STATEMENT OF WORK AND TECHNICAL DESCRIPTION

Context:
NCA Afghanistan is implementing CR-WASH projects for the most vulnerable communities, in this project named PEARL NCA is implementing tow water pipe schemes, among these tow water pipe schemes one will be in North Afghanistan.
Access to Improved Water and Sanitation Facilities Program funded by UNDP to the most vulnerable communities in Balkh province of North Afghanistan.
NCA is currently seeking a reputable, licensed suppliers for construction of water supply systems in the targeted communities in chamtal and charbolak districts, in Balkh province. The aim of this tow is to fix the prices of water supply schemes. The quantities and description will be provided in the technical description part of this document.

Important:
The suppliers must read this document thoroughly, understand well, and consider this specification while giving their prices for the project, since NCA will ask the suppliers to fulfil the requirement of this specification during implementation of the pipe scheme projects.

Type of Services
The services required under this RFQ is to provide NCA with construction of Solar Powered water supply systems containing bore wells, water reservoir, equipped with solar powered water supply system from bore wells to reservoir.

Scope of Work (SOW):
The scope of works for this RFQ is as bellow:

- Drilling of bore well with rotary technic is selected according to the soil type of targeted villages with its development, casing, gravel packing, well testing for yield (mix discharge), water quality testing and compressor test.
- Construction of RCC water reservoirs with volume of 23.5 cum capacity, the water tanks is designed in ground since the area is hilly. The tank was designed as per population of the location. Since the village has spring and it is flowing 24hours, it has a flow of about 0.8 lit/sec, as the community will collect water for 8 hours, so we designed a 23.5 cum of water tank to continue the flow of water in those 8 hours.
- Water distribution lines (water pipe network) with HDPE pipes, its fittings, and other facilities such as gate valves, manholes, for further detail BoQ and drawing is attached.
- Construction of water tap stand with installation of taps as per drawings.
- For ensuring sustainability of water pipe scheme and electrical system from WASH committee at least two people should be trained for operation and maintenance purpose of the system.
- Visibility and cleaning of the site after completion of the project.

The work should be accomplished according to specification and design given. Changes to be made in accordance with NCA technical engineer in charge and vivid reason and approval.

Protection:
During the contract period, when work is not in progress, the boreholes shall be kept capped in such a manner as to prevent the entrance of unwanted materials. The Contractor shall remove any excess matter at his own expense. The work to be done considering safety measures in place e.g., avoid child labour, explosive material, and other practices with is not in line with OSHA (Occupational Safety and Health Administration) standards.

Visibility:
All project sites shall be marked with at least one project signboard. The contractor must ensure that the sign board will contain at least the following message:
"This project is financed by NCA and the Logo of the NCA and IP should be displayed. Additionally, the Logo of Original Donor should also be reflected (UNDP). The sign board design by NCA shall be used.

Delivery date:
Since the project timeline is very short, the contractors should try much to implement it in this shorter period of (**Two Months**) with the quality required. The implementation plans of contractors to be reviewed by technical committee of NCA and to be evaluated for project implementation.

Project tests:
The contactors are to submit the test results during project implementation:

