospital
13	MediTurk Global Hospital	Hospital
14	Mediland Hospital	Hospital
15	International Medical Centre 1 / International Medical Centre 2	Medical Centre / Clinic
16	Aptek Baxis Zeytun	Pharmacy
17	LANDAU School	School
18	Educational Complex 132-134	School
19	CELT Elementary School Elmlər	School / Education Centre
20	Kaspi International School	School
21	Maestro School	Education Centre
22	32 nömrəli tam orta məktəb	School
23	23 nömrəli tam orta ümumtəhsil məktəbi	School
24	Qubadlı rayon 2 nömrəli Xanlıq kənd orta məktəbi	Secondary School
25	Bakı Türk Anadolu Lisesi / Baku Turkish Anatolian High School	High School
26	TÜRKÖM DƏRSANƏSİ	Education Centre
27	Induction Education Centre	Education Centre
28	Ana Okul Uşaq Bağçası	Kindergarten

4.5.6 Road Network Capacity Assessment

To assess the significance of spoil-haulage traffic, the estimated hourly truck movements were compared with the indicative hourly service capacity of the roads along the proposed haul routes. Since site-specific traffic count data were not available at this stage, planning-level service volume and capacity assumptions were adopted based on recognised guidance, including NCHRP Report 825 and FHWA HPMS guidance.

The intercity highway sections, including the M1 and M4, were assessed as four-lane multilane highways. Urban arterials and local streets were assessed using conservative per-lane capacity assumptions, reflecting the more constrained operating conditions typically observed on these road

types. The adopted values are therefore intended to provide a screening-level indication of potential capacity impacts, rather than a detailed operational traffic assessment. Road classifications and capacity assumptions should be reviewed once site-specific traffic count data become available.

Table 4-4 compares the estimated construction traffic contribution with the indicative planning-level hourly capacity of representative roads along the haul routes. The construction traffic contribution is presented separately for the NATM excavation phase and the TBM excavation phase, as these activities are expected to occur during different periods of the construction programme and would therefore not generate simultaneous peak truck traffic.

For screening purposes, the peak estimated spoil-haulage contribution has been conservatively applied to each representative road category along the haul routes. This does not imply that all road sections would experience the same truck flow at the same time; rather, it provides a conservative comparison of the estimated peak construction traffic against the indicative capacity of each road type.

Table 4-4: Spoil Haulage Traffic Contribution Compared with Road Network Capacity

Road	Facility Type	Estimated Hourly Capacity (two-way)	NATM Phase Spoil Traffic (veh/hr)	TBM Phase Spoil Traffic (veh/hr)
M1 Baku–Guba–Russia Border Highway	Multilane highway (4-lane)	4,960–6,560	20	10
M4 Baku–Shamakhi Road	Multilane highway (4-lane)	4,960–6,560	20	10
R6 H.Z. Tagiyev–Sahil Road	Two-lane regional highway	approx. 2,980	20	10
Ziya Bunyadov Avenue	Major urban arterial	14,400–18,000	20	10
Heydar Aliyev Avenue	Major urban arterial	9,600–12,000	20	10
Həsənoğlu Street	Urban arterial / collector	5,600–8,000	20	10
Yusif Səfərov Street	Urban arterial	3,500–5,000	20	10
Füzuli Street	Urban arterial / collector	2,800–4,000	20	10
28 May Street	Urban collector	1,200–1,800	20	10
İzmir Street	Urban local / collector	1,600–2,400	20	10
Oqtay Aliyev Street	Urban local street	600–1,000	20	10

Road	Facility Type	Estimated Hourly Capacity (two-way)	NATM Phase Spoil Traffic (veh/hr)	TBM Phase Spoil Traffic (veh/hr)
Süleyman əhmədov Street	Urban local / collector	800–1,200	20	10

Across the assessed road categories, the estimated spoil-haulage traffic contribution is approximately 20 vehicles/hour during the NATM excavation phase and approximately 10 vehicles/hour during the TBM excavation phase. These volumes represent only a minor share of the indicative hourly service capacity adopted for the screening assessment. Even for the lowest-capacity local street category, the additional truck movements remain small relative to the indicative planning-level capacity adopted for the screening assessment.

On this basis, spoil-haulage traffic is not expected to result in material capacity constraints or network-wide congestion effects. However, localised effects may still occur near construction access points, sensitive receptors, and constrained urban streets. The traffic management measures set out in this TMP will therefore be implemented to manage routing, timing, site access, dust and spillage prevention, and road safety risks.

4.5.7 Interface with the Spoil and Disposal Management Plan (SDMP)

The transport of excavated spoil is also addressed in the Project's Spoil and Disposal Management Plan (SDMP), which sets out the detailed arrangements for spoil classification, designated disposal sites, and disposal-site management. This TMP should therefore be read in conjunction with the SDMP.

Spoil-specific haul routes and any route restrictions identified in this section shall be applied consistently with the SDMP. Loaded spoil vehicles shall use sealed or covered loads to prevent spillage and dust emissions. Wheel-wash facilities shall be provided at construction site exits and, where required, at disposal site exits to prevent mud and debris from being tracked onto public roads.

Where the SDMP and this TMP both address spoil haulage, the more stringent or protective requirement shall apply.

All spoil haulage trucks shall be covered (sheeted) during transport. Combined with the fact that the haul routes follow paved (asphalt) roads, this ensures that dust generation from spoil transport is effectively prevented.

4.6 Driving Rules

Drivers must prove that they hold a current driver's license valid for the class of vehicle being operated and inform line management of any change to the status of their license immediately. Drivers must have successfully completed an on-road driving assessment as part of their recruitment process. Drivers must be medically fit to drive the vehicle they are using.

The following driving rules are to be implemented by all project drivers.

