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# MUNICIPAL INFRASTRUCTURE AND IDP HOUSING REHABILITATION PROJECT

QUALITY MANAGEMENT SYSTEM – QA/QC PLAN (Draft)

CONTRACT: AID-EDH-I-00-08-00027-00, TASK ORDER: AID-114-TO-11-00002

**30 JULY 2012**

This document was produced for review by the United States Agency for International Development. It was prepared by Tetra Tech for the Municipal Infrastructure and IDP Housing Rehabilitation Project, Task Order number AID-114-TO-11-00002 under the USAID Architectural and Engineering (A&E IQC).



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30 July 2012

Prepared By:

Vasil Apkhazava

## DISCLAIMER

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30 July 2012

Mr. Bradley Carr  
COR  
Office of Economic Growth  
US Agency for International Development  
11 George Balanchine Street  
Tbilisi, 0131  
Georgia

Re: Quality Management System – QA/QC Plan (Draft) for the Municipal Infrastructure and IDP Housing Rehabilitation Project

Dear Mr. Carr:

This report is being submitted to you in accordance with the requirements of task order no. AID-114-TO-11-00002 of contract AID-EDH-I-00-08-00027-00. It provides Tetra Tech's Quality Management System – QA/QC Plan (Draft) for the Municipal Infrastructure and IDP Housing Rehabilitation Project.

Very truly yours,



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## Acronyms

CM	Construction Management
CO	USAID Contracts Office
COP	Chief of Party
DB	Design-Build
DCOP	Deputy Chief of Party
DCS	Document Control System
EA	Environmental Assessment
EIA	Environmental Impact Assessment
ESS	Environmental Scoping Statement
GMIP	Georgia Municipal Infrastructure And IDP Housing Rehabilitation Project (the project)
IDP	Internally Displaced Persons
Bldg_10	Rehabilitation works for IDP Housing. (10 Buildings)
GoG	Government of Georgia
HO	Home Office
IL	Implementing Letters
LTTA	Long Term Technical Assistance
MDF	Municipal Development Fund
MEP	Mechanical, Electrical and Plumbing
MRA	Ministry of Refugee Affairs
MRDI	Ministry of Regional Development and Infrastructure
NCR	Non-Conformance Report
NTP	Notification to Proceed
PE	Licensed Professional Engineer (USA designation)
PEA	Programmatic Environmental Assessment
PM	Project Manager
PMC	Project Management Committee
PMP	Performance Monitoring Plan
QA	Quality Assurance
QC	Quality Control
RC	Reinforced Concrete
RFI	Request for Information
SOW	Scope of Work
STTA	Short Term Technical Assistance
TBD	To Be Determined
TOCOTR	USAID Task Order Cognizant Technical Officer
Tt	Tetra Tech
USAID	United States Agency For International Development
USG	U.S. Government

## General

### Description of the Project

Under the United States Agency for International Development (USAID)/ Caucasus – Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP) Contract No. AID-EDH-I-00-08-00027-00 Order No: AID-114-TO-I 1-00002, Tetra Tech (Tt) is responsible for providing support to monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected municipal and Internally Displaced Persons (IDP) infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations.

Activities performed under this task order will complement and reinforce the activities, project management, and engineering expertise of USAID/Georgia and its implementing partners. From 2010 to 2014, USAID/Georgia will undertake works in the infrastructure sector in collaboration with the GoG's Municipal Development Fund (MDF) to upgrade municipal infrastructure in targeted municipalities, to install and extend irrigation channels, to upgrade IDP housing and implement the various municipal infrastructure sub-projects. Sub-projects will be implemented through an agreement with the MDF, and with relevant agency. Tt will be expected to form a close working relationship with the MDF in the implementation of all sub-projects, accompanying the MDF in all phases of the sub-projects and providing monitoring and oversight services to the MDF and USAID.

The purpose of this award is to monitor current processes and practices, identify and mitigate areas of risk, and carry out oversight and quality control efforts to ensure that selected infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations. Efforts will not duplicate work that MDF does or might perform under its agreement with USAID. The monitoring and oversight role will encompass all areas of project intervention, from procurement planning to final acceptance. It will help to ensure that infrastructure deliverables are effective, efficient, and sustainable and that implementation is carried out within allowable budgets, time restraints, and within accepted quality standards.

### Purpose, Scope, and Application

The purpose of these Guidelines and this Plan is to provide instruction and guidance to GMIP MDF and Tetra Tech staff in the management of GMIP Sub-project design, contracting and construction management. The Guidelines and Plan are intended to be used by both MDF and Tetra Tech as procedures to help implement GMIP Subproject construction activities in an organized fashion so as to increase the quality and cost effectiveness of finished construction. The provisions of this guideline and plan do not replace or modify any of the clauses or provisions of an MDF USAID implementation Letter or the Tetra Tech USAID Contract. In any cases of conflict the Implementation Letters and the Contract apply. In cases where conflicts might affect construction progress or quality negatively, direction from USAID should be obtained to resolve any issues.

The scope of the GMIP Guidelines and QA/QC Plan is to:

- Ensure that design work is done in accordance with industry acceptable standards and USAID and Georgian government rules and regulations
- Ensure that all GMIP construction work is accurately planned and organized
- Ensure that organized procedures and instructions are issued for the performance of all GMIP construction works
- Ensure, qualified inspection results in expected and required quality
- Demonstrate through properly documented records that the work has been carried out and inspected to that required quality.

These CM Guidelines and QA/QC Plan apply to all applicable GMIP subproject activity in the procurement and construction phases of the work.

### **Control of the QA / QC Plan**

MDF, Tt and each Construction Contractor are all encouraged to designate a staff manager to oversee all CM, QC, and QA as mentioned in this document and to address issues and matters not covered by contract specifications, regulations, and other directives. This document does assume that QA/QC overall oversight will rest with the Tt QA/QC Manager and assigned Contract Managers - the technical monitoring and processes oversight staff. The Guidelines and Plan are divided into four distinct sections but the overall plan should be managed as an overall QA/QC system by the Tt QA/QC Manager.

Revisions can be made to the Plan and such revisions should be approved by both the MDF GMIP Program Manager and the Tetra Tech Chief of Party. Any revisions or changes made to the CM and QA/QC Plan for any reason should result in all MDF and Tt staff members being notified.

**Also, all GMIP MDF and Tt staff members are responsible for the project quality assurance and GMIP MDF Staff is responsible for assuring the Contractors Quality Control of works** As such an emphasis on quality is needed and it needs to start with management and extend to the unskilled laborer on every job. It is the duty of all MDF and Tt staff members to provide this motivation to all GMIP staff.

## **Project Organization and Management**

### **Resource Requirement**

The implementation of GMIP design and construction activities and operations requires project resources. These need to be provided by MDF and Tetra Tech in accordance with a plan. Without these resources, the plan cannot be implemented. If there is a need for resources to implement the processes and procedures laid out in this plan, MDF and Tt need to clearly identify it and plan for its specification, procurement and deployment. This includes keeping USAID informed and ensuring that funding is arranged and approved by USAID for follow on procurement. The following resources are required to carry out this work:

- Staffing
- Staffing Support Systems
- Office Space
- Basic Office Furniture
- Vehicles and/or Vehicle Access
- IT Equipment
- Expendable Office Supplies
- Inspection and Safety Equipment

An important note – the On-Site Inspector must have a laptop computer and small but effective printer. Access to a Contractor provided printer is also acceptable but many forms will need to be printed out for signature or for distribution on a daily and weekly basis.

### **USAID**

The funding for GMIP is provided by USAID. USAID/Georgia is managing and implementing the program with the assistance of two main contractors, MDF and Tetra Tech. The contract with Tetra Tech is through a Task Order (TO). The grants with MDF are through two Implementation Letters (ILs). USAID is responsible for ensuring all contracting processes undertaken under the project are in compliance with specific provisions of the USG Foreign Assistance Act and USAID policies governing USAID-financed project procurement.

## **Contract Officer's Technical Representative**

The USAID Task Order Contracting Officer's Technical Representative (TOCOTR), is responsible for managing the program for USAID. He / she is also supported by other USAID staff. At the highest level, the USAID TOCOTR will coordinate all work planning and construction budgeting with the GoG and ensure that USAID rules and regulations are enforced. The USAID TOCOTR does this through various forms of communications, meetings, and the final approval of activity designs, review of the general contractor's environmental reports and assessments, site visits, etc.

## **Municipal Development Fund**

Under the USAID Improved Economic infrastructure program, **GoG's Municipal Development Fund (MDF)** has been assigned the responsibility to perform the contracting to implement the USAID/Georgia Economic Infrastructure Program for the period of the contract from 17 February 2011 to 31 December 2013. USAID successfully carried out a certification process relating to MDF's financial, technical and procurement management capacity to perform its responsibilities under this program.

MDF will carry out the supervision of all aspects of the implementation of contracts procured under a specific loan/grant, (i.e. technical supervision, contract management and financial and schedule control, monthly and demand reporting, payments to contractors and/or suppliers, environmental impact monitoring, close-outs, etc.). MDF will carry out its supervision either directly through MDF staff or with the assistance of consultants hired by MDF to that effect. Together with overall monitoring and reporting of the project, MDF will ensure the Sub-Projects daily basis On-Site Control, reporting and compliance with Contract Requirements.

## **Program Manager**

The MDF Program Manager is responsible to manage the program in behalf of MDF and USAID requirements. This includes all new development or rehabilitation work, including designing and planning infrastructure activities; performing required construction work; implementing environmental mitigation practices; tendering, awarding and managing rehabilitation-related activities that have been outsourced to a contractor; applying Georgian and applicable USG Standards and regulations to all appropriate processes and practices; and closing-out all rehabilitation activities.

The MDF Program Manager will manage the conduct of all procurement actions financed under the project in accordance with the World Bank Procurement procedures and the additional USAID procurement requirements as provided and specified in the MDF Operations Manual and the ILs. The GMIP MDF Program Manager along with the Tt COP are chiefly responsible for the adoption and promulgation of these Guidelines and Plan including any and all changes.

## **Project Manager**

The administration of each individual GMIP Subprojects and Contract is a direct responsibility of assigned MDF Project Managers. The PM cooperates with Contractor and manages the MDF On-Site Construction Inspectors to this end. As defined in the Construction Contract, the MDF PM is responsible for implementation general specific contract and making project decisions in consultation with all other GMIP team staff including Tt staff. The PM is primarily responsible for contract budget, schedule, and physical progress control and any Subproject / Construction Contract changes that might be required from time to time. He/she is also responsible to ensure that the provisions of this CM and QA/QC Plan and used throughout the execution of Subproject / Contract including documentation management. The PM also chairs the monthly Subproject construction contract meeting and issues the Monthly Subproject Report.

## **Other Tbilisi based MDF Staff**

MDF should consider designating specific MDF staff as the GMIP QA/QC Manager, Safety Officer, Environmental Compliance Manager and required technical personnel. These staff members should work closely with their Tt counterparts to implement and manage this Guideline and Plan and MDF / Construction Contractor Safety and Environmental Compliance Plans

## **On-Site Construction Inspector**

The MDF On-Site Inspector is responsible for monitoring / controlling the Construction Contractor's daily full time construction activity of each Subproject on site. He /she shall be full time on site. Appendix 3 (3a is in English and 3b is in Georgian) includes the Job Description for MDF On-Site Construction Inspector. This includes ensuring that construction is being built in accordance with the terms and conditions of the Contract Documents – the contract, the drawings and specifications, schedules and the Contractor's QA/QC Plan, Safety Plan, and Environmental Compliance Plan. He / she shall also use these guidelines and this QA/QC Plan to carry out his/her day to day duties.

The On-Site Inspector can be MDF full time staff, MDF hired staff specifically for GMIP, qualified staff from another GoG Agency such as the Ministry of Agriculture, the Georgia Water Utility Company (GWUC), the MRA, or from Municipalities etc. For the purposes of these CM and the QA/QC Plan, all of these staff members are referred to as MDF On-Site Inspectors. This also holds true if in the event site inspection services are provided through consultant A/E outsourcing firms. These personnel are still referred to as MDF On-Site Inspectors and they should still provide inspection, construction monitoring and quality assurance services in accord with these CM and the Quality Control Plan.

Personnel with inspection duties must conduct themselves with dignity, be thorough in their work and take nothing for granted. All dealings with Subproject representatives or employees of the Construction Contractor must be courteous but firm. The quality/quantity of work in plans and specifications must be insisted upon. Decisions must be based upon knowledge of documented / reported facts and be consistent and reasonable. Unacceptable work must be brought to the attention of the Contractor and the MDF PM. All defects must be corrected after discovery (defective work must be noted in the Daily Journal and in daily and Non-Conformance Reports).

Inspection personnel must be honest and must not grant or accept gratuities/favors that might place them under any obligation to the Contractor or create the appearance of a conflict of interest.

## **Tetra Tech**

Tetra Tech under its Task Order with USAID Georgia is providing support to monitor current MDF processes and practices, identify and mitigate areas of risk, and carry out oversight and quality assurance efforts to ensure that selected municipal and IDP infrastructure projects are implemented effectively and in accordance with U.S. and Georgian standards and regulations.

Tt is responsible to form a close working relationship with MDF accompanying MDF in all phases of the project and provide monitoring and oversight services to MDF and USAID. Efforts will not duplicate the work MDF does or might perform. The special reporting plans shall be developed and approved for each sub-project and be attached to this CM and QA/QC Plan as a reference document.

The monitoring and oversight role will include all areas of project intervention from procurement planning to final acceptance. It will also ensure that infrastructure outputs are effective, efficient, and sustainable and that implementation is carried out within allocated budgets and time restraints. Further, in this role Tt will oversee adherence to applicable Georgian and USG standards and regulations in the areas of contract award, financial payments, design planning, construction practices and compliance with applicable codes or regulations, including environmental protection and mitigation measures.

Tt provides professional assistance across a range of areas, such as professional engineering support, planning, procurement, and other technical assistance. Tt will provide design oversight/review, as well as QA/QC oversight of the selected projects. Tetra Tech assesses MDF's processes and practices so as to perform and conduct necessary on-the-job and more formal training for MDF staff. Also the oversight role includes all areas of project implementation, from procurement planning to final acceptance. It also helps ensure that infrastructure outputs are effective, efficient and sustainable and that implementation is carried out within allowable budgets and time constraints. Tt will carry out detailed review of housing and infrastructure designs, plans, and cost estimates for assigned USAID programs and activities including any proposed changes to designs during the course of project implementation.

## **Chief of Party**

The Tetra Tech COP manages the GMIP from the project in Tbilisi. The COP is the single direct point of contact for the Mission and the project. He / she will also be the central interface among all team members and stakeholders providing all day to day and strategic program management, construction management and administrative oversight functions. He is assisted in these duties by the DCOP. The COP also delegates other construction management roles, responsibilities and authorities to other Tt staff as he sees fit. The COP's chief counterparts are the MDF Program Manager and the USAID TOCOTR. The Tt COP along with the GMIP MDF Program Manager are chiefly responsible for the adoption and promulgation of this CM and QA/QC Plan including any and all changes.

## **Contract Manager**

The COP shall designate a Tt Contract Manager for each Subproject /Construction Contract. The Tt Contract Manager shall be responsible for monitoring and reporting upon all MDF Subproject implementation activities including design, procurement, reporting, construction and handover. He / she shall also be responsible to assist the MDF Subproject Project Manager and the Construction Contractor in the prosecution of their duties in the implementation of the Subproject.

## **QA/QC Manager**

The Tt QA/QC Manager is responsible for the overall execution, management and implementation of this CM and QA/QC Plan within MDF and Tt so as to ensure:

- All concerned GMIP MDF and Tt staff are well versed in all provisions
- The recording, updating and distribution of the Guideline and Plan documents and information (Procedures, Reports and other information as required)
- The overall proper surveillance of Construction Contractor's work quality in accordance with approved procedures and plan
- The collection of all Subproject documentation and contracts including certificates related to materials purchased and used by Contractors and completed testing and other construction acceptance documents in accordance with approved procedures and plan
- The collection of execution of final Subproject documentation for issuance to USAID in accordance with approved procedures and plan

The QA/QC Manager is also responsible for the overall review, execution and monitoring of the individual Subproject Construction Contractor QA/QC Plans. In the event there are conflicts between this CM and QA/QC Plan and that of the individual Subproject, the QA/QC Manager shall be responsible to resolve it or report about to COP. In no event however shall the provisions of this document be overridden by the Contractor's QA/QC Plan.

## **E&HS Manager**

The Tt Environmental & Health and Safety Manager is responsible for monitoring of all Subproject Environmental Compliance Plan and Health and Safety Plan execution and implementation by the construction Contractor. While not directly responsible for any aspect of the GMIP CM and QA/QC Plan, the E&HS Manager's job is closely aligned with that of the QA/QC Manager and they should when applicable and advantageous work together to help MDF and Construction Contractors execute their QA/QC, Environmental Compliance and Health & Safety Plans.

## **Design / Construction Contractors**

MDF Subproject Design / Construction Contractors are to be selected based on competitive bidding procedures. Along with their cost and technical proposals during the bidding process, contractors will be required to present their staffing proposal and organizational structure to meet the needs of the individual Subprojects including a customized Subproject QA/QC Plans, Safety Plan and an Environmental Compliance Plan. Companies will be required to have appropriate construction and design capabilities to suit the requirements of their contracts. MDF procurements may include contracts for Design, Construction/Renovation works, Construction Management, supply and Provision of Materials and Equipment, and Testing Services.

### **Contractor's Project Manager (CPM)**

### **Contractor's Site Manager and Supervisor (CSM)**

The Contractor's CSM is responsible to manage all construction activities on site and is the Contractor's site representative. As such he / she shall follow the direction of the CMP and MDF PM and On-Site Inspector in ensuring that the provisions of this Plan are implemented. He / she shall also be responsible for implementing and managing the Contractor's Subproject QA / QC Plan. Specifically, he /she shall:

- Be responsible for the performance of the works according to the contract documents, the drawings, specifications, and directions received
- Manage the personnel and equipment to carry out the work and coordinate and verify the activities necessary to support the work
- Meets daily with and reports to MDF On-Site Inspector
- Performs the works in accordance with approved work plan, schedules and procedures
- Ensures the provisions of the Contractor's Safety Plan are followed on site
- Ensures the provision of the Tests Performance in accordance with Contractor's QC plan
- Ensures the provisions of the Contractor's Environmental Compliance Plan are adhered to followed
- Check that all operations and equipment is approved and in compliance with the law / regulations

### **Contractor's QA/QC Manager**

The Contractor's QA/QC Manager is responsible for developing of Contractor's Initial, Design and Construction QC Plan, Elaboration of Reporting and Check list forms in cooperation with Contractor's Design and Construction staff, Timely as mentioned in Sub-Project Contract submission of QC Plan for approval, Submittal control and deliverables provision.

During the Design / Construction works, The Contractor's QA/QC Manager shall be responsible for Contractor's QC staff operation on sites.

### **Contractor's On-Site QC Officer**

The Contractor's On-Site QC Officer is responsible for quality of works of all construction activities on site and is the Contractor's site QC System representative. As such he / she shall follow the direction of the Contractor's QA/QC Manager and MDF PM and On-Site Inspector in ensuring that the provisions of Contractor's QC Plan are implemented.

Specifically, he /she shall:

- Be responsible for the performance of the works according to the contract documents, drawings, specifications, and directions received
- Follow and ensure the testing procedures provided in the Contractor's QC Plan.
- Recording of inspection results
- Maintain the reporting (check lists) provided in the Contractor's QC Plan.

### **Contractor's On-Site E & HS Officer**

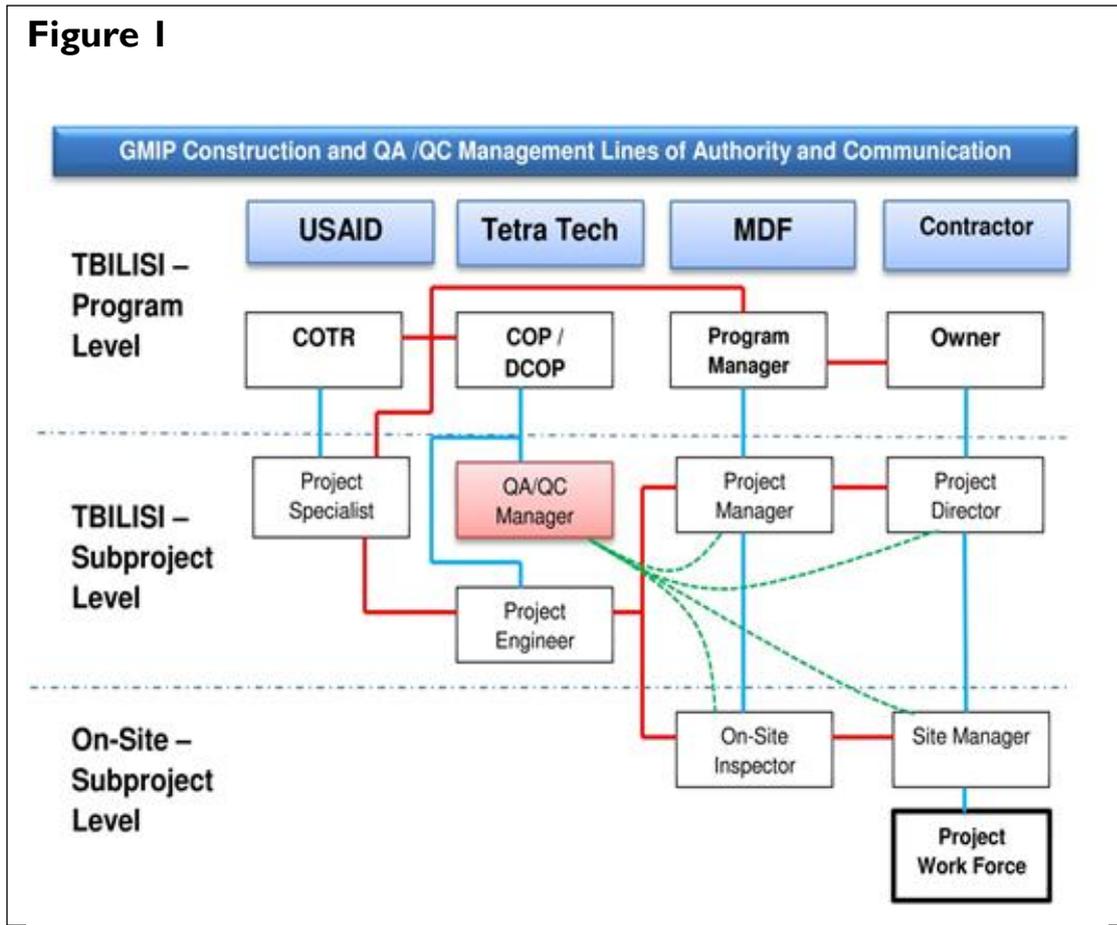
The Contractor's On-Site E&HS Officer is responsible site environmental and safety. She/he shall be responsible for site security as well as housing and On-Site office maintenance.

The Contractor's On-Site E&HS Officer will maintain the Safety and environmental records in accordance with approved E&HS Plan, Providing the morning (pre-work) safety instructions for work force assigned to he's site, providing the tool-boxes and all measures required for work safety.

