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Government of Nepal

National Reconstruction Authority

Singhadurbar, Kathmandu

Housing Reconstruction Programme

Technical Inspection Guidelines

For

Housing Reconstruction

Kartik 2073 (November, 2016)

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Technical Inspection Guidelines for Housing Reconstruction, 2073

Preamble:

This SOP is prepared to make the inspection easy and systematic for safer and strong construction on the basis of Grant Distribution Guidelines 2015, for reconstruction of houses that were damaged by the earthquake of April 25, 2105 .To facilitate all the stakeholders- House owners, beneficiaries, Local bodies, Technical Inspection Team and to create uniformity in the understanding of procedure the grant distribution for construction of safer houses this SOP was prepared based on the clause 31 of Reconstruction Act,2072.

1. Brief Name and Start:

1) The name of this guideline will be "**Technical Inspection Guidelines for Housing Reconstruction, 2073**"
2) This guideline will be effective after the approval from National Reconstruction Authority

2. Definition

Unless otherwise given a meaning, in this guidelines

a. Technical Assistance Team

Team comprising of One or more than one Engineer or Sub-engineers or Assistant Sub-Engineers or Trained masons or Social Mobiliser who are mobilized by MOUD-DLPIU or other Partner Organizations for the purpose of providing support like trainings and other technical support to the house owners/beneficiaries to construct the houses regarding earthquake safety and other right measures in VDC/Municipalities.

b. Technical Inspection Team

The team one or more than one Engineers, sub-engineers or Assistant Sub-engineers' team mobilized by MOUD-DLPIU in VDC/Municipalities to inspect and certify whether the ongoing construction of the houses are according to the National Building Code or Approved Minimum requirements

c. Technical Supervision Team

The team of supervisor engineer from MOUD-DLPIU to provide necessary guidance to the Technical Inspection Team and to re-inspect already inspected houses.

d. Third Party Monitoring Team

The engineers or technical team appointed from NRA or related donor agencies to check the overall quality of the reconstruction and the activities of Technical Assistance Team, Technical Inspection Team and Inspection Supervision Team.

e. Grant Agreement

The agreement between beneficiary and VDC/Municipality to receive the grant support for housing reconstruction based on grant distribution guidelines, 2072.

f. Plinth Band

The RCC, timber, Bamboo or other approved construction material band which is kept after the completion of the foundation covering the complete part of the wall should be understood as plinth band. Locally, it is also called DPC Band. In English it is called Plinth Band.

After the completion of this level, technical inspection-1 is done.

g. Roof Level

The upper level of the RCC, timber, Bamboo or other approved construction material band which is kept before keeping the beam for the construction of roof should be understood as roof level.

After the completion of this band, technical inspection-2 should be done. For single story houses, technical inspection-2 is done after the construction of roof band. For two and more than two story houses, the technical inspection-2 is done before the floor construction of the first floor.

h. Construction Completion

The status of the completion of the construction according to the approved design/drawings. After the completion of the construction Technical Inspection-3 is done and Construction Completion Certificate is provided.

i. Earthquake resilient structure

The earthquake resilient houses constructed according to Nepal National Building code or Minimum Requirement formulated for reconstruction purpose or retrofitted according to the approved guidelines or code.

3. Process of drawing approval and inspection of Houses under Housing reconstruction program

Section-1: Drawing Approval Process

3. Process of drawing approval and inspection of Houses under Housing reconstruction program

1) While using the resource from Government, donors, NGO and INGOs, personal, institute for housing reconstruction, retrofitting and maintenance the house should be earthquake resilient and according to the building code
2) The beneficiary should select the building during the period of enrollment camp and it should be mentioned in the PA
3) The design that they have selected could be the design approved by NRA or the earthquake resilient design prepared by the beneficiaries themselves for the reconstruction. The design prepared by the beneficiaries should be within the building act 2055, but these buildings should be earthquake resistant and should follow national building code.

(a) Category "A": Modern building to be built, based on the international state-of-the-art, also in pursuance of the building codes to be followed in developed countries.

(b) Category "B": Buildings with plinth area of more than One Thousand square feet, with more than three floors including the ground floor or with structural span of more than 4.5 meters.

(c) Category "C": Buildings with plinth area of up to One Thousand square feet, with up to three floors including the ground floor or with structural span of up to 4.5 meters.

(d) Category "D": Small houses, sheds made of baked or unbaked brick, stone, clay, bamboo, grass etc., except those set forth in clauses (a), (b) and (c)

4. Selected design has to be filled in fixed format

Under the housing reconstruction program, the beneficiaries should fill up the building typology that they are willing to construct during the enrollment camp using the form provided in **annex 3**. If the form was not filled during the enrollment camp then the detail description of the building should be filled during the period of inspection.

5. Drawing approval process for reconstruction

1) For section 1, clause (2), if the building typology is within the design catalogue approved by the NRA, then re approval from the VDC is not necessary
2) If design submitted design mentioned in section 1, clause (2), but need to be constructed in municipality, the design must be re approved by following **short process** of building permit procedure in annex-4.

6. Certification of the design different than approved design model

1) If the design is other than approved designs that then during the period of the first inspection the inspector should certify that the building is earthquake resistant.

Section-2: Inspection procedure up to plinth level.

7. Confirmation of Site selection and Layout

1) During the period of construction, of the building (as per the building mentioned in point 2), the inspector should certify that the site is safe regarding geographical and geological aspect. As far as possible the beneficiaries should ask for the inspection of the site to check the suitability for the construction in the geological and geographical aspect. In addition the house owner can ask for support for layout of the construction.

2) For these inspection the beneficiaries can fill the application form provided in **annex 5** and the inspector should provide a slip and do necessary check and certify the site filling the form provided in **annex-9**. In case the technical assistance team cannot be available from POs , the inspectors of the inspection team shall provide the technical assistance.

8. Technical Assistance can be requested during construction of foundation

1. After signing the grant distribution agreement for those who got approval for the reconstruction can ask for the technical support to construct the foundation by filling up the application form provided in **annex 5**. Similarly, the concerned VDC or municipality should inform the beneficiaries about the arrival date of the Technical Assistance team to the site. The VDC or municipality should send the technical assistance team in the same assigned date in the prioritized order. As mentioned in clause 7 (2), in case the technical assistance team are not available from the POs, the inspectors of the inspection team shall provide the technical assistance.
2. The technical assistance team can give the feedback of the under constructed foundation, He/she should fill the form provided in **annex 8** and it shall be the duty of House owner to follow the instruction.
3. If the beneficiaries is planning to construct the house in existing foundation he/she should start the construction only after suggestion from the Technical assistance team and approval from the Inspection team.

9. Apply for second tranche

1. After completing the construction of the foundation and plinth level, the beneficiaries should apply for the inspection and second installment. For that he/she should apply in VDC/Municipality or Technical Inspection team using the format of **annex-6**.

10. Inspect and Certify the construction for foundation level

1. The concerned VDC or municipality should allocate the date of inspection and assign the inspection team in prioritized order. The Technical Inspection Team should use the form provided in **annex 6** for the certification. One copy of that certification should be given to the beneficiaries and other copy to VDC/ municipality

11. Correction order if necessary for foundation construction and certification of that

1. If the Technical Inspection Team found that the construction is not within the minimum requirement, then he/she should give the correction order by filling up the form

provided in **annex 11** and the house owner shall correct taking the help from the technical assistance team.

2. After completing the foundation and plinth level by adopting the corrective measures, the beneficiaries should get the construction certified by the inspection team as explained above.

12. Approval necessary for different design

1. If the beneficiaries want to construct the building other than the building that they have s during the period of enrollment camp, then they should give the application to the VDC/municipality using the form provided in **annex 7**. Similarly the VDC/ Municipality should also give the permission to construct the building by completing the procedure mentioned in point 4.
2. But if some beneficiaries has started the construction without giving application, then he/she should follow the procedure mentioned in clause 9, 10 and 11 and get certification by the inspection team

13. House owner must be clear about the construction above foundation

1. After completing the construction up to plinth level by following the point mentioned in clause 9, 10 and 11 the beneficiaries should be clear about the complete construction of the earthquake resistant building.
2. For this, the Technical Inspection Team should provide the knowledge of the earthquake resistant construction to the house owner. To construct the earthquake resistant building the beneficiaries can get the technical guidance by the technical assistance team.

14. In case of technical problems advice can be taken from Inspection supervision team and Technical Standardization Committee

1. If the Technical Inspection Team cannot judge and certify the building for the during inspection he/she should inform the Inspection Supervision team in DLPIU by filling the form provided in **annex 10** for necessary consultation. If the building needs to be corrected then the inspection supervision team should give the correction order by filling up the form provided in **annex 11** , if the building can be certified then they should fill up the form provided in **annex 10.**
2. If the inspection supervision team of DLPIU cannot certify or recommend the correction then such type of buildings should be submitted to MOUD CLPIU and if CLPIU cannot decide then it should be sent to "Technical Standardization Committee" and should be decided

15. The technical inspection form of foundation construction should be recommended by MOUD-DLPIU

1. From the above mentioned points, using the form provided in **annex 10** for the certification of the technical inspection, copy of one form should be provided to the MOUD DLPIU for technical approval
2. MOUD DLPIU should check the details of documents of the **annex 10** certification, make a list of the beneficiaries using **annex 14**, send it to MOFALD-DLPIU (or DDC) and recommend for the disbursement of second installment
3. MOUD-DLPIU should assign the Inspection Supervision team for the inspection of the quality of the construction and progress of the work upon necessity

16. Disbursement of Second Tranche and Deposit in Bank Account

1. The respective MOFALD-DLPIU will send the letter to the DTCO based on the recommendation from MOUD-DLPIU and VDC/Municipality to disburse the second installment amount to the beneficiaries account and the second installment amount will be deposited into bank account based on the recommendation from DTCO.

2. The beneficiary house owner can withdraw the amount as per necessity of construction of the house

Section-3: Inspection procedure above plinth level

17. Based on certification construction above plinth level can be done

The beneficiaries can construct the houses under the provided certification based on **annex 10**. The further construction should not be carried out unless the beneficiaries get the certification. But the beneficiaries can start the construction before achieving the second installment

18. Technical assistance can be taken for construction above plinth level

1. The beneficiaries can apply for the technical assistance for the further construction. He/she should give the application form using the format provided in annex-5. Similarly, the respective VDC/municipality should also assign the technical Inspection Team for the guidance on the basis of priority.
2. For the construction of the house the beneficiaries should use the trained mason and carpenters.

19. Technical Inspection and certification after the construction of roof level of one story house and first floor of multistory house

1. After completion of the roof band of one story and the first floor of the multistory house, the beneficiaries should apply for the inspection of the house and third installment using the form provided in **annex 6**
2. VDC/ Municipality shall inform the date of the prioritized visit of the Technical Inspection Team to the house owner for inspection and manage the inspection.
3. Technical Inspection Team should use the form in **Annex-13** to certify the house if the constructed house is according to earthquake resilient design and approved design

20. Correction order also can be given for the construction up to roof level of one story and first floor of multistory house.

1. If correction has to be made, **annex- 11** form is to be used by Technical Assistance Team informing about the things to be corrected.
2. The concerned house owner beneficiary shall take a help from the technical assistance team and correct and apply to the VDC/ Municipality using the **annex 6** form.
3. The Technical Inspection Team shall inspect and certify the house using **Annex-13** on the assigned date.
4. If the DLPIU engineer cannot decide immediately and are confused in the decision then the inspection should be done from the one step up Inspection Supervision team using the annex-13 form for certification and annex-11 form for correction and inform the house owner.

21. Certification, Recommendation and Disbursement of Third Tranche

1. After the process in point 19 and 20 the Technical Inspection Team should provide one copy of the certificate to the house owner and the other copy to VDC/ Municipality
2. One copy of the Forms based on **Annex 13** certified by Technical Inspection Team or Inspection Supervision Team shall be sent from concerned VDC or Municipality office for technical approval to Ministry of Urban Development District Project Implementation Unit MoUD-DLPIU.

3. MOUD DLPIU should check the details of documents of the certification, make a list of the beneficiaries using **annex 14**, send it to DDC and recommend for the third installment
4. MOFALD-DLPIU shall recommend and disburse the grant in the accounts of beneficiaries through DTCO.

22. Field Inspection during in roof level of one story and first floor level of multistory house

1. Ministry of Urban Development District Project Implementation Unit-MoUD-DLPIU can do field inspection if necessary by Technical supervision team on the basis of description based on annex-14 forwarded form.
2. During the supervision by Inspection Supervision team if they find that the building is not constructed on the basis of approved drawing and requirement then the team can cancel the certification and can stop the grant.

23. Construction above the roof level of single story and first floor level of multistory building can be continued

1. After receiving the certification letter in accordance with point no 21 by respective beneficiary house owner can construct the roof of one story building or floor of multi-story building as per approved design. In accordance with the certification letter construction of roof or construction of floor can be done before receiving the third tranche.
2. But According to point no 21 deployed supervision team of Ministry of Urban Development, District Project Implementation Unit (MoUD-DLPIU) or as specified in bottom Section-5 deployed third-party monitoring Authority will inspect the house, if during the inspection or supervision any constructed house of beneficiary house owner is found to be unsafe or not as approved design then the tranche amount will be kept pending and the respective beneficiary will have to correct as specified by that team.