- Drivers shall operate vehicles in accordance with applicable Local laws and regulations.
- Only employees possessing a valid driver's license shall be allowed to drive.
- Vehicle/safety equipment must be inspected prior to each shift.
- Drivers are responsible for ensuring that lights, signals, horns, and brakes are in proper working order.
- Drivers must observe posted speed limits at all times while driving on or off the project.
- Drivers must maintain a safe distance between vehicles. A safe distance means having enough time and distance between vehicles to allow for emergency braking to avoid an accident.
- Drivers must obey traffic signs, signals, and other postings while operating vehicles.
- Drivers must always operate vehicles with headlights on.
- Drivers shall not be permitted to use company-owned and/or personal cell phones (or any other type of two-way communication device), whether for personal or company business while operating any vehicle. Drivers shall pull over, park the vehicle safely, and then use the device. Due to the potential for distraction, using the "hands-free" phone mode is not permitted while driving any vehicle. A "two-way communications device" shall include, but is not limited to mobile phones, two-way radios (including vehicle-installed, hand-held radios, and walkie-talkies), and pagers
- Drivers must not leave vehicles running unattended.
- Drivers must shut off the motor to refuel. No smoking or operating mobile/cell phones while refuelling.
- Drivers must yield to pedestrians at designated crossings and other areas indicated by signs.
- Driving under the influence of alcohol or controlled substances is strictly prohibited.
- Drivers and passengers shall wear seat belts while the vehicle is in operation.
- Vehicles must come to a complete stop to load and unload passengers.
- Drivers must park only in designated areas.
- Drivers must set parking brakes when leaving a vehicle unattended.
- Drivers should not park in heavily congested areas or where heavy equipment is in operation, if at all possible.
- Drivers must not smoke, consume food or drink while the vehicle is in motion.
- Drivers must not read maps while the vehicle is in motion.
- Drivers must not drive when feel tired

The working hours, rest periods and overtime arrangements of project drivers shall comply with the Labor Code of the Republic of Azerbaijan (February 1, 1999, No. 618-IQ) and applicable national road transport and traffic legislation. AETR requirements are not adopted as the primary legal basis for domestic project-related transport activities; however, they are retained in Table 4-5 as a good international practice benchmark for driver fatigue management, where applicable and without prejudice to compliance with Azerbaijani labour law.

Table 4-5: Driver Fatigue Management Benchmark Based on AETR, Subject to Azerbaijani Labour Law Requirements

Requirement	Rule
Daily driving time	Max 9 h (up to 10 h , 2 times/week)
Weekly driving limit	Max 56 h
Fortnightly driving limit	Max 90 h (2 consecutive weeks)

Requirement	Rule
Daily rest period	Min 11 h (may reduce to 9 h , max 3 times/week)
Split daily rest	3 h + 9 h (total 12 h)
Driving break	45 min after 4.5 h driving (15 + 30 min)
Regular weekly rest	Min 45 consecutive h
Reduced weekly rest	Min 24 h , every second week (compensation required)
Weekly rest timing	After 6 working days
Exceptional exceedance	Up to +1 h (or +2 h for regular weekly rest, exceptional cases only)

Note: For domestic project-related transport activities, Azerbaijani labour legislation and applicable national road transport/traffic requirements shall prevail. AETR values are provided only as a good international practice benchmark for fatigue management and shall not be interpreted as allowing working hours, overtime or rest arrangements beyond the limits established under Azerbaijani labour law.

The following essential behaviours are expected of all passengers of Contractor, Subcontractors and suppliers;

- Always fasten seat belts and be certain they are accessible and in good condition
- To secure the cargo; loose objects can become dangerous projectiles
- To be on time to avoid rushing the driver
- If in doubt, confirm that the vehicle has received a pre-use inspection and has safety equipment on board
- To warn and correct the driver if he is travelling too fast for road/weather conditions or demonstrates other unsafe driving practices or shows non-compliance with the Safe Driver's Code
- Never distract the driver while the vehicle is in motion. Do not drink, eat or smoke inside the vehicle
- To be prepared to provide clear directions/instructions to the driver when/if necessary

4.7 Vehicle Inspections and Maintenance

The Health and Safety Manager shall ensure that the project vehicle inspection and maintenance program includes all the requirements discussed below. Implementing the inspection and maintenance program shall be maintained, as follows:

4.7.1 Inspection

- Ongoing and regularly scheduled inspections and maintenance of each vehicle shall be maintained based on manufacturer recommendations.
- Drivers shall inspect vehicles prior to the start of shift to ensure the vehicle is safe to operate on the road, ensuring that the tires, windshield/screen, windshield wipers, brakes, and lights are in

satisfactory and working condition.

4.7.2 Maintenance

- Records shall be kept on all maintenance activities and maintained for the duration of the vehicle's use on the project.
- Drivers will be held accountable for reporting defects and completing the pre-trip inspection checklists.
- Scheduled maintenance (by dealers, project mechanics or other certified facilities) should cover critical parts and equipment such as brakes, steering systems, windshield wipers, brake lights, headlights, tires, etc.
- A defect reporting system shall be implemented on the project.
- Repairs to tires are not allowed on vehicles, except by dealers, project mechanics, or other certified facilities.
- All recalls on vehicle parts (e.g..faulty tires) shall be immediately addressed and exchanged.
- Maintenance checklists should include all safety-related items for pre-trip and routine vehicle inspections
- Maintenance records should include the detailed inspection and repair procedures carried out for vehicles involved in accidents.

4.8 Controlled Substances and Alcohol

Individuals operating project vehicles shall be subject to the following controls concerning the utilization of drugs and/or alcohol:

- Drivers will not operate project vehicles at any time if they are under the influence of drugs and/or alcohol.
- Employees taking prescribed or over-the-counter drugs that could impair their ability to safely drive project vehicles should inform their supervisor and/or the project OHS department prior to operating project vehicles.
- In cases where driving ability may be impaired due to taking medication, the employee will not be allowed to operate vehicles. The maximum Blood Alcohol Concentration (BAC) for any motor vehicle or equipment operator is 0.0%. Any driver/operator documented to have BAC above the limit of zero will have his/her -labour contract terminated.

4.9 Risk Management

Considering the traffic management parameters in the project, the risk management tool shall be determined and implemented according to a Risk Assessment Procedure. Within the risk management tools determined for the activities that will create traffic in the project, how the hazards and risks arising from the field traffic will be managed are explained in detail.