### **CM & QA/QC Plan Management and Coordination**

As noted under the descriptions of agencies and staff involved with the Plan, the Tt QA/QC Manager is responsible for the management of its actions and activities under the overall direction of the MDF Program Manager and Tt COP.

**Figure 1**



MDF, Tt and Design / Construction Contractor staff in Tbilisi and on site shall comply with the provisions of this Plan. Figure 1 illustrates the overall coordination and communications lines. Note the blue lines are main lines of subordination and communication. The red lines are inter-agency major formal lines of communication and the green dotted lines are the management and communication lines between the Tt QA/QC Manager and those responsible for the execution and implementation of the provisions of the Plan. Also each MDF and Tt GMIP staff member has a responsibility for managing quality within his / her work.

As such each MDF and Tt GMIP staff member has a responsibility to be familiar with these Guidelines and the Plan to the extent necessary to implement them as required.

### **Document Control System**

The GMIP Document Control System (DCS) shall be in compliance with Tt’s Document Control Policy and consist of the following elements. All Tt and MDF electronic and hard copy files shall be maintained in accordance with the elements of this system as described below.

- **Separate Document Systems:** Both MDF and Tt shall maintain their own in house files. Each shall consult on another as required to ensure system compatibility and to assist one another in locating files if necessary.

- **Application:** In infrastructure program management Document Control is mission critical. Failure to institute and maintain document control organization and discipline is a major breakdown in any project and or quality system. This DCS is simple and should be regarded as a minimum GMIP requirement. The purpose of this Plan is to ensure both GMIP MDF,Tt and Contractors have sufficiently organized document control and retention systems to successfully manage GMIP subprojects, meet USAID documentation requirements, are able to respond appropriately to future informal and formal project reviews and/or audits, and survive catastrophic hard copy and/or electronic data loss. In cases where MDF and Tt exiting internal document control systems apply, any conflicts between these guidelines and those systems shall be resolved by the MDF GMIP PM and the Tt COP with their own internal management staff.

- **Type of Electronic Files**

- o **Working Files:** Those Files maintained by individual GMIP MDF and Tt staff members that are related to GMIP programmatically and by subproject but are not official or record files are referred to as Working Files. Working Files are still important to the GMIP in terms of being able to describe and define Subproject planning, design, reviews, procurement, and construction. Working files are spread-sheets, PowerPoint, Word documents, drawing files, etc. Working files are also important during audits, reviews and can become key legal documents as well.

- o **Contract Files:** Original signed contract along with any and all attachments to the contract or documents referenced by the contract such as a proposal or RFP, the original project initiation (setup) forms, contract documentation review and approval memos, any change orders to the contract and/or key correspondence authorizing additional services outside of the contract scope, copies of all project invoices and all project correspondence, and transmittals associated with contractual deliverables. These can be both hard copy and electronic files.

- **QC Reports:** These are formal periodic reports and messages that are produced as part of the CM and QA/QC Plan and/or as a contract requirement. They also include the GMIP MDF, Tt and contractor submittals. They are both hard copy and electronic files. These are important files that may be required to resolve disputes and/or provide proof of what was said or done on site. They need to be properly organized and maintained on site and in the main office. See more on Quality Control Record Keeping in a following section – On-Site Filed Inspection

- o **Program Files:** These are signed or formal correspondence, memoranda, procurement agreements, reports, studies and/or submittals for the overall GMIP operations and/or activities.

- o **Subproject Files:** These are signed or formal correspondence, memoranda, procurement agreements, reports, studies and/or submittals for individual subprojects. These can be both hard copy and/or electronic files.

- o **Email Files:** Email messages are stored on each GMIP staff member’s computer in the \*.pst files. Each GMIP staff member’s \*.pst file is a Working File however some emails can be designated as Official or Record Files if they include instructions or information in accord with construction contract conditions.

- Electronic File Naming Convention: All GMIP electronic files shall be named as follows YY\_MM\_DD-filename, where filename is the descriptor name of the file. Staff members should also attempt to minimize the number of letters in files names. When editing files, add the suffix “edit\_xy” where xy are the staff member’s name initials. Where several edits are involved add a number (1, 2, 3,... etc.) to distinguish edits from the same person.

- Electronic File and Directory Management: The QA / QC Manager shall set up a directory structure on the file server (see DCS security below) and the remote file storage system (see paragraph below). They shall be the same directory system except the remote file storage system does not include working files or email files. The file server base directory shall be as shown below. The QA/QC Manager shall build the remaining sub directories. Refer to the Tt Document Control policy for assistance with this however avoid using number descriptors.

- o Program Files

- o Working Files (by staff member names with COP directories password protected)

- o Contract Files (by procurement name)

- o Subproject Files (by subproject/contract name)

- o Email Files (this shall be a password protected)

- On-Site File Storage System: All files shall be properly filed so that they can be retrieved when needed.

- o Electronic Files: All GMIP files shall be stored in a stand-alone file server. All GMIP staff shall maintain all their files on the file server. They may store files on their hard drive and work off their hard drive by at the end of each working day they shall copy all work to the file server. Failure to do so is an actionable offense by the COP and the MDF Program Manager. The file server shall also have hardware or software back-up systems installed and shall be backed up daily. A back disk safety protocol should also be established.

- o Email Files: MDF and Tt staff shall also have their \*.pst file backed up onto the file server once each two weeks. The Tt QA/QC Manager shall initiate a plan with MDF and Tt IT specialists to affect this.

- o Hard Copy Files: A hard copy file system shall also be put in place at Tt and MDF. It shall include all contract, program and subproject files. It shall also have copies of electronic files in those directories from the file server.

- Remote File Storage System (Tt): Tt staff shall ensure that all Contract, Program and Subproject files are maintained on the Tt corporate SharePoint system in accordance with Tt corporate file documentation procedures. The QA/QC Manager shall monthly check that this is occurring and ensure that it is being done in an organized and thorough manner.

- DCS Security: Both GMIP hard copy and electronic files are at risk of loss or damage from fire, theft, vandalism, and in the case of electronic files, hardware/software failure that can result in

catastrophic loss of data. Both hard copy and electronic files need viable back-up strategies. For hard copy files this means scanning and copying them into the electronic file record and ensuring the hard copy files are stored in a protected and secure location that can be locked. For electronic files this means having a dedicated file server in the office where all staff electronic files are maintained. It also means having a viable back-up strategy for data stored on the file server. Staff need to know that storing any file only on their C:\ drive is dangerous and a violation of the provision of this DCS. These files are at risk and they are unsecure.

- o Private Files: Both the MDF Program Manager and the Tt COP may keep a locked directory on the file server and/or certain files only on their hard drives. These normally will concern HR and sensitive procurement issues.
- o Classified Terminology: MDF and Tt staff shall avoid using the terms – Confidential and Secret when naming files or referring to any file information. These are USG classification names and have formal USG security definitions. To use these words in file names or on files is a violation of USG security policy. Staff is encouraged to use instead the word PRIVATE when attempting to restrict a file or some file information dissemination.
- GMIP Program and Subproject Close Out and Archiving: the QA/QC Manager shall work with the MDF Program Manager and the Tt COP to close out individual subprojects, contracts, purchase orders and the overall GMIP program in accordance with instructions from MDF and Tt management. For closing out subprojects, contracts and POs, this normally will include the QA/QC Manager working with the MDF PM or the Tt Project Engineer and includes:
  - o Asking them to make sure that subproject working files to ensure that any items that belong in the Contract or Project Directory have been moved or copied to those locations
  - o Asking them to delete any files from temporary folders in the Project Directory and/or irrelevant material that do not need to be included in the permanent archive. Review the Contract Directory to ensure it contains all required information and that it is clear of irrelevant material
  - o Ensuring that any work produced outside of the Project Directory is moved into there
  - o Discarding any unnecessary printed/plotted material such as review sets and mark-ups to avoid unnecessary storage space being used
  - o Placing copies of subproject staff Outlook \*.pst files, in the Project Directory
  - o Organizing and storing hard copies in boxes and footlockers. It is the QA/QC Manager's responsibility to ensure that all hard copy files are properly stored, organized that each box is marked with what is in it and that there is an index produced for all numbered boxes
- DCS Management : Both Tt and MDF shall appoint a person to be in charge of their DCS. Both these staff members shall report functionally to the Tt QA/QC Manager however both report directly respectively to the MDF Program Manager and Tt COP. The DCS Manager and the Tt QA/QC Manager shall ensure the DCS is functioning, that all staff are in compliance with the provisions of

this guideline and the DCS is integral to GMIP operations. The MDF Program Manager and the Tt COP are ultimately responsible to ensure this GMIP DCS is functional and in proper order.

## **Communications Plan**

As shown in Figure 1, there are several lines of formal communication. There are also informal communications that occur daily at all levels of the GMIP between various staff members. In many cases these informal communications are important and required to share vital information so as to prevent problems or simply to keep concerned staff informed as a courtesy. All communications cannot be planned for or categorized and there should not be an attempt to do so however most important GMIP communications need to be planned and included in a scheduled and/or recurring manner. The reason for doing so and therefore having a communications plan is simply to make sure that information is well distributed to the right people on a timely basis and that there are records to rely upon to help people remember what was said and/or to what was agreed or left remaining to be addressed. The key GMIP communications therefore are described as follows:

## **Meetings and Reporting**

### **i Point of Contact (POC) List**

USAID, MDF and Tt should maintain a GMIP POC List that is updated every month. This should be overseen by the Tt QA/QC Manager and COP and the list should be produced by Tt. It should include every GMIP concerned staff member within USAID, MDF, and Tt and it should include their name, title, office telephone number, cell phone number, and email address. The list should also include Construction Contractor staff data as Construction Contractors come online as contract signing. It should be widely distributed each month.

### **ii Weekly GMIP Meeting and Report**

In Tbilisi there shall be a weekly high level GMIP meeting between USAID, MDF and Tt that shall include an agenda being produced and minutes taken and distributed. This is the key overall program reporting and decision making meeting for the GMIP.

### **iii Other GMIP Programmatic Meetings**

From time to time there will be other unscheduled GMIP high level program and subproject meetings on various subjects that include USAID, MDF, Tt and Design / Construction Contractors. All GMIP staff members are encouraged to keep minutes of such meetings and ensure that the minutes are filed appropriately.

### **iv Subproject Daily On-Site Meetings**

Each day prior to beginning work on site, the On-Site Inspector shall meet with the Construction Contractor Site Manager (Superintendent) and discuss work to be during the day, specific quality expectations and/or requirements, any deliveries that might be made, any outstanding issues from the day and/or week before and any preparations for upcoming critical events over the next five

days. Any outstanding RFIs and NCRs should also be discussed. There can be other people at this meeting if requested by either party or they happen to be on site at the time.

#### **v Subproject On-Site Inspector's Journal**

This Journal should be the basic reference for preparation of the MDF Project Manager's final decision on disputes. Therefore, it must be accurate, complete and concise. This is effectively done by the On-Site inspector taking notes during meetings and during daily inspections and observations and then writing them in the Journal at the end of the day. Appendix 4 is a set of bi-lingual (English and Georgian) instructions for completing the daily entry into the On-Site Inspector's Journal.

#### **vi Subproject On-Site Inspector's Daily Report**

Every day the On-Site Inspector shall make his / her entry into the Journal and then complete the Daily Report on his / her computer and email it to the MDF Project Manager and the Tt Contract Manager. Appendix 5 includes the Subproject On-Site Inspector's Daily Report Form. The On-Site Inspector shall use this form for each daily report and keep a copy of each daily report in a separate directory on his / her computer. The report form includes instructions on filling out the report.

#### **vii Subproject Weekly On-Site Inspector Log Submittals**

At the end of each week on Friday at noon, the On-Site Inspector shall submit certain logs (reports) of to the MDF PM, the Tt Contract Manager and the Tt QA/QC Manager. These logs include a summary report of certain work site actions and activities. The logs are maintained by the On-Site Inspector and they are included as forms to be filled out in the Appendices. They are further explained in a following section. These logs are:

- The Request for Information Log (Appendix 8)
- The Material Delivery and Acceptance Log (Appendix 11)
- The Non-Conformance Report / Corrective Action Log (Appendix 13)

#### **viii Subproject MDF Project Manager's Monthly Meeting**

Once each subproject is underway, the MDF Project Manager shall hold a monthly Subproject Progress Meeting either in Tbilisi or on the subproject site as he / she sees fit. The meeting shall be held on the 7th day of the next month being reported upon (for example for the meeting for the month of February, the meeting would be held on 7 March). Attendees shall include:

- MDF Project Manager (Chair)
- MDF on-Site Inspector
- Tt Contract Manager (Deputy Chair)
- Tt QA/QC Manger • Tt QA/QC Engineer
- Contractor's Project Manager
- Contractor Site Superintendent
- Contractor Representative

Other USAID, MDF, Tt and Contractor staff members are free to attend however these other attendees should realize this is the MDF PM's meeting and he / she should preside and the direct

mentioned subproject staff noted above should be the principal meeting participants. The agenda for each meeting should be:

1. Contractor's Report (Submitted on 3th day of the next month)
  - a. Work Done This Month – Physical Progress
  - b. Highlights and Issues
  - c. Review of Time Schedule
  - d. Billing this Month – Budget Progress
  - e. Measurement and Payment Issues
  - f. Outstanding RFIs and NCRs
  - g. Materials Deliveries and Acceptance
  - h. Samples and Testing
  - i. Potential Variation Orders and Changes
  - j. Safety Report (Submitted on 3th day of the next month)
  - k. Environmental Compliance Plan Report (Submitted on 3th day of the next month)
  - l. Work Planned for Next Month
2. On-Site Inspector's Monthly Report (Submitted on 3th day of the next month)
  - a. Quality Issues
  - b. NCR Issues
  - c. Other Outstanding Issues or Points
  - d. Visitors
3. Other Business

This meeting is crucial and shall not ever be postponed. The Tt QA/QC Manager shall make sure there is someone from MDF or Tt in attendance taking minutes to this meeting. Minutes from this meeting shall be sent to all participants within five days of the meeting. Each of the primary meeting members shall have the opportunity to revise the minutes of this meeting.

#### **ix MDF Project Manager's Subproject Report**

Each month the MDF Project Manager shall issue a Subproject Monthly Report. This report shall be in the format included in Appendix 6. The report shall include information gathered from the Contractor's schedule report and the On-Site Inspector's daily reports. This report shall be issued each month on the 12th of the month following the month being reported upon (for example for the report for the month of February, the report would be due on 12 March). The Tt Contract Manager shall work with the MDF PM to assist him / her issuing this report. The report shall be issued to the MDF Program Manager, the Tt QA/QC Manager, Tt's COP, and the USAID TOCOTR.

#### **Subproject Safety Meetings**

The Contractor is responsible to hold safety meetings on site in accordance with the Contractor's Safety Plan. These normally should be weekly and cover a wide range of topics. MDF and Tt should hold their own safety meetings in accordance with their own Safety Plans. The E & HS Manager should ensure that those meetings that need to be recorded are in fact being recorded and filed. He shall work with the MDF. Contractor Health & Safety Officers to make sure that Safety Plans are

being followed and meetings held and minutes kept however it is the Health & Safety Officer's duty to manage these plans.

### **Subproject Contractor Submittals**

All Construction Contractor documentation provided as a result of contract requirements are for the purposes of these Guidelines termed submittals. It is the duty of the MDF Project manager assisted by the Tt QA/QC Manager and the Tt Contract Manger to make sure that the Contractor complies with all contract instructions regarding design, material, samples, and periodic document reporting requirements. In the case where MDF replies are required it is the MDF PM's responsibility to ensure that proper response are made and reply schedules are kept. The Tt Contract Manager shall assist the MDF PM in this.

### **Subproject Requests for Information (RFI) System**

It is inevitable that the contract documents, the drawings, and specifications will not address every single part of the subproject work that must be done. There may be gaps, conflicts, or confusing instructions with which the Contractor needs help to understand how to proceed. The goal of the Request For Information (RFI) is to act as a tool to resolve these gaps, conflicts, or confusing instruction during the construction process to eliminate the need for costly corrective measures. Should the response to the RFI lead to additional work during the construction process that represents added value that cannot be reasonably worked out in the early stages of the performance of the work, then the Contractor can make a formal claim for additional work or time. See Appendix 7 for the Request For Information (RFI) Form that also includes instructions.

The GMIP Contractor shall issue an RFI to the On-Site Inspector for all such questions. The On-Site inspector shall copy each RFI immediately to the MDF PM for resolution with the Tt Contract Manager. Once an answer is given, the On-site inspector shall complete the RFI form and close out the RFI. If the RFI leads to a Variation Oder, see the section of these Plan on Variations.

The On-Site Inspector shall also issue the RFI log (summary report) each week at noon on Friday to the MDF PM, the Tt Contract Manager and the Tt QA/QC Manager. The RFI log Form is included in Appendix 8.

### **Correspondence**

Various signed correspondence and letters shall be maintained in hard copy files. All outgoing signed official hard copy correspondence should be photocopied and a copy kept in the appropriate hard copy file. The DCC Manager shall ensure that such hard copies are also scanned and kept in the electronic files as well and copied to concerned parties. All incoming official correspondence shall be scanned, filed electronically in the appropriate file and copied to concerned parties as required. All MDF and Tt official correspondence should also be numbered and a register kept including the number, the subject of the correspondence and the addressee with the date of the correspondence.

## **Telephone Calls, Skyping, and Videoconferencing**

Important telephone calls that are GMIP and/or subproject related should be recorded in notes to the file or in an email to make sure the agreements and information passed is noted. Telephone conversations that are not recorded in notes or emails are normally lost as evidence of any conversation. When carrying out Skyping or videoconferencing meetings consider taking notes and issuing Minutes or Notes to the meeting.

## **Emails**

Email correspondence can be unofficial or official but its use is encouraged by all GMIP members. Remember that email etiquette (look it up on the internet) is important to prevent misunderstandings. Remember to write in a business formal manner and to avoid informalities. All GMIP staff members should also understand that once you send a message you are responsible for it. Use the "Copy to" command to add DCC and others to the email to expand the way information is shared. When writing official instructions or important messages share them with appropriate staff members and keep a copy in your own email record. Consider printing these messages and filing them as hard copy files or storing them electronically in the Contract or Subproject files as necessary.

## **Training Plan**

USAID is interested in and promotes sustainability in USAID funded projects worldwide. This includes funding training plans for implementers and other host government agencies with which projects work. For GMIP USAID seeks sustainability benefits resulting from GMIP operations and activities to Georgia, Georgians, MDF and Design / Construction Contractors. Both MDF and Tt should seek to define a GMIP Training Plan that addresses staff needs and also includes Design / Construction Contractor staff. There are also informal and formal training courses and methods of training. There are also training activities that have costs attached and training activities that do not. Developing a training plan may involve project funding. In this event, discussions are needed with USAID to approve an overall GMIP training plan. In order to obtain USAID approval the project training should not only benefit staff members and MDF and the Design / Construction Contractors it must also directly benefit the project.

Developing a training plan that has a cost attached will require USAID approval. MDF and Tt are encouraged to develop and submit such a training plan to USAID but in any event many of the ideas here can be used for training now as they do not have a cost.

There are three parts to any project training plan:

- Who will be trained?
- What will the subject of the training be?
- How will the training be done?

**Goal:** To train MDF, Tt and Design / Construction Contractor staff members in skills that will assist them in the GMIP implementation and in future planning, design and construction of quality infrastructure in Georgia

**Training Modalities:** Training can be imparted to staff in several ways in a mix of paid and unpaid training, certificate award and non-certificate award training, and also formal and informal settings.

- **Formal Courses Offered Outside of Georgia:** These courses normally involve travel, per-diem, and course registration fees, not to mention the cost of lost staff time in country on the project. Having said that, these certificate award courses normally offer very specialized advanced training opportunities that can be important to the project and to staff. It is not abnormal to include perhaps two of these training courses (two people) per year each costing say \$5,000 per trip/course under such a project as GMIP. Again, USAID must approve the use of project resources for such training

- **Formal Courses Offered in Georgia:** From time to time courses will be offered though the universities or professional societies or even business schools that benefit the project. These courses are certificate award courses can be quite good at developing needed project skills and they can also be set up for the project at the request of the project so as to train as many people as possible in one or two or more settings. These courses normally cost less per person than off-shore courses but can be very good. As it involved cost USAID must approve, but having say 20 to 30 people trained in such courses per year at say \$400 per person is not unusual for such a project as GMIP

- **Formal Training Workshops:** When the opportunity arises the Tt COP should have STTA staff provide one day training workshops when they are in country. These training workshops typically have little cost other than that of space and refreshments however as there are costs involved USAID approval is still necessary. GMIP should try to have at least three four to six of these types of training courses per year

- **Informal Set-Aside Time Training:** These one or two hour informal training courses can be arranged by a GMIP Tt and/or MDF staff member simply becoming proficient in a subject on the internet and presenting what was learned and found. They require energy and a spirit of learning. They also sometimes require management to direct staff to do this. It is not an onerous task but one that offers a great deal of return for little investment. Tt should develop a program of such training courses for contractor and MDF staff and then challenge their staff to lead these sessions once the program starts to move forward. Subjects can include specific software “how to’s,” safety training, and engineering technical subjects.

These courses can be:

- Brief lessons in many subjects and can be delivered by Tt staff for MDF and Design / Construction Contractor staff
- Internal Tt staff on Tt staff training or MDF staff on MDF staff training

- **On-the-Job Training:** This may be the best training option on the GMIP project. Design / Construction Contractor staff may be the largest beneficiaries to this training. Tt staff meetings with the Contractor offer a good opportunity to explain the elements of quality control and other job performance pointers.

**Training subjects:** A training program needs a course of training subjects that are determined to be useful to the staff of the project. For GMIP a beginning menu of training subjects is easy to establish. For all MDF, Tt and Design / Construction Contractor staff they are listed below. For each staff member the training need may differ in terms of whether that person should receive beginning or more advanced training but this menu offers a good start at defining the skills that if improved would benefit the project

- General Project Related
  - English Language Skills
  - Ethics
  - Technical Writing
  - Report Writing
  - MS Word
  - MS Excel
  - MS Project
- Technical Training
  - Project Management
  - Contract Management
  - Construction Management
  - Inspection / Observation
  - Specification Writing
  - Cost Estimating
  - QA / QC
  - DCC
- Safety Training
  - Construction Equipment and Clothing
  - First Aid

# Construction Management Guidelines and Quality Control

## Subproject Studies and Design

All MDF produced feasibility studies, design studies, designs – drawing and specifications and contract documents that are carried out either internally or by others require quality control and assurance. For GMIP MDF should attempt to establish its own internal system of document and deliverable QC that includes the checking and verification of the work of others. The MDF Program Manager should seek assistance from Tt to develop any internal QC systems for the production and checking of

- Procurement RFPs
- Procurement Advertisements
- Pre-Bid Meeting Agendas
- Feasibility Study SOWs
- Design Study SOWs
- Production of Drawings and Specifications
- Production of Contract Documents

In accordance with its Task Order SOW, as a QA step, Tt shall review all MDF produced GMIP documentation as noted above and provide comments and recommendation to MDF to correct or make changes to such documentation so as to ensure that best practices are included, the desired resultant work will be obtained through the procurement, and that the resultant work complies with applicable Georgian and US laws and standards.