Section-4: Process of Inspection of housing reconstruction completion

24. Apply for getting the completion certificate after completing the roof of one story house

1. For construction of one story house respective house owner should constructed the roof as mentioned in certification as **Annex-13** by the Technical Inspection Team, after that house owner should fill the application form as **Annex-6** for construction completion certificate and submit to the respective VDC or municipality office
2. Respective VDC or municipality office should prioritize the application and manage the time to inspect by the inspection team

25. Certify the house after the completion of roof of one story house

1. The Technical Inspection Team should inspect and fill the form as specified in **Annex-15** and if the constructed house is found to be as approved design and earthquake resilient then it is recommended for "House reconstruction completion certificate"
2. Based on the recommendation Inspection supervision team can supervise as needed and provide "House reconstruction completion certificate" as **annex-16**.
3. After issuance of the House reconstruction completion certificate, the VDC/Municipality shall regularly prepare list using **annex 17** and report it to MOFALD and MOUD CLPIU.

26. Correction order can be given if any correction has to be done in the completed hous

1. According to above point no (24) inspection teams or inspection supervision team will observes the house but if the house is not reconstructed according to approved design, Ministry of Urban Development, District Project Implementation Unit (MoUD-DLPIU) inspection teams, or Inspection Supervision team will fill the from in accordance to **Annex-11** and mention the things that needs to be improved and provide to beneficiary house owner.
2. The respective beneficiary house owner can take the help of technical team and improve as suggested then again as mentioned above in **Annex-14** form is filled and submitted to the VDC or municipality office, while VDC or municipality will also follow the same procedure immediately and inspect the house if the house is found to be repaired as suggested then as mentioned in **Annex-16** "House reconstruction completion certificate" should be provided**.**

27. Apply for the inspection and certification of the multistory house after completing the roof of ground floor and base of first floor

1. The house owners who construct multiple story houses should construct the houses based on the approved design and apply to the VDC using the form in **annex 6** to request for certification and approval of construction above it. The VDC/ Municipality shall prioritize and send the Technical Inspection Team for inspection
2. If the construction is according to the approved design and safe the certification should be provided using **annex-14** and if it is to be corrected **annex-11** form is used.

28. Building completion certificate after the completion of multistory house construction

1. In case of multistory construction, the procedure on the point 24 needs to be followed and after all the construction is complete, the process on the clause 27 is followed and VDC/ Municipality can provide the construction completion certificate
2. During construction of upper story the house owner can take the technical assistance applying to the VDC using the form in **Annex- 5** and VDC/ Municipality shall send the Technical Assistance team based on the priority on the assigned date.
3. Based on that completion certificate only, the concerned house owner can receive the recommendation for support through different organizations.
4. After issuance of the House reconstruction completion certificate, the VDC/Municipality shall regularly prepare list using **annex 17** and report it to MOFALD and MOUD CLPIU.

Section-5: Inspection Process for Retrofitting/ Maintenance

29. Application, inspection and completion certification related to retrofitting/maintenance

1. The house owners who do the retrofitting/ maintenance should fill up the application form attached in the **annex 6** and apply to the VDC/ Municipality.
2. The concerned VDC/ Municipality shall manage the Technical Inspection Team in priority on the assigned date
3. The Technical Inspection Team should visit the site and recommend for the certification and based on that the technical supervision team shall visit the site and provide the certification.

30. Correction/retrofitting order can be given

1. If house is not repaired or retrofitted based on approved standards after inspection in clause number 29, Technical Inspection Team of MOUD-DLPIU will give instructions by filling form of ANNEX-7

2. After improvement on previously done retrofit/repair as per instruction, concerned house owner will get Certificate of completion retrofit/repair as according to clause 29.
3. Only after this certificate, concerned house owner will get the recommendation or facilities provided by VDC or Municipality or Concerned Government Agencies.

31. Technical assistance can be taken for retrofitting/maintenance

1. If any earthquake victim house owners give application to concerned VDC or Municipality after realizing the need of repair or retrofit, concerned VDC or Municipality should provide technical support and related advices by mobilizing Technical Assistance Team
2. If house owner give application according to **annex-6** after doing retrofit/repair as per advice of technical assistance team, retrofit/repair completion certificate should be provided after fulfilling procedure of clause 30.

Section-6: Process of Third Party Technical Monitoring

32. Technical Monitoring through Third party for Reconstruction/ Retrofitting

1. For monitoring of reconstruct/retrofit or repair of private houses within specified time after fulfilling above mentioned clauses, NRA will manage monitoring of at least 5% of reconstruct/retrofit/repair required houses forming third party technical monitoring team. In which one percentage of the house will be same from Foundation to Completion and four percent house will done through random sampling.
2. The technical monitoring as mentioned in clause 32 (1) , team can monitor reconstruction/Retrofitting or repair work anytime and concern house owner, VDC or municipality, offices, and other related government agency, concerned person and other organization should support the monitoring team.
3. The formation process and monitoring procedure of the technical monitoring as mentioned in clause 32 (1) will be as per specified by NRA. The technical assistant team, technical inspection team, Technical supervision team and other related agency and person must make necessary improvement in private housing reconstruction work as per the recommendation of above mentioned technical monitoring team.
4. Authority will manage a third party monitoring team in coordination with donor agency or organizations who helped in private housing reconstruction and through them the concern donor agency or organization can monitor to know the situation of their own service operation

Section-7: Process of inspecting the houses that are reconstructed before PA

33. Inspection of the houses which were constructed before PA

Reconstruction of the houses that have been done prior to private housing reconstruction grant agreement, inspection of the houses will be done from the same level of construction that have been completed. For this purpose, respective beneficiary house owner should fill the form for the same level and leave an application to related VDC or municipality office for inspection.

34. Certification or correction order for houses constructed before PA

1. Based on the application as mentioned in Point No. 33, Technical Inspection Team will inspect the construction work at all levels. For relevant level, specified form must be

certified and based on the specified form the team must give direction to the house owner of respective beneficiary regarding the improvement of the house

2. Also after the correction of the house by the respective beneficiary house owner, on the basis of application given to VDC, a Technical Inspection Team and if required inspection supervision team concluded that specified improvement have been done, then this team must certify the reconstruction up to the relevant level.
3. Based on Point no 34.1, arrangement will be made on prescribed grant only on the basis of certification as given by the Technical Inspection Team or inspection supervision team.

35. Grant will be provided based on the level of completion for houses already constructed before PA

1. Based on Point no 34 arrangement will be made on prescribed grant only on the basis of certification as given by the Technical Inspection Team or inspection supervision team.

Section-8: Management and use of information system

36. Management and Development of Use of information system.

1. According to law mentioned above in various bullets to provide technical assistance in the rebuilding of private accommodation or technical inspection, supervision and monitoring of financial assistance, if possible, available information technology to use, and for this management information systems(MIS) shall be developed
2. According to the system the recommendations made by correspondence will also be recognized But in the case where there is no possibility to use information technology and information management system, through paperwork process (hard copy) shall not hinder the performance of its functions

Section-9: The amendment in Guidelines

37. Guidelines can be amended

1. In the course of the implementation of this procedure, if any amendment is required, Executive Committee of the Authority may amend.

4. Annexes

Annex 1: Procedure of Housing Reconstruction Program under the method of inspection and responsibility of related agencies.

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD-DLPIU	Responsibility of Technical Assistance Team	Relevant Form
A	To ensure the construction site in terms of geographical and geological safety and layout of foundation.						
1	Before the construction of the foundation, to inspect the construction site from related technical team to ensure the Safety and appropriate in terms of geological and geophysical condition. In addition apply for supporting construction of foundation layout from technical team.	Apply for Inspection	Receive Application				Annex 5
2	Mobilize Technical team for Inspection		Mobilize Technical team			Management of Technical Assistance team	
3	Technical Assistance at construction site for Technical Inspection	Provide the information to Technical Inspection about the construction site and foundation				To ensure technical inspection about construction site and further recommend and necessary direction to move	Annex 8

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD-DLPIU	Responsibility of Technical Assistance Team	Relevant Form
						ahead for construction	
4.1	Technical Assistance team has been on a construction site and using the appropriate form for technical inspection and to ensure that place is safety and appropriate in terms of geographical and geological condition, and also carry out the construction of foundation layout. After that also promote to recommend additional construction.	Receive Inspection and certification				Provide Certificate	Annex 9
4.2	Order to Correction					Order to Retrofitting or Correction	Annex 11
4.3	Get detailed information about the correction from technical support team and then after getting directions household owner have to improve layout and construction site.	Correct/ Retrofit					

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD-DLPIU	Responsibility of Technical Assistance Team	Relevant Form
4.4	After Correction re-apply for checking/ examine.	To Apply	To receive the application				Annex 5
4.5	After getting re-application mobilize technical assistance team		Mobilize Technical Assistance Team				
4.6	Inspect the house After Correction	Provide the information to Technical Assistance				Technical inspection and certify	Annex-9
B	**House Construction work up to plinth level**						
5	Apply for the technical inspection and pass after the completion of the house up to plinth level do technical inspection-1	Apply for inspection	Receive the application				Annex 6
6	Mobilize technical Inspection Team for inspection		Mobilize Inspection team		Manage Inspection team		
7	Technical Inspection Team to be mobilized in construction site using appropriate form for doing technical inspection-1	Provide information about construction technical inspection team		Provide certification and necessary direction after technical inspection			Appropriate form of Annex-10
8.1	The under construction house are according to technical standard and if they can be pass, immediately inspect the	Receive Technical Inspection		Provide Certification for inspection			Appropriate form of Annex-10

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD-DLPIU	Responsibility of Technical Assistance Team	Relevant Form
	house and provide them certificate						
8.2	Order retrofitting or Correction			Retrofitting or Correction	Support Technical Inspection Team on complex technical subject		Annex 11
8.3	In case of which house are made in completely different type or in different techniques, Preparing the detail technical terms to guide for appropriate feedback send information to district, MOUD-DLPIU			Collects the detail technical and send it MOUD-DLPIU	To guide for to improve the technical decisions	Provide more support MOUD-DLPIU	Annex-7
8.4	Within 7 days after getting guidance from MOUD-DLPIU order household owner for correction and retrofitting			Order house owner for correction and retrofitting	To guide for improvement after technical inspection	Provide more support MOUD-DLPIU	Annex-11
8.5	After get detailed information and instructions about correction from technical team household owner should go ahead with construction of his/her house.	Construction correction and retrofitting					

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD-DLPIU	Responsibility of Technical Assistance Team	Relevant Form
9	After Correction re-apply for inspection	To apply	Receive the application				Annex 6
10	After getting re-applied mobilize technical inspection team		Mobilize technical inspection team				
11	Inspect the house after correction	Provide information to technical inspection		Technical Inspection			Appropriate form of Annex-10
12	After certification from technical inspection checked pass from that evidence to direct the second installment grant payment.		Provide the information about grant payment to MOUD-DLPIU	Order the VDC/Municipality and MOUD-CLPIU about certify from check pass and grant aid.	To recommend the MOFALD-CLPIU about grant payment.		Annex-14
13	Second installment grant aid for VDC or municipality to receive money through a bank.	Take second installment grant					
C	Construction Works above the plinth band						
14	Do Construction Works above the plinth band						
15	After the completion of up to one floor building or second story floor level apply for technical inspection-2	To apply	Receive the application				Annex-6