Journey road risk assessments shall be developed for all routine haulage routes between construction sites and waste/spoil disposal sites, and between construction sites and material delivery points. These assessments are not limited to special or abnormal loads.

4.9.1 Risk Assessment

Risk assessment to be made for the road to be used. Hazard and Risk Management Procedure, all elements and good practices that may result in undesirable events, including but not limited to the ones stated below takes into account. These applications are:

- Preferring the hours when the traffic is not very busy when planning high-risk activities,

- The location of the work carried out in the field, its interaction with vehicles or pedestrians,
- Hazards specified in the traffic management plan prepared specifically for the site,

Control of Risks

- Separation of routes with appropriate traffic controls to minimize pedestrian and vehicle interaction,
- Suitable marking, signaling and using barriers to reduce vehicle speed and control pedestrian movements,
- Separation of vehicle and pedestrian roads with physical barriers,
- Providing safe access for pedestrians and people with disabilities,
- Improvement of road geometry, terrain, vegetation and other conditions that may affect visibility and visibility.
- Recording traffic management regulations for the site,
- Regular control and inspection of field traffic routes and all traffic control devices

In cases where it is not possible to completely eliminate the risk as a result of the journey road risk assessment, one or more of the following options are considered in order to minimize the risks:

- Ensuring the job is done with safer equipment (Ex: Replacing forklifts with other load handling equipment such as walker stackers or pallet trucks),
- Avoiding contact between hazards and people (e.g. creating a delivery area away from other pedestrians or their activities),
- Using engineering controls (Ex: Speed limiters on forklifts, presence detection devices, breakers, etc.)

If a risk still remains after applying the above control measures, the following controls are considered in order to minimize the residual risk, as reasonably practicable:

- Using administrative controls (eg, reviewing warning signs or delivery times to prevent or reduce the need for pedestrians and vehicles to interact),
- Use of personal protective equipment (eg: high-visibility workwear)
- If a single control is not sufficient to minimize risks, a combination of the above- mentioned controls may be used.

4.9.2 Mitigation Measures and Management Controls

A set of management controls should be developed to manage the identified risks and impacts. Basic management controls are outlined in the Risk Management Procedure. Additional procedures and guidelines may be developed as needed to support this Management Plan. The following specific risk scenarios have been identified for the Project and shall be addressed through journey road risk assessments and site-specific traffic management measures:

A set of management controls should be developed to manage the identified risks and impacts. Basic management controls are outlined in the Risk Management Procedure. Additional procedures and guidelines may be developed as needed to support this Management Plan. The following specific risk scenarios have been identified for the Project and shall be addressed through journey road risk assessments and site-specific traffic management measures:

HGV–Pedestrian Collision: The Green Line construction sites are located within densely populated residential districts along the Khatai–Hazi Aslanov corridor, characterised by narrow sidewalks, high pedestrian density, and proximity to sensitive receptors including schools, health centres, and residential blocks. The risk of collision between heavy goods vehicles and pedestrians is elevated where passing space is limited and pedestrian diversions are in place. Mitigation measures shall include physical separation of pedestrian and vehicle routes, deployment of flagmen at conflict points, restricted HGV

movements during peak pedestrian hours, and speed limits of 20 km/h within 300 m of station construction sites.

HGV–Cyclist Conflict at Junctions: At junctions where construction vehicle routes intersect with existing cycling routes or shared road space, the Contractor shall implement measures to manage conflict between HGVs and cyclists, including advanced warning signage, designated turning areas, and cyclist priority markings where practicable.

Nighttime HGV Operations: Night-time heavy vehicle movements introduce additional risks due to reduced visibility for both drivers and pedestrians. Where night-time HGV operations are required, vehicles shall be equipped with additional lighting and audible warnings, and temporary lighting shall be maintained along affected routes. Night-time HGV movements through residential areas shall be minimised and, where unavoidable, coordinated with the Traffic Safety Supervisor.

Emergency Vehicle Access During Diversions: Traffic diversions and temporary road closures shall be planned to maintain unobstructed access for emergency services at all times. The Contractor shall coordinate with local emergency services prior to implementing any diversion to confirm that emergency access routes remain clear. At stations where narrow street geometry constrains vehicle passage, specific emergency access arrangements shall be documented in the Construction TMP. Safe public access to hospitals, polyclinics and other healthcare facilities shall also be maintained throughout construction.

Cumulative Congestion and Emergency Response Times: The cumulative effect of construction traffic, diversions, and temporary closures across multiple station sites may increase congestion on the surrounding road network and affect emergency response times. The Contractor shall assess the cumulative impact of concurrent construction activities on emergency access and shall coordinate with BCEA and emergency services to identify alternative emergency routes where primary routes are affected.

Temporary Traffic Drawing Completeness and Approval: The Contractor shall update the Stage 1 temporary traffic drawings in Appendix A so that pedestrian diversion routes are delineated separately from vehicle routes, and bus stop relocations, public transport rerouting and emergency vehicle access are clearly shown at each station. The Contractor shall prepare Stage 2 temporary traffic drawings for Stations Y-16 and Y-17 (Stage 2 currently provided for Stations Y-14 and Y-15 only). All Stage 1 and Stage 2 drawings shall be submitted by the Contractor to the Baku City Executive Authority (BCEA) and the Traffic Police for approval prior to the commencement of construction at each station.

4.10 Operational Phase Traffic Management

During the operational phase, traffic management requirements shift from construction-related vehicle and haul route management to the management of passenger flows, surface-level traffic generated by station operations, and the interface between metro users and the surrounding road network. Baku Metro shall be responsible for developing and implementing operational traffic management arrangements for each station, in coordination with the Baku City Executive Authority (BCEA) and relevant transport operators.