Both MDF and Tt need to pay close attention to ensure that proper Georgian, Russian, Eurocode, or IBC standards are being applied to all design work and that any deviations from code are fully explained and approved by USAID. This also applies to all materials and methods used in GMIP construction. Also, all drawings and specifications provided by others shall be arranged and produced so as to comply with standard layouts and best industry practices. This is especially true of drawings. All RFPs for design work shall include a standard set of instructions for engineering drawing layout and production.

Tt is the review of drawings and specifications should establish checklists for each type of MDF produced work being reviewed and fill out review documents and forms using these checklists. Further all such Tt reviews shall be signed and dated by the reviewer and transmitted formally to MDF with copies to USAID. All reviews shall ensure to take into account:

- Functionality
- Performance
- Legal and Regulatory Compliance
- Industry Codes and/or Standards
- USAID Requirements
- Future Owner Agency Requirements (MRA, GUWC, Municipalities, MoA, etc.)
- Information derived from similar projects
- Other requirements essential for the design and development

For each subproject and potential contract Tt shall also promote the development and production of an Engineer's Cost Estimate at the end of the Design phase just prior to procurement so this estimate can be used as a basis of bid cost review. While the MDF Operations Manual does not specifically call for this, this is a normal step in USAID funded project procurement. Needless to say such Engineer's Estimate needs to be held close during procurement.

### **Subproject Procurement**

In accordance with its USAID Implementation Letters, MDF shall use their Operations Manual for the management of all study, design and other procurement and all subproject construction procurement. Tt shall provide QA review of the pre-procurement process and procedures, SOWs, RFP documentation, award decisions and evaluation documentation and shall recommend concurrence or other actions to USAID based upon their reviews. Tt shall provide these services in accord with its USAID GMIP Task Order SOW.

MDF and Tt shall pay particular attention to Pre-Bid meetings as the best opportunity to ensure that potential bidders understand the terms and conditions of RFP documentation. These meetings need to have MDF leadership and Tt participation.

Tt shall assist MDF in tracking USAID approvals of the procurement steps as included in the MDF implementation Letters and shall create and file USAID approval step checklists.

### **Pre-Design / Pre-Construction Conference**

Along with the Pre-Bid Meeting the Pre-Design or Pre-Construction Meeting is the most important meeting of the subproject. During this meeting, MDF and Tt can ensure that the Design / Construction Contractor understands without a doubt what will be expected of them and how their work will be monitored, inspected and observed. Appendix 9 includes a Pre-Design / Pre-Construction Conference Agenda with instructions how to set up and organize the conference.

Here MDF and Tt staff will be able to coordinate how project work will be performed and controlled. In particular, this is the time to talk about quality measures and the results that you expect. Go over your quality assurance and quality control policies and procedures. And, be sure to use the forum to reinforce your culture of quality and extend it to all stakeholders.

### **On-Site Field Inspection**

Project on-site inspection is provided to ensure that the Design / Construction Contractor's work complies with the contract requirements. Many details of construction are not specifically covered in the contract, drawings and/or specifications and are optional with the Contractor as to how he/she may approach them. However the On-Site Inspector must always verify that proper practices are followed and guard against the use of unsatisfactory materials or faulty methods. Inspection is one of the most important elements of construction and contract administration. Good engineering design and properly prepared drawings and specifications are essential for a quality end product however ensuring that specifications and drawings are adhered to on the construction site depends largely on the On-Site Inspector. This is especially true of more complex projects such as general

building construction that involves field-made products whose quality is dependent on use of satisfactory materials and workmanship.

On-Site Inspection is normally carried out under GMIP by the MDF's On-Site Inspector but can also be carried out by the MDF PM or even the Tt Contract Manager with MDF consent. In order to provide inspection properly it is important to keep the following guidelines in mind:

- Know the drawings and specifications and enforce them
- Report promptly to the MDF PM any conditions that differ from those in project drawings and specifications
- If work is not being performed in accordance with drawings / specifications, complete and submit a Non-Conformance Report to the Contractor, advise the MDF PM and note this in the Daily Journal and Daily Report. If the work is not immediately corrected, or if there is a disagreement, consult the MDF PM
- Consult the MDF PM if a question arises that you cannot answer
- Make an accurate, comprehensive record of all work inspected by completion of Daily Logs while on-site
- Be professional in manner, but not overly familiar with the Contractor's personnel.
- Maintain a courteous and tactful attitude, but never become complacent in inspection duties. These people are not your friends
- Do not waste workers' time with unnecessary conversations
- Issue instructions to the Contractor's Superintendent or authorized representative only. Never issue instructions to a foreman except in cases involving personnel safety
- Do not argue. Refer disputed interpretations to the MDF PM and use your best judgment prior to a response
- When relieving another Inspector, check on the status of work and any special instructions. Pass on pertinent and current information to the Inspector succeeding you
- Report all unsafe practices to the MDF PM and advise immediately of any accidents
- Be courteous to the public, visitors and MDF and Contractor personnel. Do not give disrespectful answers to what may seem simple questions. The public is entitled to courteous and thoughtful answers

This Plan depend on the use of several forms that must be completed and then distributed in order to ensure work specification compliance. Notes on the use of these forms and the forms are included within these Guidelines and the Plan. The On-Site Inspector and the MDF PM must be diligent in using these forms and forcing the Contractor to use them as well. Failure to do so will

lead to breakdowns in quality and construction work performance. The On-Site Inspector also must be committed to acceptable contractor performance and quality construction.

### **Quality Control Record Keeping**

The On-site Inspector must have a way to keep hard copy files and records. Whether it is file cabinet a bookshelf or boxes, he / she needs file folders and office supplies. Simply having large piles of unsorted paper will not be sufficient. Not keeping records is also unacceptable. He / she must also have directories set up on his / her computer that contain the completed reports, the forms and other correspondence in an organized fashion. The Tt QA/QC Manager shall make sure that each On-Site Inspector understands these requirements and has organized hard copy and electronic files. Hard copy (HC) and electronic (E) files shall include:

- The Daily On-Site Inspector's Journal (HC)
- The latest drawings and specifications (HC and E)
- A copy of the contract (HC and E)
- The Daily Reports (E)
- NCRs (HC and E)
- Material Delivery and Acceptance Reports (HC and E)
- RFIs (HC and E)
- Contractor Submittals (HC)
- Testing Results (HC)
- Inspector's Photographs (E)
- Check List as (HC)

It is also important to remember that the On-Site Inspector needs access to a printer on site. The Contractor shall provide such a printer in the Contractor's Construction Office.

### **Budget, Schedule and Physical Progress Control**

The Construction Contractor is responsible to ensure that the work is not only done in accordance with the terms of the drawings and the specifications, he /she must also ensure the work is done in accordance with a budget and schedule that is produced by the Contractor at the beginning of the subproject and presented in the Pre-Design / Pre-Construction Conference. The Contractor shall produce a monthly report to the MDF On-Site Inspector and the MDF Project Manager that shows monthly budget and schedule progress. This report shall be used to judge subproject progress along with examining physical progress. In cases where budget, schedule and/or physical progress become problems due to the Contractor's inability to keep to schedule or contract time requirements, the On-Site Inspector and the MDF PM may require the Contractor to submit a Corrective Action Plan (CAP) that details how the Contractor intendeds to bring the work back to schedule.

## **Material Management**

### **Deliveries, Acceptance, Rejection, Storage**

Appendix 10 includes a form that the On-Site Inspector shall use to record all materials deliveries to site and their acceptance and/or rejection. The On-Site Inspector prior to receiving any material should have approved a sample of that material provided by the Contractor. The sample shall meet the terms of the specifications in order to be approved. The Inspector can also accept some but not all material. In the case of all rejected materials, the Inspector shall inform the Contractor to remove those rejected materials from the site immediately or within a reasonable amount of time but never more than 72 hours. All materials shall also be properly and neatly stored on site while they are waiting for use on the project. This includes no material touching the ground and wood and other MEP materials covered to protect them from rain and snow. If the Inspector has any questions about how materials are to be stored, he / she shall seek guidance on the subject.

The On-Site Inspector shall also issue the Material Delivery and Acceptance Log (summary report) each week at noon on Friday to the MDF PM, the Tt Contract Manager and the Tt QA/QC Manager. The Material Delivery and Acceptance Log Form is included in Appendix 11.

### **Samples, Manufacturer's Certificates and QC Testing**

Material samples brought to site by the Contractor must be approved or rejected by the On-Site Inspector or the MDF PM. Prior to any material delivery material samples must be approved in accordance with Sub-Project Contract Requirements. The On-Site Inspector shall keep all accepted and rejected material samples and tag each one with date of receipt and action taken. Along with actual physical material samples, the Contractor shall also provide the On-Site Inspector and the MDF PM with manufacturer's written material specifications that demonstrates the material meets the terms of the contract specifications.

At the beginning of the project the MDF PM, the On-Site Inspector, the Tt Contract Manager and Tt QA/QC Manager and the Construction Contractor's Representative and the Contractor's Site Manager shall meet and develop a raw material and finished work Testing Plan for the subproject. The Testing Plan shall be included in the Contractor's QC Plan and laid out according to requirements of the specifications in terms of the material to be tested, the finished work to be tested, the tests to perform, and the frequency of the tests. The frequency can be according to some number of tests per KG of material delivered or SQM or CM of work completed. Once this Testing Plan is agreed upon, it shall be followed from the beginning of the project. Most of these tests will require samples to be taken and delivered to a testing laboratory. The Contractor is responsible to propose a certified laboratory and arrange and pay for the transport and testing of all samples.

Random tests shall also be carried out by the On-Site Inspector such as concrete slump tests, aggregate sieve tests, sand settling tests, paint thickness and wood moisture tests.

All test results from Laboratories shall be delivered to the On-Site Inspector, the MDF PM, and the Tt Contract Manager by the Contractor as soon as they are available. The On-site Inspector shall make sure that any work that was tested remains uncovered and unfinished until passing test results have

been submitted by the Contractor. If failed test results return, the On-Site Inspector shall issue an NCR and the Contractor shall remove and replace the failed work or material.

### **Acceptance of the Work – Non-Conformances**

There are two methods to accept completed work. First is to inspect each part of the work as it is completed and provide acceptance certificates for each part as they are completed. The second is to observe the work as it is going on and provide non-conformance reports (NCR) to the Construction Contractor when the work does not meet the requirements of the drawings and/or specifications. GMIP inspection and work acceptance is based upon both approach. When there are instances of the following issues, the On-Site Inspector shall issue a NCR to the Contractor:

- Unsuitable or incorrect materials used
- Poor preparation and workmanship
- Failure to comply with terms of the drawings and/or specifications

The NCR form is included in Appendix 12. Instructions on how to complete the NCR are also included on the Form. The Inspector shall discuss the non-conformance with the contractor and develop a plan to correct the non-conformance as soon as possible. The second half of the NCR is documenting the required corrective action and then recording when it is completed.

The On-Site Inspector shall also issue the NCR Log (summary report) each week at noon on Friday to the MDF PM, the Tt Contract Manager and the Tt QA/QC Manager/Engineer. The NCR Log Form is included in Appendix 13.

If there are any disputes concerning NCRs the On-Site Inspector shall refer the issue to the MDF PM and the Tt Contract Manager to assist in explanation to and resolution with the Contractor.

The MDF's On-Site Inspectors shall maintain the stage / work part inspection check Lists during the work and submit it weekly as an attachment to the weekly report to GMIP PM, Tt's Contract Manager and Tt's QA/QC Manager.

Upon completion of Stage / Work Part, the MDF's On-Site Inspector will close the check list and submit it with attached test reports, hidden works and stage / work part's acceptance report and any applicable for this stage / work part documents (RFIs, VORs etc.) to MDF's PM, Tt's Contract Manager and Tt's QA/QC Manager.

### **Contractor Monthly Payment Procedures and Approvers**

Design / Construction Contractor Monthly Payment Requests, Forms and procedures shall be those that are included in the Contract and the MDF Operation Manual. The MDF's PM and On-Site Inspector shall verify in writing all Contractor Bid Item measurements and Tt Contract Manager shall have signature approval of the final payment form prior to MDF submitting it to USAID for payment. The Tt QA/QC Manager shall make sure that processes to ensure prompt Contractor payment are in place and that proper verification is occurring in accord with the Contract and the MDF Operations Manual.

## **Work Changes – Variations**

Changes to the Contract and the Contract Documents can only be made in accordance with the terms and conditions of the Contract. When changes are contemplated however, the Contractor shall issue a Variation Order Form (see Appendix 14 for the Form). The Variation Order issued by the Contractor shall not have a number and shall be considered a Potential Variation Order until it has been approved and signed by the MDF PM. The Form also includes instructions.

## **Site Safety and Environmental Compliance**

Each GMIP Contractor will in complying with their design / construction contract produce a Quality Control Plan, a Safety Plan, and an Environmental Compliance Plan. The Tt QA/QC Manager shall work with the Design / Construction Contractor to assist them in the preparation and implementation of these plans. He/ she shall also make sure that the Contractor's QC Plan is harmonized with this Plan.

The On-Site Inspector shall also monitor the Contractor's compliance with their QC, Safety and Environmental Compliance Plans. Failure to comply with their plans should be recorded by the On-Site Inspector.

The On-Site Inspector shall closely monitor the Contractor's Safety and Environmental Compliance Plan to ensure that the conditions of these plans are being met. Non-compliance of these plans shall be immediately reported to the MDF PM, the Tt QA/QC Manager, the Tt Contract Manager and the Tt EH&S Manager. Non-compliance with these plans may be grounds for work stoppages. Non-safe practices by the Contractor on site should not be tolerated by MDF and Tt staff.

## **Final Inspections and Subproject Handovers**

The final inspections verify that the completed works and items are in conformance with the requirements of the drawings and specifications. These final inspections also verify the operational readiness of systems and items. For GMIP, USAID must approve the final inspection of the subproject. To this end, Tt will perform final inspection on behalf of USAID prior to USAID approval. Therefore, when the Contractor calls for Final Inspection to MDF the following process shall be used to obtain final USAID approval:

- MDF carries out its own final inspection with the Contractor in accordance with contract conditions and its Operations Manual
- When MDF is satisfied that the project is ready for final Tt inspection, MDF will formally request Tt final inspection using the letter form in Appendix 15
- Tt's Contract Manager shall schedule a Final Inspection and conduct it. This inspection shall be led by the Tt Contract Manager and shall include the MDF PM, the On-Site Inspector, and the Contractor's Site Manager
- The Tt Contract Manager shall issue a Final Inspection Punchlist of any and all items that require attention prior to Tt issuing their final inspection certificate to USAID. This Punchlist form is

included in Appendix 16. Items on the Punchlist may include completion of subproject paperwork and filing such as As-Built drawings or Contractor files being ready for handover

- The Contractor addresses all of the Punchlist items and the Tt Contract Manager confirms their completion
- Once the Punchlist items are completed, the Tt COP will issue the Final Inspection certificate to MDF and USAID certifying the work is complete according to the contract documents. Appendix 17 includes this form letter
- After this certification letter is received by USAID and MDF, USAID should write their own final approval letter of the subproject to MDF with a copy to Tt
- MDF is at this point free to initiate handover of the completed subproject to the concerned GoG owner Agency in accordance with its Operation Manual

### **Defects & Liability Period**

MDF staff shall manage the Subproject Defects & liability Period actions and inspections with monitoring provided by the Tt Contract Manager. Inspection reports and completion certificates shall be approved by USAID.

## Quality Assurance

Auditing the GMIP CM & QA/QC Plan should occur in three ways during GMIP performance as follows:

- Overall Plan Audit
- Subproject Audits
- Regular Spot Check Audits

These are described herein however, it should be remembered that GMIP is a project with a limited time of performance. While ensuring the system is being used and that it is useful is important, it may be more important to ensure that Subproject Quality Control is occurring than to spend resources performing system checks and modifications. So, both MDF's Program Manager and Tt GMIP COP should be consulted prior to undertaking a system wide overall audit.

### Overall Plan Audits

An overall CM and QA/QC Plan Audit should only occur twice during GMIP. Once within say four months of adoption and once at what is determined to be the mid-point of the construction program in terms of project finances expended.

The initial Audit should be a "shake down" that goes over the entire plan with Tt Contract Manager, MDF Project Managers and MDF On-Site Inspectors. It should start with an office meeting in Tbilisi and include field visits to sites. It should result in obtaining feedback from these three groups and making modifications (additions, subtractions, changes) to the system that streamline it and strengthen it. It should not result in changes that simply reduce its scope or its documentation burden without solid reasoning. The purpose of this audit is to fine tune this document and the overall system.

The mid-term audit should be similar in scope and result in changes based on the use of the system. Again, the goal is to strengthen the system not make it simply easier without good justification. Both of these overall audits should be conducted as follows:

- Announce the Audit formally including details and schedule
  - Select an Audit Team of say one USAID Program Specialist and one MDF's Program Manager or PM and the Tt QA/QC Manager who should lead the Audit
  - Carry out a Pre-Design / Pre-Construction meeting in Tbilisi – keep minutes of the meeting
  - Interview Tt and MDF managers, engineers and PMs in Tbilisi. Prepare a brief questionnaire to document responses
  - Interview the USAID TOCOTR
  - Interview selected On-Site Inspectors and Design / Construction Contractor staff
- Municipal Infrastructure and Irrigation and IDP Housing Rehabilitation Project  
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- Write up findings and recommendations. Present them to the same group from the initial meeting. Discuss recommendations
- Submit final report to Tt COP and MDF Program Manager.

### **Subproject Contract Audits**

After each Subproject begins and is proceeding apace, an Audit of the Subproject / Contract compliance with the CM and QC Plan needs to be performed at about the 20 to 25% physical performance completion level. Each of these audits should be quick and result in any required Guideline and Plan compliance and/or performance changes by MDF and Tt staff members that are found during the audit. These audits should take no more than ten calendar days to perform from announcement to submission of the Audit Report. Compliance actions by the MDF Project Manager, Program Manager and or the Tt COP need to also be handled within a five day calendar time window after the review of the Audit Report. The need to have the results of this audit acted upon quickly is to prevent and correct substandard quality control practices during construction. These Subproject audits need to include;

- Description of QA audit scope and announcement
- Identification of auditors – this should be a two or three person team (the Tt’s QA/QC Manager, and at least one if three following – Tt Contract Manager, COP, and/or USAID Project Specialist)
- Discussions / interview of MDF PM and Design / Construction Contractor Home Office staff – using a standard interview forms. This include review of records
- Field Trips to Site – interviews with MDF On-Site Inspector and Contractor Site Manager and review of completed CM forms, On-Site Inspector and Contractor files
- Summary of audit results in Report
  - Details of specific non-conformances observed
  - Recommendations for correcting
  - Date of required response by the Party responsible for the non-compliance

Follow up actions by Tt’s QA/QC Manager including compliance follow up report to MDF PM and Program Manager and Tt COP

### **Tetra Tech and USAID Inspections / Observation Visits – Compliance Spot Checks**

Each Tt Contract Manager inspection visit and each USAID Project Specialist observation visit should include a quick review of the use of the CM and QA/QC Plan by the on-site Inspector and the Design / Construction Contractor. The QA/QC Manager should review their trip reports with this in mind and regard each of these trip reports as a Plan compliance spot check that results in him / her taking action to ensure that the provisions of this Plan are being followed. The level of that action from a simple telephone call, an email, or a more intensive intervention is left to the discretion off the QA/QC Manager, however that response needs to be such so as to ensure that substandard

construction is not allowed, will not be accepted, and will not be paid for under the project – without exception.

It is also suggested that this Subproject CM and QA/QC Plan Audit also be carried out with a concurrent Subproject Contractor’s Safety Plan and Environmental Compliance Plan review at the same time. For all Tt Contract Manager visits, not just for audits, Tt Contract manager and all Tt staff shall use the form in Appendix 18.

## **Compliance**

Requiring changes in behavior sometimes causes disruption in operations. The Tt QA/QC Manager is responsible to ensure that these provisions of the Plan are being followed and that their use is resulting in the expected level of quality control in the finished GMIP construction work. From time to time it will be necessary to address non-compliance. The QA/QC Manager is responsible to ensure that:

- Contractors comply with the provisions of this document through instruction from MDF and to some extent Tt staff. Contractor failure to comply needs to be dealt with by MDF PMs and the Program Manager. In cases where this direction is not being effective, the QA/QC Manager needs to direct the attention of the Tt COP to assist in issue resolution. In cases where construction-work quality is suffering due to contractor non-compliance and MDF inaction, the COP need to request USAID to intervene to prevent any completed substandard work being accepted and/or paid for. Any all actions at this level of intervention need to be well documented
- MDF failure to oversee the compliance of the provisions of the Plan need to be brought to the attention of the Tt COP. The Tt COP needs to address such issues within MDF. MDF PMs and the Program Manager need to correct any such deviations from these provisions. The Tt COP should also if necessary ask USAID to intervene with MDF up to and including the removal of MDF staff from GMIP. Again, all such instances of such action at this level need to be carefully documented
- Tt staff that do not comply with the provisions of the Plan should also be requested to comply and if failing this, the QA/QC Manager needs to bring this to the attention of the COP for action up to and including disciplinary action

## **APPENDICES**

## Appendix 1 - REFERENCES

### General Reference Documents

**a) Title: Construction Guidelines And Quality Assurance / Quality Control Plan.**

*Contract: AID-EDH-I-00-08-00027-00, TASK ORDER: AID-114-TO-11-00002*

*Doc. No: CMGQAQC\_PLAN\_Draft\_19 5 12*

**b) Title: Doc Control Police**

*Contract: AID-EDH-I-00-08-00027-00, TASK ORDER: AID-114-TO-11-00002*

*Doc. No: To be Inserted*

### Sub-Projects Reference Documents *(will be modified upon contracts award)*

**a) Title: Deliverables Schedule**

*I. Contract: USAID/W/ICB/01-2011*

*Doc. No: 12 06 27\_Bldg10\_QAC\_Submittals and Deliverables Schedule\_TT\_D2*

*II. Contract: USAID/W/ICB/02-2012*

*Doc. No: 12 06 27\_Irrig\_QAC\_Submittals and Deliverables  
Schedule\_TT\_D2*

**b) Meeting/Reporting Plan**

*I. Contract: USAID/W/ICB/01-2011*

*II. Contract: USAID/W/ICB/02-2012*

*Doc. No: 12 06 28\_Irrig & Bldg10\_QAC\_Meetins Schedule\_TT\_D1*

**c) Project Schedule (per Sub-Project)**

*(To be Provided by the Contractors)*

**d) QA/QC Forms**

*I. Contract: USAID/W/ICB/01-2011*

*Doc. No: 120703\_Bldg10\_QAC\_Forms\_TT\_D3*

Municipal Infrastructure and Irrigation and IDP Housing Rehabilitation Project  
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*II. Contract: USAID/W/ICB/02-2012*  
*Doc. No: 120705\_Irrig\_QAC\_Forms\_TT\_D3*



## **Appendix 3 (a) – MDF On-Site Inspector Job Description (English)**

Georgia Municipal Development Fund (MDF) |

Tbilisi, Georgia

### **A. Position Information**

Title: GMIP On-Site Construction Inspector

Functional Supervisor: Project Manager

Duration: 12 months (with possibility of extension)

Duty Station: The incumbent shall be stationed primarily close to on-site GMIP construction operations that are being implemented all over Georgia as designated by MDF and will be called upon to visit and carry out inspection work on other nearby sites as needed and directed. The incumbent shall not be based in Tbilisi.