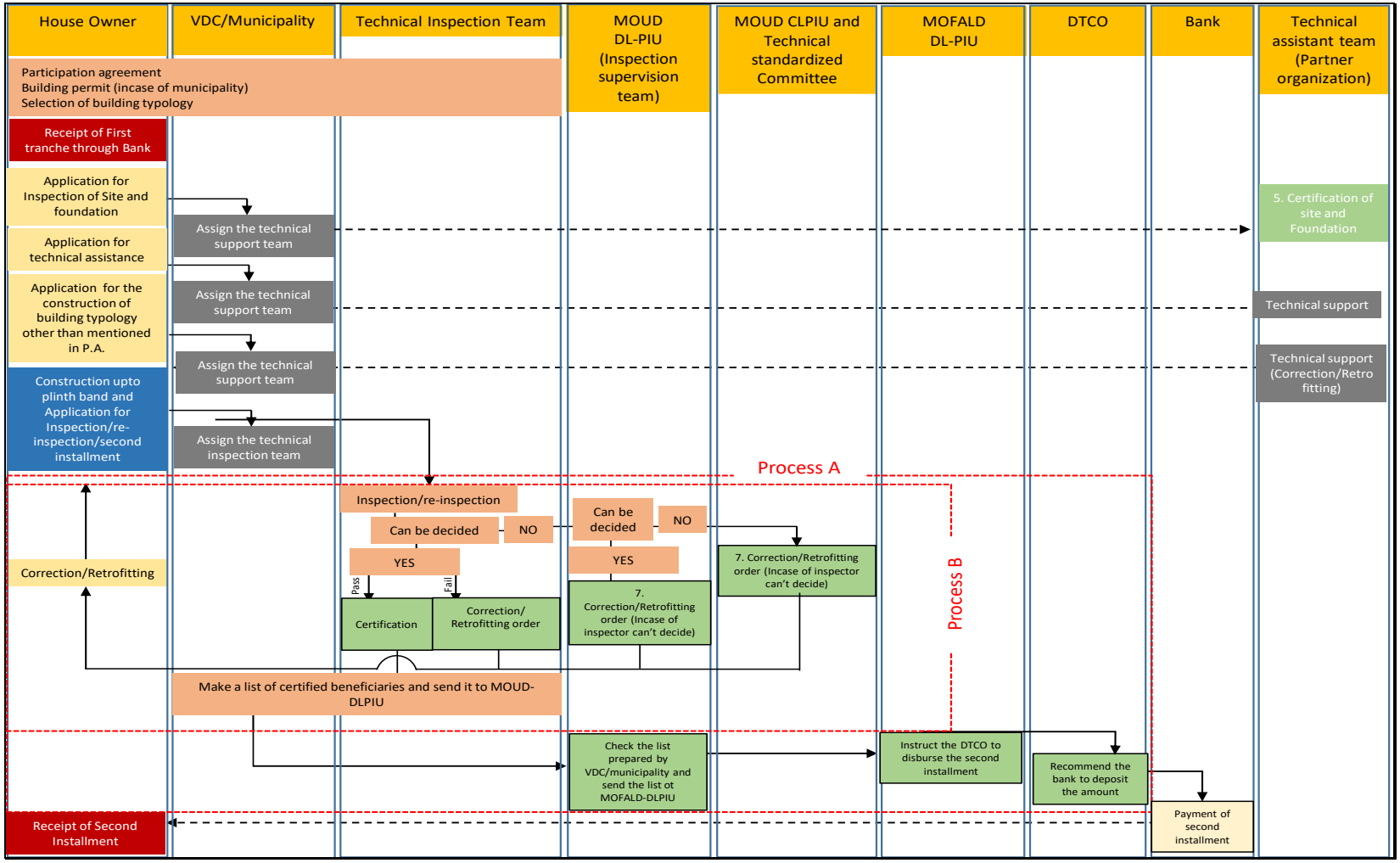
S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD-DLPIU	Responsibility of Technical Assistance Team	Relevant Form
16	Inspection for under construction house mobilize the technical team in priority order form.		Mobilize technical inspection team.				
17	Technical inspection -2 for under construction house. Detailed description of the technical checked was according to the approved layout design or minimum standard whether or not. In that case follow point No. 8 to 11 for necessary and appropriate procedures.	Provide information to technical inspection team		Technical inspection	To guide the technical inspection team		Appropriate form of Annex-13
18	Provide certification to house owner after approve in terms of techniques of up to one floor building or second story floor level completion	Receive certification		Provide certification			Appropriate form of Annex-13
19	After certification from technical inspection checked pass from that evidence to direct the third installment grant payment.		Provide the information about grant payment to MOUD-DLPIU	Order the VDC/Municipality and about certification from check pass and grant aid.	To recommend the MOFALD-CLPIU about third grant payment.		Annex-14

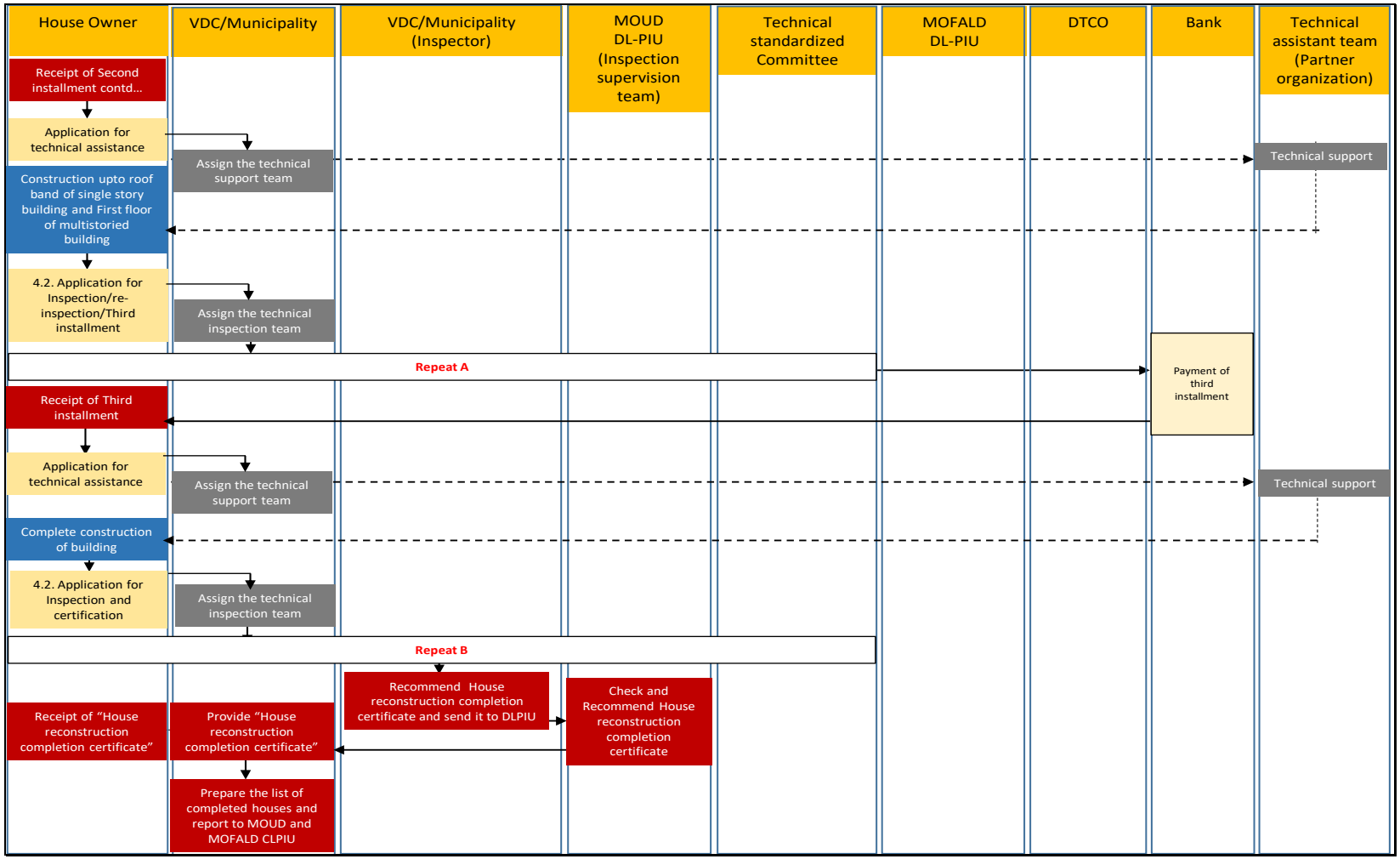
S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD-DLPIU	Responsibility of Technical Assistance Team	Relevant Form
20	Third installment grant aid for VDC or municipality to receive money through a bank.	Taken Third installment grant					
D	Completion of construction one-floor building						
21	To move ahead with construction works	Do construction work					
22	To apply for technical inspection-3 of final certified of complete construction work after complete construction one-floor building	Apply	Receive the application				Annex 6
23	Mobilize technical Inspection Team for complete construction work		Mobilize technical inspection team				
24	Technical inspection-3 of construction of the house. From 8.2 to 11points should be applied the house that are not state as in accordance of detail technical, map design and minimum standard.	Provide the certification and information about complete construction work to technical inspection team		Do technical inspection	Do technical inspection		Annex 15
E	To move ahead two story building						
25	To apply for technical inspection after completion of first floor	To apply	To receive the application				Annex 6

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD-DLPIU	Responsibility of Technical Assistance Team	Relevant Form
	level of two story building						
26	Mobilize technical assistance Team to inspect the under construction house		Mobilize Technical Assistance Team			Manage Technical Assistance mobilize team	
27	Technical inspection of construction house by Technical assistance team. From 8.2 to 11 points should be incorporate the house that are not state as in accordance of detail technical, map design and minimum requirements.	Provide information to inspection assistance team				Do technical inspection	Appropriate form of Annex-13
F	Completion of two story building						
28	To apply for technical inspection after completion of two story building for final certification.	To apply	Receive the Application				Annex 6
29	Mobilize Technical Inspection Team for complete construction		Mobilize technical Inspection Team				
30	Technical inspection-3 of constructed house. From 9 to 14 points should be applied the house that are not state	Provide information to technical inspection team		Do Technical Inspection	Mobilize Technical Inspection		Annex-16

S.N	Works Related with Technical Inspection	Responsibility of Beneficiaries	Responsibility of VDC and Municipality	Responsibilty of Team of Inspection Team	Responsibility of MoUD-DLPIU	Responsibility of Technical Assistance Team	Relevant Form
	as in accordance of detail technical, map design and minimum requirements.						
G	Prepare report of Complete construction work of house						
31	Submit overall summary of complete construction work report of house to MOUD CLPIU in quarterly.			Report Preparation and send to VDC/Municipality	Coordination for report preparation and submit report to MOFALD-CLPIU and MOUD-CLPIU		Annex 17

Annex 2: Flow chart of Construction and Inspection Procedure




House Owner
VDC/Municipality
VDC/Municipality (Inspector)
MOUD DL-PIU (Inspection supervision team)
Technical standardized Committee
MOFALD DL-PIU
DTCO
Bank
Technical assistant team (Partner organization)
Receipt of Second installment contd...
Application for technical assistance
Assign the technical support team
Technical support
Construction upto roof band of single story building and First floor of multistoried building
4.2. Application for Inspection/re-inspection/Third installment
Assign the technical inspection team
Repeat A
Payment of third installment
Receipt of Third installment
Application for technical assistance
Assign the technical support team
Technical support
Complete construction of building
4.2. Application for Inspection and certification
Assign the technical inspection team
Repeat B
Recommend House reconstruction completion certificate and send it to DLPIU
Check and Recommend House reconstruction completion certificate
Receipt of "House reconstruction completion certificate"
Provide "House reconstruction completion certificate"
Prepare the list of completed houses and report to MOUD and MOFALD CLPIU

Annex-3: Type of house selected by beneficiary

Government of Nepal

Ministry of Federal Affairs and Local Development

……..VDC/Municipality Office

Type of House selected by Beneficiary

(Included in the PA)

Application form to be filled for the supervision of under construction house.

Selected Design number among the purposed design: ……Or

The description of the building typology planned by the house owner:

1. Technique and construction materials.

1.1 ☐ Stone masonry with mud mortar
1.2 ☐ Stone masonry with cement mortar
1.3 ☐ Brick masonry with mud mortar
1.4 ☐ Brick masonry with cement mortar
1.5 ☐ Stone masonry with mud mortar and wooden post and beam
1.6 ☐ R.C.C framed structure
1.7 ☐ House surrounded with wood or CGI sheet in metal or wooden frame

2. Construction of roof and materials.

2.1 ☐ CGI sheet over wooden beam, rafter and purlin
2.2 ☐ Tile over wooden beam, rafter and purlin
2.3 ☐ CGI sheet over bamboo beam, rafter and purlin
2.4 ☐ Tile over bamboo beam, rafter and purlin
2.5 ☐ Tile over bamboo beam, rafter and purlin
2.6 ☐ RCC slab
2.7 ☐ CGI sheet over metal beam, rafter and purlin

I agree to construct the house according to the building typology that has been provided by the NRA, following the minimum requirement that has been selected above.

Beneficiaries/ representative:

Signature:……..

Name:…….

Address:…….

Annex-4: Simplified process **for** Building Permit

Steps	**Activities**	**Responsibility and Timeline**			
		Responsibility of House Owner	**Timeline**	**Responsibility of Municipality**	**Timeline**
First	**Apply with Drawing of the house**	**Submit the drawing and necessary documents**	**First Day**	**Register the application**	**First Day**
Second	**Publish Notice for check**	**Publish notice with Officer**	**First day**	**Prepare notice and provide it to House owner/ Officer**	**First Day**
Third	**Check the drawing and consult with the consultant for improvements**	**Arrange the meeting of consultant with Municipality**	**First day**	**Finalise the technical part / inform for correction to the consultat**	**Seventh Day**
Fourth	**Check the site boundary and layout and orientation regarding construction**	**Layout to be done by the consultant and neighbours to be called for checking of boundary**	**Within Fifteenth day**	**Check the site boundary along with the consensus of neighbors and orient**	**Within Fifteenth day**
Fifth	**Certification of drawing**	**Contact Municipality for approved drawing**	**With in seventeeth day**	**Provide certified drawing**	**Seventeenth day**

Annex- 5: Application form for Technical Assistance

Government of Nepal

Ministry of Federal Affairs and Local Development

……..VDC/Municipality Office

Application form for Technical Assistance

Mr. President /Secretary of……. VDC/Chief/executive officer of……. municipality. Under the housing reconstruction programme, I am writing this application to request you to check the below mentioned level and provide appropriate guidance. I have attached all the required detail description along with this application letter.