- **Water quality tests report:** (Biological test, physical and chemical tests)
- **Concrete test report:** Temperature test, slump test, compressive strength test and air content test of concrete. While casting concrete the weather temperature shall be between 5 and 35 degrees and the concrete temperature shall be between 10 and 32 degrees, in case of fluctuation in weather conditions the approval from the government shall be taken whether to cast concrete in cold weather conditions using the strategy of cold weather concreting or not in case of approval the supplier can cast the concrete, but what is recommended from NCA engineering team is that after successful completion of the borewell the supplier should first start and complete the concrete (RCC and PCC) containing deliverables. The slump test of the concrete is generally considered from 75 to 100mm, compressive strength of concrete should much the standard requirement of proposed mark of concrete, for every item of the RCC concrete there shall be compressive strength test in case of failure of any of the test for 7 or 28 days, the supplier shall perform core cutting of jack hummer test if again the tests are failed then the supplier must remove and rebuild the item including all the items which are constructed after the failed item. all the casts shall be on suppliers' shoulder and there is no tolerance in this case from NCA side. Air content shall be at the range of 4 and 7 percent, if it is less than 4% then the supplier may add air content materials, it shall be used for slabs and beams only and the aggregate bigger size shall not exceed 19 mm.
- **Cement required tests result**: tests which shall be performed over cement includes, setting time of cement, the recommended setting time as per Indian standard is 30 minutes but it shall not increase than 60 minutes in that case the cement won't be used but the supplier must use the chemical materials which manage the setting time of the cement, it will be selected as per the weather condition. And the item for which concrete is made.

Consistency of cement shall be tested, early stiffening of cement, fineness of cement, density of cement, and compressive strength test of cement mortar these all-tests permissible range shall be checked with standards.

- **HDPE pipes test results**: Complete set of Laboratory test (Tensile Strength & Elongation of PE Pipe, Hydrostatic Pressure test (Normal Test), Heat Reversion Test, Density Test, Specific Gravity Test, Corbon Black Test, MFI & MFR Test, Physical Check) for (25-110) as per the BoQ mm diameters High Density Polyethylene pipe (PE 100) conforming To ISO 4427, DIN 8074-8075 & PrEN 12201 Specifications.
- **Steel test report**: for steel all tests shall be done for the grade 60 steel bars and the permissible range will be checked with standards.
- In case needed stone and bricks lab test result, it shall be required in specific cases.
- The permissible range of all tests will be checked with standards and the supplier must provide.
  the standard for every test.

Technical staff:
NCA suppliers requires to have at least one site engineer dedicated to only construction work to ensure quality and quantity of work, Engineer should not be involved in other tasks of suppliers such as logistics, admin, and finance. In the meantime, NCA staff will be in their support for technical and contextual issues.

Monitoring and reporting:
All the suppliers must have their own daily, weekly, and monthly reporting template, regular two-week timelines which will be updated every week, they must have on site meetings with NCA and partners technical and M&E staff in which the progress and the quality of work will be discussed. In addition, since NCA is working with PRRD and UNDP in every province so PRRD and UNDP engineers will be visiting the sites, their comments considering the contract should be considered, in case of any problem NCA should be immediately put in the picture. The supplier should have journal in every site no excuse will be there for missing the journal, in case of missed journal in the site the work on that day won't be counted for the suppliers. Moreover, journal should be in a diary notebook which should have stamps by relevant IP, and suppliers, also it should have page numbers.
The supplier must also have a check list for every deliverable of the project such as shuttering, steel work, concrete casting, installation of submersible and other electric devices, which should be signed prior, during and after completion of the specific task. If the suppliers don't have check lists signed by responsible engineers, then those deliverables won't be accepted by NCA. The responsibility of taking signature of the responsible engineer in the site goes to the suppliers.

Pipe Network:
These are the distribution lines of the water pipe scheme, and its hydraulic design is done by the help of Water Gems, the distribution lines are HDPE pipes which will be installed in the trenches, the design of the trenches are shown in the drawings, the depth of the trenches will vary according to freezing depth of every province and district but the width of the trenches will be the same everywhere, there will be 20cm sand under and over the HDPE pipe 10/10 cm each. The suppliers must excavate the trenches exact as per the drawing, bed of the trenches must be flat not round, and the size should be as per exact dimensions. The HDPE pipes connection shall be with glue and

there should be no leakage in the fittings of the pipes. After the pipe's connection is over it should be ensured that the pipe network doesn't have any leakage. What shall be done for ensuring no leakage in the network, first at two ends of the network pipes should be cut with a hight then all the pipes should be filled from water and left for at least 24 hours, after that it shall be check the is there any drop in the level of water in two ends of pipe network, if yes it shows leakage if no it means the fittings are well connected with no leakage. After ensuring no leakage is there in the pipes and fittings then the supplier can start backfilling for the trenches. The suppliers are not allowed to do backfilling prior to ensuring leakage in the network.