### **B. Job Description**

Under the USAID funded Georgia Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP) MDF will be managing several construction contracts all over Georgia. This includes providing on-site, full time, construction supervision and inspection. Construction activities may include:

1. The Rehabilitation of Existing Multi-Story Buildings;
2. The Rehabilitation of Irrigation Systems;
3. Road, Street, Bridge, Culvert and River Protection Works Rehabilitation; and
4. The Construction of IDP Cottage Water Supply and Wastewater Collection/Disposal System Improvements

MDF will field between 30 and 40 On-Site Construction Inspectors on GMIP. Under the direct supervision of the Project Manager the On-Site Construction Inspector shall perform the following principal functions on the Contract(s) to which he/she is assigned:

1. Liaise with MDF Officials, Tetra Tech Engineers, Officials from Other Government of Georgia Agencies, and the public
2. Oversee the Construction Contractor Daily Works
3. Oversee and Manage Site Safety
4. Oversee and Manage Site Environmental Compliance;

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5. Oversee and Manage GMIP Construction Quality Control Activities
6. Maintain a Daily Log Book and Site Diary
7. Create, transmit and file Daily, Weekly and Monthly Reports

It should be noted that the On Site Construction Inspector may have inspection responsibilities under one or more than one Contract. And he/she could have work going on under one or more Contracts at up to say 30 sites (the high number would be for instance on Contracts where there might be several street improvements in a municipality under one Contract.

**C. Specific Duties**

**1. GMIP Project General Engineering and Coordination:**

- a. Work with GMIP MDF and Tetra Tech staff: As required and directed, the incumbent shall work closely with staff in the planning, design, execution, monitoring, and reporting of completed, ongoing and planned infrastructure projects;
- b. Work closely as needed with Officials, Engineers, and other staff with Government of Georgia Agencies as delegated by the MDF Project Manager; and
- c. Meet with and give information to the public as directed by MDF.

**2. Work On-Site with GMIP Construction Contractors:**

- a. Maintain an up to date set of contract documents in his / her possession for each GMIP project upon which they are working including contract, drawings, specifications, safety plan, quality control plan, environmental compliance plan and any other relevant document needed for reference with the Contractor;
- b. Daily, full time presence on-site at sites included under Contract assigned to Site Inspector including observing the quality of all work on-going each day;
  - i. Interpret Contract Documents for the Construction Contractor with telephone and/or email contact with MDF Project Manager if required; The On-Site Inspector shall encourage the use of the Contractor Request for Information (RFI) system including keeping RFI generated documentation;
  - ii. Conducts on-site inspections to evaluate construction work in progress, ensures work is in compliance with plans, specifications, and codes. Independently rejects substandard work, substandard workmanship or out of specification materials;
  - iii. Check and verify all survey horizontal and vertical control points and survey lines;

- iv. Supervises and/or performs on-site testing to ensure all required tests are performed. Writes up any issues in Non-conformance reports (NCRs). Recommends corrective action on failed tests. Records Corrective Action Report when deficiencies are corrected;
- v. Maintain a Daily Log of all work and all activity on site each day. The format of the Daily Log shall be as provided to the On-Site Inspector;
- vi. Photograph work every day with particular reference to issues, important work junctures and milestones and download and store photo-files every day on their MDF provided computer;
- vii. Check Material and Equipment Storage areas to ensure that all material and equipment is properly and safely stored and that no rejected material stays on the project site longer than 48 hours;
- viii. Ensures the overall job site is well kept, cleaned, and organized to prevent accidents, promote good traffic flow, and present a neat and workmanlike appearance;
- ix. Ensures the Health & Safety and Environmental Compliance Management Plan is used in site management and that their application is strictly enforced. The On-Site Inspector shall pay special attention to ensuring that the public is well protected while they are in close proximity to any activity, on-site and off-site, related to the project;
- x. Ensures the site is well secured by the Contractor during construction work hours and after hours as well;
- c. Ensuring completed work quantity measurements and material usage follow initial plans;
- d. Analyzes and tracks the construction progress schedule to ensure work completed versus approved contract time schedule of schedule of financial values is accurate. Compares progress schedule to the Contractor's Monthly Pay Application to substantiate payment request;
- e. Inspects all delivered materials to ensure compliance with specifications and undamaged condition, rejecting all materials that do not meet requirements.
- f. Ensuring all construction is in compliance with applicable Government of Georgia, MDF and any local rules and regulations and local national and local laws;
- g. Coordinates activities and schedules with other national and local utility companies, Contractors, property owners and other Municipal departments as required;
- h. Resolves conflicts with Contractors within scope of authority. Works closely with the MDF Project Manager to ensure that he/she does not overstep authorities;
- i. Ensures that all work associated with the project both on and off site is performed in accordance with safety policies and procedures;

- j. If requested, provide technical review of Contractor submittals and Requests for Information (RFIs) and construction methods as directed by the MDF Project Manager;
- k. Certifies in writing at the completion of each construction activity that the work was constructed according to contract documents, and confirms that the contractor has provided all required material certificates, O&M and testing documentation before the Contractor Notice of Completion is filed; and
- l. The incumbent shall schedule and hold regular daily, weekly and monthly meetings and schedule periodic special meetings with the GMIP Construction Contractor Supervisor for the purpose of formal coordination of the work:

**3. Contract Management**

- a. Maintain close contact with the MDF Project Manager regarding any Contract question;
  - b. Monthly Payment Requests: With the Contractor’s Representative, check, measure and verify completed work quantities as required to check Contractor payment requests;
  - c. Variation Requests: Check Contractor submissions for completeness and accuracy and send them onto the Project Manager for final decisions and action;
  - d. Communications: Receive and review any and all letters from the Contractor and begin action if necessary with MDF Project Manager and other concerned MDF staff; and
  - e. Disputes: Record any actions/discussions by/with the Contractor that might lead to a new or contribute to an existing dispute. Provide the Project Manager with information regarding any on-going dispute;
4. Record/File Keeping/Reporting:
- i. Record all observations (including supplemental photographs, field notes, work locations, type of equipment used, material on site, material used, contractor personnel on site, and conclusion whether work was performed according to contract documents) in each site visit in the On-Site Inspector’s Daily Dairy and in Hard copy and electronic Inspection Forms (forms for these records will be provided by MDF);
  - ii. Maintain a Material Delivery, Inspection and Approval/Rejection Log electronically and in hard copy (forms for these records will be provided by MDF);
  - iii. Maintain a RFI log electronically and in hard copy (forms for these records will be provided by MDF); and
  - iv. Maintain a log of all Non-conformance Reports and Corrective Action follow up reports electronically and in hard copy (forms for these records will be provided by MDF).

**D. Essential Qualifications**

1. Two years (minimum) construction inspection/observation experience and QA/QC experience;
2. Professionally well-organized with an attention to detail with a history of meeting deadlines;
3. Understands and can interpret drawings, specifications and contract terms and conditions. Has ability to sketch engineering quality construction details and plans for use with Contractors or with MDF Project Managers;
4. Understands Georgian building and construction regulations;
5. Understands safety and environmental issues on construction sites;
6. Ability to operate simple survey equipment;
7. Has some experience carrying out construction management on teams in the field;
8. Has some skill at negotiating with Construction Contractors avoiding conflicts;
9. Must have a level of physical fitness required to climb simple ladders and scaffolding, and move through smaller than usual openings and stay on his/her feet for hours at a time and generally working effectively on a construction site;
10. Ability to work independently;
11. Very good oral and written communications skills, working knowledge of English (Oral and Written);
12. Proficient using Microsoft Word, Excel and MS Outlook; and
13. Ability to work with and direct Contractor staff, engineers, skilled and unskilled laborers.

**E. Education**

1. B.S., Civil Engineering or related engineering from an accredited university preferred;
2. Certificate in Civil Engineering or related field from an accredited technical school required; and
3. Work experience may be substituted for formal education however in this case, attention to the Skills (Section D) requirement will be magnified.

### Appendix 3 (b) – MDF On-Site Inspector Job Description (Georgian)

სამუშაოს აღწერილობა

საქართველოს მუნიციპალური განვითარების ფონდი (მგფ)

თბილისი, საქართველო

#### ა. თანამდებობრივი ინფორმაცია

სახელწოდება: ადგილობრივი ინფრასტრუქტურისა და იძულებით გადაადგილებულ პირთა საცხოვრებელი სახლების რეაბილიტაციის პროექტის ველის ინსპექტორი

ფუნქციური ზედამხედველი: პროექტის მენეჯერი

ხანგრძლივობა: 12 თვე (ხანგრძლივობა შესაძლოა გაიზარდოს)

სამუშაოს ადგილმდებარეობა: ინსპექტორი თავდაპირველად განთავსდება ადგილობრივი ინფრასტრუქტურისა და იძულებით გადაადგილებულ პირთა საცხოვრებელი სახლების რეაბილიტაციის პროექტის ფარგლებში (რომელიც მთელ საქართველოს ტერიტორიაზე ხორციელდება) მიმდინარე სამშენებლო ობიექტებთან ახლოს, როგორც ეს მგფ-ის მიერაა წარმოდგენილი და საჭიროების შემთხვევაში განახორციელებს სხვა ახლომდებარე ობიექტებზე გასვლას. ინსპექტორის მუდმივი სამუშაო ადგილი არ უნდა იყოს თბილისში.

#### ბ. სამუშაოს აღწერილობა

ამერიკის საერთაშორისო განვითარების სააგენტოს მიერ დაფინანსებული ადგილობრივი ინფრასტრუქტურისა და იძულებით გადაადგილებულ პირთა საცხოვრებელი სახლების რეაბილიტაციის პროექტის ფარგლებში მუნიციპალური განვითარების ფონდი განახორციელებს რამოდენიმე სამშენებლო კონტრაქტის მენეჯმენტს საქართველოს მასშტაბით. მენეჯმენტი გულისხმობს მშენებლობის ზედამხედველობას და ინსპექტირებას ადგილზე, სრული დატვირთვით. სამშენებლო საქმიანობა შესაძლოა მოიცავდეს:

1. არსებული მრავალსართულიანი შენობების რეაბილიტაცია;
2. ირიგაციის სისტემების რეაბილიტაცია;
3. გზის, ქუჩის, ხიდის, მილხიდის სარეაბილიტაცია და ნაპირდაცვა; და
4. იძულებით გადაადგილებულ პირთა კოტეჯური ჩასახლებებისთვის წყალმომარაგების და ჩამდინარე წყლების შეშენება/გამწმენდი ნაგებობის მოწყობა.

მუნიციპალური განვითარების ფონდი გამოყოფს 30-40 ინსპექტორს მშენებლობის ადგილზე ინსპექტირებისათვის. პროექტის მენეჯერის

უშუალო ზედამხედველობით მშენებლობის ინსპექტორი განახორციელებს კონტრაქტით გათვალისწინებულ შემდეგ ფუნქციებს:

1. მუდმივი კონტრაქტი მგფ-ის ოფიციალურ პირებთან, ტეტრა ტეკის ინჟინრებთან, საქართველოს სამთავრობო სტრუქტურების და სააგენტოების სხვა ოფიციალურ პირებთან და საზოგადოებასთან;
2. მშენებელი კონტრაქტორის ყოველდღიური ზედამხედველობა;
3. ობიექტზე უსაფრთხოების ზომების კონტროლი და მართვა;
4. ობიექტზე გარემოსდაცვითი მოთხოვნების შესრულების კონტროლი და მართვა;
5. ადგილობრივი ინფრასტრუქტურისა და იძულებით გადაადგილებულ პირთა საცხოვრებელი სახლების რეაბილიტაციის პროექტის ხარისხის კონტროლის უზრუნველსაყოფი ქმედებების კონტროლი და მართვა;
6. ყოველდღიური სარეგისტრაციო ჟურნალის და ობიექტზე წარმოებული სამუშაოების დღიურის წარმოება;
7. ყოველდღიური, ყოველკვირეული და ყოველთვიური ანგარიშების მომზადება, გადაცემა და დაარქივება.

უნდა აღინიშნოს, რომ ერთ ინსპექტორს შესაძლებელია ინსპექტირების ვალდებულება აღებული ქონდეს ერთ ან რამდენიმე კონტრაქტზე და შესაძლოა ერთი ან რამდენიმე კონტრაქტის ფარგლებში ახდენდეს 30-მდე ობიექტის ინსპექტირებას (მაგალითად, მუნიციპალიტეტებში გზების რეაბილიტაციის შემთხვევაში, რომლებიც ერთი კონტრაქტით განისაზღვრება).

### **გ. კონკრეტული ვალდებულებები**

1. ადგილობრივი ინფრასტრუქტურისა და იძულებით გადაადგილებულ პირთა საცხოვრებელი სახლების რეაბილიტაციის პროექტის კორდინაცია:
  - ა. ადგილობრივი ინფრასტრუქტურისა და იძულებით გადაადგილებულ პირთა საცხოვრებელი სახლების რეაბილიტაციის პროექტის ფარგლებში მგფ-ის და ტეტრა ტეკის თანამშრომლებთან ერთად მუშაობა: მოთხოვნის და მითითების თანახმად, ინსპექტორმა მიმდინარე და დაგეგმილი ინფრასტრუქტურის პროექტების დაგეგმვის, პროექტირების, აღსრულების, მონიტორინგის და დასრულების ანგარიშის მომზადებისას მჭიდროდ უნდა ითანამშრომლოს პერსონალთან;
  - ბ. მჭიდროდ ითანამშრომლოს მგფ-ის პროექტის მენეჯერის დელეგირებულ საქართველოს სამთავრობო სააგენტოების ოფიციალურ პირებთან, ინჟინრებთან თუ სხვა პერსონალთან;
  - გ. ჩაატაროს შეხვედრები და მიაწოდოს ინფორმაცია საზოგადოებას მგფ-ის მითითებით.

2. მუშაობა ობიექტზე ადგილობრივი ინფრასტრუქტურისა და იძულებით გადაადგილებულ პირთა საცხოვრებელი სახლების რეაბილიტაციის პროექტის მშენებელ კონტრაქტორებთან ერთად:

ა. ინსპექტორმა უნდა იქონიოს ადგილობრივი ინფრასტრუქტურისა და იძულებით გადაადგილებულ პირთა საცხოვრებელი სახლების რეაბილიტაციის პროექტის ფარგლებში მიმდინარე იმ პროექტების საკონტრაქტო დოკუმენტაციის უახლესი ვერსია, რომელზეც მუშაობენ. საკონტრაქტო დოკუმენტაციაში იგულისხმება: კონტრაქტი, ნახაზები, სპეციფიკაციაში, უსაფრთხოების გეგმა, ხარისხის კონტროლის გეგმა, გარემოსდაცვით გეგმა და სხვა სათანადო, კონტრაქტთან დაკავშირებული დოკუმენტი.

ბ. კონტრაქტით გათვალისწინებული ყოველდღიური, მუდმივი დასწრება ინსპექტორისა ობიექტზე ითვალისწინებს ინსპექტორის მიერ ყოველდღიურად შესრულებული ყველა მიმდინარე სამუშაოს ხარისხის ინსპექტირებას;

- I. საჭიროების შემთხვევაში ტელეფონით და/ან ელექტრონული ფოსტით მგფ-ის პროექტის მენეჯერთან კონტაქტის საშუალებით განახორციელოს საკონტრაქტო დოკუმენტაციის ინტერპრეტირება მშენებელი კონტრაქტორისთვის; ობიექტზე მომუშავე ინსპექტორმა ხელი უნდა შეუწყო კონტრაქტორის მიერ ინფორმაციის მოთხოვნის სისტემის (დ I) გამოყენებას, დოკუმენტაციის შესაბამის ფორმატში შენახვის ჩათვლით;
- II. განახორციელოს ობიექტის ინსპექტირება მიმდინარე სამშენებლო სამუშაოების შესაფასებლად; უზრუნველყოს, რომ შესრულებული სამუშაოები შესაბამისობაში მოდიან გეგმებთან, სპეციფიკაციებთან და კანონმდებლობასთან. დამოუკიდებლად უნდა მიიღოს გადაწყვეტილება არასტანდარტული სამუშაოს, არასტანდარტული ნამუშევრის ან ტექნიკური მახასიათებლებით არადაამაჟყოფილებელი მასალების უარყოფაზე;
- III. უნდა შეამოწმოს და გადაამოწმოს ყველა საკვლევი ჰორიზონტალური და ვერტიკალური საკონტროლო კვანძი და საკვლევი პროფილი;
- IV. ზედამხედველობას უწევს და/ან ახორციელებს ობიექტზე ტესტირებას რათა დარწმუნდეს, რომ ობიექტზე ყველა საჭირო ტესტი ჩატარებულია. დოკუმენტურად აფიქსირებს ანგარიშის სახით კონტრაქტით გათვალისწინებული ნებისმიერი სამუშაოს არ შესრულების ფაქტს.
- V. აღრიცხავს ყოველდღიურად ობიექტზე წარმოებულ ყველა სამუშაოს. ჩანაწერები უნდა ხოსციელდებოდეს ინსპექტორისთვის შემუშავებულ ფორმატში;
- VI. ფოტოზე აფიქსირებს შესრულებულ მნიშვნელოვან სამუშაოს და ფოტო მასალებს ინახავს მგფ-ის მიერ გამოყოფილ კომპიუტერში;
- VII. ამოწმებს მასალების და აღჭურვილობის საცავს, რათა დარწმუნდეს, რომ მასალები და აღჭურვილობა სათანადოდ და უსაფრთხოდ ინახება და დაწინაურებული მასალები 48 საათზე მეტხანს არ რჩება ობიექტზე;
- VIII. უზრუნველყოს, რომ ობიექტი იყოს მოვლილი, სუფთა და ორგანიზებული იმ კუთხით, რომ თავიდან იყოს აცილებული ინციდენტები, ასევე ხელი შეუწყო ტრანსპორტის თავისუფალ გადაადგილებას; ასევე იყოს

მოწესრიგებული და აკმაყოფილებდეს მუშა მოსამსახურისთვის არსებულ ყველა კრიტერიუმს;

IX. უზრუნველყოს, რომ უსაფრთხოების და გარემოსდაცვითი მართვის გეგმა ობიექტის მენეჯმენტის ნაწილი იყოს და მოხდეს მისი ზედმიწევნით შესრულება. ინსპექტორმა განსაკუთრებული ყურადღება უნდა დაუთმოს საზოგადოების უსაფრთხოებას პროექტთან დაკავშირებული ნებისმიერი სამუშაოს განხორციელებისას ობიექტთან ახლოს ყოფნის შემთხვევაში;

X. უზრუნველყოს ობიექტის დაცულობა კონტრაქტორის მხრიდან როგორც მუშაობის დროს, ასევე მუშაობის შემდგომ;

ბ. უზრუნველყოს, რომ შესრულებული სამუშაოების მოცულობა და გამოყენებული მასალები შეესაბამებოდეს თავდაპირველ გეგმას;

დ. აკონტროლოს და ჩაუტაროს შესაბამისი ანალიზი მშენებლობის გრაფიკს, რათა დასრულებული სამუშაო შესაბამისობაში იყოს კონტრაქტში მოცემულ სამუშაოთა შესრულების დროის და ფინანსურ გრაფიკებთან.

ე. ინსპექტირებას ჩაუტარებს ყველა მიღებულ მასალას, რათა უზრუნველყოს ტექნიკურ მოთხოვნებთან შესაბამისობა და დაიწუნოს მასალები, რომლებიც არ აკმაყოფილებენ სტანდარტებს;

ვ. უზრუნველყოს, რომ ყოველი შესრულებული სამუშაო შესაბამისობაში მოდიოდეს შესაბამის სამთავრობო სტრუქტურასთან, მგფ-თან და სხვა ადგილობრივ და სახელმწიფო კანონმდებლობასთან;

ზ. მოთხოვნის შესაბამისად, განახორციელებს საქმიანობის და გრაფიკების კოორდინირებას სხვა სახელმწიფო და ადგილობრივ საკომუნიკაციო კომპანიებთან, კონტრაქტორებთან, ობიექტის მფლობელებთან და მუნიციპალიტეტის სხვადასხვა სამსახურებთან;

თ. უფლებამოსილების ფარგლებში აგვარებს კონტრაქტორებთან წარმოქმნილ კონფლიქტებს. მჭიდროდ თანამშრომლობს მგფ-ის პროექტის მენეჯერთან რათა თავიდან აიცილოს მის მიერ უფლებამოსილების გადაშეცემა;

ი. უზრუნველყოს, რომ ნებისმიერი სამუშაო, შესრულებული ობიექტის შიგნით თუ გარეთ სრულდება უსაფრთხოების წესების და პროცედურების დაცვით;

კ. საჭიროების შემთხვევაში, მგფ-ის პროექტის მენეჯერის უშუალო ხელმძღვანელობით მოამზადოს ტექნიკური მიმოხილვა კონტრაქტორის მიერ წარმოდგენილი დოკუმენტაციის, მოთხოვნილი ინფორმაციისა და მშენებლობის მეთოდებთან დაკავშირებით;

ლ. კონტრაქტორის მიერ სამუშაოს დასრულების უწყება მზადდება მას შემდეგ, რაც წერილობით დაამოწმებს თითოეულ შესრულებულ სამუშაოს შესაბამისობას საკონტრაქტო დოკუმენტებთან და დაადასტურებს, რომ კონტრაქტორმა მოთხოვნისამებრ წარმოადგინა

სერტიფიკატები მასალებზე და შესაბამისი დოკუმენტაცია მოვლად-შენახვის და ტესტების ჩატარების თაობაზე;

მ. ინსპექტორმა უნდა დაგეგმოს და ჩაატაროს ყოველდღიური, ყოველკვირეული და ყოველთვიური შეხვედრები და დაგეგმოს ასევე პერიოდული სპეციალური შეხვედრები ადგილობრივი ინფრასტრუქტურისა და იძულებით გადაადგილებულ პირთა საცხოვრებელი სახლების რეაბილიტაციის პროექტის მშენებელი კონტრაქტორის ზედამხედველთან სამუშაოს კოორდინირებულად წარმოების ფორმალური მხარის უზრუნველსაყოფად.