☐ Site Selection and Layout

☐Foundation

☐Above Plinth Level

☐Repair/Retrofit

Name,Surname of house Owner/ beneficiaries……..
Grant Aggrement no:…… …….
location of under construction house: District…….
VDC/Municipality…….
Ward No.:…… Village/tole:…… Land Plot No.:……

Building typology of underconstructed building:
If design is from Catalogue, model no.:……

If design is apart from catalogue:

Wall/column typology no.:…….

Storey/type of roof no:…….

Other:……..

Full name of Applicant:…….

Signature:……..Date:…….

For Official use only: Application registered No:……

Officer name (enrolled to register application):…… Post:……..

Signature: …… Application registration Date:……..

Description of the technical mobile team enrolled for inspection:

Annex- 6: Application form for Inspection and re-inspection

Government of Nepal

Ministry of Federal Affairs and Local Development

……..VDC/Municipality Office

Application form for inspection

Mr. President /Secretary of……. VDC/Chief/executive officer of……. municipality. Under the housing reonstruction programme, I am writing this application to request you to inspect/re-inspect my house under construction or to provide appropriate guidance. I have attached all the required detail description along with this application letter.

Name,Surname of house Owner/ beneficiaries……..
Grant Aggrement no:……
…….
location of under construction house: District…….
VDC/Municipality…….
Ward No.:…… Village/tole:…… Land Plot No.:……

Building typology of underconstructed building:
If design is from Catalogue, model no.:……

If design is apart from catalogue:

Wall/column typology no.:…….

Storey/type of roof no:…….

Other:……..

Present status of completion :

☐ completion of Foundation

☐ Completion of opening and masonry wall above opening (below the floor level)

☐ Completion of construction

Permitted after completion of Inspection :

☐ Permitted after completion of Foundation

☐ Permitted after completion of Roof

☐ Permitted after Construction Completion

Full name of Applicant:…….

Signature:……..Date:…….

For Official use only: Application registered No:……

Officer name (enrolled to register application):…… Post:……..

Signature: …… Application registration Date:……..

Description of the technical mobile team enrolled for inspection:

Annex-8: If the construction of the building is different than that was agreed in PA

Government of Nepal

Ministry of Federal Affairs and Local Development

……..VDC/Municipality Office

Application form if the building is different from that was agreed during PA

Application form to be filled for the supervision of under construction house.	Application form to be filled for the supervision of under construction house.
Selected Design number among the purposed design: …… ……Or The description of the building typology planned by the houseowner: 1. Technique and construction materials. 1.1 Stone masonry with mud mortar 1.2 ☐ Stone masonry with cement mortar 1.3 ☐ Brick masonry with mud mortar 1.4 ☐ Brick masonry with cement mortar 1.5 ☐ Stone masonry with mud mortar and wooden post and beam 1.6 ☐ R.C.C framed structure 1.7 ☐ House surrounded with wood or CGI sheet in metal or wooden frame 2. Construction of roof and materials. 2.1 ☐ CGI sheet over wooden beam, rafter and purlin 2.2 ☐ Tile over wooden beam, rafter and purlin 2.3 ☐ CGI sheet over bamboo beam, rafter and purlin 2.4 ☐ Tile over bamboo beam, rafter and purlin 2.5 ☐ Tile over bamboo beam, rafter and purlin 2.6 ☐ RCC slab 2.7 ☐ CGI sheet over metal beam, rafter and purlin	Selected Design number among the purposed design: …… ……Or The description of the building typology planned by the houseowner: 3. Technique and construction materials. 1.1 Stone masonry with mud mortar 1.2 ☐ Stone masonry with cement mortar 1.3 ☐ Brick masonry with mud mortar 1.4 ☐ Brick masonry with cement mortar 1.5 ☐ Stone masonry with mud mortar and wooden post and beam 1.6 ☐ R.C.C framed structure 1.7 ☐ House surrounded with wood or CGI sheet in metal or wooden frame 4. Construction of roof and materials. 2.1 ☐ CGI sheet over wooden beam, rafter and purlin 2.2 ☐ Tile over wooden beam, rafter and purlin 2.3 ☐ CGI sheet over bamboo beam, rafter and purlin 2.4 ☐ Tile over bamboo beam, rafter and purlin 2.5 ☐ Tile over bamboo beam, rafter and purlin 2.6 ☐ RCC slab 2.7 ☐ CGI sheet over metal beam, rafter and purlin

I agree to build the type of the house selected based on the minimum requirements provided by National Reconstruction Authority

Beneficiary or representative:

Signature:

Name:

Address:

Annex-8: Correction/ Retrofitting Order and Inspection form for site selection and layout

Government of Nepal

Ministry of Federal Affairs and Local Development

……..VDC/Municipality Office

Correction/ Retrofitting Order and Inspection form

Under Inspection SOP for reconstruction of houses, after the detail inspection of the building under construction on …….. (Date) it is recommended that the building under construction of Mr…… is not built according to the minimum requirements and do not satisfy site selection and layout

Name of house Owner/beneficiary……..
Agreement Serial Number: …….
Citizenship Number: ……...

Description provided during the application to survey the house:
Designed no (If design is selected from catalogue): ……
Flexible Design:
Wall/Column typology no/typology: …….
Floor/ Roof typology no/typology: ……

The following points are found unsatisfactory, so it is recommended to follow below mentioned correction order/ retrofitting order

Retrofitting order	Status after retrofitting

Tentative Drawing after Retrofitting

a) After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ It is recommended to move ahead with the construction because it was found that the site selection and the layout is satisfactory

☐ Correction/Retrofitting order is given because it was found to be corrected or retrofitted.

b) Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

c) Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

d) Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex 9: Form to be filled by the inspector for the certification of Site Selection and layout for the construction of foundation.

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

Form to be filled by the inspector for the certification of Site insurance and layout for the construction of foundation.

Inspection sheet					
Information of House Owner/Beneficiary			Inspection date:	Date - Month - Year	
Name:			Grant aggrement no:		
Address:	District	VDC/Municipality ward tole Land plot No			
SECTION-I: DESCRIPTION PROVIDED IN THE APPLICATION TO SURVEY THE HOUSE					
If use fix design from design catalogue,			Design No.		
If free design by house owner Fill construction typology from P.A form		Technique and Construction material			
		Construction of roof and materials			
Technical Assistant	□Yes □No		Organization	□GON □NGO/INGO	

SECTION- II: DETAILED TECHNICAL INSPECTION					
MR №	Category	Description	Site condition during inspection		Remarks
			Yes	No	
1.	Site selection	Geological fault or Ruptured Area	□	□	
		Steep Slope > 20°	□	□	
		Landslide susceptible Area	□	□	
		River bank and Water logged Area	□	□	
		Rock-fall Area	□	□	
		Liquefaction susceptible Area	□	□	
		Filled Area	□	□	
2.	Shape of House	No. of bay			
		Area			
		Shape			
		Length			
		Breadth			
3.	Set back in land	East			
		West			
		North			
		South			
4.	Site where building is to be erected	Area to be occupied by building			
		The building occupying the land of neighbour	□	□	
		Public land captured by building	□	□	
		Public road captured by building	□	□	
5.	Foundation	Depth			
		Base width			
		Height of plinth level			

Others:

a. At least four number of photographs of site with their number……

b. Tentative drawings of the site and purposed plan of building.

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

☐Yes ☐ No

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

e. Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-10: Forms for technical inspection and Certification of buildings after completion of foundation (Technical Inspection-1)

Annex-10.1: Forms for first technical inspection and Certification of Category "A" and "B" buildings

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

RCC (Category A and B) First Inspection

Inspection Sheet

First Inspection of RCC (Category A and B) Buildings

		Date of Inspection	
Name		Grant Agreement No.	
Address	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,	Design No.	
If free design by house owner Fill construction typology from P.A form	Technique and Construction material	
	Construction of roof and materials	

Technical Assistance	☐Yes ☐No	**Organization**	☐GoN, ☐NGO ( )
Trained Masons Used	☐Yes ☐No	**Soil Type**	☐Hard, ☐Medium, ☐Soft

MR no	Category	Description	According to building permit		Remarks
			Yes	No	
1	Site selection located away from	Geological fault or Ruptured Area	☐	☐	
		Steep Slope > 20°	☐	☐	
		Landslide susceptible Area	☐	☐	
		River bank and Water logged Area	☐	☐	
		Rock-fall Area	☐	☐	
		Liquefaction susceptible Area	☐	☐	
		Filled Area	☐	☐	
2	Shape of House	No of Bays	☐	☐	
		Area	☐	☐	
		Shape	☐	☐	
		Length	☐	☐	
		Breadth	☐	☐	
3	Materials	Mortar	☐	☐	
		Concrete	☐	☐	
		Rebar	☐	☐	
4	Foundation	Type	☐	☐	
		Depth	☐	☐	
		Size	☐	☐	
		Rebar	☐	☐	

		Width	☐	☐	
		Tie Beam	☐	☐	
5	**Plinth Beam**	Height	☐	☐	
		Size	☐	☐	
		Rebar	☐	☐	
		Connection	☐	☐	

6	**Pillar**	Size	☐	☐	
		Rebar	☐	☐	
		Ring	☐	☐	
		Connection	☐	☐	

Others:

a. At least four number of photographs with their number
b. Tentative drawings of building:

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection of the first inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of second tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

e. Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-10.2: Forms for technical inspection and Certification of Category "C" buildings after the construction of the foundation (Technical Inspection-1)

Annex-10.2 (A): Form for inspection and Certification for category "C" buildings of Stone Masonry with Mud Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

First Inspection of SMM

INSPECTION SHEET OF

STONE MASONRY WITH MUD MORTAR FOR FIRST INSPECTION

		Date of Inspection	D D - M M - Y Y Y Y
Name:		Grant Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,		Design No.	SMM-1.1
If free design by house owner Fill construction typology from P.A form	Technique and Construction material		1.1
	Construction of roof and materials		2.1
Technical Assistant	☐YES, ☐NO	Organization	☐GoN, ☐NGO ( )
Trained Masons used	☐YES, ☐NO	Soil type	☐Hard, ☐Medium, ☐Soft

MR No.	Category	Description			Comply to MRs YES	Comply to MRs NO	Remarks
1	**Site selection** located away from	Geological fault or Ruptured Area			☐	☐	
		Steep Slope > 20°			☐	☐	
		Landslide susceptible Area			☐	☐	
		River bank and Water logged Area			☐	☐	
		Rock-fall Area			☐	☐	
		Liquefaction susceptible Area			☐	☐	
		Filled Area			☐	☐	
2	**Shape of House**	No. of storey	RC band	Not more than one plus habitable attic	☐	☐	
			Timber band	Not more than one storey.			
		Span of Wall	Not more than 12 times thickness of wall and not more than 4.5m .(14'9")		☐	☐	
		Size of room	Not more than 13.5sq.m (145'4"sq.ft)		☐	☐	
		Proportion	Simple and regular shape as square and rectangular		☐	☐	
			The length is not more than 3 times of its width		☐	☐	
3	**Materials**	Stone	Avoid round, easily breakable soft stone Size: Thickness>50mm(2"),length/Breadth>150mm(6")		☐	☐	
		Mortar	Mud mortar	Free from organic materials, pebbles, hard materials.	☐	☐	
			Cement mortar	Strength is not less than 1 cement : 6 sand mixture			
		Concrete	M15grade (1 cement: 2 sand: 4 aggregate)		☐	☐	
		Rebar	fy = 415 Mpa /500 Mpa		☐	☐	
		Timber	Hard wood		☐	☐	
4	**Foundation**	Continuous strip footing			☐	☐	
		Depth below GL	750mm(2'6") for one storey		☐	☐	
		Base Width	Soft≥800mm(2'8"),Medium≥750mm(2'6"),Hard≥750mm(2'6")		☐	☐	
5	**Vertical member**	Started right from the foundation			☐	☐	
		Reinforcement	Rc	Timber	☐	☐	
			Placed at all corners, junctions of walls and openings	Hard wood. One member of 75mm(3") x 100mm(4") for corner. Two member of 75mm(3") x 100mm(4") for openings			

		Anchorage	60 times diameter of reinforcement	-	☐	☐	
6	**Plinth**	Height from GL	Not less than 300mm(1') from GL		☐	☐	
		Thickness	150mm(6")for medium and soft soil. 75mm(3") for hard soil		☐	☐	
		Width	Not less than wall thickness/350mm		☐	☐	
		Reinforcement	RC band: Main: 4-12dia for 150mm(6"), 2-12dia for 75mm(3") height Stirrups: 6mm dia. at 150mm(6"), Concrete cover of 25mm(1")	Timber band: Main member : 2-75mmx100mm connected with batten 50mmX38mm@500c/ c	☐	☐	

a) At least four number of photographs with their number

b) Tentative drawings of building:

c) After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection of the first inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of second tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d) Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

e) Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f) Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-10.2 (B): Form for inspection and Certification for Category "C" building of Stone Masonry with Cement Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