Concrete.

This project is designed based on ASTM standard and includes both PCC and RCC concrete, the steel bars for RCC is made in Tashkent with grade 60 tensile strength at least 620 Mpa and yield strength of at least 420 Mpa or Khan steel with the same specifications. The mixing methodology of concrete must be by mixer machine based on mix design considering local strengthen of concrete materials. The prepared concrete must be used within 30 min and after it would be expired and not allowed to use. The mix design should be by MANAK and by weight of gravel, Sand, cement, and water.

The materials used in concrete shall be proportionate by weight following the standard cement/sand/aggregate mix ratios as follows: -

For reinforced concrete mix - 1:1.5:3 mix ratios for all RCC works.

For brick masonry mortar mix- 1:3 Mix ratio –

For plastering mortar mix- 1: 3 Mix ratio –

For stone masonry mortar mix- 1:4 Mix ratio the aggregates mix, cement, and water content ratio shall be selected to obtain the best results for compressive strength, density, water tightness & durability, workability, and finishing quality. The concrete mix must be such that the design is compatible with the minimum water cement ratio to give each grade adequate concrete workability.

The grades of concrete for the various works shall be as noted on the drawings and as below: C25: all reinforced concrete (foundations, slabs, etc.) - Characteristics compressive strength at 28days: 250kg/cm - Minimum cement content: 400 kg/m3 - water cement ratio: 0.5-0.55 - Max nominal size of aggregates: 19mm After placement, the concrete shall be vibrated by mechanical vibrator. The vibration method is to be approved by the WASH Site Engineer/works personnel before the operation. The vibrated and consolidated concrete is finished by toweling or floating the surface to a smooth and flat finish. Following placement, vibration, and finishing work to the concrete and after the initial set has occurred not to damage the surface of the concrete, appropriate measures, approved by the site Engineer/Works personnel are to be implemented to cure the concrete for a minimum period of 14 days. Where concrete previously placed as part of the works is to be butted, jointed, or raised with the addition of further concrete, except in the case where the initial concrete is blinding concrete, the first concrete surface must be suitably prepared by the scrabbling, i.e., removing the laitance (fine concrete surfacing) before placement of the other concrete. The method is to be approved by the Site Engineer/Works personnel. After scrabbling, the concrete shall be a thoroughly wet and thin layer of cement slurry should be applied before pouring the new concrete. Steel reinforcement shall be positioned with a clearance or 40mm to the face of the concrete unless otherwise directed by the Engineer/Works personnel or shown in the Contract drawings. Formwork for the concrete shall be to the approval of the NCA Engineer and shall not allow slurry loss from the concrete mix. Prior to the concrete placement, the formwork is to be inspected and

all harmful materials removed to the approval of the NCA and IP WASH Engineer/Works personnel. The Contractor must undertake no mixing or placement of concrete without prior permission by the NCA or IP WASH Engineer.
Steel reinforcement shall be the correct diameter, as shown on the drawings. The bars shall be clean and free from rust. They shall be securely fixed with wire before placing the concrete.
Once mixed, concrete shall be used immediately. Any concrete, which had been allowed to achieve its initial setting, shall not be placed. Concrete shall be placed in layers with a maximum thickness of 250mm. Each layer shall be properly compacted with a vibrator. When placing on old or set concrete, the surface of the old concrete shall be thoroughly cleaned and wetted with water. If the surface is smooth, it must be chipped to form a suitable key. Old concrete shall be painted with liquid cement prior to placing new concrete.
Sufficient water is required for concrete to harden through hydration. The concrete must be kept moist or "cured" to ensure that it does not dry out. Poorly cured concrete will shrink or crack, and not achieve its full strength. Concrete shall be cured by covering it in plastic sheets. Spraying with water, covering with wet Sand, or other methods proposed by the Contractor and approved by the Engineer. The Contractor shall ensure that all concrete is adequately cured. Curing shall start as soon as the concrete has been set and shall continue until curing is completed after 14 days. Otherwise, the concrete will be rejected, and all the main and associated costs would be on contractor.