3. კონტრაქტის მენეჯმენტი

ა. მგფ-ის პროექტის მენეჯერთან მჭიდრო კავშირის შენარჩუნება კონტრაქტთან მიმართებაში წარმოჭრილ ნებისმიერ შეკითხვასთან დაკავშირებით;

ბ. ყოველთვიური ანაზღაურების მოთხოვნა: კონტრაქტორის ანაზღაურების მოთხოვნის შესამოწმებლად ინსპექტორი კონტრაქტორის წარმომადგენელთან ერთად ამოწმებს, ატარებს აზომვებს და აზუსტებს დასრულებული სამუშაოების მოცულობებს;

გ. ცვლილების მოთხოვნა: შეამოწმოს კონტრაქტორის მიერ წარმოდგენილი დოკუმენტაციის სისრულე და გადაუგზავნოს პროექტის მენეჯერს საბოლოო გადაწყვეტილების მისაღებად;

დ. კომუნიკაცია: მიიღოს და განიხილოს კონტრაქტორის მიერ გამოგზავნილი ყველა წერილი და საჭიროების შემთხვევაში იმოქმედოს მგფ-ის პროექტის მენეჯერთან და მგფ-ის სხვა სათანადო პერსონალთან შეთანხმებით;

ე. დაგები: ჩაიწეროს ყველა ქმედება/დისკუსია კონტრაქტორთან, რამაც შესაძლოა გამოიწვიოს ახალი, ან გაამწვავოს არსებული დავა. პროექტის მენეჯერს მიაწოდოს ინფორმაცია ყველა მიმდინარე დავასთან დაკავშირებით;

4. ჩანაწერები/დოკუმენტაციის შენახვა/ანგარიში:

I. გააკეთოს ჩანაწერები ნებისმიერ მოპოვებულ ინფორმაციაზე (დამატებით გადაღებული სურათების, ველზე გაკეთებული ჩანაწერების, სამუშაოს განხორციელების ადგილის, გამოყენებული აღჭურვილობის, ობიექტზე არსებული მასალების, ობიექტზე კონტრაქტორის პერსონალის და მომზადებული დასკვნის ჩათვლით იმის თაობაზე, თუ შესრულებული სამუშაო რამდენად შეესაბამება საკონტრაქტო დოკუმენტაციას) ობიექტზე ყოველი გასვლის შემდეგ ინსპექტორის დღიურში და ინსპექტირების ელექტრონულ ფორმაში (მსგავსი ჩანაწერების გასაკეთებლად საჭირო ფორმებს შეიმუშავენ მგფ);

II. შეინახოს ობიექტზე მასალების ინსპექტირების, მიღება/უარყოფის ჩანაწერების ელექტრონული და ხელნაწერი ვერსიები (ამ ჩანაწერების ფორმების მომზადებას უზრუნველყოფს მგფ);

- III. შინახოს ელექტრონული და დაბეჭდილი ვერსიები წარმოდგენილი მასალების, ინსპექტირების და მიღება/უარყოფის დოკუმენტაციის (ამ ჩანაწერების ფორმების მომზადებას უზრუნველყოფს მგფ);
- IV. შინახოს ელექტრონული და დაბეჭდილი ვერსიები შეუსრულებელი სამუშაოს და შემდგომ გამოსასწორებელი ქმედებების ამსახველი ანგარიშების (ამ ჩანაწერების ფორმების მომზადებას უზრუნველყოფს მგფ).

**დ. აუცილებელი საკვალიფიკაციო მოთხოვნები**

1. ორწლიანი (სულ მცირე) გამოცდილება მშენებლობის ინსპექტირება/ზედამხედველობაში და ხარისხის უზრუნველყოფა/ხარისხის კონტროლის კუთხით;
2. კარგად ორგანიზებული, დეტალებზე ორიენტირებული და სამუშაოს დროულად შესრულების ისტორიით;
3. უნდა შეეძლოს ნახაზების, სპეციფიკაციების და საკონტრაქტო პირობების გაგება და ახსნა; შეეძლოს სამშენებლო დეტალების და გეგმის მონახაზის გაკეთება კონტრაქტორისთვის ან მგფ-ის პროექტის მენეჯერისთვის;
4. უნდა იცნობდეს საქართველოს სამშენებლო კანონმდებლობას;
5. გათვითცნობიერებული უნდა უყოს მშენებლობის ობიექტზე უსაფრთხოების და გარემოსდაცვით საკითხებში;
6. უნდა შეეძლოს მარტივი საკვლევი აღჭურვილობის გამოყენება;
7. უნდა ქონდეს ობიექტზე მშენებლობის მენეჯმენტის წარმოების გამოცდილება;
8. უნდა ქონდეს სამშენებლო კონტრაქტორებთან ურთიერთობისას კონფლიქტების თავიდან არიდების უნარი;
9. უნდა ქონდეს სათანადო ფიზიკური მონაცემები, რათა შეეძლოს კიბეებზე და ხარაჩოებზე ასვლა, საათობით ფეხზე ყოფნა და მცირე ზომის გასასვლელებში სიარული და ზოგადად, ეფექტურად მუშაობა სამშენებლო ობიექტზე;
10. უნდა გააჩნდეს დამოუკიდებლად მუშაობის უნარე;
11. უნდა ქონდეს ძალიან კარგი ზეპირი და წერითი კომუნიკაციის უნარი და ფლობდეს ინგლისურს სამუშაოს შესასრულებლად (წერა და ზეპირი);
12. უნდა ფლობდეს იცროსოფტ ჭორდ, ხცელ ანდ შ უტლოკ პროგრამებს;
13. უნდა ქონდეს კონტრაქტორის პერსონალთან, ინჟინრებთან და გამოუცდელ მუშახელთან მუშაობის და მათი ხელმძღვანელობის უნარი.

## ე. განათლება

1. ბრიტანული სტანდარტი; სამშენებლო ინჟინრის ან მასთან დაკავშირებული ხარისხი სასურველია აკრედიტირებული უნივერსიტეტიდან;
2. სერტიფიკატი სამშენებლო ინჟინერიაში ან მსგავს სფეროში აკრედიტირებული ტექნიკური სასწავლებლიდან;
3. სამუშაო გამოცდილებას შესაძლებელია არ დაეთმოს ყურადღება თუ კანდიდატს უმაღლესი განათლება აქვს მიღებული, თუმცა, ამ შემთხვევაში განსაკუთრებული ყურადღება მიექცევა უნარების (სექცია დ) მოთხოვნებს.

## Appendix 4 – Subproject On-Site Inspector’s Journal

### Georgia Municipal Development Fund (MDF)

#### On-Site Inspector’s Daily Journal

##### Instructions

საქართველოს მუნიციპალური განვითარების ფონდი (მგფ)

ობიექტზე მომუშავე ინსპექტორის ყოველდღიური ჟურნალის წარმოების ინსტრუქციები

The MDF On-Site Inspector shall keep a Hard Cover Daily Journal. The Inspector shall keep the Journal in his/her files either on the job site or in his/her possession. It shall either be a bound book filled in by hand.

მგფ-ის წარმომადგენელმა ინსპექტორმა უნდა აწარმოოს ყოველდღიური ჟურნალი. ინსპექტორმა ჟურნალი უნდა შეინახოს თავის დოკუმენტებთან ობიექტზე ან ატაროს თან. ჟურნალი შეიძლება იყოს ბლოკნოტის ტიპის, რომელიც ხელით შეივსება.

##### General

##### ზოგადი

This GMIP Subproject Daily Construction Journal is for the exclusive use of the MDF On-Site Inspector.

ადგილობრივი ინფრასტრუქტურისა და იძულებით გადაადგილებულ პირთა საცხოვრებელი სახლების რეაბილიტაციის პროექტის (GMIP) ქვეპროექტის ყოველდღიური სამშენებლო ჟურნალი განკუთვნილია მხოლოდ მგფ-ის წარმომადგენელი ინსპექტორებისათვის.

The On-Site Inspector is the only one who shall make entries into the Journal.

მხოლოდ ინსპექტორს აქვს უფლება ჩანაწერები შეიტანოს ჟურნალში.

The information in this journal shall be treated as private. Access to the contents by others is denied except by specific permission from the MDF On-Site Inspector or MDF Project Manager.

ჯურნალში ასახული ინფორმაცია კონფიდენციალურია. სხვა პირებს ჯურნალის შინაარსთან გაცნობა შეუძლიათ მხოლოდ მგფ-ის წარმომადგენელი ინსპექტორის ან პროექტის მენეჯერის თანხმობით.

The Journal shall be filled out daily by the On-Site Inspector and any unused portion of the page "lined-out" to prevent additions at a later date.

ინსპექტორმა ყოველდღიურად უნდა შეიტანოს ჩანაწერები ჟურნალში და გადახაზოს გამოუყენებელი სივრცე, რათა თავიდან აიცილოს მოგვიანებით ინფორმაციის ჩამატება ჟურნალში.

This Journal may be used as evidence in legal proceedings therefore the Inspector shall print / write legibly and in ink.

ზემოთაღნიშნული ჟურნალი შეიძლება გამოყენებული იქნას როგორც მტკიცებულება, შესაბამისად ინსპექტორმა უნდა დაბეჭდოს/წეროს ავტოკალმით და გარკვევით.

Cover important points of the daily construction progress and unusual events that occur on the project.

ჩანაწერები უნდა მოიცავდეს ყოველდღიურად მშენებლობის პროცესთან დაკავშირებულ მნიშვნელოვან საკითხებს და ნებისმიერ უჩვეულო შემთხვევას, რომელსაც მშენებლობის პროცესში ექნება ადგილი.

Every week, the Inspector shall make a photocopy of the past week's sheets/pages and file them separately in case the Journal is lost. He / she shall also send a copy of these pages to the MDF Project Manager.

კვირაში ერთხელ ინსპექტორმა უნდა გააკეთოს წინა კვირის ჩანაწერების ასლი და შეინახოს ცალკე, რათა ჟურნალის დაკარგვის შემთხვევაში ჩანაწერები არ დაიკარგოს. ინსპექტორმა ასლები უნდა გადაუგზავნოს ასევე მგფ-ის პროექტის მენეჯერს.

At the completion of the project, the diary must be appropriately filed in the MDF office.

პროექტის დასრულების შემდეგ ჟურნალი უნდა ინახებოდეს მგფ-ის ოფისში.

### **Specific**

#### **კონკრეტული**

The Inspector shall record the following in the Daily Journal.

ინსპექტორმა ყოველდღიურ ჟურნალში უნდა ჩაიწეროს შემდეგი სახის ინფორმაცია:

#### **Weather**

##### **ამინდი**

Temperature at 08:00, 12:00 and 16:00

Wind Chill Temperature at 08:00, 12:00 and 16:00

Wind Speed at 08:00, 12:00 and 16:00

General weather conditions (cloudy, windy, sunny, showers, medium rain, heavy rain, light snow, heavy snow, sleet, hail, ice)

ტემპერატურა 08:00, 12:00 და 16:00 საათზე

ქარის ტემპერატურა 08:00, 12:00 და 16:00 საათზე

ქარის სიჩქარე 08:00, 12:00 და 16:00 საათზე

ზოგადი მეტეოროლოგიური პირობები (ღრუბლიანი, ქარიანი, მზიანი, წვიმიანი, საშუალოდ ნალექიანი, უხვნალექიანი, მსუბუქი თოვა, ძლიერი თოვა, წვიმიანი თოვლი, სეტყავა, ყინული)

### **Daily Contractor's Meeting**

#### **ყოველდღიური შეხვედრები კონტრაქტორთან**

Who was present?

What was specifically discussed, who said what – enumerate each item

List any agreements made

List any RFIs generated or discussed

შეხვედრაში მონაწილე პირები

განხილული საკითხები, ვინ იყვნენ განმხილველები - ჩამოთვალეთ ყველა საკითხი

ჩამოთვალეთ ყველა მიღწეული შეთანხმება

გაკეთდეს ჩანაწერი ინფორმაციის მოთხოვნის არსებობის ან განხილვის შემთხვევაში

### **Work Done During the Day**

#### **დღის განმავლობაში შესრულებული სამუშაო**

Ensure work noted is defined by stationing or by floor, hallway and/or room number or some other work item number (from the drawings if possible) and / or location definition.

Comment on quality of work

Comment if work is ahead of schedule or behind schedule

Testing:

Note any Samples taken and / or shipped off site

Note any testing results delivered back to site

In the event results are out of specification, note Contractor's proposed corrective action required and agreed to

შესრულებული სამუშაო აღწერისას მითითებული უნდა იყოს ადგილი ან სართულის, კორიდორის და/ან ოთახის ნომერი ან სამუშაოს სხვა პუნქტის ნომერი (თუ შესაძლებელია ნახაზებიდან) და /ან განისაზღვროს სამუშაოს შესრულების ადგილი.

გაკეთდეს კომენტარი შესრულებული სამუშაოს ხარისხზე

გაკეთდეს კომენტარი სამუშაოს გრაფიკის წინსწრებით ან ჩამორჩენით განხორციელების შემთხვევაში

ტესტები:

ალინიშნოს ნებისმიერი სინჯის აღება ობიექტზე და გატანა ობიექტიდან

ალინიშნოს ჩატარებული ტესტირ შედეგი

თუ ტესტის შედეგი არ აკმაყოფილებს სპეციფიკაციებს, დაფიქსირდეს მოთხოვნილი და შეთანხმებული, კონტრაქტორის მიერ შემოთავაზებული გამოსასწორებელი ქმედება

### **Contractor's Workforce and Equipment**

#### **კონტრაქტორის სამუშაო ძალა და დანადგარები**

Staff: record the following each day პერსონალი: გაკეთდეს ჩანაწერები ქვევით მოყვანილ თითოეულ საკითხზე

Site Supervisor's Name ობიექტის ზედამხედველი

How many რამდენი:

Foreman ბრიგადირი

Equipment Operator დანადგარების ოპერატორი

Mason კალატობი

Plumber სანტექნიკოსი

Electrician ელექტრიკოსი

Carpenter დურგალი

Painter მღებავი

Pipe Fitter სანტექნიკოსი

Storekeeper მასალების საცავის ზედამხედველი

Guard დაცვა

Driver მძღოლი

Mechanic მექანიკოსი

Other Skilled Laborers სხვა კვალიფიციური მუშახელი

Unskilled Laborers დამხმარე მუშახელი

Equipment record the following each day დანადგარებთან დაკავშირებით ყოველდღიურად საჭირო ჩანაწერები

How many რამდენი

Scraper ასფალტის ფრეზი

Front End Loader დამტვირთველი

Back-Hoe ბელორუსის ტიპის ექსკავატორი

Roller Compactor / Vibrator კომპაქტორი/ვიბრატორი

Motor Grader გრეიდერი

Crane ამწეკრანი

Dump Truck თვითმცლელი

Concrete Mixer / Pump ბეტონის მანქანა/ტუმბო

Generator გენერატორი

Water Pump წყლის ტუმბო

Vehicle ავტომანქანა

### **Materials Delivered / Accepted / Rejected / Storage**

**ობიექტზე მიტანილი/მიღებული/დანუნებული მასალები/მათი დასაწყობება**

Note any and all material deliveries to site

Note materials accepted and / or rejected

Note materials used each day

Note any and all material samples delivered to the On-site Inspector

Note any issues with material storage

აღირიცხოს ობიექტზე შემოსული ყველა მასალა

აღინიშნოს მიღებული და ან დაწუნებული მასალები

აღინიშნოს ყოველდღიურად გამოყენებული მასალები

აღინიშნოს ინსპექტორისთვის გადაცემული მასალის ნიმუშები

გაკეთდეს ჩანაწერი მასალების დასაწყობებასთან დაკავშირებით ნებისმიერ საკითხზე

### **Drawings Marked Up**

#### **ნახაზების ანოტირება**

Neatly mark up a set of project drawings showing work done each day. This set of drawings becomes the “record set.”

საპროექტო ნახაზებს, რომლებზეც ასახულია დღის განმავლობაში განსახორციელებელი სამუშაო, უნდა გაუკეთდეს ანოტაციები. ნახაზები, რომლებზეც შენიშვნებია გაკეთებული წარმოადგენს „ჩანაწერების ნაკრებს“.

## Appendix 5 – Subproject On-Site Inspector’s Daily Report Form (bi-lingual)

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**GMP SUBPROJECT DAILY INSPECTION REPORT** **GMP**  
**qveproeqtis farglebSi yoveldRiuri inspeqtirebis angariSi**

Name of Subproject: \_\_\_\_\_  
**qveproeqtis saxelwodeba:** \_\_\_\_\_  
 Type of Subproject: qveproeqtis \_\_\_\_\_  
 tipi: \_\_\_\_\_

Location (City, Region): \_\_\_\_\_  
**adgilmdebareoba (qalaq, regioni):** \_\_\_\_\_

Subproject / Contract No: \_\_\_\_\_  
**qveproeqtis/kontraqtis N:** \_\_\_\_\_

Contractor: kontraqtori: \_\_\_\_\_ Date: \_\_\_\_\_  
**TariRi:** \_\_\_\_\_

Name of On-Site Inspector: \_\_\_\_\_ Day: dRe: \_\_\_\_\_  
**obieqtis inspeqtori:** \_\_\_\_\_

Weather Today: amindi: \_\_\_\_\_ Temp: \_\_\_\_\_  
**temperatura:** \_\_\_\_\_

Contractor Worked Today (Y/N): \_\_\_\_\_ Start Time: \_\_\_\_\_  
**axorciebs Tu ara kontraqtori samuSaoes dRes (k/ara):** \_\_\_\_\_ **samuSaoes dawyebis TariRi:** \_\_\_\_\_

Finish Time: \_\_\_\_\_  
**samuSaoes dasrulebis TariRi:** \_\_\_\_\_

**# of Contractor Staff On Site Today:** \_\_\_\_\_ **Contractor Equipment On Site Today (#):** \_\_\_\_\_  
**kontraqtoris personalis ricxvi obieqtze:** \_\_\_\_\_ **kontraqtoris manqanadanadgarebis ricxvi obieqtze:** \_\_\_\_\_

		Vehicles transporti	
Supervisors / Foremen zedamxedveli/xelmZRvaneli:	_____	Trucks manqanebi	satvirTo _____
Equipment Operators manqana-danadgarebis operatorebi:	_____	Concrete Mixer betonis amrevi	_____
Skilled Labor kvalificuri muSaxeli	_____	Small Equip zomis danadgarebi	mcira _____
Unskilled Labor arაკvalificირი muSaxeli	_____		
<b>Total sul</b>	-		-

**General Management Issues:** (S - Satisfactory; U - Unsatisfactory) **zogadi marTvis sakiTxebi:** (S - damakmayoflebeli; N - aradamakmayoflebeli)

Labor samuSao	Safety usaTxeoba	VIP Site Visit mriSvnelovani piris viziti obieqtze
Plant/Equipment qaxana/ danadgarebi	Housekeeping administraciul saqmianoba	Pub. Relations sazogadoebasTan urTierToba
Personnel personali	Quality Tests xarixis ganmsazRvreli testebi	Right of Way saxelmwilo miaa


**GMIP SUBPROJECT DAILY INSPECTION REPORT**  
**qveproeqtis farglebSi yoveldRiuri inspeqtirebis angariSi**
**GMIP**

Schedule grafiki _____	Site Records obieqtze ganxorcielebuli Canawerebi _____	Env. Concern garemosdaviTi sakiTxebi _____
Site Security obietis usafrTxoeba _____	Material Storage masalebis ganTavsebis adgili _____	Contract Issue kontraqtan dakavSirebuli sakiTxebi _____
Quant. Surv. moculobebis kvleva _____	Work Quality samuSaos xarixi _____	

**Any Discussions with Contractor Today:** (Include any additional notes on "U" notes above and any instructions to the Contractor.)

**kontraqtan gamarTuli nebismeri saxis diskusia dRis ganmavlobaSi:** (igulisxmeba damatebiTi SeniSvnebi kontraqtoris mier samuSaos aradamakmayofleblad Sesrulebisas da instruqciebi kontraqtorisTvis)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Insert XXXX In each applicable space, Report can have several boxes X'ed. Write brief description of work from each check box in spaces below the main box

CaseviT XXX yvela gamotovebi ujraSi, angariSi SeiZleba Sedodes ramdenime Sesavsebi ujra, warmoadgineT samuSaos detaluri daxasiaTeba kiTxvaris iTTeuli komponentis miqedviT.

100 GENERAL zogadi	400 STRUCTURES nagebobebi	700 EARTHWORKS samuSaoebi	miwis
101 Clearing amenda _____	401 Surveying kvleva _____	701 Surveying kvleva _____	
102 Demolition daSla _____	402 Materials masalebi _____	702 Materials masalebi _____	
103 Materials masalebi _____	403 Formwork ysibebis mowyoba _____	703 Excavation eqskavacia _____	
104 Fencing SemoRobva _____	404 Foundation saZirkveli _____	704 Disposal ganTavseba _____	
105 Earthwork miwis samuSao _____	405 Concreting dabetoneba _____	705 Dewatering grunTis amoSroba _____	
106 Planting ganaSenianeba _____	406 Placement ganTavseba _____	706 Backfill ukuCayra _____	
107 Testing testireba _____	407 Plaster Selesva _____	707 Embankment miwayitis mowyoba _____	
108 Clean Up dasufTaveba _____	408 Finish dasruleba _____	708 Erosion erozia _____	
200 ROADS gzebi	409 Floors latakebi _____	709 Compaction dakepyra _____	





**GMIP SUBPROJECT DAILY INSPECTION REPORT**  
qveproeqtlis farglebSi yoveldRiuri inspeqtirebis angariSi

**GMIP**


## Appendix 6 – MDF Project Manager’s Subproject Report Forms (English)

To save printing, this is only the cover page to a 13 part report. All 13 parts are in forms available with Tetra Tech. The MDF PM simply has to complete the forms to develop the Monthly Report



### Georgia Municipal Development Fund

UNITED STATES AGENCY for INTERNATIONAL DEVELOPMENT

#### **GMIP Component**

*Subproject Name:*

Monthly Managers Report *Month 20XX*

#### **COVER PHOTO**

Employer: Municipal Development Fund

General Contractor: *Contractor's Name*

USAID Oversight Contractor: Tetra Tech, Inc.