4.10.1 Passenger Access and Pedestrian Flow

Station entrances and exits shall be designed and managed to accommodate peak-hour passenger volumes safely and without obstruction to adjacent pedestrian pathways and road crossings. Pedestrian flow management measures shall include clear wayfinding signage, adequate lighting, and separation of entering and exiting passenger streams where station geometry permits. Station overseers (Nezaretçi) shall monitor passenger flow during peak periods and coordinate crowd management measures as necessary to prevent overcrowding at entrances, exits, and escalator areas.

4.10.2 Taxi, Ride-share, and Kiss-and-Drop Arrangements

Baku Metro shall coordinate with BCEA to designate taxi and ride-share pick-up and drop-off zones at or near each station. These zones shall be located and designed to avoid conflict with pedestrian access routes, bus stops, and general traffic flow on adjacent roads. Kiss-and-drop areas shall provide short-term stopping capacity with clear signage and enforceable time limits to prevent congestion and ensure turnover during peak periods.

4.10.3 Bus Interchange and Public Transport Integration

Where bus routes serve or terminate at Green Line stations, Baku Metro shall coordinate with BCEA and public transport operators to ensure that bus stop locations, passenger waiting areas, and interchange routes are integrated with station access arrangements. Pedestrian connections between bus stops and station entrances shall be clearly signed, adequately lit, and accessible to persons with reduced mobility.

4.10.4 Accessibility for Persons with Disabilities (PWD)

All new Green Line stations shall be designed and operated to provide barrier-free access for persons with disabilities, elderly passengers, and caregivers, in accordance with universal access principles. Accessibility provisions shall include lifts, tactile guidance, accessible wayfinding signage, and level boarding where feasible. Wheelchair users and persons with reduced mobility shall be able to access station platforms and board trains independently, without the need for advance reservation or staff accompaniment. Baku Metro shall ensure that accessibility features are maintained in operational condition and that station personnel are trained to provide assistance when requested.

4.10.5 Cumulative Traffic Impact on Adjacent Streets

The introduction of passenger services at each station is expected to generate additional traffic on adjacent streets, including pedestrian movements, private vehicle pick-up and drop-off, taxi queuing, and bus movements. Baku Metro shall assess the cumulative traffic impact of station operations on the surrounding road network following the commencement of revenue service and coordinate with BCEA to implement corrective measures where traffic capacity or safety concerns are identified. Measures may include signal timing adjustments, pedestrian crossing improvements, turning restrictions, or reallocation of kerbside space to manage competing demands.

4.11 Indicative Costs and Resourcing

The cost of implementing the traffic management measures set out in this Plan is incorporated within the Contractor's civil works contract and Bill of Quantities (BOQ), consistent with the approach adopted in the Project's Environmental and Social Action Plan. No separate standalone budget line is established for traffic management; instead, the measures are resourced as an integral part of construction delivery and the Project's wider E&S management arrangements. Table 4-6 summarises the principal cost categories, the basis on which each is resourced, and the party responsible.

Table 4-6: Indicative Cost Categories for Traffic Management Measures

Cost Category	Indicative Cost Basis	CAPEX / OPEX	Responsible Party	Where Budgeted
Traffic signage, road markings, barriers, and lighting	One-off per-site supply and installation; quantities scale	CAPEX	Contractor	Civil works BOQ

Cost Category	Indicative Cost Basis	CAPEX / OPEX	Responsible Party	Where Budgeted
	with number of diversions and site accesses			
Flagmen / traffic marshals	Recurring labour cost over the construction period; driven by number of active sites and shift coverage	OPEX	Contractor	Civil works BOQ / contractor staffing
Community liaison and public notification	Recurring cost of CLO activities, meetings, leaflets, and signage; coordinated with the SEP	OPEX	Contractor / PIU	E&S management budget / SEP
Signal timing modifications	One-off coordination and implementation where required, agreed with BCEA	CAPEX	Contractor / BCEA	Civil works BOQ / BCEA
Alternative-route and access improvements	Contingent cost, incurred only where temporary route upgrades or repairs are required	CAPEX	Contractor	Civil works BOQ (contingency)
Road condition surveys and monitoring	Recurring cost of pre-construction and periodic route surveys and audits	OPEX	Contractor	Civil works BOQ / E&S budget
Driver training and competency	Recurring cost of induction and job-specific training for drivers, operators, and flagmen	OPEX	Contractor	Civil works BOQ / HSE budget

The indicative unit rates and quantities underlying these categories shall be confirmed by the Contractor in the site-specific Construction TMP, based on the finalised construction methodology, BOQ, and prevailing local rates.

5. MONITORING AND REPORTING

5.1 Overview of Monitoring Requirements

The monitoring of the traffic activities during construction will be conducted by the HS Lead in coordination with the Traffic Safety Supervisor and Social Lead.

The monitoring measures that are to be implemented during the construction and operational phases to assess compliance with Project standards are described in this section.

In the event that monitoring identified non-conformance with Project standards, these will be investigated, and appropriate corrective actions identified.

Traffic incident investigation shall be initiated in line with the Incident Reporting and Investigation Procedure specified in the ESMP and a report will be compiled. For some incidents, there may be investigations undertaken by external authorities, and the PIU / Baku Metro will cooperate with these authorities as required.

On completion of these processes 'Lessons Learned' from the traffic incident may be circulated internally where appropriate.

5.2 Key Performance Indicators (KPIs)

The performance of the Traffic Management Plan will be monitored through a set of Key Performance Indicators (KPIs). These KPIs are based on existing monitoring, inspection, audit, incident reporting and community grievance records described in this Plan. KPIs include both lagging indicators (e.g., accident and incident rates) and leading indicators (e.g., compliance with driver hours, speed limits, and approved haul routes) to enable proactive identification and correction of traffic management deficiencies before incidents occur. KPI results will be reviewed regularly by the HS Lead and relevant discipline leads and will be used to support corrective actions and periodic review of the Traffic Management Plan.

Table 5-1 summarises the key performance indicators (KPIs) and associated key monitoring actions that can be used to assess the progress and effectiveness of proposed mitigation.

Traffic-related community complaints and grievance response times (KPIs 8 and 9) shall be reported monthly to the PIU Social Specialist for integration into SEP monitoring and GRM performance reporting, in accordance with the Stakeholder Engagement Plan.