First Inspection of SMC

INSPECTION SHEET OF

STONE MASONRY WITH CEMENT MORTAR FOR FIRST INSPECTION

		Date of Inspection	D D - M M - Y Y Y Y
Name:		Grant Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,		Design No.	SMC-1.1
If free design by house owner Fill construction typology from P.A form	Technique and Construction material		1.1
	Construction of roof and materials		2.1
Technical Assistant	☐YES, ☐NO	Organization	☐GoN, ☐NGO ( )
Trained Masons used	☐YES, ☐NO	Soil type	☐Hard, ☐Medium, ☐Soft

MR №	Category	Description		Comply to MRs YES	Comply to MRs NO	Remarks
1	**Site selection** located away from	Geological fault or Ruptured Area		☐	☐	
		Steep Slope > 20°		☐	☐	
		Landslide susceptible Area		☐	☐	
		River bank and Water logged Area		☐	☐	
		Rock-fall Area		☐	☐	
		Liquefaction susceptible Area		☐	☐	
		Filled Area		☐	☐	
2	**Shape of House**	No. of storey	Not more than two plus attic	☐	☐	
		Span of Wall	Not more than 4.5m (14'9")	☐	☐	
		Size of room	Not more than 13.5sq.m (145'4"sq.ft)	☐	☐	
		Proportion	Simple and regular shape as square and rectangular	☐	☐	
			The length is not more than 3 times of its width	☐	☐	
3	**Materials**	Stone	Avoid round, easily breakable soft stone Size: Thickness>50mm(2"), length >150mm(6")	☐	☐	
		Mortar	Strength is not less than 1 cement : 6 sand mixture	☐	☐	
		Concrete	M20grade (1cement: 1.5sand: 3aggregate)	☐	☐	
		Rebar	fy = 415 Mpa /500 Mpa	☐	☐	
		Timber	Hard wood	☐	☐	
4	**Foundation**	Continuous strip footing		☐	☐	
		Depth below GL	800mm(2'8") for one storey, 900mm(3') for two storey	☐	☐	
		Base Width 1 storey	Soft: >800mm(2'8"), Medium: >600mm(2'), Hard: >600(2')mm	☐	☐	
		Base Width 2 storey	Soft: Not recommended, Medium:>800mm(2'8"), Hard:>600mm(2')			
5	**Vertical member**	Started right from the foundation		☐	☐	
		Placed at all corners, junctions of walls and openings		☐	☐	
		Reinforcement	12mm for one storey, 16mm for two storey	☐	☐	
		Overlap	60 times diameter of reinforcement	☐	☐	
6	**Plinth**	Height from GL	Not less than 300mm(1') from GL	☐	☐	
		Thickness	150mm(6")for medium and soft soil. 75mm(3") for hard soil	☐	☐	
		Width	Not less than wall thickness/350mm(1'2")	☐	☐	
		Reinforcement	Main: 4-12dia for 150mm(6"), 2-12dia for 75mm(3") height, Stirrups: 6mm dia. at 150mm(6") Concrete cover of 25mm(1")	☐	☐	

a. At least four number of photographs with their number
b. Tentative drawings of building:

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection of the first inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of second tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

e. Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-10.2 (C): Form for inspection and Certification for Category "C" building of Brick Masonry with Mud Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

First Inspection of BMM

INSPECTION SHEET OF
BRICK MASONRY WITH MUD MORTAR FOR 1ST INSPECTION

		Date of Inspection	D D - M M - Y Y Y Y
Name:		Grant Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,		Design No.	BMM-1.1
If free design by house owner Fill construction typology from P.A form	Technique and Construction material		1.1
	Construction of roof and materials		2.1
Technical Assistant	☐YES, ☐NO	Organization	☐GoN, ☐NGO ( )
Trained Masons used	☐YES, ☐NO	Soil type	☐Hard, ☐Medium, ☐Soft

MR No.	Category	Description			Comply to MRs YES	Comply to MRs NO	Remarks
1	**Site selection** located away from	Geological fault or Ruptured Area			☐	☐	
		Steep Slope > 20°			☐	☐	
		Landslide susceptible Area			☐	☐	
		River bank and Water logged Area			☐	☐	
		Rock-fall Area			☐	☐	
		Liquefaction susceptible Area			☐	☐	
		Filled Area			☐	☐	
2	**Shape of House**	No. of storey	RC band	Not more than one plus habitable attic	☐	☐	
			Timber band	Not more than one storey.			
		Span of Wall	Not more than 12 times thickness of wall and not more than 4.5m .(14'9")		☐	☐	
		Size of room	Not more than 13.5sq.m (145'4"sq.ft)		☐	☐	
		Proportion	Simple and regular shape as square and rectangular		☐	☐	
			The length is not more than 3 times of its width		☐	☐	
3	**Materials**	Brick	Not using over-burnt, under-burnt and deformed bricks		☐	☐	
		Mortar	Mud mortar	Free from organic materials, pebbles, hard materials.	☐	☐	
			Cement mortar	Strength is less than 1 cement : 6 sand mixture			
		Concrete	M15grade (1 cement: 2 sand: 4 aggregate)		☐	☐	
		Rebar	fy = 415 Mpa /500 Mpa		☐	☐	
		Timber	Hard wood		☐	☐	
4	**Foundation**	Continuous strip footing			☐	☐	
		Depth below GL	750mm(2'6") for one storey		☐	☐	
		Base Width	Soft≥750mm(2'8"),Medium≥650mm(2'6"),Hard≥550mm(2'6")		☐	☐	
5	**Vertical member**	Started right from the foundation			☐	☐	
			Rc	Timber			
		Reinforcement	Placed at all corners, junctions of walls and openings	Hard wood. One member of 75mm(3") x 100mm(4") for corner. Two member of 75mm(3") x 100mm(4") for openings	☐	☐	
		Anchorage	60 times diameter of reinforcement	-	☐	☐	
6	**Plinth**	Height from GL	Not less than 300mm(1') from GL		☐	☐	
		Thickness	150mm(6")for medium and soft soil. 75mm(3") for hard soil		☐	☐	
		Width	Not less than wall thickness/350mm		☐	☐	
		Reinforcement	RC band	Timber band			

			Main: 4-12dia for 150mm(6”), 2-12dia for 75mm(3”) height Stirrups: 6mm dia. at 150mm(6”), Concrete cover of 25mm(1”)	Main member : 2-75mmx38mm connected with batten 50mmX38mm@500c/c	☐	☐	

Others:

a. At least four number of photographs with their number

b. Tentative drawings of building:

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection of the first inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of second tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……..……

Relationship with house owner (In case of representative):……Date:……..……

e. Submit for Approval of the technical inspection:…….

MOUD-DLPIU Supervisor:……

Name…… Designation:……..

Signature…… Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-10.2 (D): Form for inspection and Certification for Category "C" building of Brick Masonry with Cement Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

First Inspection of BMC

INSPECTION SHEET OF
BRICK MASONRY WITH CEMENT MORTAR FOR FIRST INSPECTION

		Date of Inspection	D D - M M - Y Y Y Y
Name:		Grant Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,		Design No.	BMC-1.1
If free design by house owner Fill construction typology from P.A form	Technique and Construction material		1.1
	Construction of roof and materials		2.1

Technical Assistant	☐YES, ☐NO	Organization	☐GoN, ☐NGO ( )
Trained Masons used	☐YES, ☐NO	Soil type	☐Hard, ☐Medium, ☐Soft

MR No.	Category	Description		Comply to MRs YES	Comply to MRs NO	Remarks
1	**Site selection** located away from	Geological fault or Ruptured Area		☐	☐	
		Steep Slope > 20°		☐	☐	
		Landslide susceptible Area		☐	☐	
		River bank and Water logged Area		☐	☐	
		Rock-fall Area		☐	☐	
		Liquefaction susceptible Area		☐	☐	
		Filled Area		☐	☐	
2	**Shape of House**	No. of storey	Not more than two plus attic	☐	☐	
		Span of Wall	Not more than 4.5m (14'9")	☐	☐	
		Size of room	Not more than 13.5sq.m (145' 4"sq.ft.)	☐	☐	
		Proportion	Simple and regular shape as square and rectangular	☐	☐	
			The length is not more than 3 times of its width	☐	☐	
3	**Materials**	Brick	Over burnt, under burnt and deformed brick shall not be used.	☐	☐	
		Mortar	Strength more than 1 cement : 6 sand mixture	☐	☐	
		Concrete	M20grade (1cement: 1.5sand: 3aggregate)	☐	☐	
		Rebar	fy = 415 Mpa /500 Mpa	☐	☐	
		Timber	Hard wood	☐	☐	
4	**Foundation**	Continuous strip footing		☐	☐	
		Depth below GL	800mm (2'8") for one storey, 900mm (3') for two storey	☐	☐	
		Base Width 1 storey	Soft:>650mm (2'2"), Medium:>550mm (1'10"), Hard:>550mm (1'10")	☐	☐	
		Base Width 2 storey	Soft:>900mm (3') , Medium:>650mm (2'2"), Hard:>550mm (1'10")			
5	**Vertical member**	Started right from the foundation		☐	☐	
		Placed at all corners, junctions of walls and openings		☐	☐	
		Reinforcement	12mm for one storey, 16mm for two storey	☐	☐	
		Anchorage	60 times diameter of reinforcement	☐	☐	
6	**Plinth**	Height from GL	Not less than 300mm(1') from GL	☐	☐	
		Thickness	150mm (6") for medium and soft soil. 75mm(3") for hard soil	☐	☐	
		Width	Not less than wall thickness /230mm (9") for one storey /350mm (1'2") for two storey	☐	☐	
		Reinforcement	Main: 4-12dia for 150mm (6") , 2-12dia for 75mm (3") thick Stirrups: 6mm dia. at 150mm,	☐	☐	

			Concrete cover of 25mm			

Others:

a. At least four number of photographs with their number

b. Tentative drawings of building:

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection of the first inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of second tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……..……

Relationship with house owner (In case of representative):……Date:……..……

e. Submit for Approval of the technical inspection:…….

MOUD-DLPIU Supervisor:……

Name…… Designation:…….

Signature…… Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-10.2 (E): Form for inspection and Certification for category "C" buildings of RCC Structure

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

First Inspection of RCC Buildings (Catetory-C)

Inspection sheet

RCC Buildings FOR FIRST INSPECTION

		Date of Inspection	
Name:		Grant Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,	Design No.	
If free design by house owner Fill construction typology from P.A form	Technique and Construction material	
	Construction of roof and materials	
Technical Assistant	Organization	Organization ☐GoN, ☐NGO (
Trained Masons used	☐YES, ☐NO	Soil type ☐Hard, ☐Medium, ☐Soft

MR №	Category	Description		Comply to MRs YES	Comply to MRs NO	Remarks
1	**Site selection** located away from	Geological fault or Ruptured Area		☐	☐	
		Steep Slope > 20°		☐	☐	
		Landslide susceptible Area		☐	☐	
		River bank and Water logged Area		☐	☐	
		Rock-fall Area		☐	☐	
		Liquefaction susceptible Area		☐	☐	
		Filled Area		☐	☐	
2	**Shape of House**	Storey	Limited up to 3 floor	☐	☐	
		bay	Two to six	☐	☐	
		Area	Less than 1000 sq ft and area in between 4 pillars 13.5 sq m only	☐	☐	
		Height	Less than 11m	☐	☐	
		Height of floor	Height of floor from 2.75m to 3.35m	☐	☐	
		Shape	Square or rectangular	☐	☐	
		Ratio	Length less than 3 times the breadth	☐	☐	
3	**Materials**	Mortar	1:6	☐	☐	
		Concrete	M 20 Grade (1:1.5:3)	☐	☐	
		Rebar	fy = 415 Mpa /500 Mpa	☐	☐	

4	**Foundation**	Depth	At least 5 ft		☐	☐	
		Width of Foundation	Corner	Loose soil >2.2 m Soft soil > 1.5 m Medium Soil > 1.25m Hard Soil > 1.2m	☐	☐	
			Front	Loose soil >2.4 m Soft soil > 1.65 m Medium Soil > 1.4m Hard Soil > 1.1m			
			Mid	Loose soil >3 m Soft soil > 2.1 m Medium Soil > 1.7 m Hard Soil > 1.5 m			
		Rebar			☐	☐	
		Depth	400 mm in middle and 300mm in other sides.		☐	☐	
		Beam	Minimum 9"X9" and 4-12 revars		☐	☐	
5	**Plinth beam**	Height	At least 450 from GL		☐	☐	
		Size	9" X 9"		☐	☐	
		Rebar	4-12mm and 8 mm rods in 6 inches		☐	☐	
		Connection	Not 50 % overlap				
6	**Pillar**	The pillar should be aligned in one line			☐	☐	
		Size	12 " X 12 "		☐	☐	
		Rebar	Ground and first floor 4-16 + 4-12 mm and third floor 8-12mm		☐	☐	
		Ring	Edge and joints 4 inch and 6 inch in others , 8 mm		☐	☐	
		Joints	In the middle leaving 2 ft from edge and not more than 50 % and lap of 60 X dia.		☐	☐	

Others:

a. At least four number of photographs with their number

b. Tentative drawings of building:

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection of the first inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of second tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……..……

Relationship with house owner (In case of representative):……..…Date:……..……

e. Submit for Approval of the technical inspection:…….