**Appendix 7 – Requests For Information (RFI) Form (bi-lingual)**



<b>GMIP SUBPROJECT REQUEST FOR INFORMATION (RFI)</b> <b>GMIP qveproeqtis farglebSi informaciis moTxovnis forma (RFI)</b>	<div style="border: 1px solid black; height: 40px; width: 100%;"></div> <p style="margin-top: 5px;"><b>RFI #</b></p>
---	--

**Name of Subproject:**  
**qveproeqtis saxelwodeba:** \_\_\_\_\_

Type of Subproject:  
 qveproeqtis tipi: \_\_\_\_\_

Location (City, Region):  
 adgilmdebareoba (qalaqi, regioni): \_\_\_\_\_

Subproject / Contract No:  
 qveproeqtis/kontraqtis N: \_\_\_\_\_

Contractor: kontraqtori: \_\_\_\_\_

Name of On-Site Inspector:  
 obieqtze momuSave inspeqtori: \_\_\_\_\_

Date of RFI: RFI dokumentis momzadebis TariRi: \_\_\_\_\_  
 Day: dRe: \_\_\_\_\_

**Requested Information / Clarification:**  
**moTxovnili informacia/ganmarteba:**

(use additional attached sheets if necessary) (gamoiyeneT TandarTuli furceli saWiroebis SemTxvevaSi)

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By: Semsrule beli: \_\_\_\_\_ Signature: xelmower a: \_\_\_\_\_ Date: TariRi: \_\_\_\_\_

# Appendix 8 – RFI Log

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**GMIP SUBPROJECT REQUEST FOR INFORMATION (RFI) LOG**  
**qveproeqtis farglebSi informacilis moTxovnis forma (RFI)**

**GMIP**

**Name of Subproject:**  
**qveproeqtis saxelwodeba:**

Type of Subproject:  
 qveproeqtis tipi:

Location (City, Region):  
 adgilmdbareoba (qalaqi, regioni):

Subproject / Contract No:  
 qveproeqtis/kontraqtis N:  
 Contractor: kontraqtori:

RFI # RFI №	Date Contractor Submitted kontraqtoris momarTvis TariRi	Description aRweriloba	MDF Initial Response Date mgt-is pirveli reagirebis TariRi	Close Date (Both Inspector and Contractor Agree) dasrulebis TariRi (inspeqtoris da kontraqtoris TanmobiT)	Action Taken ganxorcielebuli qmedeba
1					
2					
3					
4					
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12					
13					
14					
15					

## Appendix 9 – Pre-Design / Pre-Construction Conference (bi-lingual)

### GMIP SUBPROJECT PRE-DESIGN / PRE-CONSTRUCTION AGENDA

ადგილობრივი ინფრასტრუქტურისა და იძულებით გადაადგილებულ პირთა საცხოვრებელი სახლების რეაბილიტაციის პროექტის (GMIP) ქვეპროექტის წინა საპროექტო და წინა სამშენებლო შეხვედრების დღის წესრიგი

*See instruction at the end of this document*

*იხილეთ ინსტრუქცია დოკუმენტის ბოლოს*

Date of Meeting:

შეხვედრის თარიღი:

**Subproject Name:** ქვეპროექტის დასახელება:

**Subproject Location:** ქვეპროექტის ადგილმდებარეობა:

**Agenda Prepared By** (Name, Title, Agency): დღის წესრიგი მოამზადა (სახელი, პოზიცია, ორგანიზაცია)

**Meeting Location:** შეხვედრის ადგილი:

**Meeting Time:** შეხვედრის დრო:

**Minimum Invited Attendees** (Name, Title, Agency) შეხვედრაზე მონაწილე პირები (სახელი, პოზიცია, ორგანიზაცია)

Contractor Owner კონტრაქტორი/კომპანიის მფლობელი

Contractor Chief Engineer (Design Build) კონტრაქტორის მთავარი ინჟინერი (პროექტირება-მშენებლობის ტიპის კონტრაქტი)

Contractor Chief Construction engineer (Design Build and Design Bid Build Contracts) კონტრაქტორის მთავარი სამშენებლო ინჟინერი (პროექტირება-მშენებლობის და პროექტირება-ტენდერი-მშენებლობის ტიპის კონტრაქტები)

Contractor Site Superintendent სამშენებლო ობიექტის ხელმძღვანელი, კონტრაქტორის წარმომადგენელი

MDF Program Manager მგფ-ის წარმომადგენელი, პროგრამის მენეჯერი

MDF Project Manager მგფ-ის წარმომადგენელი, პროექტის მენეჯერი

MDF On-Site Inspector(s) მგფ-ის წარმომადგენელი, სამშენებლო ობიექტის ინსპექტორი

Tt COP or DCOP ტეტრა ტეკის პროექტის ხელმძღვანელი და პროექტის ხელმძღვანელის მოადგილე

Tt Engineer ტეტრა ტეკის წარმომადგენელი ინჟინერი

Tt QA/QC Engineer ტეტრა ტეკის წარმომადგენელი, ხარისხის უზრუნველყოფის/ხარისხის კონტროლის ინჟინერი

Tt Translator ტეტრა ტეკის წარმომადგენელი, თარჯიმანი

**Contract Information კონტრაქტთან დაკავშირებული ინფორმაცია**

Award (NTP) Date: კონტრაქტის მიკუთვნების თარიღი:

Contract Signed Date: კონტრაქტის ხელმოწერის თარიღი

Contract Completion Date: კონტრაქტის დასრულების თარიღი:

Liquidated Damages: ზარალის ანაზღაურება დაგვიანებისთვის:

**Obtain Project Organization (Names, Tel. Email) List:** პროექტის სტრუქტურა (სახელები, ტელეფონები, ელექტრონული ფოსტა)

Contractor კონტრაქტორი

Design Contract Administrator კონტრაქტორის წარმომადგენელი, დაპროექტების ადმინისტრატორი

Prime Contractor Representatives კონტრაქტორის მთავარი წარმომადგენლები

Project Manager პროექტის მენეჯერი

Chief Engineer მთავარი ინჟინერი

Site Superintendent სამშენებლო ობიექტის ხელმძღვანელი

QA / QC Manager ხარისხის უზრუნველყოფის/ხარისხის კონტროლის მენეჯერი

Safety Manager უსაფრთხოების მენეჯერი

Env. Compliance Manager გარემოსდაცვითი მოთხოვნების დაცვის მენეჯერი

List of subcontractors( attached) ქვეკონტრაქტორთა სია (თანდართული)

MDF მგფ

MDF Project Manager მგფ-ის წარმომადგენელი, პროექტის მენეჯერი

MDF On-Site Inspector მგფ-ის წარმომადგენელი, ობიექტის ინსპექტორი

Tetra Tech ტეტრა ტეკო

Tt Engineer ტეტრა ტეკის წარმომადგენელი ინჟინერი

Tt QA/QC Engineer ტეტრა ტეკის წარმომადგენელი, ხარისხის უზრუნველყოფის/ხარისხის კონტროლი ინჟინერი

### **Pre-Design წინა საპროექტო შეხვედრა**

Discuss Contract Requirements. Ensure that deadlines are established for all deliverables. The Contractor needs to understand the requirements and expectation for the following issues. კონტრაქტის მოთხოვნების განხილვა. ყველა წარმოსადგენი დოკუმენტისთვის ვადების განსაზღვრის უზრუნველყოფა. კონტრაქტორი უნდა აცნობიერებდეს მის წინაშე არსებულ მოთხოვნებს ქვემოთ ჩამოთვლილ საკითხებთან მიმართებაში

Drawing Standards ნახაზების მომზადების სტანდარტები

Standards of Design პროექტირების სტანდარტები

Quantity Calculations მოცულობების გაანგარიშება

Scheduled Reviews and Approvals რეგულარული განხილვა და დამტკიცება

Schedule Harmonization – the design and construction can and should occur simultaneously. Once design of some elements are approved, there is no reason to not start construction on those elements of the project. წინასწარ დაგეგმილი პროცესი - პროექტირება და მშენებლობა შესაძლებელია და უნდა მიმდინარეობდეს თანადროულად. პროექტის გარკვეული ეტაპის დასრულების და დამტკიცებისთანავე უნდა დაიწყოს მშენებლობა პროექტის დასრულებულ ნაწილებზე.

**Review Contractor Bonds (How much? With Who? By Who? Expiry Date?) კონტრაქტორის გარანტიების/ვალდებულებების განხილვა (რაოდენობა, ვისთან აქვს ვალდებულება, ვის მიერ, ვალდებულების დასრულების თარიღი )**

Payment გადახდა

Performance შესრულება

Ensure all Bonds are proper and in place ყველა ვალდებულების შესაბამისობაში დარწმუნება

**Insurance Certificate (How much? With Who? By Who? Expiry Date?) დაზღვევის სერტიფიკატი (რაოდენობა, ვისთან, ვის მიერ, დაზღვევის დასრულების თარიღი)**

Builders Risk მშენებლის რისკები

Vehicles ავტომანქანა

Workman's Comp მუშის კომპენსაცია

Ensure all insurances are in place and up to date. Ensure MDF and Tt have copies of certificates უზრუნველყოფილ იქნას ძალაში მყოფი სადაზღვევო პოლისების წარმოდგენა

### **Licenses and Permits ლიცენზიები და ნებართვები**

What are required in the Contract? By the Municipality? Others? კონტრაქტით გათვალისწინებული, მუნიციპალიტეტის და სხვა მოთხოვნები

Does the Contractor have them? Are they up to date? ხელმისაწვდომია თუ არა მოთხოვნები კონტრაქტორისთვის? მიეწოდება კონტრაქტორის მოთხოვნების უახლესი ვარიანტი?

Ensure that MDF and Tt have copies of all licenses and permits მგფ-ის და ტეტრა ტეკისთვის ყველა საჭირო ლიცენზიისა და ნებართვის ასლის გადაცემის უზრუნველყოფა

### **Site Management and Documents on Site ობიექტის მენეჯმენტი და ობიექტზე საწარმო დოკუმენტაცია**

Record Keeping – go over the records that On-Site Inspector is expected to keep and the records the Contractor is expected to keep ჩანაწერების წარმოება - ობიექტის ინსპექტორის და კონტრაქტორის ჩანაწერების შინაარსის განხილვა

**On-Site Inspector Journal** – go over with everyone the instructions and the information the On-Site Inspector will be keeping and why ინსპექტორის ჟურნალი - ინსტრუქციის, ინსპექტორის მიერ ჟურნალში შესატანი ინფორმაციის და ამ ინფორმაციის ჟურნალში შეტანის საჭიროების განხილვა

**Daily Inspection Report (Electronic)** – go over the form the Inspector will send out to all parties at the end of each day ყოველდღიური ინსპექტირების ანგარიში (ელექტრონული ვერსია) - ინსპექტორის მიერ შესაბამისი ადრესატებისათვის გადასაგზავნი დოკუმენტების განხილვა

Site Security – Contractor shall present his plan ობიექტის უსაფრთხოება - კონტრაქტორმა უნდა წარმოადგინოს მისი გეგმა

Site Housekeeping – MDF and Tt shall address requirements ადმინისტრაციული-სამეურნეო საქმიანობის წარმართვა ობიექტზე - მგფ-მა და ტეტრა ტეკმა უნდა იმოქმედონ მოთხოვნების შესაბამისად

Lay Dow Yards – Security and Housekeeping requirements should be discussed მასალების და აღჭურვილობის განთავსების ადგილი - უნდა მოხდეს უსაფრთხოების და ადმინისტრაციულ-სამეურნეო მოთხოვნების განხილვა

**Record Drawings (As Built Drawings) and Specifications** – the Contractor shall maintain an up-to-date set of drawings on site that he uses to record all daily construction and any changes to the drawings. He shall include accurate location of all new and existing underground and overhead utilities and all existing utility field modifications. **სამშენებლო ნახაზებთან და სპეციფიკაციებთან დაკავშირებული ჩანაწერები** - კონტრაქტორმა ობიექტზე თან უნდა იქონიოს ნახაზების საბოლოო ვერსია, რომელსაც გამოიყენებს ყოველდღიურად განხორციელებული სამუშაოს ან ნებისმიერი ცვლილების (ნახაზთან მიმართებაში) ჟურნალში ასახვისას. ინსპექტორმა უნდა დააფიქსიროს ყველა ახალი და არსებული მიწისქვეშა და მიწისზედა კომუნიკაციის ზუსტი ადგილმდებარეობა და ყველა არსებული კომუნიკაციის ადგილმდებარეობის ცვლილება.

Speaking to the Press – nobody is allowed to do this – refer press inquiries to the Project Manager  
პრესასთან ურთიერთობა - პრესასთან ურთიერთობა აკრძალულია - გადაამისამართეთ პრესა პროექტის მენეჯერთან

Handling Visitors – Safety Training and Equipment; **Locals** ურთიერთობა ვიზიტორებთან - ტრენინგი უსაფრთხოების საკითხებსა და არჭურვილობაზე; ადგილობრივი

**Project and Progress Meetings პროექტთან და მიღწეულ პროგრესთან დაკავშირებული შეხვედრები**

**Daily meetings with On-Site Inspector** – review what will be discussed ყოველდღიური შეხვედრები ობიექტის ინსპექტორთან - განსახილველი საკითხების მიმოხილვა

**Regularly monthly scheduled job conferences** each month on \_\_\_\_\_ 2012: რეგულარული, ყოველთვიური დაგეგმილი სამუშაო კონფერენციების ჩატარება 2012 წლის განმავლობაში:

The first meeting will be: \_\_\_\_\_ პირველი შეხვედრა იქნება:

The Contractor shall be prepared to discuss any questions he or his subs may have regarding the work, the work that was supposed to be done during the preceding month or the intended progress of the work and the work to be done in the upcoming month. These items will be listed in the minutes and status reports received at subsequent meetings until resolved კონტრაქტორი მზად უნდა იყოს განიხილოს ქვეკონტრაქტორების მიერ წამოჭრილი სამუშაოსთან დაკავშირებული ნებისმიერი საკითხი. ეს შეეხება სამუშაოს, რომელიც წინა თვეებში უნდა შესრულებულიყო, მიმდინარე სამუშაოს პროგრესს ან სამომავლოდ შესასრულებელ სამუშაოს. ეს საკითხები ჩამოთვლილი იქნება შეხვედრის ოქმსა და სტატუსის ანგარიშში რომელიც წარმოდგენილი იქნება შემდგომ შეხვედრებზე საკითხის საკითხი არ მოგვარდება.

The **Schedule** will be discussed. Deviations from the Contractor provided schedule by the Contractor need to be explained and justified მოხდება **გრაფიკის** განხილვა. კონტრაქტორის მიერ მისივე შემუშავებული გრაფიკის დარღვევის შემთხვევაში უნდა მოხდეს გრაფიკიდან გადახვევის მიზეზის განმარტება და გამართლება.

Non-Conforming Work will be discussed. Schedules to correct all non-conforming work will be reviewed მოხდება შეუთანხმებლად შესრულებული სამუშაოს განხილვა. მოხდება შეუთანხმებელი სამუშაოს გრაფიკის გადახედვა.

RFIs will be discussed and resolved of possible მოხდება ინფორმაციის მოთხოვნის განხილვა და შესაძლებლობის შემთხვევაში დაკმაყოფილება

Material deliveries, acceptance, rejection, and storage will be discussed განხილული იქნება მასალების მიტანა, მიღება, დანუნება და დასაწყობება

Quality control will be discussed განხილული იქნება ხარისხის კონტროლი

Safety will be discussed განხილული იქნება უსაფრთხოება

Environmental Compliance will be discussed განხილული იქნება გარემოსდაცვითი მოთხოვნების დაცვა

The Tt Project Engineer will keep minutes of the meeting and send them out to all participants within three days of the meeting date ტეტრა ტეკის წარმომადგენელი პროექტის მენეჯერი მოამზადებს შეხვედრის ოქმებს და გადაუგზავნის შეხვედრის ყველა მონაწილეს შეხვედრიდან სამი დღის განმავლობაში

### **Demand Meetings შეხვედრების ჩატარების მოთხოვნა**

Meetings that are not scheduled but are called by the Contractor, Tt, or MDF. Minutes shall be kept შეხვედრები, რომლებიც არაა გრაფიკით გაცხერილი, მაგრამ იმართება კონტრაქტორის, ტეტრა ტეკის ან მგფ-ის ინიციატივით. უნდა შედგეს ოქმები.

### **Other Communications კომუნიკაციის სხვა ფორმები**

All official communications regarding construction documents (contract, drawings, specifications, etc.) and procedures between Contractor and MDF shall be copied to Tetra Tech სამშენებლო დოკუმენტაციასთან დაკავშირებული ყველა ოფიციალური სახით გამართული კომუნიკაცია და კონტრაქტორსა და მგფ-ს შორის თანამშრომლობის პროცედურები უნდა გაეგზავნოს ასლის სახით ტეტრა ტეკს

The Contractor and MDF staff shall use emails for communication and avoid telephone communications where possible კონტრაქტორის და მგფ-ის თანამშრომლებმა უნდა

ანარმონ კომუნიკაცია ელექტრონული ფოსტის საშუალებით და შაძლებისდაგვარად თავი აარიდონ ტელეფონით კომუნიკაციას

### **Requests for Information ინფორმაციის მოთხოვნა**

Review the **RFI Form** and how it works. Ensure the Contractor knows how to use the form.

ინფორმაციის მოთხოვნის ფორმის და მისი პრაქტიკაში გამოყენების განხილვა.

დარწმუნება, რომ კონტრაქტორმა იცის თუ როგორ უნდა გამოიყენოს ზემოთაღნიშნული ფორმა

All RFIs must be copied to the MDF Project Manager and to the Tetra Tech. Engineer ყოველი

ინფორმაციის მოთხოვნის შემთხვევაში, ასლებიუნდა დაეგზავნოს მგფ-ის პროექტის

მენეჯერს და ტეტრა ტეკის ინჟინერს.

The On-Site Inspector shall maintain a **RFI Log** and send it to the MDF PM, the Tt Project Engineer

and the Contractor by **COB** Friday each week. Review the procedure ობიექტის ინსპექტორმა უნდა

ანარმონოს ჩანაწერები ინფორმაციის მოთხოვნაზე და გადაუგზავნოს მგფ-ის პროექტის

მენეჯერს, ტეტრა ტეკის პროექტის ინჟინერს და კონტრაქტორს ყოველი კვირის პარასკევ

დრეს.

RFI resolution shall be the responsibility of the Contractor and the On-Site Inspector. The On-Site Inspector shall use the MDF PM and the Tt Project Engineer to help resolve RFI issues with the Contractor.

ინფორმაციის მოთხოვნასთან დაკავშირებული საკითხის მოგვარებაზე

პასუხისმგებელი უნდა იყოს კონტრაქტორი და ობიექტის ინსპექტორი. ინსპექტორმა

კონტრაქტორთან ინფორმაციის მოთხოვნის საკითხის მოსაგვარებლად უნდა დაიხმაროს

მგფ-ის პროექტის მენეჯერი და ტეტრა ტეკის ინჟინერი

### **Monthly Payments ყოველთვიური გადახდები**

Contractor measured quantities need to be checked by On-Site Inspector. Contractor shall inform the Inspector when measurements are being taken so he/she can observe

კონტრაქტორი მიერ

აზომვები მოცულობები საჭიროა გადამოწმდეს ინსპექტორის მიერ. კონტრაქტორმა უნდა

შეატყობინოს ინსპექტორ აზომვების ჩატარების თარიღი, ისე რომ ინსპექტორმა შეძლოს

პროცესზე დაკვირვება

Review the MDF and contract monthly measurement and payment procedure including letters, approvals, forms, deadlines, and who is checking who. This procedure should be well understood

მგფ-ის და კონტრაქტით გათვალისწინებული ყოველთვიური გადახდის და აზომვების

ჩატარების პროცედურების განხილვა წერილების, დამტკიცების, ფორმების, ვადების და

შემოწმების განმახორციელებლის განსაზღვრის ჩათვლით. ეს პროცედურა კარგად უნდა

იქნას გაგებული

A Tetra Tech approval step must be included prior to MDF approving payment and releasing any monthly Contractor payment ტეტრა ტექის თანხმობა წინ უნდა უძღოდეს მგფ-ის თანხმობას გადახდაზე და კონტრაქტორის ყოველთვიურ ანაზღაურებაზე

### **Quality Control ხარისხის კონტროლი**

**General** – It's important that everyone involved in the project understands that QUALITY along with SCHEDULE and BUDGET are the three most important things to USAID. There has to be a commitment to quality by all parties. Everyone should agree to this ზოგადი - მნიშვნელოვანია, რომ პროექტში ჩართულ ყველა მონაწილეს ესმოდეს, რომ ხარისხი გრაფიკთან და ბიუჯეტთან ერთად სამი ყველაზე მნიშვნელოვანი კომპონენტია ამერიკის საერთაშორისო განვითარების სააგენტოსთვის (USAID). ყველა მხარე ვალდებულია დაიცვას ხარისხი და ყველა უნდა შეთანხმდეს ამაზე

### **Materials მასალები**

Approval of Samples and Provision of Manufacturer Material Specification Sheet – Before any material is brought to the site the Contractor shall provide the On-Site Inspector with a sample for approval and the material specification sheet that proves it meets specification requirements. No materials shall be brought to the site without prior MDF approval ნიმუშების მიღება და მწარმოებლის მიერ გაცემული მასალის სპეციფიკაციის ფურცლის უზრუნველყოფა - ნებისმიერი მასალის ობიექტზე მიტანამდე, კონტრაქტორმა ობიექტის ინსპექტორს უნდა აგდასცეს მასალის ნიმუში დასამტკიცებლად და მასალის სპეციფიკაციის ფურცელი, რათა ინსპექტორი დარწმუნდეს, რომ მასალა შეესაბამება სპეციფიკაციებს მოთხოვნებს. არანაირი მასალა არ უნდა იქნას შეტანილი ობიექტზე მგფ-ის დამტკიცების გარეშე.

### **Independent Testing დამოუკიდებელი კვლევა**

**Testing Schedule and Tests:** The Contractor, MDF and Tt shall agree on a testing program for all materials including cement, reinforcing steel, structural steel, sand, aggregate, bricks, blocks, water and wood. This means that for every item a frequency of tests shall be agreed to and the tests to be carried out shall be agreed to. The Contractor is responsible to have the tests run კვლევების ჩატარების გრაფიკი და კვლევები: კონტრაქტორი, მგფ-ი და ტეტრა ტექი უნდა შეთანხმდნენ კვლევების ჩატარების პროგრამაზე, რომელიც შეეხება ყველა მასალას ცემენტის, არმატურის, სტრუქტურული ლითონის ნაკეთობის, ქვიშის, ინერტული მასალის, აგურის, ბლოკის, წყლის და ხის მასალის ჩათვლით. ეს იმას ნიშნავს, რომ თითოეულ კომპონენტზე უნდა შეთანხმდეს კვლევის ჩატარების საკითხი და სიხშირე. კონტრაქტორი პასუხისმგებელია კვლევის ჩატარებაზე

**Installed Concrete** shall have compression testing done in accordance with the specifications. A testing schedule shall be agreed to during this meeting ბეტონზე ტესტირება უნდა ჩატარდეს სპეციფიკაციების მიხედვით. კვლევების ჩატარების გრაფიკი უნდა შეთანხმდეს შეხვედრების დროს

Paints, pipe, wire, conduit, and all **MEP** equipment and materials shall have manufacturers specification sheets საღებავებს, მილს, კაბელს, საიზოლაციო მილს და ყველა არჭურვილობასა და მასალებს თან უნდა ახლდეს მწარმოებლის მიერ გაცემული სპეციფიკაციის ფურცელი

Review the On-Site Inspector's **Material Delivery Form**. The Contractor need to know materials will be rejected and what he must do when this occurs. **Review the Material Weekly Log** უნდა მოხდეს ინსპექტორის მიერ შესავსები მასალების მიწოდების ფორმის განხილვა. კონტრაქტორმა უნდა იცოდეს მასალების უარყოფის შესახებ და უნდა იცოდეს თუ როგორ მოიქცეს მსგავს შემთხვევაში. მასალების აღრიცხვის ყოველკვირეული ჩანაწერის განხილვა.