Table 5-1: Key Performance Indicators and Monitoring Measures

No	Monitoring Area	KPI Description	Measurement / Record Source	Acceptance Criteria	Monitoring Frequency	Responsible
1	Incident Management	Number of project-related traffic accidents	Incident and accident reports	Zero fatalities	Monthly	HS Lead
2	Incident Management	Number of reported traffic near-miss events	Near-miss records	All near-misses reported	Monthly	Traffic Safety Supervisor

No	Monitoring Area	KPI Description	Measurement / Record Source	Acceptance Criteria	Monitoring Frequency	Responsible
3	Vehicle Compliance	Completion rate of daily pre-use vehicle checklists	Vehicle inspection checklists	100% completion	Daily / Monthly summary	Line Managers
4	Driver Compliance	Percentage of drivers with valid license and medical clearance	Driver records and audits	100% compliance	Monthly	HSE Team
5	Training	Percentage of drivers/operators receiving traffic safety training	Training attendance records	100% trained	Monthly	HSE Manager
6	Audit & Assurance	Completion of planned vehicle and driver audits	Audit and inspection records	100% completed	Monthly	Traffic Safety Supervisor
7	Road Condition	Number of project-related road damage cases	Site inspections / grievance records	Damage recorded and restored	Monthly	Traffic Safety Supervisor
8	Community Impact	Number of traffic-related community complaints	Grievance Mechanism records	All complaints registered	Monthly	Social Lead
9	Grievance Handling	Average response time to traffic-related grievances	GM tracking records	≤ 7 days	Monthly	CLO
10	Driver Compliance	Number of driver hours / rest period violations	Driver logbooks and tachograph records	Zero violations	Monthly	Traffic Safety Supervisor
11	Driver Compliance	Number of speeding incidents by project vehicles	Speed monitoring / GPS tracking records	Zero speeding incidents	Monthly	Traffic Safety Supervisor
12	Driver Compliance	Number of mobile phone usage violations while driving	Site observations and incident reports	Zero violations	Monthly	Traffic Safety Supervisor

No	Monitoring Area	KPI Description	Measurement / Record Source	Acceptance Criteria	Monitoring Frequency	Responsible
13	Route Compliance	Number of deviations from approved haul routes	GPS tracking records and site observations	Zero unauthorised deviations	Monthly	Traffic Safety Supervisor

5.3 Audit & Assurance Process and Record-Keeping

To ensure that the Traffic Management Plan (TMP) remains fully effective and that its objectives are consistently implemented by the workforce and subcontractors, a continuous review and audit mechanism shall be established. During the construction phase, the Contractor shall be responsible for implementing and maintaining this process. Upon commencement of the operation phase, responsibility for the review, maintenance, and updating of the TMP shall be assumed by Baku Metro.

Auditing records of vehicle maintenance, servicing, driver training, driver medicals, journey management forms, check calls, daily vehicle checklists, night driving permits, safe pass cards, and driver permit cards will be carried out on a weekly and monthly basis. The Traffic Safety Supervisor is responsible for ensuring these audits take place efficiently and, in the periods, specified. The other responsibilities of this person are ensuring safe loading and unloading. He/she ensures that all kinds of loads are securely loaded and transported until the final destination. These audits of records must be kept and used as a part of the OHS assurance process.

In addition to records audits, monthly road safety audits shall be conducted on all active haulage routes and construction site access points. These field audits shall assess physical conditions, signage, speed compliance, and pedestrian/vehicle separation. Findings shall be recorded and corrective actions tracked to closure.

5.4 Incident and Accident Reporting

Road accidents must be reported immediately (and in any case no later than 24 hours) and investigated according to applicable Road Safety Policy definitions and requirements. The purpose is mainly to ensure that lessons are learnt and shared to avoid recurrence.

In case of any accidents made with a company vehicle or personal vehicle, by any Subcontractor staff, the driver shall follow the incident/accident reporting procedures. It is obligatory for all authorized drivers recruited within the Project, to drive safely, follow traffic rules, show courtesy to all road users and familiarize themselves with local road conditions to adjust their driving habits.

All incidents irrespective of the cause/fault will be immediately reported to the Traffic Safety Supervisor and H&S Supervisor who will fill out the required form and investigate the incident and should ensure that applied reporting requirement procedures and forms are available and kept up-to-date. Project Manager and Line Managers should ensure that all employees are aware of this requirement and comply with it.

5.5 Review & Revision of TMP

Contractor will regularly update the TMP according to the requirements of the changing needs.

TMP will be reviewed at least every 6 months to meet the new requirements. The following information obtained by progress reports, audits & inspections and compliance monitoring activities will provide input for the review process:

- Results of internal/external audits and inspections
- Evaluation of compliance
- Communication / Complaints
- Key performance indicators
- Changing circumstances, legal requirements, organization, environmental aspects and impacts
- Recommendations for improvement
- The revised plan will be approved by Project Management.

5.6 Public-Facing Traffic Communication

The Contractor shall ensure that communities affected by construction-related traffic changes are informed in a timely and accessible manner, in coordination with the Stakeholder Engagement Plan (SEP). The following minimum requirements shall apply:

- Advance notification of planned traffic diversions, haul route activations, and sidewalk closures shall be provided to affected communities at least four weeks prior to commencement of works, through community meetings, leaflets, and rayon coordination channels.
- Weekly schedule updates on active and upcoming traffic management activities shall be communicated to affected communities through station-area notice boards, digital platforms, and the 964 Contact Centre.
- Visible information signs shall be installed at all affected junctions and diversion points, displaying the nature and expected duration of the traffic arrangement and the 964 Contact Centre hotline number for enquiries and complaints.
- In the event of unplanned traffic changes or traffic-related incidents affecting public access, the Contractor shall notify affected communities within 24 hours through CLOs and available SEP channels.