Concrete Clear Cover: in order to safe steel from open air and soil it is compulsory for concrete element to have a clear cover of concrete between stee, soil and open air, the elements of concrete which are in contact with soil its clear should be at least 7cm, and the element that are in contact with air its clear cover varies from 1.5 cm to 5 cm, the below are clear covers for different items of concrete.

1. For foundation the clear cover is 7cm
2. For columns the clear cover is 4cm
3. For Beams the clear cover is 3cm
4. For shar wall the clear cover is 3 cm
5. For Slabs the clear cover is 2cm

Concrete Checklists:
Prior concrete casting as we must first fix shuttering and steel bars, so there will be checklist prior concrete casting, during concrete casting and after concrete casting.

1. Checklist prior concrete casting, after the formwork and steel work is finished the monitoring engineers will check the formwork and steel work quality and will allow the suppliers for concrete casting in case of no deficiency, and if there is deficiency in the formwork or steel work the supplier will rectify and then can start concrete (checklist format will be shared).
2. Checklist during concrete casting, the monitoring engineers will look for the activities and supplies which shall be done and present during concreting, such as (vibrator, mixer machine, skilled, unskilled labours, manak, scaffolding, safety tools, rubber hammer etc) if the suppliers fulfil the requirements, then it’s OK otherwise should stop the concrete work until everything is in place during concreting. (Checklist format will be shared).
3. Checklist after concrete casting, after the concrete is casted, the concrete is set the supplier can remove the formwork after approval of the engineers then engineer will use the

checklist after concrete casting to ensure the concrete quality is good and there is no deflection, crack and segregation in concrete item then the engineer will allow the supplier to start another item of concrete. (Checklist format will be shared). The setting time for footings, columns and share walls can be 24 hours in hot weather, and 48 hours in normal weather over 5 degrees Celsius. But for beam and slabs it shall not be less than 15 days in hot weather and 21 days in cold weather.

Curing:
After the cast concrete has set and achieved its stiffness then the curing shall start, in cold weather at least 7days of curing is required, while during hot weather conditions 14 days of curing is needed. Till the mentioned time periods it is not allowed to keep concrete dry even for one minute. If the supplier failed to cure the concrete so there will be deduction from the cost of the item of concrete, the cost deduction will be 5% of the item per day, in case the supplier has cured the concrete for initial three days, but it the supplier fails to cure the concrete from the start then 50% of the cost will be deducted from the particular item.
The curing of the concrete shall be with direct watering through pipes, with wet sand over slabs, or with rapping wet bags (بوجييوج ب) around footing, columns and share walls and wetting the bags continuously. Point to be noted that all costs of curing shall be included in the cost of concrete for both PCC and RCC works.

Quality of the concrete Items:

Footings:
For footing first need is the foundation, the foundation should be levelled, sides should be 90-degrees vertical, smooth, and well compacted, the compaction should be with 120kg compaction vibrating machine, if the ground is suitable for compaction then OK otherwise the supplier may put some compaction suitable material and do the compaction, but it is not necessary to change the material it will be decided as per site.

Stone pitching:
There will be stone pitching, as per drawing the stone pitching shouldn't be vertical, all the stones should be flat with space among them, so while casting PCC there will be PCC between the stones. PCC: after stone pitching PCC shall be laid as per the drawing, it shall be smooth and well levelled and shall be cured as per curing instructions. PCC shall be laid as per drawing; any extra PCC will not be counted for suppliers if they want to cast for easiness of their work for shuttering or other purpose.