MOUD-DLPIU Supervisor:……

Name…… Designation:……..……..

Signature…….. Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…….. Date……

Annex-11: Correction/ Retrofitting Order and Inspection form

Government of Nepal

Ministry of Federal Affairs and Local Development

……..VDC/Municipality Office

Correction/ Retrofitting Order and Inspection form

Under Inspection SOP for reconstruction of houses, after the detail inspection of the building under construction on …….. (Date) it is recommended that the building under construction of Mr…… is not built according to the minimum requirements and do not satisfy all points till the construction of the plinth/ roof level.

Name of house Owner/beneficiary……..
Agreement Serial Number: …….
Citizenship Number: ……...

a. Description provided during the application to survey the house:

Designed no (If design is selected from catalogue): ……
Flexible Design:
Wall/Column typology no/typology: …….
Floor/ Roof typology no/typology: ……

b. The following points are found unsatisfactory, so it is recommended to follow below mentioned correction order/ retrofitting order

Retrofitting order	Status after retrofitting

g. Tentative drawings of building after correction

h. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection of the first inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of second tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

i. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

j. Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

k. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex 12: Inspection for under construction house

Government of Nepal

Ministry of Urban Development

Central Level Project Implementation Unit

Technical Inspection Sheet for Construction

(If the house under construction is found completely different than the approved technologies)

Houseowner / Beneficiaries name, surname:…… Grant agreement no :……

Address: District:…….. VDC/Municipality :…….

Ward:……. Tole:…….. Land Plot no:……..

a) Detail Technical description:

1. Number of storey:
2. Status of the construction:

Under construction……
Construction completed……
Roof Band in Ground Floor……
Construction up to Roof Band……

3. Description of Foundation:

Materials:……
……
Tentitive depth of foundation (Below ground level):……m/ft/inch
Tentitive width of foundation:……..m/ft/inch
Height of foundation above ground level:……m/ft/inch

4. Description of ground floor:

Materials:……
…….
Construction technique:……
……..

Detail
description:……
…….

5. Description of roof in ground floor:

Materials:……
…….
Construction
technique:……
……..
Detail
description:……
…….

6. Description of first floor:

Materials:……
……
Construction
technique:……
……
Detail
description:……
…….
……
……

7. Description of roof:

Materials:……
…….
Construction
technique:……
……..
Detail
description:……
…….
……
……

8. Others:
   g. At least four number of photographs with their number
   h. Tentative drawings of building:

9. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection of the first inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of second tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

10. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……..……

Relationship with house owner (In case of representative):……Date:……..……

11. Submit for Approval of the technical inspection:…….

MOUD-DLPIU Supervisor:……

Name…… Designation:……..

Signature…… Date……

12. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……..

Signature…… Date……

Annex- 13: Forms for technical inspection and Certification of buildings after construction up to roof level(Technical Inspection-2)

Annex- 13.1: Forms for technical inspection and Certification of category "A" and "B" buildings (Technical Inspection-2)

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

RCC (Category A and B) Second Inspection

Inspection Sheet

Second Inspection of RCC (Category A and B) Buildings

		Date of Inspection	
Name		Grant Agreement No.	
Address	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,	Design No.	
If free design by house owner Fill construction typology from P.A form	Technique and Construction material	
	Construction of roof and materials	

Technical Assistance	☐Yes ☐No	**Organization**	☐GoN, ☐NGO (
Trained Masons Used	☐Yes ☐No	**Soil Type**	☐Hard, ☐Medium, ☐Soft

MR no	Category	Description	According to building permit		Remarks
			Yes	5}g	
1	Shape and size of Building	No of storey	☐	☐	
		No of bays	☐	☐	
		Area	☐	☐	
		Total height	☐	☐	
		Height of floor	☐	☐	
		Shape	☐	☐	
		Length	☐	☐	
		Breadth	☐	☐	
2	Materials	Mortar	☐	☐	
		Concrete	☐	☐	
		Rebar	☐	☐	
3	PIllar	In same line	☐	☐	
		Short column	☐	☐	
		Size	☐	☐	
		Rebar	☐	☐	
		Ring	☐	☐	
		Joints	☐	☐	
4	Beam	Position	☐	☐	
		Size	☐	☐	
		Rebar	☐	☐	

		Ring	☐	☐	
		Joints	☐	☐	

5	**Joint of beam and pillar**	Size of beam should be less than pillar	☐	☐	
		Joint	☐	☐	
		Ring	☐	☐	
6	Non structural wall	Position of wall	☐	☐	
		Wall straight or not	☐	☐	
		Joints missed or not	☐	☐	
		Width	☐	☐	
		Joints	☐	☐	
		Sill Band	☐	☐	
		Lintel Band	☐	☐	
7	**Floor**	Level	☐	☐	
		Openings	☐	☐	
		Size	☐	☐	
		Rebar	☐	☐	
		Cover	☐	☐	
		Overhang	☐	☐	

Others:

a. At least four number of photographs with their number
b. Tentative drawings of building:

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of third tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

e. Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex- 13.2: Forms for technical inspection and Certification of category "C" buildings after the construction of the plinth (Technical Inspection-2)

Annex-13.2(A): Form for inspection and Certification for category "C" buildings of Stone Masonry with Mud Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

Second Inspection of SMM

INSPECTION SHEET OF STONE MASONRY WITH MUD MORTAR FOR SECOND INSPECTION

		Date of Inspection	D D - M M - Y Y Y Y
Name:		Grant Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,		Design No.	SMM-1.1
If free design by house owner Fill construction typology from P.A form	Technique and Construction material		1.1
	Construction of roof and materials		2.1
Technical Assistant	☐YES, ☐NO	Organization	☐GoN, ☐NGO ( )
Trained Masons used	☐YES, ☐NO	Soil type	☐Hard, ☐Medium, ☐Soft

MR No.	Category	Description			Comply to MRs YES	Comply to MRs NO	Remarks
2	**Shape of House**	No. of storey	RC band	Not more than one plus habitable attic	☐	☐	
			Timber band	Not more than one storey.			
		Span of Wall	Not more than 12 times thickness of wall and not more than 4.5m (14'9")		☐	☐	
		Size of room	Not more than 13.5sq.m (145'4"sq.ft)		☐	☐	
		Height of wall	Not be more than 3.0m (9'10").		☐	☐	
		Height of attic	Floor to ridge: Not more than 1.8m (5'11") Floor to eave :Not more than 1.0m(3'10")		☐	☐	
3	**Materials**	Stone	Avoid round, easily breakable soft stone Size: Thickness>50mm(2"),length/Breadth>150mm(6")		☐	☐	
		Mortar	Mud mortar	Free from organic materials, pebbles, hard materials.	☐	☐	
			Cement mortar	Strength is not less than 1 cement : 6 sand mixture			
		Concrete	M15grade (1 cement: 2 sand: 4 aggregate)		☐	☐	
		Rebar	fy = 415 Mpa /500 Mpa		☐	☐	
		Timber	Hard wood		☐	☐	
5	**Vertical member**	Reinforcement	RC	Timber	☐	☐	
			Placed at all corners, junctions of walls and openings	Hard wood. One member of 75mm (3") x 100mm (4") for corner. Two member of 75mm(3") x 100mm(4") for openings			
		Anchorage	60 times diameter of reinforcement	-	☐	☐	
7	**Walls**	layering	Interlocked at corner and junction. Avoid vertical joint and staggered.		☐	☐	
		Thickness	Not less than 350 mm(1'2")		☐	☐	
		Through stones	Not more than 600 mm (2'), vertically 1.2m (4') horizontally.		☐	☐	
		Mortar Joint	Not more than 20mm(0.8") and less than 10mm (0.4")		☐	☐	
		Buttresses	Provided when the wall length is longer than above mentioned.		☐	☐	
		Gable wall	Using light material		☐	☐	
8	**Doors / windows**	Location	Away from corner at least 600 mm (2')or 1/4th of height of opening.		☐	☐	
		Total length	Not less than 30% of the wall length for single storey.		☐	☐	

		Distance	Not less than 600 mm (2').		☐	☐	
9	Horizontal band		Rc	Timber			
		Sill band	Continuous band through all walls Not less than 75mm (3") thick.	Main member, 2-75mmX38mm properly connected with batten, 50mmX30mm @ 500c/c.	☐	☐	
		Lintel band	Not less than 75mm(3") thick,if opening width<1.0m(3'3") and masonry height above opening 0.9m.(3') Not less than 150mm(6") thick,if opening width<1.5m(5') and masonry height above opening 1.2m(4')		☐	☐	
		stitch	At corners and junctions, length>1.2m (4') Not less than 75mm (3") thick		☐	☐	
		Roof band	Continuous band through all walls. Not less than 75mm(3") thick		☐	☐	
		Reinforcement	Main: 4-12dia for 150mm (6"), 2-12dia for 75mm (3") height Stirrups: 6mm dia. at 150mm (6"), Concrete cover of 25mm (1")		☐	☐	
		Overlap	60 times diameter of reinforcement		☐	☐	

Others:

a. At least four number of photographs with their number
b. Tentative drawings of building:

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of third tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

e. Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-13.2 (B): Form for inspection and Certification for category "C" building of Stone Masonry with Cement Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

Second Inspection of SMC

INSPECTION SHEET OF
STONE MASONRY WITH CEMENT MORTAR FOR SECOND INSPECTION

		Date of Inspection	D D - M M - Y Y Y Y
Name:		Grant Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,		Design No.	SMC-1.1
If free design by house owner Fill construction typology from P.A form	Technique and Construction material		1.1
	Construction of roof and materials		2.1

Technical Assistant	☐YES, ☐NO	Organization	☐GoN, ☐NGO ( )
Trained Masons used	☐YES, ☐NO	Soil type	☐Hard, ☐Medium, ☐Soft

MR No	Category	Description		Comply to MRs YES	Comply to MRs NO	Remarks
2	Shape of House	No. of storey	Not more than two plus attic	☐	☐	
		Span of Wall	Not more than 4.5m(14'9")	☐	☐	
		Size of room	Not more than 13.5sq.m (145'4"sq.ft)	☐	☐	
		Height of wall	Not more than 3.0m(9'10")	☐	☐	
		Height of Attic	Floor to Ridge: Not more than 1.8m(6'), Floor to Eave: Not more than 1.0m(3'3")	☐	☐	
3	Materials	Stone	Avoid round, easily breakable soft stone Size: Thickness>50mm(2"), length >150mm(6")	☐	☐	
		Mortar	Strength is not less than 1 cement : 6 sand mixture	☐	☐	
		Concrete	M20grade (1cement: 1.5sand: 3aggregate)	☐	☐	
		Rebar	fy = 415 Mpa /500 Mpa	☐	☐	
		Timber	Hard wood	☐	☐	
5	Vertical member	Placed at all corners, junctions of walls and openings		☐	☐	
		Reinforcement	12mm for one storey, 16mm for two storey	☐	☐	
		Overlap	60 times diameter of reinforcement	☐	☐	
7	Walls	Layering	Interlocked at corner and junction. Avoid vertical joint and staggered.	☐	☐	
		Thickness	Not less than 350mm(1'2")	☐	☐	
		Mortar joint	Not more than 20mm(0.8") and less than 10mm(0.4")	☐	☐	
		Through stone	Not more than 600mm(2') vertically, 1.2m(4') horizontally	☐	☐	
		Buttresses	Provided for the longer wall	☐	☐	
		Gable wall	Light weight material	☐	☐	
8	Doors/ Windows	Location	Away from corner at least 600mm(2')	☐	☐	
		Total length	Not less than 50% and 42% of the wall length for single and two storey	☐	☐	
		Distance	Not less than 600mm(2')	☐	☐	
9	Horizontal band	Sill band	Continuous band through all walls Not less than 75mm(3") thick	☐	☐	
		Lintel band	Continuous band through all walls Not less than 75mm(3") thick, if opening width<1.25m and masonry height above 0.9m(3") Not less than 150mm(6")thick, if opening width>1.25m and masonry height above 1.2m(4")	☐	☐	
		Stitch	At corners and junctions, length>1.2m(4') Not less than 75mm(3") thick	☐	☐	
		Roof band	Continuous band through all walls. Not less than 75mm(3") thick	☐	☐	

		Reinforcement	Main: 4-12dia for 150mm(6”), 2-12dia for 75mm(3”) height, Stirrups: 6mm dia. @ 150mm(6”) c/c Concrete cover of 25mm(1”)	☐	☐	
		Overlap	60 times diameter of reinforcement	☐	☐	

Others:

a. At least four number of photographs with their number
b. Tentative drawings of building:

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of third tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

e. Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-13.2 (C): Form for inspection and Certification for category "C" building of Brick Masonry with Mud Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