6. TRAINING

Traffic training requirements shall be identified at the outset (e.g. using a Health Safety and Environment (HSE) Training Matrix), before construction works commence, and the matrix and a training plan developed to ensure the preparedness of the Contractor's Traffic Safety Supervisor, Contractor's Flagmen, and Contractor's drivers, operators and employees. Training shall be delivered by a combination of external training organisations competent in the training topic and internally by the Baku Metro's PIU Health and Safety Specialist and Contractor's Health and Safety Manager during the construction and Baku Metro's Health and Safety Specialist during operation.

Training will be used to communicate business continuity and planning to all personnel. An annual training programme will be developed each year. The programme will be realistic to test traffic plans and procedures.

Individual employees will receive traffic management training at the following stages in their employment:

- Induction; and
- Job / activity-specific orientation, e.g. for construction flagmen, drivers and operators.

All training will be recorded, and records retained for at least 5 years.

6.1 Induction Training

All employees who will be working in a Project location shall be provided with induction training before;

- Beginning work.
- Making a movement to the Project site.

This induction training (like all other safety training) is recorded and includes:

- Introduction to Health and Safety Law and related Regulations,
- Defensive Driving Training,
- Safe Driving Techniques,
- Fatigue Management, and
- Safe Working Practices.

Induction training will be refreshed every year. Also, toolbox training will be given daily by HSE supervisors.

Information about the other subjects such as traffic management-related responsibilities, traffic signs and controls, off-road driving and anti-rollover training (as necessary), night driving, general project components related traffic rules and access roads along the Project area will be given to the relevant parties both with the "Traffic Management Trainings" and when needed according to the requirements of the work.

6.2 Job / Activity – Specific Training

Flagmen, operators and drivers engaged in traffic management activities shall be physically fit, medically cleared, and temperamentally suitable for their assigned duties. The Project shall establish clear recruitment, competency, and assignment criteria to ensure fitness for duty. Compliance with these eligibility requirements shall be formally verified and documented prior to deployment.

Visitors / temporary drivers or operators are not allowed to enter the project site with mobile equipment – vehicles unless essential. In case of permission, the individuals must be informed about the traffic management rules, their movements in the field will be kept under close surveillance and a competent worker in the field must guide them as long as they are on site.

For proof of competence and acceptance by Project Management, the following must be provided:

Vocational Qualification: The original or certified copy of the relevant education diploma or graduation certificate. The original or a copy of the relevant professional qualification or vocational training certificate.

Technical Training: It is the original or certified copy of the certificate containing the content, duration, date, name of the participant, information of the training provider organization, or a letter signed by the authorized person on the letterhead of the training provider institution, which contains the same information and confirms the participation in the training.

- Defensive Drive Training,
- Anti-Skid Tutorial,
- Off-Road Driving Techniques Training, and
- Traffic Safety & Safe Driving Training.

Which employees will receive the training listed above will be defined in the Training Matrix.

The Table 6-1 below summarises the driving licence classes applicable in the Republic of Azerbaijan, together with the relevant requirements and equivalency provisions. These classifications are established in accordance with the national traffic legislation and define the categories of vehicles that licence holders are authorised to operate.

All drivers engaged under the Project shall hold a valid and appropriate driving licence corresponding to the type and class of vehicle they operate. No personnel shall be permitted to operate any vehicle unless they possess the legally required licence category and meet the applicable regulatory requirements. Compliance with these requirements shall be verified and documented prior to deployment.

Table 6-1: Driving License Classes, Requirements and Equivalency⁴

License Class	Vehicle Type / Authorization	Experience Requirement	Authorized Other Classes	Condition → Validity Period
A1	Motorcycles / tricycles ≤125 cc, ≤11 kW	—	—	• Under 60 years old → 10 Years • Between 60-69 years old → Until reaching 70 years old • 70 years and above → 2 Years • Drivers with medical restrictions → As stated in medical
A	All types of motorcycles	—	A1	
B1	Quadricycles	—	—	
B	Passenger cars ≤3,500 kg, ≤8 seats	—	B1	

⁴ <https://www.dyp.gov.az/?/en/content/132/>

License Class	Vehicle Type / Authorization	Experience Requirement	Authorized Other Classes	Condition → Validity Period
C1	Goods vehicles 3,500–7,500 kg	—	B, B1	certificate (max 2 years)
C	Goods vehicles >3,500 kg	Category C required	C1, B, B1	
D1	Passenger vehicles (9–16 seats)	—	C1, B, B1	
D	Passenger vehicles (>8 seats)	Category D required	D1, C, C1, B, B1	
BE	Category B vehicles with trailer >750 kg	Category B required	B	
C1E	Category C1 vehicles with trailer >750 kg	Category C1 required	C1, B, B1	
CE	Category C vehicles with trailer >750 kg	Category C required	C, C1, B, B1	
D1E	Category D1 vehicles with trailer >750 kg	Category D1 required	D1, C1, B, B1	
DE	Category D vehicles with trailer >750 kg	Category D required	D, D1, C, C1, B, B1	
Tram	Trams	—	—	
Trolleybus	Trolleybuses	—	—	

Appendix A Traffic Temporary Projects Stage 1

LEGEND

Temporary Traffic Project – Stage 1

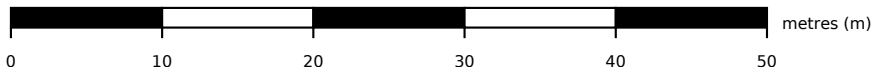
LINES & AREAS

-  Temporary construction traffic route
-  Existing main carriageway (road edge)
-  Traffic flow direction
-  Existing buildings & cadastral lines
-  Temporary barrier / road closure point