RCC Footings:
For constructing of footing there so many activities, footings should be properly positioned deviation in the footings positioning is not allowed more than 1cm while cross checking, if there is more than 1cm deviation the footings shall be rejected and won't be counted for the suppliers. Shuttering for footing shall be levelled, in line as per drawing, plumbed, and very well fixed such that while vibrating the concrete the shuttering shall remain strong and wouldn't damage. The steel work for footings should be as per drawing, the overlaps are not accepted in the steel work of footings. Steel shall be clean from rust while using, every joint of the steel should be tied with

building wire, random tying is not allowed and not accepted. Ends of the footing steel bars should have at least 10cm hoke or as per drawing if more is shown in the drawings.

Columns:
Columns should be properly positioned, no deviation more than 1cm is acceptable in the positioning of columns, columns should be properly plumbed, no deviation more than 1.5mm/meter is acceptable while plumbing the columns, no twist in the columns is acceptable more than 0.5cm. so the columns shuttering should be very well tied. The shuttering materials should be plywood, new, with no wounds and cracks, shuttering jacks should be used. In every side of the columns two jacks should be installed to prevent twisting of columns. In the back of the plywood timbers should be fixed, the timber should be tied with hokes such that while vibrating the concrete no slurry of cement should come out of the columns. All the steel bars for columns shall not be overlapped at one point and at the middle of the columns, half of the steels shall be overlapped at 1/3 down the middle of columns and half of the steels shall be overlapped at 1/3 over the middle of the columns, stirrups shall be with little space 10cm c/c in these two areas 1/3 down and over the middle but at the middle it can be more space 15cm c/c if not shown in the drawings.

Beams:
It is not allowed to cast columns and beams at the same time, but first the columns are constructed, set, the shuttering is removed then the supplier can start beams, although it is required to have fix joints of the columns and beams (steels of beam and columns should be inserted in each other), in beam alike columns the overlaps shall not be in one points, if possible half of the steels overlap in one side column and half of then overlap in another side column if not possible then 1/3 approach will be applied. Also, the stirrups spacing shall be the same as column in the middle with 15cm c/c and at 1/3 both sides 10cm c/c if not shown in the drawings. shuttering should be well fixed with no holes, wounds, and cracks to prevent waste of slurry. Plywood, timber, jack, and hokes shall be used in shuttering of the beams. Also, it would make the beam stronger, while fixing the shuttering the middle of the beam is curved means that the middle is around 1.5cm higher than the end of the beams.

Slabs:
Slab is horizontal element of water tank which is very important, and it is highly affected by moments and deflection, while fixing the shuttering it would be better if we fix the middle of the slab 1.5cm higher than the corners. In addition, for shuttering plywood, jack, and timber should be used. Also, while fixing the timbers the space should be considered. The spaced between two timbers shouldn't be more than 70cm and the space between two jacks should be considered 60cm not more than that. The steel work of the slab should be such that there should be no overlaps since the slab is very small, ends of the steel bar should have at least 10cm hoke if not shown in the drawings. While casting the concrete the slab should be well levelled, the surface should be well smoothened, no crack, (any type of cracks) is acceptable in slabs the causes of the cracks should be considered and precautions should be applied while casting the concrete to avoid cracks in the concrete. Curing instructions should be followed strictly.

Share walls: After the slab is set the supplier can start their work on share walls. Maybe it will take 2 or 3 days depending on the weather condition for slab to set well and allow us to work on

it. The share walls should be 90-degree vertical there is no tolerance in verticality of share walls, if even one 1mm deviation have been noticed in verticality of the share wall that will not be accepted, the supplier will remove and rebuild it, since it is bearing horizontal loads so we cannot take any chance, so no deviation of plumb and twist is acceptable. For this reason, the suppliers should be very careful while fixing the shuttering, it should be very strong and not to move even 1mm, so while fixing the shuttering all the instruction of fixing shuttering of slabs should be considered in terms of spaces between timbers and jacks but in share wall the jacks are needed in both sides of share walls. in addition, it should be carefully vibrated no extra vibration is needed. The steel work of the share wall is also very important the supplier should pay full attention to this matter as well, share wall steel work should be done while fixing the steel of the beam and slab such that the steel from share wall should overlapped into the slab and beam as shown in the drawings. After finishing the steel work and while casting the concrete it should not be forgotten to install a water stope as instructed by the responsible engineer in the site.