Second Inspection of BMM

INSPECTION SHEET OF

BRICK MASONRY WITH MUD MORTAR FOR SECOND INSPECTION

		Date of Inspection	D D - M M - Y Y Y Y
Name:		Grant Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,				Design No.	BMM-1.1
If free design by house owner Fill construction typology from P.A form		Technique and Construction material			1.1
		Construction of roof and materials			2.1
Technical Assistant	☐YES,	☐NO	Organization	☐GoN,	☐NGO ( )
Trained Masons used	☐YES,	☐NO	Soil type	☐Hard,	☐Medium, ☐Soft

MR No.	Category	Description			Comply to MRs YES	Comply to MRs NO	Remarks
2	**Shape of House**	No. of storey	RC band	Not more than one plus habitable attic	☐	☐	
			Timber band	Not more than one storey.			
		Span of Wall	Not more than 12 times thickness of wall and not more than 4.5m .(14'9")		☐	☐	
		Size of room	Not more than 13.5sq.m (145'4"sq.ft)		☐	☐	
		Height of wall	Not be more than 3.0m (9'10").		☐	☐	
		Height of attic	Floor to ridge: Not more than 1.8m (5'11") Floor to Eave :Not more than 1.0m(3'10")		☐	☐	
3	**Materials**	Brick	Not using over-burnt, under-burnt and deformed brick		☐	☐	
		Mortar	Mud mortar	Free from organic materials, pebbles, hard materials.	☐	☐	
			Cement mortar	Strength is less than 1 cement : 6 sand mixture			
		Concrete	M15grade (1 cement: 2 sand: 4 aggregate)		☐	☐	
		Rebar	fy = 415 Mpa /500 Mpa		☐	☐	
		Timber	Hard wood		☐	☐	
5	**Vertical member**	Reinforcement	Rc: Placed at all corners, junctions of walls and openings	Timber: Hard wood. One member of 75mm (3") x 100mm (4") for corner. Two member of 75mm(3") x 100mm(4") for openings	☐	☐	
		Anchorage	60 times diameter of reinforcement	-	☐	☐	
7	**Walls**	layering	Interlocked at corner and junction. Avoid vertical joint and staggered.		☐	☐	
		Thickness	Not less than 35mm(1'2")		☐	☐	
		Mortar Joint	Not more than 20mm(0.8") and less than 10mm (0.4")		☐	☐	
		Buttresses	Provided when the wall length is longer than above mentioned.		☐	☐	
		Gable wall	Using light material		☐	☐	
8	**Doors / windows**	Location	Away from corner at least 600 mm(2')		☐	☐	
		Total length	Not less than 30% of the wall length		☐	☐	
		Distance	Not less than 600 mm(2')		☐	☐	
9	**Horizontal band**		RC	Timber			
		Sill band	Continuous band through all walls Not less than 75mm (3") thick.	Main member, 2-75mmX38mm properly connected with batten,	☐	☐	
		Lintel band	Not less than 75mm (3") thick, if opening width<1.0m(3'3") and masonry height above opening 0.9m. Not less than 150mm(6") thick ,if		☐	☐	

			opening width<1.5m and masonry height above opening 1.2m(4')	50mmX38mm @ 500c/c.			
		stitch	At corners and junctions, length>1.2m(4') Not less than 75mm(3") thick		☐	☐	
		Roof band	Continuous band through all walls. Not less than 75mm(3") thick		☐	☐	
		reinforcement	Main: 4-12dia for 150mm (6"), 2-12dia for 75mm(3") height Stirrups: 6mm dia.@ 150mm (6")c/c, Concrete cover of 25mm (1")		☐	☐	
		overlap	60 times diameter of reinforcement		☐	☐	

Others:

a. At least four number of photographs with their number
b. Tentative drawings of building:

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of third tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

e. Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-13.2 (D): Form for inspection and Certification for category "C" building of Brick Masonry with Cement Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

Second Inspection of BMC

INSPECTION SHEET OF
BRICK MASONRY WITH CEMENT MORTAR FOR SECOND INSPECTION

		Date of Inspection	D D - M M - Y Y Y Y
Name:	.	Grant Agreement No	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,		Design No.	BMC-1.1
If free design by house owner Fill construction typology from P.A form		Technique and Construction material	1.1
		Construction of roof and materials	2.1
Technical Assistant	☐YES, ☐NO	Organization	☐GoN, ☐NGO ( )
Trained Masons used	☐YES, ☐NO	Soil type	☐Hard, ☐Medium, ☐Soft

MR №	Category	Description		Comply to MRs YES	Comply to MRs NO	Remarks
2	**Shape of House**	No. of storey	Not more than two plus attic	☐	☐	
		Span of wall	Not more than 4.5m (14'9")	☐	☐	
		Size of room	Not more than 13.5 sq.m. (145'4" sq.ft.)	☐	☐	
		Height of wall	Floor height shall not be more than 3.0m (9'10")	☐	☐	
		Height of Attic	Floor to ridge: Not more than 1.8m (6'), Floor to eave : Not more than 1.0m(3'3")	☐	☐	
3	**Materials**	Brick	Not using over-burnt, under-burnt and deformed brick	☐	☐	
		Mortar	Strength is not less than 1 cement : 6 sand mixture	☐	☐	
		Concrete	M20grade (1cement: 1.5sand: 3aggregate)	☐	☐	
		Rebar	fy = 415 Mpa /500 Mpa	☐	☐	
		Timber	Hard wood	☐	☐	
5	**Vertical member**	Placed at all corners, junctions of walls and openings		☐	☐	
		Reinforcement	12mm for one storey, 16mm for two storey	☐	☐	
		Overlap	60 times diameter of reinforcement	☐	☐	
7	**Walls**	layering	Interlocked at corner and junction. Avoid vertical joint and staggered.	☐	☐	
		Thickness	Not less than 230mm (9") for one storey and 350mm(1'2") and 230mm(9") for ground floor and first floor of two storey respectively.	☐	☐	
		Mortar Joints	Not more than 20mm and less than 10mm	☐	☐	
		Buttresses	Provided for the longer wall.	☐	☐	
		Gable wall	Lightweight materials	☐	☐	
8	**Doors / windows**	Location	Away from inside corner at least 600mm(2')	☐	☐	
		Total length	Not less than 50% and 42% of the walls length for single and two storey	☐	☐	
		Distance	Not less than 600mm (2')	☐	☐	
9	**Horizontal band**	Sill band	Continuous band through all walls Not less than 75mm (3")	☐	☐	
		Lintel band	Continuous band through all walls Not less than 75mm (3"), if opening width<1.25m (4'1") and masonry height above opening 0.9m (3')	☐	☐	

			Not less than 150mm (6"), if opening width>1.25m (4'1") and masonry above opening upto 1.2m (4')			
		Stitch band	At corner and junction, not less than 75mm (3"), length<1.2m(4')	☐	☐	
		Roof band	Continuous bands through all walls, Not less than 75mm (3")	☐	☐	
		Reinforcement	Main: 4-12mm dia for 150mm (6"), 2-12mm dia for 75mm (3"), stirrups:6mm dia @150mm (6")c/c Concrete cover of 25mm (1")	☐	☐	
		Overlap	60 times diameter of reinforcement.	☐	☐	

Others:

a. At least four number of photographs with their number
b. Tentative drawings of building:

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of third tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……..……

Relationship with house owner (In case of representative):……Date:……..……

e. Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……..

Signature…… Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……..

Annex-13.2 (E): Form for inspection and Certification for category "C" building of RCC Structure

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

Second Inspection of RCC Buildings (Category-C)

Inspection sheet

RCC Buildings FOR FIRST INSPECTION

		Date of Inspection	
Name:		Grant Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,		Design No.	
If free design by house owner Fill construction typology from P.A form	Technique and Construction material		
	Construction of roof and materials		
Technical Assistant	Organization	Organization	☐GoN, ☐NGO (
Trained Masons used	☐YES, ☐NO	Soil type	☐Hard, ☐Medium, ☐Soft

MRN№	Category	Description		Comply to MRs YES	Comply to MRs NO	Remarks
1	Shape and size of Building	Storey	Limited up to 3 floor	☐	☐	
		bay	Two to six	☐	☐	
		Area	Less than 1000 sq ft and area in between 4 pillars 13.5 sq m only	☐	☐	
		Height	Less than 11m	☐	☐	
		Height of floor	Height of floor from 2.75m to 3.35m	☐	☐	
		Shape	Square or rectangular	☐	☐	
		Ratio	Length less than 3 times the breadth	☐	☐	
2	Materials	Mortar	1:6	☐	☐	
		Concrete	M 20 Grade (1:1.5:3)	☐	☐	
		Rebar	fy = 415 Mpa /500 Mpa	☐	☐	
3	PIllar	The pillar should be aligned in one line		☐	☐	
		Short column		☐	☐	
		Size	12 " X 12 "	☐	☐	
		Rebar	Ground and first floor 4-16 + 4-12 mm and third floor 8-12mm	☐	☐	
		Ring	Edge and joints 4 inch and 6 inch in others , 8 mm	☐	☐	
		Joints	In the middle leaving 2 ft from edge and not more than 50 % and lap of 60 X dia.	☐	☐	
4	Beam	The joints of the beam should be positioned in the beam		☐	☐	

		Size	9' X14 " and less than size of pillar	☐	☐	
		Rebar		☐	☐	
		Ring	Edge and joints 4 inch and 6 inch in others , 8 mm	☐	☐	
		Joints	Upper rod to be connected in middle and lower rod after leaving 2 feet from edge and lap of 60 dia.	☐	☐	
5	**Joint of beam and pillar**	Size of beam should be less than pillar		☐	☐	
		Upper rod to be bent downwards and lower rod to be bent upwards lapping 60 dia		☐	☐	
		At least two rings in the joints		☐	☐	
6	Non structural wall	Should be constructed equally from two sides		☐	☐	
		Wall should be straight		☐	☐	
		Joints missed or not		☐	☐	
		Width	230 mm or 110 mm	☐	☐	
		Joints	10 mm to 20 mm	☐	☐	
		Sill Band	Minimum depth 75 mm and 2-8mm rebars should be connected to pillar	☐	☐	
		Lintel Band	Minimum depth 75 mm and 2-8mm rebars should be connected to pillar	☐	☐	
7	**Floor**	Level	Floor should not be in different levels	☐	☐	
		Openings	Maximum 25 %	☐	☐	
		Size	Minimum 125 mm	☐	☐	
		Rebar	Minimum 8 mm rod 6 inch cc	☐	☐	
		Cover	Minimum 15mm	☐	☐	
		Overhang	1 m maximum from center of pillar	☐	☐	

Others:

a. At least four number of photographs with their number
b. Tentative drawings of building:

c. After the detail description of the under constructed house, is it satisfactory to give permit for the further construction.

Yes ☐ , No ☐

☐ it was passed through the inspection so the construction can move ahead and VDC/ Municipality it is certified for necessary procedures of disbursement of third tranche.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d. Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……..……

Relationship with house owner (In case of representative):……Date:……..……

e. Submit for Approval of the technical inspection:…….

MOUD-DLPIU Supervisor:……

Name…… Designation:……..……

Signature…… Date……

f. Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-14: For grant disbursement of second/third tranche

Recommendation form to be filled by the VDC/ Municipality and MOUD-DLPIU

Government of Nepal

MOFALD

…… VDC/Municipality

Government of Nepal

MOUD

DLPIU,……

Recommendation form for grant disbursement of second/third tranche

Name of Bank: **Branch Name:** **Date:**

SN	MIS_Batch	PA_NO	Name of Recipient	VDC/MUN	Ward	Citz_No	Mobile	A/C No	Tranche	Amount	Remarks
1											
2											

_____ _____ _____

Prepared by VDC/Municipality

Name:

Designation:

Name of VDC/ Municipality:

Certified by VDC/Municipality

Name:

Designation:

Name of VDC/ Municipality:

Recommended by MOUD-DLPIU

Name:

Designation:

Name of VDC/ Municipality: **:**

Annex- 15: Forms for technical inspection and Certification of construction completed buildings (Technical Inspection-3)

Annex- 15.1: Forms for technical inspection and Certification of category "A" and "B" buildings (Technical Inspection-3)

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

RCC (Category A and B) Final Inspection

Inspection Sheet

Final Inspection of RCC (Category A and B) Buildings

		Date of Inspection	
Name		Grant Agreement No.	
Address	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,		Design No.	
If free design by house owner Fill construction typology from P.A form		Technique and Construction material	
		Construction of roof and materials	
Technical Assistance	☐Yes ☐No	**Organization**	☐GoN, ☐NGO (
Trained Masons Used	☐Yes ☐No	**Soil Type**	☐Hard, ☐Medium, ☐Soft

MR no	Category	Description	According to building permit		Remarks
			Yes	5}g	
1	Shape and size of Building	No of storey	☐	☐	
		No of bays	☐	☐	
		Area	☐	☐	
		Total height	☐	☐	
		Height of floor	☐	☐	
		Shape	☐	☐	
		Length	☐	☐	
		Breadth	☐	☐	
2	Materials	Mortar	☐	☐	
		Concrete	☐	☐	
		Rebar	☐	☐	
3	PIllar	In same line	☐	☐	
		Short column	☐	☐	
		Size	☐	☐	
		Rebar	☐	☐	
		Ring	☐	☐	
		Joints	☐	☐	
4	Beam	Position	☐	☐	
		Size	☐	☐	