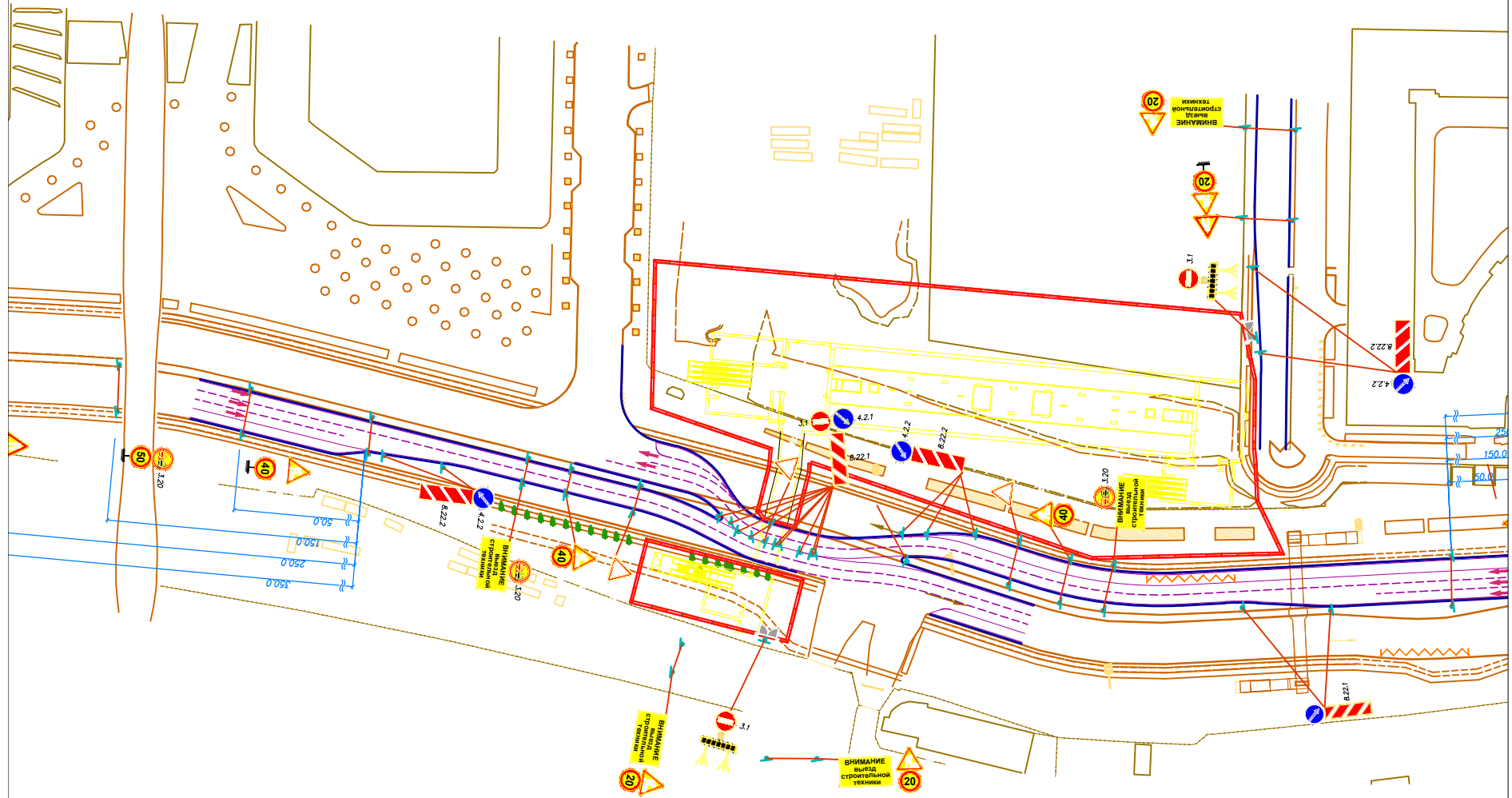
SIGNS & DEVICES

-  No entry (3.1)
-  Speed limit 40 km/h (3.24)
-  Warning sign
-  Warning board (site vehicle exit)
-  Traffic controller / flagman
-  Temporary barrier / fencing
-  Traffic light (temporary)