### **Non-Conforming Work შეუსრულებელი სამუშაო**

Review the On-Site Inspector's **Non-Conformance Report Form** and **Weekly Log**. The Contractor needs to understand how this will work and his responsibilities for corrective action ინსპექტორის მიერ შესავსები შეუსრულებელი სამუშაოს ანგარიშის ფორმის და ყოველკვირეული ჩანაწერის განხილვა. კონტრაქტორს უნდა ესმოდეს, თუ რა გავლენა ექნება ამ ანგარიშს და გაცნობიერებული უნდა ქონდეს მისი პასუხისმგებლობა გამოსასწორებელ ქმედებასთან მიმართებაში

### **Variation Orders ორდერი ცვლილებაზე**

Only properly authorized changes to the work will be allowed. A Variation Order must be created as a Potential Variation Order by the Contractor for any work or procedure or Contract Change. Review the **Variation Order Form** and agree how it will work ნებადართული იქნება მხოლოდ სათანადოდ დამონმებული ცვლილებების განხორციელება. ორდერი ცვლილებაზე უნდა შემუშავდეს კონტრაქტორის მიერ როგორც პოტენციური ორდერი ცვლილებაზე ნებისმიერი სამუშაოს, პროცედურის ან კონტრაქტში განწერილი ცვლილების განსახორციელებლად. ცვლილების ორდერის ფორმის და მისი პრაქტიკაში გამოყენების განხილვა.

No payment will be made for work performed without prior written MDF approval and Tt agreement. შესრულებული სამუშაოს ანაზღაურება მოხდება მხოლოდ მგფ-ის წერილობითი თანხმობის და ტეტრა ტეკთან შეთანხმების შემდეგ.

No agreement that modifies the contract is approved unless it embodied in a Variation Order and signed by MDF ნებისმიერი შეთანხმება კონტრაქტის მოდიფიცირებასთან დაკავშირებით მტკიცდება მხოლოდ ცვლილების ორდერის მომზადების და მასზე მგფ-ის წარმომადგენლის ხელმოწერის შემდეგ

### **Safety უსაფრთხოება**

Contractor's Safety Plan and Safety Officer – the Contractor should present his Safety Coordinator and they should present and discuss the safety plan. These issues need particular discussion: კონტრაქტორის უსაფრთხოების გეგმა და უსაფრთხოების ოფიცერი - კონტრაქტორმა უნდა წარმოადგინოს უსაფრთხოების კოორდინატორი და მათ უნდა წარმოადგინონ და განიხილონ უსაფრთხოების გეგმა. ეს საკითხები საჭიროებს კონკრეტული სახის დისკუსიებს:

First aid პირველადი დახმარება

Fire protection and prevention ხანძრისგან დაცვა და ხანძრის პრევენცია

Sanitation and housekeeping სანიტარული პირობების გაუმჯობესება და სამეურნეო-ადმინისტრაციული საქმიანობა

Following the Health and Safety Plan – MDF needs to ensure the Contractor understands the importance of this and expectations ჯანმრთელობის და უსაფრთხოების გეგმასთან დაკავშირებული შემდგომი ნაბიჯი - მგვ-ი უნდა დარწმუნდეს, რომ კონტრაქტორს გაცნობიერებული აქვს მისი მნიშვნელობა და მოლოდინები

Penalties for Non-Conformance – Work Stoppages – the penalty of non-compliance. Agreements about enforcement need to be reached ჯარიმები სამუშაოს შეუსრულებლობის შემთხვევაში - სამუშაოს შეფერხება - ჯარიმა მოთხოვნათა შეუსრულებლობისთვის. უნდა იქნას მიღწეული შეთანხმება აღსრულებასთან დაკავშირებით.

Safety Clothing and Equipment – what is expected shall be discussed and agreements need to be reached უსაფრთხოების დასაცავად საჭირო სამოსი და აღჭურვილობა - უნდა მოხდეს სათანადო საკითხების განხილვა და შეთანხმების მიღწევა

Injury reports should be discussed. უნდა მოხდეს ინციდენტზე მომზადებული ანგარიშის განხილვა

### **Environmental Compliance გარემოსდაცვითი მოთხოვნების დაცვა**

Following the Compliance Plan - the Contractor should present his Environmental Compliance Plan for discussion. Everyone needs to understand it agree to it. Does it comply with contract requirements? გარემოსდაცვით მოთხოვნათა დაცვის გეგმის მომზადების შემდგომ - კონტრაქტორმა უნდა წარმოადგინოს მის მიერ მომზადებული გარემოსდაცვითი მოთხოვნათა დაცვის გეგმა განსახილველად. გეგმა უნდა იყოს ყველასთვის გასაგები და უნდა იყოს ყველასთვის მისაღები. შეესაბამება იგი კონტრაქტის მოთხოვნებს?

Penalties for Non-Conformance – Work Stoppages – the penalty of non-compliance. Agreements about enforcement need to be reached შეუსრულებლობის შემთხვევაში - სამუშაოს შეფერხება - ჯარიმა მოთხოვნათა შეუსრულებლობისთვის. უნდა მოხდეს შეთანხმება კანონის აღსრულებასთან დაკავშირებით.

These issues need discussion and agreement შემდგომი საკითხები საჭიროებს განხილვას და შეთანხმების მიღწევას:

Trash Disposal – where, how, when ნაგვის განტავსება - სად, როგორ, როდის

Debris Disposal ნარჩენების განტავსება

Demolition activities დემონტაჟი

Hazardous Waste disposition სახიფათო ნარჩენების განთავსება

End of Project Site clean-up ობიექტის გასუფთავების დასრულება

Archeological remains არქეოლოგიური ნარჩენები

### **Project Completion and Handover პროექტის დასრულება და გადაცემა**

The completion and handover procedure needs to be discussed საჭიროა პროექტის დასრულების და მის გადაცემასთან დაკავშირებული საკითხების განხილვა

The Punch list and Request for final Tt inspection shall be discussed and understood დეფექტების ნუსხის და ტეტრა ტეკის მიერ საბოლოო ინსპექტირების მოთხოვნის განხილვა და შეთანხმება.

### **General Instructions: ზოგადი ინსტრუქციები:**

This is the most important meeting of the construction project. Agreements reached in this meeting can always be referred to later on in the construction as precedent for expectations by each party. It is the meeting to outline and solve concerns, establish a project partnership, and set the tone for the whole project. This meeting should be as long as it needs to be, include respectful discussions, and most of all result in a complete understanding of each party's role and responsibility in the project.

There should also be an establishment of some trust between the contract parties. ეს წარმოადგენს სამშენებლო პროექტისთვის ყველაზე მნიშვნელოვან შეხვედრას. ამ შეხვედრაზე მიღწეული შეთანხმების გამოყენება შეიძლება მოგვიანებით, მშენებლობის პროცესში, როგორც ყოველი მონაწილე მხარის მოლოდინების მაჩვენებელი. ეს არის შეხვედრა, რომელზეც ხდება პრობლემების განსაზღვრა და მოგვარება, პროექტის ფარგლებში თანამშრომლობის დანერგვა და მთლიანი პროექტის მიმდინარეობის ხასიათის განსაზღვრა. ეს შეხვედრა უნდა გაგრძელდეს იმდენ ხანს, რამდენიც საჭიროა, უნდა მოიცავდეს საჭირო დისკუსიებს რაც მთავარია, შეხვედრის შედეგად ყველა პროექტში მონაწილე მხარეს სრულად უნდა ქონდეს გაცნობიერებული თითოეული მათგანის როლი და პასუხისმგებლობა ამ პროექტის ფარგლებში. ასევე უნდა ჩამოყალიბდეს გარკვეული ნდობა კონტრაქტში მონაწილე მხარეებს შორის.

The agenda template should be reviewed and customized for each meeting depending upon the conditions of the contract, the construction to be done and any design to be done. დღის წესრიგი უნდა გადაიხედოს და შეიცვალოს ყოველი შეხვედრის წინ კონტრაქტის სამშენებლო და საპროექტო პირობების შესაბამისად

Hold this meeting in a comfortable place, assume it will require at least four to five hours. Schedule lunch. შეხვედრის ჩასატარებლად უნდა შეირჩეს კომფორტული ადგილი იმის გათვალისწინებით, რომ შეხვედრა გრძელდება სულ მცირე 4 -5 საათი.

The Contract is the first document in the project. Any concerns or issue needs to be resolved first by reading the contract. Each party at the Pre-Design or Pre-Construction Meeting needs to have a copy of the signed Contract, the drawings and the specifications. Nobody should be in this meeting without these. კონტრაქტი უპირველესი დოკუმენტია პროექტისთვის. ნებისმიერი პრობლემის ან საკითხის მოგვარება უნდა მოხდეს უპირველეს ყოვლისა კონტრაქტის წაკითხვის შედეგად. წინა საპროექტო და წინა სამშენებლო შეხვედრის მონაწილე ყველა მხარეს უნდა ქონდეს ხელმოწერილი კონტრაქტის ასლი, ნახაზები და სპეციფიკაციები. არავინ არ უნდა ესწრებოდეს შეხვედრას ამ დოკუმენტაციის გარეშე

During this meeting, all of the Contract should be reviewed as references for agenda items. შეხვედრაზე უნდა მოხდეს კონტრაქტის განხილვა დღის წესრიგის მიხედვით

Set schedules for all the Contractors work (ensure the Contractor comes to the meeting with his MS Project work Schedule and is prepared to discuss it). Set deadlines for all Contractor deliverables. თითოეული კონტრაქტორისთვის უნდა შემუშავდეს გრაფიკი (უნდა უზრუნველყო, რომ კონტრაქტორი გამოცხადდება შეხვედრაზე პროექტით გათვალისწინებული სამუშაოს გრაფიკით და მზად იქნება იმსჯელოს მასზე). უნდა დადგინდეს კონტრაქტორის მიერ წარმოსადგენი დოკუმენტაციის ვადები.

Make sure the Contractor understands how the MDF –Tt GMIP inspection and oversight functions are going work and how their performance will be inspected and monitored. კონტრაქტორმა უნდა გაიგოს, თუ როგორ განახორციელებს მგფ-ტეტრა ტეკი GMIP პროექტის ინსპექტირებას და ზედამხედველობას და როგორ მოხდება მათი (კონტრაქტორის) საქმიანობის ინსპექტირება და მონიტორინგი.

Ensure that the Contractor has all their questions answered. პასუხი უნდა გაეცეს კონტრაქტორის ყველა შეკითხვას.

During the meeting take good notes of agreements made and issues and points that were made. უნდა მოხდეს მიღწეული შეთანხმებების და განხილული საკითხების და მოსაზრებების ჩანიშვნა.

Take good meeting notes including accurate recounting of agreements and who agreed. Distribute these meeting notes within three days of the meeting to each participant and give them an

opportunity to make any corrections within 48 hours. After this time issue the Minutes of the Meeting as formal უნდა გაკეთდეს შეხვედრის ცანაწერი შეხვედრაზე მიღწეული შეთანხმების ზუსტი აღწერით და შეთანხმებაში მონაწილე მხარეების მითითებით. ჩანაწერები შეხვედრიდან სამი დღის განმავლობაში უნდა გადაეგზავნოს ყველა მონაწილეს, რომლებსაც შესაძლებლობა ექნებათ მომდევნო 48 საათის განმავლობაში შეიტანონ ნებისმიერი სახის ცვლილებები. ამის შემდეგ მოხდება ფორმალური შეხვედრის ოქმის მომზადება.

## Appendix 10 – Material Delivery and Acceptance Form (bi-lingual)



**GMIP SUBPROJECT MATERIAL RECEIVING REPORT GMIP**  
**qveproeqtis farglebSi masalebis miRebis angariSi**

**DELIVERY # mowodebuli**  
**masalis nomeri**

**Name of Subproject:**

**qveproeqtis saxelwodeba:** \_\_\_\_\_

Type of Subproject:

qveproeqtis tipi: \_\_\_\_\_

Location (City, Region):

adgilmdebareoba (qalaqi, regioni): \_\_\_\_\_

Subproject / Contract No:

qveproeqtis/kontraqtis

nomeri: \_\_\_\_\_

Contractor: kontraqtori: \_\_\_\_\_

Name of On-Site Inspector:

obieqtze momuSave

inspeqtori: \_\_\_\_\_

Date of Material Delivery:

masalebis miRebis TariRi: \_\_\_\_\_

Day: dRe: \_\_\_\_\_

Time: dro: \_\_\_\_\_

**Description of Material Delivered:**

**miRebuli masalebis aRwera:**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Material Units:

erTeuli masalebi: \_\_\_\_\_

Quantity of Units Delivered:

miRebuli masalebsi

mocoloba: \_\_\_\_\_

1. Manufacturer Specification Sheet received (Y / N):

mwarmoeblis sertifikati (diax/ara) \_\_\_\_\_

2. Manufacturer testing result received (Y / N)

mwarmoeblis mier Catarebuli testebis Sedegebi (diax/ara) \_\_\_\_\_

3. Name of Manufacturer:

mwarmoebeli: \_\_\_\_\_

4. Inspected for overall quality, workmanship, verification, markings? (Y / N)

Semowmebulia Tu ara mTlialan xarisxi, xeloba, markireba da dasturi Sesrulebul

samuSaoebze (diax/ara) \_\_\_\_\_



<b>GMIP SUBPROJECT MATERIAL RECEIVING REPORT GMIP</b> <b>qveproeqtlis farglebSI masalebis miRebis angariSI</b>	<b>DELIVERY # mowodebuli</b> <b>masalis nomeri</b>
---	---

5. Disposition Notes  
SeniSvna ganTavsebase \_\_\_\_\_  
\_\_\_\_\_

6. Does material comply with Specifications (Y / N)  
Seesabameba Tu ara masalebi specifikaciebs (diax/ara) \_\_\_\_\_

7. If No, Instructions to Contractor:  
Seusabamobis SemTxvevaSi, instruqcia kontraqtorisaTvis: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. If Yes, where will Contractor store materials:  
Sesabamisobis SemTxvevaSi, kontraqtoris mier masalebis ganTavsebis adgili: \_\_\_\_\_

9. Is Material approval an Exception? (Y / N) \_\_\_\_\_ aris  
Tu ara masalebis damtkiceba gamonaklisi (diax/ara) \_\_\_\_\_

10. If partially accepted give details of material rejected, its disposition and why. Also list any information on statut of exception: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**On-Site Inspector**  
**Signature obieqtze**  
**momuSave inspeqtoris**  
**xelmowera**

**Contractor's Representative Signature**  
**kontraqtoris warmomadgenlis xelmowera**

\_\_\_\_\_ Date TariRi

\_\_\_\_\_ Date TariRi

Appendix 11 – Material Delivery and Acceptance Log (bi-lingual)



**GMIP SUBPROJECT MATERIAL LOG** GMIP proeqtis farglebsi masalebis aRricxvis uwyisi

Name of Subproject: **dasaxeleba**

Type of Subproject: qveproeqtis tipi

Location (City, Region): adgimdebareba (qalaqi, regioni)

Subproject / Contract No: qveproeqtis/kontraqtis nomeri

Contractor: kontraqtori

Material Delivery # miRebuli masalis #	Date Material Delivered masalis miRebis TariRi	Description afweriloba	Units erTeuli	Unit Quantity erTeulis fasi	Disposition / Accepted-Rejected and Notes (Note Issues in red) ganTavseba/miReba-dawuneba da SeniSynebi (SavSmebi dimerca wTali berT)	Amount Remaining in Storage (at project physically % complete) sacavSi darCamili masalebis raodenoba (proqetis %T gvauncaklebiata)
1						25%
2						75%
3						100%
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						

**Appendix 12 – Non Conformance Report Form (bi-lingual)**



**GMIP SUBPROJECT NON CONFORMANCE / CORRECTIVE ACTION REPORT GMIP  
qveproeqtis farglebSi Seusrulebeli samuSaos/gamosasworebeli qmedebis angariSi**

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By: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 i: \_\_\_\_\_ a: \_\_\_\_\_ TariRi: \_\_\_\_\_

**Contractor Response: kontraqtoris  
reagireba:**

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By: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
 i: \_\_\_\_\_ a: \_\_\_\_\_ TariRi: \_\_\_\_\_

*The On-Site Inspector shall be the only source to submit NCRs and shall fill in the NCR Form and give it to the Contractor and begin numbering NCRs as 001 and three digits following. The On-Site Inspector should include citations for applicable contract / specifications, plan sheet number, detail number, etc. The Contractor should indicate his plan of action in regard to responding to the NCR. Additional sheets can be used. The Contractor should provide a Proposed Solution if applicable. The On-Site Inspector shall maintain a LOG of all NCRs and their status. The Log shall keep an updated record of the Contractor's performance in resolving the NCR and prosecution the Corrective Action.*

---

*Seusrulebeli samuSaos angariSs (NCR) warmoadgens mxolod obieqtze myofi inspeqtori, romelmac unda Seavsos aRniSnuli forma da gadasces kontraqtors. dokumentis danomvra unda moxdes cifrebiT 001 da momdevno sami cifriT. inspeqtorma unda mouTiTos informacia kontraqtidan/specifikaciebi, naxazis gverdis nomeri da a.S. kontraqtorma Seusrulebeli samuSaos angariSis sapisaxod unda warmoadginos misi samoqmedo gegma, risTvisac SeuZila gamolyenos damatebiTi furceli. kontraqtorma unda warmoadginos sakiTxis gadaWris gza aseTis arsebobis SemTxvevaSi. inspeqtorma unda awarmoos Canawerebi yvela Seusrulebeli samuSaos angariSze da TiToeulis statusze. Canawerebi unda Seicavdes ganaxlebul informacias kontraqtoris mier ganxorcielebul gamosasworebel qmedebaze.*



**GMIP SUBPROJECT NON CONFORMANCE / CORRECTIVE ACTION REPORT GMIP**  
**qveproeqtis farglebSi Seusrulebeli samuSaos/gamosasworebeli qmedebis angariSi**

**Name of Subproject:**  
**qveproeqtis saxelwodeba:** \_\_\_\_\_ **NCR #**

Type of Subproject:  
 qveproeqtis tipi: \_\_\_\_\_

Location (City, Region):  
 adgilmdebareoba (qalaqi, sofeli): \_\_\_\_\_

Subproject / Contract No:  
 qveproeqtis/kontraqtis N: \_\_\_\_\_  
 Contractor: kontraqtori: \_\_\_\_\_

Name of On-Site Inspector:  
 obieqtze momuSave  
 inspeqtori: \_\_\_\_\_

Date of Non Conformance Report:  
 Seusrulebeli samuSaos angariSi  
 Sedgenis TariRi: \_\_\_\_\_  
 Day: dRe: \_\_\_\_\_

**Details of Non-Conformance:**  
**detaluri informacia Seusrulebel**  
**samuSaoze:**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Corrective Action Required, by When:**  
**vin unda ganaxorcielos gamosasworebeli**  
**qmedeba da rodis:**

\_\_\_\_\_

\_\_\_\_\_

## Appendix 13 – Non Conformance Report Log (bi-lingual)





**GMIP SUBPROJECT NON CONFORMANCE REPORT / CORRECTIVE ACTION (NCR / CA) LOG GMIP qveproeqtis Seusrulebelli samuSaos angariSis/gamosworebelli qmedebis aRricxvls uwyjisi**

**Name of Subproject:** \_\_\_\_\_  
 qveproeqtis saxelwodeba: \_\_\_\_\_

Type of Subproject: qveproeqtis \_\_\_\_\_  
 tipi: \_\_\_\_\_

Location (City, Region): \_\_\_\_\_  
 adgilmdebareoba (qalaci, regioni): \_\_\_\_\_

Subproject / Contract No: \_\_\_\_\_  
 qveproeqtis/kontraqtis nomeri: \_\_\_\_\_  
 Contractor: kontraqtioni: \_\_\_\_\_

Non Conformance Report # Seusruleblolis angariSis N	Date of Non Conformance Report kontraqtis Seusruleblolis angariSis TariRi:	Description of Non Conformance Report Seusruleblolis angariSis aRwera:	Corrective Action Required gamosaworebelli qmedebis saWiwoeba	Contractor Actions <i>(Keep Updated)</i> kontraqtionis inter gawarcellobul qmedebis (aekWicobis gemawivebas)	Date Finally Corrected sabollood gasworebis TariRi
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					

## Appendix 14 – Variation Order Form (bi-lingual)



<b>GMIP SUBPROJECT VARIATION ORDER</b> qveproeqtis farglebSi cvlilebis ganaxadi	<b>GMIP</b>	<b>VO #</b>
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**Name of Subproject:**

qveproeqtis saxelwodeba: \_\_\_\_\_

Type of Subproject: qveproeqtis  
tipi: \_\_\_\_\_

Location (City, Region):  
adgilmdebareoba (qalaqi,  
regioni): \_\_\_\_\_

Subproject / Contract No:

qveproetis/kontraqtis Ne: \_\_\_\_\_

Contractor: kontraqtori: \_\_\_\_\_

Name of On-Site Inspector:

obieqtze myofi inspeqtori: \_\_\_\_\_

Date of Variance Order:

cvlilebaze gacemuli ganaxadis

TariRi: \_\_\_\_\_

Day: dRe: \_\_\_\_\_

Time: dro: \_\_\_\_\_

	Scope Description Sinaarsis aRwera	BOQ Reference mITiTeba xarjTaRricxvidan	Unit Rate erTeulis fasi	Quantity raodenoba	Total sul
Omit Total mTliani nusxidan amoRebuli samuSaoebi					
Add Total mTlian nusxas damatebuli samuSaoebi					
Net Additions/ Omissions sxvaoba damatebulsa da gamoklebul samuSaoebs Soris					



GMIP SUBPROJECT VARIATION ORDER qveproeqtis farglebSi cvlilebis ganacxadi		GMIP			VO #	
Any Time Addition/ Subtraction gauTvaliswin ebell damatebull da amoRebuli samuSaoebi						

List all Attachments:  
yvela TandarTuli  
masalis sia

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**MDF Authorized Representative mgf-is  
uflebamosili piri**

**Contractor's Representative Signature  
kontraqtoris warmoadgenlis xelmowera**

\_\_\_\_\_ Date TariRi

\_\_\_\_\_ Date TariF

Printed Name dabeWdili saxeli

*Variation Orders are issued by the Contractor to the On-Site Inspector who forwards them to the Project Manager. All Variation Orders are **POTENTIAL VARIATION ORDERS** until they are signed by an authorized MDF Representative. ცვლილების ორდერს კონტრაქტორს გადასცემს ობიექტის ინსპექტორი, რომელიც მათს მხარეზე გადასცემს პროექტის მენეჯერს. ყველა ცვლილების ორდერს ხელმოწერის გარეშე ცვლილების ორდერს მართალი, სხვათა შორის კი არაა მართალი სიგის ანუ ხელმოწერის გარეშე.*

**Appendix 15 – Request for Final Tt Inspection (English)**

Date:

Mr. Jeffrey W. Fredericks, P.E., PHD

Chief of Party

Municipal Infrastructure and IDP

Housing Rehabilitation Project

Tbilisi, Georgia

**RE: REQUEST FOR TETRA TECH FINAL INSPECTION (FORM A)**

Gentlemen,

We are pleased to inform you on the progress of the \_\_\_\_\_ Sub Project of the Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP) that was opened to service on \_\_\_\_\_ 2012. MDF has completed its final site inspection with the Contractor and a Punch-List of remaining work items to be completed has been established as of \_\_\_\_\_ 2012 for your review and information. Based on the results of the MDF final site inspection, we feel the Sub Project has reached a point of readiness for Final Inspection by Tetra Tech.

We recommend a date of Tetra Tech Final Inspection on or around \_\_\_\_\_ 2012 subject to your availability.

It is understood that Award of Final Inspection Certificate is subject to the results of the Tetra Tech Final Inspection and the approval of the completion of works reaming listed on the final Punch-List.