Cement.

Fresh Cement type 2 (Portland 400 or 500) shall be delivered to the site in prime powder form and sealed bags. It shall be kept clean and dry until usage. Partially used bags of cement shall be stored in a dry place until required. Any partially used bags, which have become damp, shall be rejected. The Contractor will store the empty bags for the NCA technical team count and later disposal of them by the Contractor. The cement will be tested in the lab and will be approved by NCA engineers if matches the standards. The cement will be approved once as per standard and availability in the market, there will be no changes in cement brand after approval, so the suppliers must propose the cement which is available in the market and is matching the standards.

The suppliers should have proper store for storing the cements, the cements bags should be piled up over each other such that it should not exceed 10 bags over each other, down the cement bags dry wooden timbers should be laid down to avoid surface contact with cement bags. If the suppliers don't follow the storing rules of cement and the cement is moist and transforms to stones, then the cement will be rejected, and all the responsibility will be on suppliers' shoulders. Also first comes first practice should be followed while using the cement bags.

The supplier should segregate the empty cement bags activity wise such as stone masonry, brick masonry, PCC, RCC etc, and give daily count to NCA or IP engineers which will be later count as per mark of concretes or mortar. If the suppliers used less bags of cement than the standard there will be a penalty over that item, and the suppliers don't have the right to claim.

Bricks.

First class burnt bricks shall be obtained from an approved source and of uniform color, size (8*11*22) cm, and shape. Bricks shall have smooth rectangular faces with sharp straight, right-angle edges. Maximum absorption shall not be more than 15% of its dry weight on immersion in water for 24 hours. Minimum crushing strength shall be 140 kg/cm2. Suppliers will follow the instructions of NCA or IP engineers in terms of selecting the bricks type or else the suppliers must prove the bricks selected by them are first class burnt bricks fulfilling the requirement mentioned above, means that they have to conduct lab test of brick.

Stone:

Stone shall be hard, sound, free from decay and weathering. Stones with porous matter or with boulder skin shall be rejected. The size of stones shall not be less than 15cm in any direction.

Cement and sand for cement mortar shall be of standard specification. The stone should at least have three flat surfaces otherwise will not be allowed to be used for stone masonry, if used by supplier then it shall be rejected. The stone masonry will include pointing with it. The percentage of mortar for stone masonry shall be not less than 35%, as per the ratio of the mortar (1:4) in every cubic meter of stone masonry 3 bags of cement shall be used, if less than 3 bags used, NCA engineers have the authority to reduce the cost or quantity of the stone masonry as a penalty for compliance of rules.

Safety:
The contractor should provide sufficient safety measures for skilled and unskilled labors and other hired workers on the Project site, the contractor should provide all required PPEs (personal protection equipment) to their workers and labors such as Safety glasses, Safety shoes, safety helmet cap, Gloves, and safety vest coat. If a labor injured/died in time of work in the project all the responsibilities go to the company and NCA doesn't have any responsibility in it at any case.

Formworks:
Formwork should be from new and smooth surface plywood with no crakes or dotes in it (NO PLYWOOD IS ALLOWED TO BE REUSED WITH CRACKS OR WOUNDS). During framing metallic jacks shall be used and no wooden pole stanchion is allowed due to construction norms and safety issues. It is worth mentioning that in case of breaching any construction rules in framing no paid of frames should be made to the contractor. More details on formwork were given for every item of the water tank.

General Recommendations:

1. During implementation of the solar powered pipe scheme for every activity and item the suppliers need an advance approval from NCA or contracor team. If NCA find any deficiency in the work, in any stage of the project and there is no written approval or checklist signed by NCA, then item is spontaneously rejected, if the item is affecting its predecessor or successor then those are accompanied with rejected item. No verbal or scenario-based approval is not acceptable.
2. The suppliers should make a work plan and should strictly follow up their plan and achieve their milestones accordingly.
3. NCA technical team recommends the supplier to prioritize concrete work, first finish all the concrete works soon after water quality is approved then the must start other works, such as pipe network, solar system etc. since the weather will get cold and we would have already finished the works which are affected by cold weather.
4. The suppliers should have technical staff present on the site every day, if there is no technical staff NCA will stop the work, so the responsibility of delay will be on supplier, and it will be counted on the penalty days.
5. If the supplier is doing any activity on their own without prior approval, then NCA has the right to accept or reject the item and supplier has no right to claim.
6. The suppliers must coordinate all work progress or on-site quality of work with Ips, and NCA ground staff, but the issues which have cost implication or materials approval related should coordinate with NCA Kabul. Every approval should be in written.
7. As per project requirements supplier must follow the safety rules and shall equipe all the skilled and unskilled laborers by PPE (personal protection equipment) complete package.

8. The supplier will be asked to fulfill all the terms within this specification, it would be part of their contract, so they must read all the instructions carefully and consider them while giving their price and while implementing the project.
9. All the drawings and BoQs should be strictly followed, in case of need for any changes increase in the quantity, NCA technical and managerial teams should be put in picture and take approvals.
10. As shown in the BoQs NCA has its own available materials in the stocks in both regions (South and North) so the suppliers must use those items first and if there is something which is not available in NCA's warehouse then supplier can buy those items and put NCA staff in the picture. The available materials in warehouse are (HDPE pipes, Solar panels, Inverters, Submersible pumps, different sizes of cables, PVC pipes, and Steel).
11. There can be 10% of independency to site technical staff whether it is suppliers' engineer, IP or NCA staff to bring necessary changes while needed in the design while needed but that will be coordinated in advance with NCA or IP technical staff in Kabul. It is just for the betterment of the implementation otherwise for changes in the quantities terms of contracts will be followed. Moreover, for every item every predecessor activity should be approved then the successor should be started.
12. The suppliers are not allowed to give the project on subcontracts with materials, they are only allowed to give the workmanship on contracts to skilled labours, such as they can give stone masonry only masonry on contract to the mason, or steel work or shuttering work only the work not with the materials. If NCA found that the supplier has given the project on subcontract with materials, then the supplier will face penalty as per NCA's policy.
13. In case of delay of project from the stipulated time mentioned in the contract the supplier will be fined as per NCA penalty policy.
14. Along with this specification, BoQ and drawings supplier will be provided, or supplier will provide some other annexes, which shall be part of the contract of the suppliers the annexes are (Health and Safety plan, Quality Contract Plan, Risk Management Plan and Environmental Screening or safety plan) which will signed along with the contract.
15. For excavation where there is no flat area the supplier should make its profile taking the elevation before and after the excavation, if the supplier fails to provide an excavation profile, then the quantity of the excavation will be counted as per drawing, the supplier has no right to claim for more. For profile there should be approval from NCA or IP site responsible engineers.
16. Health and Safety rules should be applied as per OSHA rules for PPE, Scaffolding, trenching and excavation, for compaction, around water tank based on need there should be four-sided scaffolding and green curtain. For elevated water tanks from ground up to the top slab there should be scaffolding and green curtains.
17. The supplier must bear in mind that while giving their cost for the projects, if they are finding any mismatch in the design or BoQs, then prior giving their cost they have to clear their doubts and confusions with NCA technical engineers, if not later while implementation of the project they cannot claim for extra cost and they have to work as per instructions of NCA and IP engineers