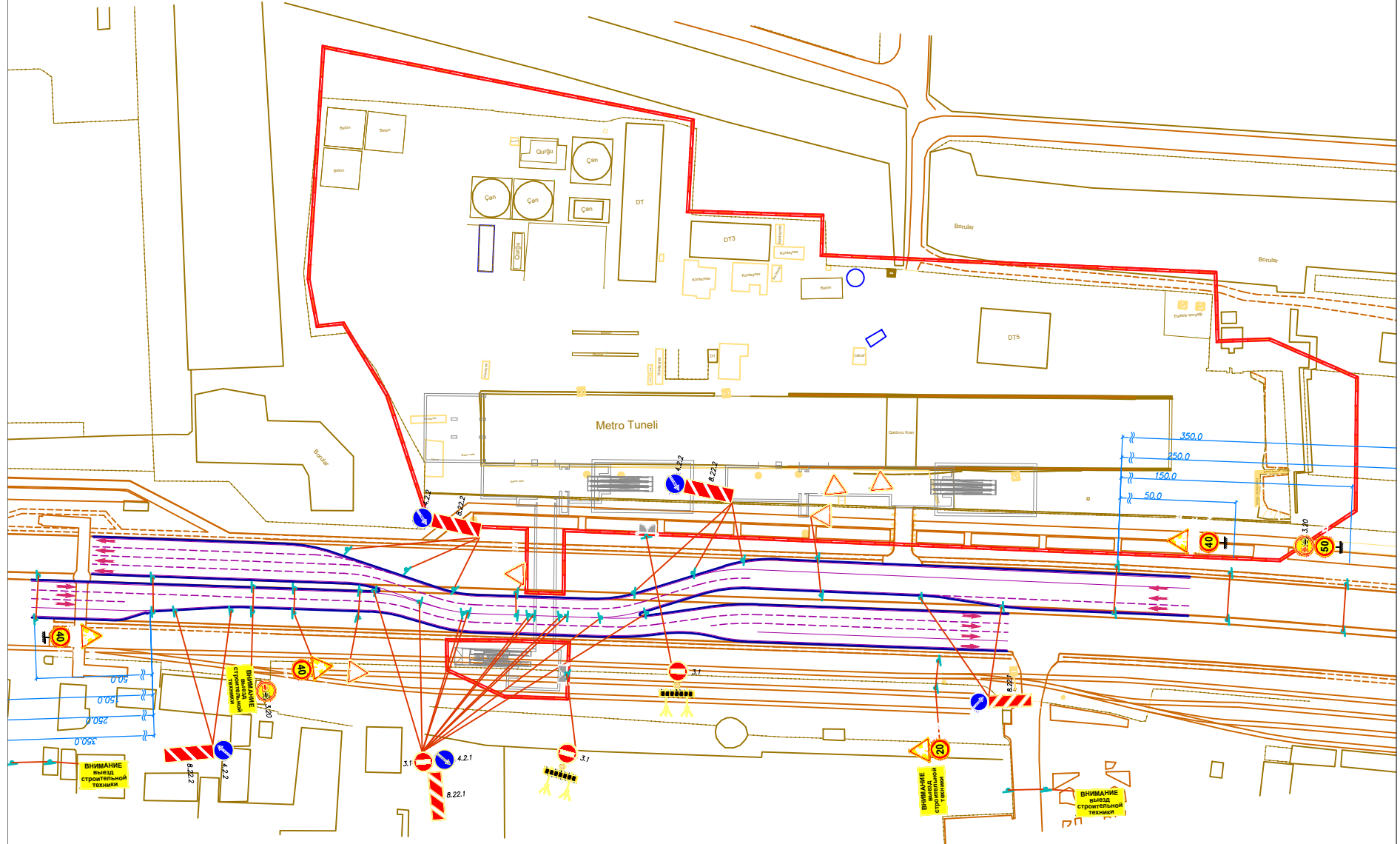
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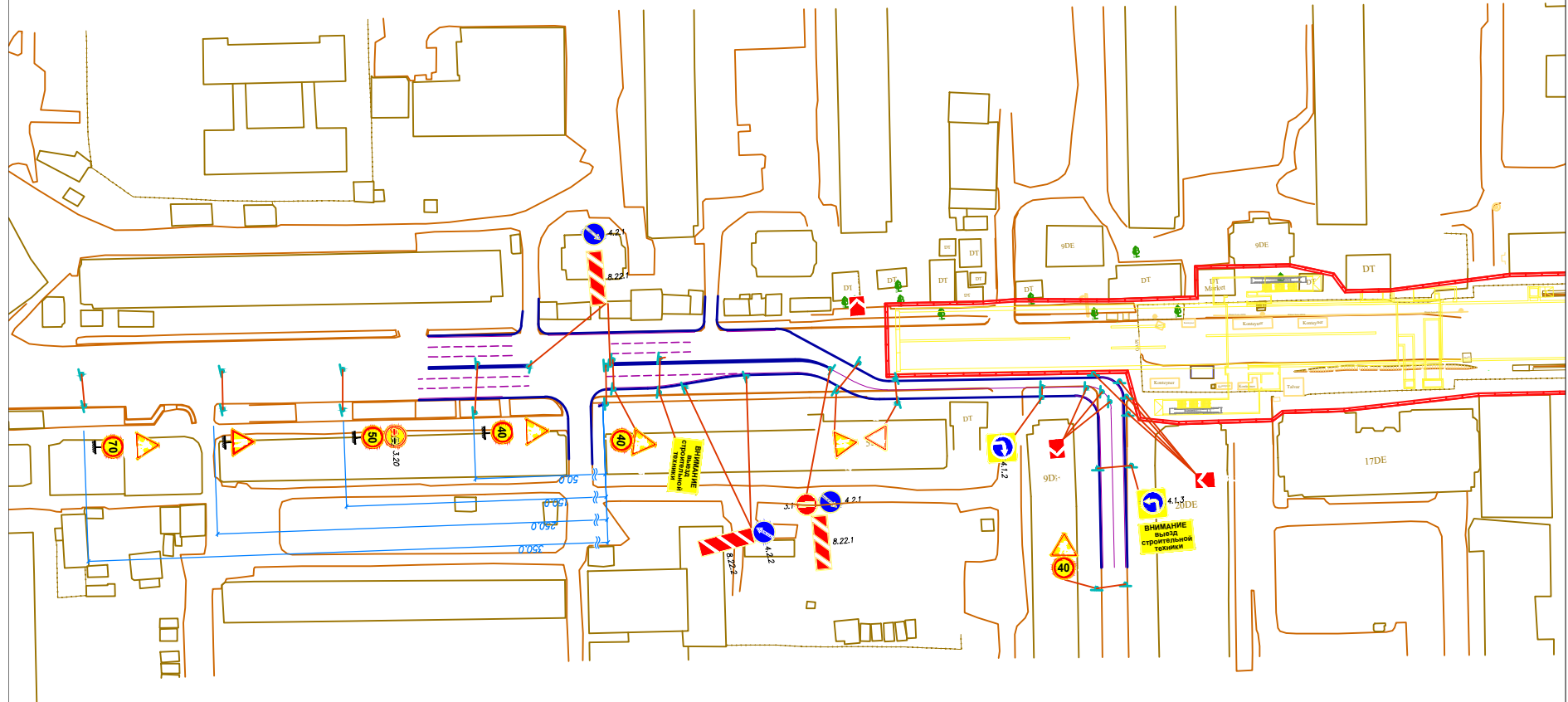
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Y-15 İSTASYONU GEÇİCİ TRAFİK PROJESİ 1.AŞAMA Y-15 STATION TEMPORARY TRAFFIC PROJECT – STAGE 1







Appendix B Traffic Temporary Projects Stage 2

LEGEND

Temporary Traffic Project – Stage 2

LINES & AREAS

-  Temporary construction traffic route
-  Existing main carriageway (road edge)
-  Traffic flow direction
-  Existing buildings & cadastral lines
-  Temporary barrier / road closure point

SIGNS & DEVICES

-  No entry (3.1)
-  Speed limit 40 km/h (3.24)
-  Warning sign
-  Warning board (site vehicle exit)
-  Traffic controller / flagman
-  Temporary barrier / fencing
-  Traffic light (temporary)

SCALE 1:500



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