Please contact this office if you have any questions or require additional information.

Mr. Kartlos Gviniashvili

Program Manager

GMIP Municipal Development Fund

Attachment: MDF Final Inspection Report

Copy: USAID

File

## Appendix 16 – Final Inspection Punchlist (English)



**USAID**  
U.S. Agency for International Development



**TETRA TECH**

**GMIP**

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**GMIP SUBPROJECT FINAL INSPECTION PUNCHLIST**  
 qveproeqtis farglebsi gansaxorcielebel samuSaos inspeqtirebis saboloo sia

**Name of Subproject:** \_\_\_\_\_  
 qveproeqtis saxelwodeba: \_\_\_\_\_

**Type of Subproject:** \_\_\_\_\_  
 qveproeqtis tupt: \_\_\_\_\_

**Location (City, Region):** \_\_\_\_\_  
 aqilindebereze (qelaxi, regioni): \_\_\_\_\_

**Subproject / Contract No:** \_\_\_\_\_  
 qveproeqtis/kontraqtis N: \_\_\_\_\_

**Contractor:** \_\_\_\_\_  
 kontraqtori: \_\_\_\_\_

**Date:** Tariqi: \_\_\_\_\_

Item # sakiTxis N	Description	Corrective Action Required gansaxawerebeli qmdeba	Contractor Actions kontraqtoris mlar gansorciebuli qmdeba	Date Corrective Work Completed gansaxaw erebeli sakiTxis Tariqi
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

**Appendix 17 – Final Tt Inspection Certification (English)**

Date:

Mr. Kartlos Gviniashvili

GMIP Program Manager

Georgia Municipal Development Fund

**RE: TETRA TECH FINAL INSPECTION CERTIFICATE (FORM B)**

Gentlemen,

Tetra Tech Final Inspection was conducted on the blow noted Sub Project of the Municipal Infrastructure and IDP Housing Rehabilitation Project (GMIP) as funded by USAID, Georgia on \_\_\_\_\_ 2012.

Subproject: \_\_\_\_\_

Location: \_\_\_\_\_

Date of Final Inspection: \_\_\_\_\_

Final Inspection Party Participants \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

The attached Punch List of discrepancies, as determined by the Inspection Party, was addressed and completed on \_\_\_\_\_ 2012. Please contact this office if you have any questions or require additional information.

Mr. Jeffrey W. Fredericks, P.E., PHD

Tt Chief of Party

Municipal Infrastructure and IDP Housing Rehabilitation Project

Attn: Final Inspection Report

Cc: USAID

File

## Appendix 18 – Tt Subproject Site Visit Form

---

### BASIC FIELD TRIP DATA

---

*(The Engineer shall complete this field trip report form within 48 hours after returning from the field and ensure that it is sent to the MDF Project Manager and the MDF On-Site Inspector within 72 hours after leaving the construction site)*

**Subproject Name:**

Date of Field Trip:

Date of Report:

**Program:**

Subproject Location (City, State):

Subproject Location (Lat-Long)

Contractor Name:

Report Submitted By:

---

Purpose of Visit:

Date and Time of Visit:

Weather During Visit:

Travel Details:

---

Personnel on Trip:

(name, title, agency)

Met with:

(name, title, agency [where])

---

## CHECK LIST

---

*(For any "No" answer in this section, the Engineer shall provide a narrative explanation in Section C. of this Report including corrective action requested.)*

	<u>Contractor</u>	<u>Inspector</u>
Drawings and Specifications on site? (Y/N)	___	___
Safety Plan on site? (Y/N)	___	___
QA/QC Plan on site? (Y/N)	___	___
Environmental Compliance Plan on site? (Y/N)	___	___
Contractor As Built Drawings up to date? (Y/N)		___
Contractor hard copy files neat and up to date? (Y/N)		___
Inspector's MDF Daily Journal up to date? (Y/N)		___
Construction site is well secured? (Y/N)		___
Construction site is neat and orderly? (Y/N)		___
All construction material is stored properly and neatly? (Y/N)		___
Work is in accord with the Safety Plan (Y/N)		___
Work is in compliance with Environmental Compliance Plan (Y/N)		___
Work is in compliance with QA / QC Plan (Y/N)		___
Work is on schedule (Y/N)		___

---

## REPORT / OBSERVATIONS / FINDINGS / MEETING NOTES

---

*(List findings of fact. State if fact or opinion. Append Excel Excerpts for All Tables. Do Not Make Tables in Word.)*

---

## PHOTOGRAPHS

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*(Three photos per page, Include photo number, attribution, date, and photo caption/description)*

## **Appendix 19 - Tt's Design Check List**

*The Forms will be developed and attached*

The format and content of Sub-Projects Design Check Lists will be developed individually for different Sub-Projects in accordance with project type, works to be performed under the contract and applicable to sub-project standards.

Below is provided the main issues to be highlighted in the Design Check List.

- Functionality
- Performance
- Legal and Regulatory Compliance
- Industry Codes and/or Standards
- USAID Requirements
- Future Owner Agency Requirements (MRA, GUWC, Municipalities, MoA)
- Information derived from similar projects
- Other requirements essential for the design and development

## **Appendix 20 - Weekly GMIP Meeting (Review Meeting) agenda and Report**

Will be developed and attached later

## **Appendix 21 - Monthly Meeting agenda**

1. Review the Contractor's Report
  - a. Work Done This Month – Physical Progress
  - b. Highlights and Issues
  - c. Review of Time Schedule
  - d. Billing this Month – Budget Progress
  - e. Measurement and Payment Issues
  - f. Outstanding RFIs and NCRs
  - g. Materials Deliveries and Acceptance
  - h. Samples and Testing
  - i. Potential Variation Orders and Changes
  - j. Review the Safety Report
  - k. Review the Environmental Compliance Plan Report
  
2. Review the On-Site Inspector's Monthly Report
  - a. Quality Issues
  - b. NCR Issues
  - c. Other Outstanding Issues or Points
  - d. Visitors
  
3. Work Planned for Next Month
  
4. Other Business

## **Appendix 22 - Pre-Bid Meeting Agendas**

- A. Project Purpose
- B. Review the Bid Documentation
- C. Performance
- D. Legal and Regulatory Compliance
- E. Review the Required Financial Documentation
- F. Industry Codes and/or Standards
- G. USAID Requirements
- H. Future Owner Agency Requirements (MRA, GUWC, Municipalities, MoA, etc.)
- I. Information derived from similar projects
- J. Other requirements essential for the design / construction and development

## **Appendix 23 - Weekly Report**

Will be developed and attached later

## Appendix 24 – Guidelines for CQC Plan Evaluation

 <b>USAID</b> FROM THE AMERICAN PEOPLE							
<p><b>Quality Management System</b></p> <p><b>QA/QC Guidelines</b></p> <p><b>Guidelines for CQC Plan Evaluation</b></p>							
<b>REFERENCE DOCs.</b>							
Rev.	Issued Date:	Doc Title:			Doc Number		
A06	22 Dec, 2011	Project Technical QA/QC Guidelines			TT-GMIP-QAC-GDL-0001		
A02	15 Dec, 2011	Document Control Procedures			TT-GMIP000-QAC-PRO-0001		
2004	2004	CQM for Contr. (Student Study Guide)			Control #784 (Module 3)		
N/A	N/A	USACE Specification, Sec tion 01452, CQC			N/A		
<b>CONCERNED PARTIES</b>							
No	Position		Name:	Receive Date	Signature		
1	Chief of Party Tetra Tech, Inc.		J.W.Fredericks				
2	Deputy Chief of Party Tetra Tech, Inc.		I. Eloshvili				
<b>ORIGIN DOC.</b>							
Rev.	Date:	Reason for Issue	Prepared By / Position:	Checked By/ Position:	Approved By/ Position:		
A01	6 Jan, 2012	Initial issue	V. Apkhazava TBD	I. Eloshvili DCoP Tt	J.W.Fredericks CoP Tt		
<b>DOCUMENT NUMBER:</b>							
Date	Org.	Project ID / Area Code	Disc.	Document Type	Sequence Number	Pages	Revision

06 Jan 2010	TT	GMIP	QAC	GLN	001	-25-	D1
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## INTRODUCTION

A contractor quality control plan (QC PLAN) is the documentation of the contractor's process for delivering the level of construction quality required by the contract. This document is intended to provide guidance to GIMP contractors, subcontractors and suppliers as to what is expected from QC PLANS, and what the criteria for accepting and using the requirements for these plans will be.

The QC PLAN is a framework for the contractor's process for delivering quality construction. The plans and specifications define the expected results or outcome. The QC PLAN outlines how those results will be achieved. While it is not possible to determine from the QC PLAN whether the level of construction quality will be acceptable, it is possible to verify that the contractor, as an organization, has addressed the basic elements of its quality process.

These guidelines address, not only what should be in the QC PLAN in order for it to be acceptable to the Employer, but also what elements the Employer's QA process needs to have in order to assure quality.

## QUALITY CONTROL REQUIREMENTS

### FEATURES OF WORK

Features of Work of a project are each individual task of a project. Features of Work include such activities, which are separate and distinct from other tasks, but these may not be sufficiently broken down for the QC process. Each of these activities has sub-categories for the overall activity. To properly manage quality on a project, each activity must be broken down to very specific activities that are called "features of work"

The following should be considered:

1. Features of work require different Preparatory Inspections
2. Contract specifications should be used to identify features of work. The separable features of work to be find.
3. If new crew is required to do the work, a new feature of work to be included.

**It is important that the Contractor have a clear understanding of the exact type of work the Feature of Work represents.**

### CONTRACTOR PERSONNEL

Contractor and Subcontractor Staffing information is to be attached to QC Plan

### TEST REQUIREMENTS

QC Requirements include Tests. QC Tests are defined in the Contract and are based on engineering and construction judgment as to the type and number of tests to be accomplished.

### SUBLITTALS

The Contractor is required to furnish a specified quality of Design/Construction, including materials and equipment to be incorporated in the work. Control of the quality of materials and equipment

Municipal Infrastructure and Irrigation and IDP Housing Rehabilitation Project  
Quality Management System – QA/QC Plan (Draft)

require timely review, testing, or other evaluation. All required submittals must be made in time to allow for evaluation, approval, procurement, and delivery prior to the preparatory control phase and before the item is needed in the construction process.

## **SCHEDULE**

Schedule Activities shall include an appropriate level of detail. The schedule shall be the basis for measuring Contractor progress. Schedule activities will show the order in which the Contractor proposes to perform the work, the dates on which the Contractor planning for starting and completing salient features.

Each activity must include

- Its relation to a specific Contractor or Subcontractor,
- Feature of Work,
- Phase,
- Project Area,
- Work Category

## **QC STAFFING**

The Contractor QC staff must be of sufficient size and have the qualifications necessary to ensure contract compliance, whether the prime contractor, subcontractors or vendors, performs work. The size and composition of the QC organization may vary as the job progresses. At all times it should be compatible with the level of effort and capability required by the contract and construction schedule.

## **QC PLAN REQUIREMENTS**

The contract documents establish the quality required in a project to be designed/constructed. Contractors are responsible for comply with the contract documents and produce the required product. Contractors are responsible for executing their Plan to schedule, control, and assure the end product quality.

The following parts of contractor QC plans need special attention during review and approval of the plan.

### **QC ORGANIZATION DESCRIPTION**

The QC plan must include a QC organization description, which shows in detail exactly who is responsible for the quality of each type of work performed. This means the name and qualifications of all the individuals responsible must be listed.

### **TESTING PROCEDURES**

The QC plan must identify all control, verification and acceptance testing procedures for each specific test. It shall list the test name, specification paragraph number requiring test, feature of work to be tested, test frequency and the person responsible for each test. It is noted that if the contractor uses a commercial testing lab, the Employer must approve it. If the contractor intends to set up his own lab, then this must also be inspected and approved by the Employer.

### **DEFICIENCIES**

The QC plan must describe a procedure for tracking construction deficiencies from initial identification thru correction. It is noted that establishment of the procedures does no good unless the contractor is required to implement and maintain them.

## **REPORTING**

Procedures for reporting (including forms) must be developed in the QC plan. This should include as a minimum, forms for daily QC activities, preparatory and initial meetings, control testing, final inspections and subcontractor QC activities forms (if any).

## **DEFINABLE FEATURES OF WORK**

The QC plan must also contain a list of definable features of work. There may be more than one definable feature of work in each section of the specifications. A definable feature of work is any task, which is separate and distinct from other tasks, has separate control requirements, or is identified by different trades or disciplines.

## **DOCUMENT/SUBMITTAL MANAGEMENT**

The contractor must show how they plan to manage the submittals required by the contract and show the Document procedures including proposed report formats. These QC procedures must show who is responsible for the review and approval of all submittals for the contractor, including those from subcontractors, offsite fabricators and suppliers. Note that the individual signing for the contractor is certifying that the submittal meets all contract requirements. If too many submittals sent to the Employer are not in compliance, then it is that individual who should be either retrained or replaced.

## **THREE PHASE OF CONTROL**

If the project is design-build, the controls shall be adequate to cover all design and construction operations, including both onsite and offsite fabrication, and will be keyed to the construction schedule. The three phases are as follows:

- Preparatory Phase. This phase shall be performed prior to beginning work on each definable feature of work. Use the preparatory phase checklist when conducting this phase meeting. Safety is a consideration.
- Initial Phase. This phase must be accomplished at the beginning of a definable feature of work. Use the initial phase checklist when conducting this phase meeting. Safety is a consideration.
- Follow-Up Phase. Daily checks shall be performed to assure continuing compliance with contract requirements. Safety is a consideration.

## **INSPECTION**

On the number of Testing Procedures, the Quality Control Procedures are obligating the Contractor to conduct completion inspections of the work and develop a “punch list” of items which do not conform to the contract requirements. The QC staff shall make a second completion inspection to ascertain that all "punch list" items have been corrected and so notify the Employer. The completion inspections and any "punch list" item corrections will be accomplished within the time stated for completion of the work. The plan must include project completion turnover procedures. These may include:

- Warranty information.
- O & M manuals
- system operation and sequence verification
- final system testing
- instruction and training procedures
- punch-out
- pre-final inspection to include the Government
- final inspection to include the client/customer "punch list"
- “punch list” correction and verification
- turnover of extra materials and spare parts
- turnover of keys

- completed as-built drawings

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  - Appendix B Concrete Placement Procedure
  - Appendix C Forms
  - Appendix D Submittal Flow Chart
  - Appendix E Major Definable Features of Work
  - Appendix F Required Tabs
  - Appendix G Organizational Chart

## Appendix 25 – Guidelines for Method Statement Evaluation

 <b>USAID</b> FROM THE AMERICAN PEOPLE	 მშენებლობის მენეჯმენტი	 <b>TETRA TECH</b>				
<h1>Quality Management System</h1> <h2>Guidelines for Method Statement Evaluation</h2> <h3>PROJECT: GMIP</h3>						
<b>CONCERNED PARTIES</b>						
<b>No.</b>	<b>Agency / Position</b>	<b>Name:</b>	<b>Received Date</b>	<b>Signature</b>		
1	Tt / COP	J.W. Fredericks				
2	Tt / DCOP	I. Eloshvili				
3	MDF / PrgM	K. Gviniashvili				
<b>ORIGIN DOC.</b>		<b>Prepared By/ Position:</b>	<b>Checked By/ Position:</b>	<b>Approved by/ Position:</b>		
		VA / QA/QC Engin.	IE / DCOP	JwF / COP		
<b>DOCUMENT NUMBER:</b>						
Date	Project ID / Area Code	Disc.	Document Type	Organization	Revision	Pages
<b>26 July 2012</b>	<b>GMIP</b>	<b>QAC</b>	<b>GDL</b>	<b>TT</b>	<b>D1</b>	<b>- 118-</b>

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## Responsibilities

This form has been prepared to act as guidance when compiling a task specific Method Statement.

If the activity has been identified as one which will be undertaken by a specialist contractor then, prior to the relevant works starting on site, ensure that you have received a Risk Assessment / Method Statement from the contractor which is then to be reviewed using the Method Statement Checklist

## Content of Method Statement

All method statements must include, as a minimum, assessments / arrangements under the following:

### Identify the Scope of Works and/or Tasks (Work Features)

Assess the Scope of Works / Task by breaking it down into basic components/operations or groups of operations (Work Features). Other sources of information when making these assessments include:

- a. Program Breakdown (Task List).
- b. Identification of main activities (Work Features)
- c. Identification of natural and urban conditions / structures
- d. Engineers Instruction

### Carry out Risk Assessment

Use the Hazard Checklist to identify which operations require the significant findings to be recorded and then use the Risk Assessment to record the assessment and attach to the completed Method Statement

### Identify the Labor Requirements

- a. List type of labor and trades required.
- b. Assess numbers of each trade plus support labor to complete to the project requirement.
- c. Ensure a review workforce competence certification according to the works to be performed

### Identify the Plant Requirements

- a. List the plant type and numbers to be used.
- b. Ensure the equipment is checked as having the required Maintenance Inspections, Thorough Examinations and Testing.
- c. List any particular requirements for special works i.e. vehicles – heavy lifting equipment
- d. Specific delivery requirements (police escorts).

## **Identify any Hazardous Materials**

Attach any relevant Assessment checklist (which can be obtained from the Health & Safety Department) to the completed Method Statement.

## **Sequence of Works/ Methodology by the Work Features**

- a. The scope of work is to be broken down into a chronological series of events.
- b. Then detail how the works are to be completed (i.e. by establishing a safe system of work for each work event using the control measures determined in the relevant Risk Assessment).
- c. Detail how any existing services etc. are to be protected.
- d. Include the access arrangements (scaffolds, walkways, ramps, ladders etc.).
- e. Assess whether a Lifting Plan is required
- f. Include how materials are to be delivered and how & where they are to be off-loaded and stored (On site but not in the Store).
- g. Confirm if there is a requirement for authorization prior to commencement.
- h. Detail any approvals and hand-overs.

## **Permit To Work Requirements**

Any requirements for the use of a Permit To Work system should be itemized including consideration for the following permits:

- a. Confined Space Entry
- b. Hot Works
- c. Roof work Permit
- d. Permit to Excavate
- e. False work / Formwork Permit

Describe the process of submittal and approval of deliverables for issuing the Permit to Work

## **Review Access**

The access requirements around the site should be itemized including:

- a. Traffic management.
- b. Routes through infrastructure (Bridges, Small roads, etc.).

## **Review the Health Protection**

Review health protection including:

- a. P.P.E.

- b. Manual Handling
- c. Asbestos / Hazardous Materials

## **Submit the Method Statement**

All Method Statements must be signed and dated by the author.

Method Statements must be briefed to all the staff and operatives concerned, prior to commencing the activity, and then recorded as having been given, dated and confirmed as being understood by signature using the Method Statement Briefing

## Appendix 26 – Guidelines for Mobilization Plan Evaluation

 <b>USAID</b> FROM THE AMERICAN PEOPLE						
<h1>Quality Management System</h1> <h2>Guidelines for Mobilization Plan Evaluation</h2> <h3>PROJECT: GMIP</h3>						
<b>CONCERNED PARTIES</b>						
<b>No.</b>	<b>Agency / Position</b>	<b>Name:</b>	<b>Received Date</b>	<b>Signature</b>		
1	Tt / COP	J.W. Fredericks				
2	Tt / DCOP	I. Eloshvili				
3	MDF / PrgM	K. Gviniashvili				
<b>ORIGIN DOC.</b>		<b>Prepared By/ Position:</b>	<b>Checked By/ Position:</b>	<b>Approved by/ Position:</b>		
		VA / QA/QC Engin.	IE / DCOP	JwF / COP		
<b>DOCUMENT NUMBER:</b>						
Date	Project ID / Area Code	Disc.	Document Type	Organization	Revision	Pages
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## General

Mobilization Plan shall include all Construction equipment, Materials and Work force delivery to the site as well as submittal of related documentation to start the works / Site Setup.

The Mobilization Plan shall also include the cleaning and preparation of the work area and the personnel services preparatory to commencement of the actual work.

## Submittals

Under the Mobilization Plan the Contractor shall submit as an attachment:

**a) Location Plan, including:**

- Construction Site(s) Location,
- Plant (s) / Workshop(s) / Construction Yard (s) location,
- Distances from and to Site (s)
- Roads / routes to be used

**b) Layout of the Construction Site, including :**

- Fence,
- Roads / accesses,
- Parking,
- Buildings,
- Storage Area,
- Other specific to the Project items

## Work Force Mobilization

This clause shall name the work force to be involved in the mobilization / Site setup process.

Describe the works to be performed during site setting up and the machinery / equipment's to be used. Follow to the works description and identify the disciplines /special works and the teams / Engineers, masters, technicians, operators and labors to be involved for site setup works

## Construction Plant and Equipment Transportation

The transportation of machinery / equipment and plants are most important issue of Health Safety and environmental and need to be carried out in accordance with Contractors Safety Plan and Local State Regulations.

- a) Provide the list of main equipment / plants to be transported,

- b) Describe the transport and lifting machinery / equipment to be used,
- c) Provide the Rigging plan (Lifting plan) of heavy equipment (loading, unloading) and identify the natural and/or urban difficulties (limited areas, buildings/structures around, etc.)

## Materials Delivery

Materials to be used for site setup and the materials to be delivered to the site and/or workshop/plants for general works shall be delivered to the site/workshop/plants during the Mobilization Phase.

The Mobilization Plan shall provide:

- a) List of materials to be delivered during the Mobilization phase
- b) Provide the approval processes
- c) Delivery sequences
- d) Storage specifics

## Erecting, setting up the Temporary Facilities

The temporary facilities to be erected / constructed on site and/or construction yards, plants or workshops need to be listed in mobilization plan and provided the sketches and/or drawings showing details if required by the Employer’s Project Managers.

Under description of **each entity**, the following need to be highlighted:

- a) Type of facility (provide sketch or drawings [attach to document])
- b) Location of facility (shown on the map and/or area layout[attach to document])
- c) Specific works to be performed
- d) Defined work force to be used
- e) Materials need for installation
- f) Utilities to be installed

## Utilities

The construction activities will require the different type of supplies/services to perform the works and maintain the temporary facilities. Contractor under the clause “Utilities” shall provide the type, sources, capacity and installation details (Sketches/drawings) for:

- a) Water Supply
- b) Power Supply
- c) Sewage system
- d) Storm Water System
- e) Communications

f) Etc.

## **Accommodations**

Under this clause Contractor shall provide the information concerning to the number of workforce to be involved in project implementation (construction), identify required accommodation needs and provide the living facilities/houses location, number and utilities to be setup for services.

## **Attachments**

**Layout of the Construction Site, including: Fence, Roads/accesses, Parking, Buildings, Storage Area, Other specific to the Project items**

**Location Plan showing the Plant (s) / Workshop(s) / Construction Yard (s)**

**Sketch or drawings of Temporary Site Offices**

**Sketch or drawings of Temporary Batching Plants**

**Sketch or drawings of Temporary Construction Yards**

**Area layouts for Temporary Facilities**

**Sketch or drawings of Temporary Water Supply System**

**Sketch or drawings of Temporary Power Supply**

**Sketch or drawings of Temporary Sewage system**

**Sketch or drawings of Temporary Storm Water System**

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