		Rebar	☐	☐	
		Ring	☐	☐	
		Joints	☐	☐	

5	**Joint of beam and pillar**	Size of beam should be less than pillar	☐	☐	
		Joint	☐	☐	
		Ring	☐	☐	
6	Non structural wall	Position of wall	☐	☐	
		Wall straight or not	☐	☐	
		Joints missed or not	☐	☐	
		Width	☐	☐	
		Joints	☐	☐	
		Sill Band	☐	☐	
		Lintel Band	☐	☐	
7	**Floor**	Level	☐	☐	
		Openings	☐	☐	
		Size	☐	☐	
		Rebar	☐	☐	
		Cover	☐	☐	
		Overhang	☐	☐	

Others:

a) At least four number of photographs with their number

b) Tentative drawings of building:

c) After the detail description of the under constructed house, is it satisfactory to give completion certificate

Yes ☐ , No ☐

☐ It was passed through the inspection of the third inspection so the construction can be provided building completion certificate from VDC/Municipality.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d) Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

e) Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f) Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex- 15.2: Forms for technical inspection and Certification of category "C" buildings after completion of construction (Technical Inspection-3)

Annex-15.2(A): Form for inspection and Certification for category "C" buildings of Stone Masonry with Mud Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

Final Inspection of SMM

INSPECTION SHEET OF STONE MAONRY WITH MUD MORTAR FOR FINAL INSPECTION														
				Date of Inspection	D	D	-	M	M	-	Y	Y	Y	Y
Name:				Grand Agreement No.										
Address:	District	VDC/Municipality	ward	tole	Land plot No									
If use fix design from design catalogue,				Design No.	SMC-1.1									
If free design by house owner Fill construction typology from P.A form				Technique and Construction material	1.1									
				Construction of roof and materials	2.1									
Technical Assistant	☐YES,	☐NO		Organization	☐GoN,	☐NGO ( )								
Trained Masons used	☐YES,	☐NO		Soil type	☐Hard,	☐Medium,	☐Soft							

MR №	Category	Description		Comply to MRs		Remarks
				YES	NO	
7	Walls	Gable wall	Lightweight materials	☐	☐	
10	Roof	Material	Use light roof	☐	☐	
		Connection	All member connected properly	☐	☐	
		Bracing	For flexible diaphragm, Diagonal bracing shall be considered.	☐	☐	

Others:

a) At least four number of photographs with their number
b) Tentative drawings of building:

c) After the detail description of the under constructed house, is it satisfactory to give completion certificate

Yes ☐ , No ☐

☐ It was passed through the inspection of the third inspection so the construction can be provided building completion certificate from VDC/Municipality.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d) Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……..……

Relationship with house owner (In case of representative):……..…Date:……..……

e) Submit for Approval of the technical inspection:…….

MOUD-DLPIU Supervisor:……

Name…… Designation:…….

Signature…… Date……

f) Approved by:

MOUD DLPIU Supervision Engineer……
Designation:…….

Signature…… Date……

Annex-15.2 (B): Form for inspection and Certification for category "C" building of Stone Masonry with Cement Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

Final Inspection of SMC

INSPECTION SHEET OF STONE MAONRY WITH CEMENT MORTAR FOR FINAL INSPECTION															
				Date of Inspection	D	D	-	M	M	-	Y	Y	Y	Y
Name:				Grand Agreement No.										
Address:	District	VDC/Municipality	ward	tole	Land plot No									

If use fix design from design catalogue,				Design No.	SMC-1.1
If free design by house owner Fill construction typology from P.A form				Technique and Construction material	1.1
				Construction of roof and materials	2.1
Technical Assistant	☐YES,	☐NO	Organization	☐GoN,	☐NGO ( )
Trained Masons used	☐YES,	☐NO	Soil type	☐Hard,	☐Medium, ☐Soft

MR №	Category	Description		Comply to MRs		Remarks
				YES	NO	
7	**Walls**	Gable wall	Lightweight materials	☐	☐	
10	**Roof**	Material	Use light roof	☐	☐	
		Connection	All member connected properly	☐	☐	
		Bracing	For flexible diaphragm, Diagonal bracing shall be considered.	☐	☐	

Others:

a) At least four number of photographs with their number
b) Tentative drawings of building:

c) After the detail description of the under constructed house, is it satisfactory to give completion certificate

Yes ☐ , No ☐

☐ It was passed through the inspection of the third inspection so the construction can be provided building completion certificate from VDC/Municipality.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d) Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……..……

Relationship with house owner (In case of representative):……..…Date:……..……

e) Submit for Approval of the technical inspection:…….

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f) Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-15.2 (C): Form for inspection and Certification for category "C" building of Brick Masonry with Mud Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

Final Inspection of BMM

INSPECTION SHEET OF Brick MASONRY WITH MUD MORTAR FOR FINAL INSPECTION			
		Date of Inspection	D D - M M - Y Y Y Y
Name:		Grand Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,	Design No.	BMM-1.1
If free design by house owner Fill construction typology from P.A form	Technique and Construction material	1.1
	Construction of roof and materials	2.1

MR No	Category	Description		Comply to MRs YES	Comply to MRs NO	Remarks
7	**Walls**	Gable wall	Using light material	☐	☐	
10	**Roof**	Material	Use light roof	☐	☐	
		Connection	All member connected properly	☐	☐	
		Bracing	For flexible diaphragm, Diagonal bracing shall be considered.	☐	☐	

Others:

a) At least four number of photographs with their number
b) Tentative drawings of building:

c) After the detail description of the under constructed house, is it satisfactory to give completion certificate

Yes ☐ , No ☐

☐ It was passed through the inspection of the third inspection so the construction can be provided building completion certificate from VDC/Municipality.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d) Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

e) Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f) Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-15.2 (D): Form for inspection and Certification for category "C" building of Brick Masonry with Cement Mortar

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

Final Inspection of BMC

INSPECTION SHEET OF
BRICK MASONRY WITH CEMENT MORTAR FOR FINAL INSPECTION

		Date of Inspection	D D - M M - Y Y Y Y
Name:		Grand Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,		Design No.	BMC-1.1
If free design by house owner Fill construction typology from P.A form		Technique and Construction material	1.1
		Construction of roof and materials	2.1
Technical Assistant	☐YES, ☐NO	Organization	☐GoN, ☐NGO ( )
Trained Masons used	☐YES, ☐NO	Soil type	☐Hard, ☐Medium, ☐Soft

MR No	Category	Description		Comply to MRs YES	Comply to MRs NO	Remarks
7	**Walls**	Gable wall	Lightweight materials	☐	☐	
10	**Roof**	Material	Use light roof	☐	☐	
		Connection	All member connected properly	☐	☐	
		Bracing	For flexible diaphragm, Diagonal bracing shall be considered.	☐	☐	

Others:

a) At least four number of photographs with their number
b) Tentative drawings of building:

c) After the detail description of the under constructed house, is it satisfactory to give completion certificate

Yes ☐ , No ☐

☐ It was passed through the inspection of the third inspection so the construction can be provided building completion certificate from VDC/Municipality.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d) Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……..……

Relationship with house owner (In case of representative):……Date:……..……

e) Submit for Approval of the technical inspection:…….

MOUD-DLPIU Supervisor:……

Name…… Designation:……..……..

Signature…… Date……

f) Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex-15.2 (E): Form for inspection and Certification for category "C" building of RCC Structure

Government of Nepal
Ministry of Urban Development
Central Level Project Implementation Unit

Final Inspection of RCC Buildings (Category-C)

Inspection sheet

RCC Buildings FOR FINAL INSPECTION

		Date of Inspection	
Name:		Grant Agreement No.	
Address:	District VDC/Municipality ward tole Land plot No		

If use fix design from design catalogue,		Design No.	
If free design by house owner Fill construction typology from P.A form	Technique and Construction material		
	Construction of roof and materials		
Technical Assistant	Organization	Organization	☐GoN, ☐NGO (
Trained Masons used	☐YES, ☐NO	Soil type	☐Hard, ☐Medium, ☐Soft

MRN№	Category	Description		Comply to MRs YES	Comply to MRs NO	Remarks
1	Shape and size of Building	Storey	Limited up to 3 floor	☐	☐	
		bay	Two to six	☐	☐	
		Area	Less than 1000 sq ft and area in between 4 pillars 13.5 sq m only	☐	☐	
		Height	Less than 11m	☐	☐	
		Height of floor	Height of floor from 2.75m to 3.35m	☐	☐	
		Shape	Square or rectangular	☐	☐	
		Ratio	Length less than 3 times the breadth	☐	☐	
2	Materials	Mortar	1:6	☐	☐	
		Concrete	M 20 Grade (1:1.5:3)	☐	☐	
		Rebar	fy = 415 Mpa /500 Mpa	☐	☐	
3	PIllar	The pillar should be aligned in one line		☐	☐	
		Short column		☐	☐	
		Size	12 " X 12 "	☐	☐	
		Rebar	Ground and first floor 4-16 + 4-12 mm and third floor 8-12mm	☐	☐	

		Ring	Edge and joints 4 inch and 6 inch in others , 8 mm	☐	☐	
		Joints	In the middle leaving 2 ft from edge and not more than 50 % and lap of 60 X dia.	☐	☐	
4	**Beam**	The joints of the beam should be positioned in the beam		☐	☐	
		Size	9' X14 " and less than size of pillar	☐	☐	
		Rebar		☐	☐	
		Ring	Edge and joints 4 inch and 6 inch in others , 8 mm	☐	☐	
		Joints	Upper rod to be connected in middle and lower rod after leaving 2 feet from edge and lap of 60 dia.	☐	☐	
5	**Joint of beam and pillar**	Size of beam should be less than pillar		☐	☐	
		Upper rod to be bent downwards and lower rod to be bent upwards lapping 60 dia		☐	☐	
		At least two rings in the joints		☐	☐	
6	Non structural wall	Should be constructed equally from two sides		☐	☐	
		Wall should be straight		☐	☐	
		Joints missed or not		☐	☐	
		Width	230 mm or 110 mm	☐	☐	
		Joints	10 mm to 20 mm	☐	☐	
		Sill Band	Minimum depth 75 mm and 2-8mm rebars should be connected to pillar	☐	☐	
		Lintel Band	Minimum depth 75 mm and 2-8mm rebars should be connected to pillar	☐	☐	
7	**Floor**	Level	Floor should not be in different levels	☐	☐	
		Openings	Maximum 25 %	☐	☐	
		Size	Minimum 125 mm	☐	☐	
		Rebar	Minimum 8 mm rod 6 inch cc	☐	☐	
		Cover	Minimum 15mm	☐	☐	
		Overhang	1 m maximum from center of pillar	☐	☐	

Others:

a) At least four number of photographs with their number
b) Tentative drawings of building:

c) After the detail description of the under constructed house, is it satisfactory to give completion certificate

Yes ☐ , No ☐

☐ It was passed through the inspection of the third inspection so the construction can be provided building completion certificate from VDC/Municipality.

☐ If was found to be corrected/retrofitted so correction order is given using Annex-6

d) Acceptation of Description provided agreeing that the technical details during inspection is correct:

House owner/Beneficiaries or representative name:……Signature:……

Relationship with house owner (In case of representative):……Date:……

e) Submit for Approval of the technical inspection:……

MOUD-DLPIU Supervisor:……

Name…… Designation:……

Signature…… Date……

f) Approved by:

MOUD DLPIU Supervision Engineer……
Designation:……

Signature…… Date……

Annex- 16: Building Completion Certificate

Government of Nepal

Ministry of Federal Affairs and Local Development

……..VDC/Municipality Office

Construction Completion Certificate

Under Inspection SOP for reconstruction of houses, after the detail inspection of the building under construction on …….. (Date), it is certified that the building under construction was completed and technical inspection is also completed and this certificate is provided.

Name of house Owner/beneficiary……..
Agreement Serial Number: ……. Inspection Certificate No:……
Survey Slip Number: ……..
Citizenship Number: ……...

Description provided during the application to survey the house:
Designed no (If design is selected from catalogue): ……
Flexible Design:
Wall/Column typology no/typology: …….
Floor/ Roof typology no/typology: ……

Inspection mobile team:

Head of inspection:…… Position:…….. Signature:……

Member:…….Date:…….

Acceptation of Description provided after technical supervision:

Houseowner/Beneficiaries or representative name, surname:…….. Signature:……

Relationship with houseowner(In case of representative):…… Date:……

Annex-17: Details of Construction completed Houses

Government of Nepal

Ministry of Federal Affairs and Local Development

……..VDC/Municipality Office

Details of Construction completed Houses

District:

VDC/ Municipaliy:

Ward no:

Serial No:	Beneficiary Name	Agreement Serial No.	Type of House	Date of completion Certiciate

Technical Detail Report prepared by:

Name of the Technical person:

Designation:

Signature:

Date:

Certifying Authority:

Name:

Designation:

Signature:

Date: