

## DELHI DEVELOPMENT AUTHORITY

NO. EM.3(16)82/2351

Dated: 29.4.83

## CIRCULAR No. 1

VICE-CHAIRMAN, DDA, during the inspection of certain works and areas has found that the pump houses located in various D.D.A. Colonies/areas are in a very dilapidated conditions. Though costly pumping installations have been installed in the pump houses but no heed is being paid to the proper up keep and maintenance of the pump houses. It is enjoined upon all the Engineers to ensure that all the pump houses in their jurisdiction are inspected and necessary repairs are carried out and these are maintained properly so that no damage to the pumping installations takes place due to improper maintenance of the pump houses.

AS YOU are aware the monsoon season is approaching and during the rainy season the pumps will have to be operated very frequently for pumping out the water from low lying and flood prone areas. It is, therefore, all the more necessary that the pump-houses are repaired and kept in proper shape so that there may not be any problem in the operation of the pumps during the rainy season. All the Engineers will see that necessary repairs to pump houses are completed by the middle of May 1983.

Sd/-  
( K.D. BALI )  
ENGINEER MEMBER.

## DELHI DEVELOPMENT AUTHORITY

NO.EM.1(10)83/2411

Dated: 4.5.83

OFFICE ORDER NO.2

In PURSUANCE of the various recommendations given by the Fact Finding Committee/Expert Committee appointed by the Chairman, DDA/VC/DDA(in connection with Quality Control Measures), it has been decided that in future whenever any tenders are submitted to higher authorities, a detailed report must be given about the performance of the three lowest tenderers, in respect of works executed by them in DDA with a special reference to the quality and speed of these works. As far as possible comments of the Chief Engineer, Quality Control, should be obtained if he(or his teams) had inspected any of these works. This procedure should be followed in respect of all tenders submitted to W.A.B. As WELL AS THOSE ACCEPTED by lower authorities (.C.E., ACEs, SEs & EEs).

Sd/-  
(K.D. BALI)  
ENGINEER MEMBER

(3)

DELHI DEVELOPMENT AUTHORITY

NO.EM.1(10)83/2412

Dated: 4.5.83

CIRCULAR NO. 3

IT HAS come to my notice that a number of deposit works were taken up in DDA in the past, without getting formal clearance & deposits from the Delhi Admn. The instructions regarding execution of deposit works are contained in para 119 of the C.P.W.D. Code and these should be followed very strictly. In the case the deposit works should be undertaken without containing necessary funds required for the execution of the works. These funds may either be realised in lump sum or in such instalments and by such dates may be decided by the competent authority. No funds will be spent from the DDA for execution of any deposit works. It will be duty of the officer incharge of the work to bring to the notice of his superiors and to the concerned administrative Department on whose behalf the work is being executed any anticipated excess over the estimates with the progress of expenditure so that so no responsibility may attach to DDA in the event of the work having to be stopped for want of funds.

LT.GOVERNOR, DELHI has also on a number of occasions made it clear that even where he himself orders for immediate taking up of a deposit work, all formalities in this regard may be followed before undertaking the deposit work.

IT IS enjoined on all the Engineers to follow the instructions regarding execution of deposit works very strictly.

Sd/-  
( K. D. BALI )  
ENGINEER MEMBER

## DELHI DEVELOPMENT AUTHORITY

NO.EM.1(13)83/2413

Dated: 4.5.1983

## CIRCULAR NO. 4

IT HAS BEEN OBSERVED that in many housing projects the work of plastering of walls and ceilings has been taken up by the contractors without attending to the defects pointed out to them in brick masonry and RCC work properly. This has perhaps been done in a bid to cover up the defects. This is highly unsatisfactory.

2. IT HAS BEEN decided that in future no plastering of any walls or ceilings is to be permitted on any housing or other projects till such time the masonry and RCC work are thoroughly checked and all defects pointed out in the same are attended to properly and fully to the full satisfaction of the EE and SE incharge of the work. The following procedure shall be followed in this regard:-

1. Whenever the structural work is completed in a scheme and the work is ready for starting the plastering work, the Ex. Engineer and personally inspect each and every block in the scheme and record a detailed note pointing out all the defects noticed by him in masonry as well as RCC work in the site Order Book. A copy of this note must also be submitted to the Supdg. Engineer concerned.
2. After the defects, pointed out by the EE, are rectified, the buildings must be inspected by the EE's again to satisfy himself that all defects have been rectified fully and properly. Thereafter he must record a certificate in the Site Order Book as well as in the Measurement Book to this effect.
3. The EE will also inform his SE about such rectifications and the work being fit for commencing the plastering work.
4. Immediately after receipt of this intimation, the SE concerned shall also inspect the work. The plastering is to be commenced only after written permission is given by the SE after he is satisfied about proper rectification of all defects.

Sd/-  
(K.D. BALI)  
ENGINEER MEMBER.

## CIRCULAR NO. 5

Sub: Anti-flood measures.

TO PREPARE for the coming monsoons, we have to take all anti-flood measures well in advance to prevent water logging and flooding of DDA areas. Special attention is required to be paid to the following measures by all concerned - They must ensure that action on these point is completed with utmost speed within next 2-3 weeks.

1. DESILTING OF DRAINS:- All drains should be desilted immediately and kept desilted during Monsoon so that there is no hindrance, to the flow of water. It is observed that lot of silt and foreign matter has accumulated both in internal and external drains in some cases. This should immediately be got removed to ensure free flow of water during the Monsoons.
2. COMPLETION OF STORM WATER DRAINS AND CULVERTS:- All works of storm water drains and culverts, which are in progress should be completed on top priority basis. In case, where it is not at all possible to do so, at least katchna drains and pipe culverts should be provided and connected with the outfall drains.
3. OUTFALL DRAINS:- Outfall Drains should be maintained in perfect condition. Wherever any weak spots or damages are noticed, the same must be strengthened/repared promptly particularly in sections where the drains run in embankment. During rains, a class watch must be kept on the flow conditions in these drains, specially at junction with main drains. If any, tendency of back flow is noticed due to rise of level in the trunk drain, immediate steps must be taken to plug the inlet to prevent back flow of water. Special watch has to be kept on the junctions of Pankha Road Drain, Eastern outfall drain, Wester Outfall Drain at Paschimpuri, Gazipur Cattle Farm Drain and Khichripur Complex Drain. Sufficient no. of empty cement bag should be kept in stock so that they can be filled with sand and dumped to avoid back flow, wherever need arises. AEs/JEs incharge of these areas should make themselves fully conversant with the operation and working of the gated regulators, provided by Flood Control department at



the junction of Pankha Road, drain with Najafgarh drain, and Khichripur Complex drains with Gazipur drain so that in emergency, they can operate these regulators themselves to prevent the back flow of flood waters from the trunk drains.

4. Staff quarters and Office buildings:- It should be ensured that roof tops of all the staff quarters and office buildings under the charge of DDA are cleaned and all refuse rubbish etc. is removed, specially below the water tanks for allowing free flow of water. The mouths of rain water pipes should be removed. Similarly internal drains of the staff colonies and office buildings should also be desilted and silt removed away from the sides of the drains.

5. MAINTENANCE OF MECH. EQUIPMENT-PUMPING INSTALLATIONS:- All concerned EEs(Civil) and EEs(Elect) must ensure that all pumping sets, which available with them are repaired/overhauled wherever necessary in advance and the same are in good serviceable conditions. These must be frequently tested to ensure that these are fit in all respects. Certain pumps in Mech. & W/shop Division and pumping stations, are lying out of order. All these pumps must be got repaired and tested immediately. The requisite number of Operators should be available for operating these pumps in time when need arises. At vulnerable points, like Nand Nagri, Gokalpuri, Seemapuri Khichripur Complex, Yamunapuri G-8 area, Gazipur Cattle Dairy Farm ISBT etc. etc. the requisite number of pumps should be installed in advance after necessary testing etc. It should be ensured that adequate quantities of diesel, spare parts, accessories required for pumps(delivery lines,) suction lines, float valves etc.) tools required for repairs, are available at various work sites as well as in the Central workshop. At pumping sites and Central Workshop, adequate number of Mechanics must also be available for prompt repairs of pumps whenever needed.

7. PUMPING ARRANGEMENTS:- The EEs should taken effective steps to ensure that there is no stagnation of water in any of our colonies. Missing manshole covers if any, must be replaced. The concerned staff must be available at site throughout the day

during working hours. In case, some flooding does take place in some area, effective arrangement must be made immediately for dewatering the areas as quickly as possible on round the clock basis. All site staff in flood prone areas must have the telephone numbers (office as well as residence) of their Ex. Engineers, Suptdg. Engineers and Flood Control Room of DDA/Delhi Administration etc.

8. General:- All approach roads and internal roads in colonies should be maintained in good serviceable condition. It should be ensured that proper access roads are maintained to all pumping sites for carrying diesel, accessories, additional pumps etc. without any difficulty. The EEs/AEs should keep themselves apprised of the situation within their jurisdiction regarding water logging, flooding etc. They must also keep the higher officers informed about the position of flooding, if any, in a particular colony.

Sd/-  
(K.D. BALI)  
ENGINEER MEMBER

All SEs & EEs (Civil & Elect.).

## DELHI DEVELOPMENT AUTHORITY

NO.EM.1(13)83/2415

Dated: 4.5.83

## CIRCULAR NO. 6

A CASE HAS come to notice whom the houses were released for allotment without providing water, street lighting roads, sewerage etc. Vice-Chairman has observed that the allotment of the flats without proper services brings embrassment and bad name to DDA. It has been decided that before the houses are released for handing over possession all the services such as water supply sewerage, electricity should be completed in all respects and tested properly in the housing schemes so that there may not be any chance of complaint from the allottees.

IT IS enjoined upon the CE/ACEs that before any housing scheme is released for allotment they will personally inspect the particular scheme and satisfy themselves about the completion of the flats as well as services by the targets fixed for completion.

Sd/-  
(K.D. BALI)  
ENGINEER MEMBER



## DELHI DEVELOPMENT AUTHORITY

NO.EM.1(10)83/2545

Dated:11/12th May,1983

## CIRCULAR NO.7

Sub:- Work agreements and control of expenditure.

CASES HAVE come to notice where in some officers in DDA had awarded work within their financial powers, but during execution the scope of work was enlarged to such an extent that the overall expenditure was much more, some times several times, the amount of work awarded originally.

THIS PRACTICE is not correct. All engineering officers in DDA are requested to ensure that the expenditure on a work's contract does not exceed beyond 10% of the contract amount. In cases, where the limit's expected to exceed, the EEs concerned should approach and obtain approval of the authority competent to award the work of the enhanced amount.

Sd/-  
( K.D. BALI )  
ENGINEER MEMBER

## DELHI DEVELOPMENT AUTHORITY

NO.EM.1(10)82/2567

Dated: 16.5.83

## CIRCULAR No. 8

Sub:- Acceptance of sub-standard work and guidelines  
for working out reduced rates for substandard work.  
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A COPY of letter No. CE/CON/751 dated 3rd May, 1983  
from Director General (Works) C.P.W.D. is enclosed for  
taking necessary action and following the instructions  
contained in the above circular very strictly.

Sd/-  
(K.D. BALI)  
ENGINEER MEMBER

Encl: As stated.

C I R C U L A R

Sub: Acceptance of Sub-standard work and guidelines for working out reduced rates for substandard works,  
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Attention is drawn to the instructions issued in this office Memo No. CE/Con/662 dated 9.5.77 CE/CON/527 dated 31.12.71 and CE/CON/541 dt.30.8.72 regarding acceptance of substandard work.

In order to avoid situations where acceptance of substandard work with reduction in rates becomes necessary it is essential that the defects are noticed by departmental officers during the progress of the work and timely action taken to get them rectified there and then, rather than overlooking them and proposing to accept such work under reduced rates later. A notice of the defective work should be given to the contractor in writing during the progress of the work asking him to rectify the defects and in case of failure, on the part of the contractor, the defect should be got rectified by employing skilled labourers departmentally. Timely action alone can prevent occurrence of defects which will be difficult or impossible to rectify later on like hollow vertical joints in brick masonry and similar defective structural members.

It will be the duty of the field staff, that is AEEs, AEs, JEs to point out such defects in the work in time during the progress of the work. These defects should also be brought to the notice of the Ex.Engineer immediately, so that he may take timely action to issue notices to the contractor either to rectify the defects or even get the work dismantled and redone if necessary. Acceptance of work below specification and payment at reduced rates should be resorted to only in exceptional cases. In cases where it is structurally impossible to get the work redone, such a decision should be taken only with approval of the competent authority.

As per Para-3 section 31 of CPWD Manual, the Engineer in charge should take action as per clause-14 of Form 7 & 8. In the case of acceptance of sub-standard work, Superintending Engineer is the competent authority who will also determine the reduced rates thereon. It is, therefore, imperative that approval of the Supdtg. Engineer should be obtained in the first instance before making payment for such sub-standard work even with part rates in the running bills.

It is incumbent on the part of the Ex.Engineer, that after getting the approval of the competent authority he should write a letter to the contractor on behalf of the president, of India for the acceptance of rates at the provisional rates and should also obtain the consent of the contractor as specified in para-4, section 31 of CPWD Manual Vol.II 1972 Edition. At the time of

scrutiny of the running bills before payment the Divisional Accountant will be responsible to ensure that proper reasons for payment at part rates are given in the abstract of cost entered in measurement books and bills. He should also ensure that prior approval SE is available in respect of part rates for defective work and a proper notice to the contractor is available on the record. It is also imperative that Suptdg. Engineers examine the proposals for sanction of reduction in rate sent by the Ex. Engineer properly and ensure that formalities which are required to be followed for acceptance of sub-standard work has been followed before acceptance of the proposals.

It is once again enjoined on all concerned that acceptance of sub-standard work should be allowed only in exceptional cases where the defects can not be rectified or work redone, and all formalities as mentioned above are completed. This may be brought to the notice of all concerned for their guidance and strict observance.

Sd/-

(G.S. RAO)

DIRECTOR GENERAL (WORKS)

(ISSUED FROM FILE NO.14.10.82 VSI OF VIGILANCE UNIT)

To

Engineer Member, DDA/Delhi Vikas Minar/N.Delhi.

Sd/-

(VIPAN CHAND)

F.O. to D.G. (WORKS)

NO.EM.1(10)83/2596

Dated: 17th May, 1983

## CIRCULAR No. 9

Sub: Construction of Sample Houses.

It has been decided that in all housing schemes of DDA, which are either in progress or to be taken up in future, one or two sample houses of each type must be completed under each contract in the first instance. For all works in progress, top priority should be given to this item and sample houses must be completed in all respects including providing and fixing of all fittings and fixtures, various services etc. Within next 2 to 3 weeks. These sample houses shall be inspected by the concerned EE/SE/ACE/CE in detail and all defects pointed out by them or other observations made, should be got attended to immediately. Thereafter the sample houses shall be formally approved by the concerned SE and the balance work shall be got executed as per this approved sample only.

2. Construction of sample houses at the beginning of the project will have several advantages both to the department as well as to the contractors:-

1. Standard and quality of workmanship, expected of the contract and acceptable to the department will be known to all concerned parties, including the junior staff (Mates, work Assistants, JEs and AEs of DDA Supervisors and Munshis of Contractors) in the very beginning and they would be in a better position to execute similar work on rest of the project.
2. Possible errors in drawings, designs and construction will come to notice at the initial stage itself and necessary remedial measures taken well in time.
3. For construction of sample houses, all necessary architectural and structural designs upto the last detail including colour schemes shall have to be made available to the contractors and bottlenecks, if any, in these activities will be highlighted and action will be possible to remove such bottlenecks well in time.
4. Changes required, if any, in architectural and structural designs and specifications, (Particularly deviations from the contract provisions) will be known and action can be taken



well in advance for obtaining approval of the competent authority in respect of such changes and saction of necessary extra and substituted items etc. Numerous decisions, which often linger on right upto the fag and can be taken in the beginning itself upto the last detail including colour scheme, which will go a long way towards speedy execution.

In view of all the above advantage, it will be in the interest of the contractors as well as the department to complete the sample houses in all respects as quickly as possible.

It is, therefore, enjoined on all the SE/ACs/CE to please ensure completion of sample houses in all schemes in progress under their charge within next 2-3 3eeks positively and send a compliance report by 5.6.1983 in this regard in the following proforma:-

1. No.	Name of Divn.	Name of Scheme	Name of Contractor	Present % age progress	Date of completion of sample houses.	Remarks
2	3	4	5	6	7	

Sd/-  
(K.D. BALI)  
ENGINEER MEMBER

CE/ACEs/SEs/EEs/AEs

DELHI DEVELOPMENT AUTHORITY

NO.EM.1(10)83/2600

Dated: 17.5.83

CIRCULAR NO. 10

Sub:-Monitoring of works-pert/Bar charts and Co-  
Ordination Meetings.

IT HAS been observed that in many of the housing schemes and other projects taken up by the DDA, there is a considerable gap between the date of completion stipulated in the contract for the main civil work and the actual data of completion of houses in all respects including services, etc. There is a large number of registrants (about 2 lakhs) who are waiting for allotment of houses by DDA for the last several years. It is, therefore, very important to complete the houses taken up by us as early as possible. In many cases, the civil works are by and large completed, but the houses cannot be occupied for want of services like electricity, water supply, sewerage etc. resulting in blocking of large amounts of DDA's finances in these projects for a long period without any return. In self financing schemes, interest has to be paid by DDA in cases where the completion is delayed beyond 2 1/2 years after the date of initial allotment. It is, therefore, very important to keep a close watch on the progress of our schemes and taken remedial measures in time for avoiding these delays.

2. IT HAS been decided that for all housing and other important projects (like commercial schemes, development projects etc.) Pert charts/Bar charts must be prepared immediately by the concerned EEs/SEs/ACEs in consultation with their counter parts on the electrical side as well as other concerned departments like MCD, DESU etc. This will facilitate fixing of targets, periodical monitoring of project and identification of bottlenecks, where advance action is necessary to avoid delays. For housing projects, simple bar charts could be prepared showing the expected dates of commencement and completion of various major activities, while Pert charts may be prepared for other major projects like multi-storeyed commercial buildings, multi-storeyed housing projects etc. These Bar/Pert charts must also include the activities mentioned in Annexure-A which often cause delay in completion of works. A sample Bar Chart is enclosed

for the information of all concerned. I

3. FOR speedy completion of houses, it is also very important to review and monitor the progress made on various items and identify the critical activities, shortfalls in targets vis-a-vis the date fixed on the Bar charts and taken remedial actions as necessary. For this purposes, periodical Coordination Meetings must be held by the SE(Civil) who will be the coordinating officer for this purpose. These meetings should be preferably held at site of work, followed by inspections and should be attended by all concerned officers, such as Architect structural designer, EE(Elect) concerned EEs of DESU, MCD, Telephone Department, representatives of the contractors(civil) as well as electrical) etc. The Chief Engineer/Addl. Chief Engineers should also hold regular coordination meetings at site for major projects. These meetings could be held by SEs weekly and by CE/ACEs/ fortnightly / monthly. Minutes of the meetings should be circulated to all concerned.

4. IT IS enjoined on all the EEs, SEs, ACEs/CEs to follow these instructions meticulously. Action must be started immediately and a copy of Bar Charts/Pert charts prepared in respect of schemes under their charge, must be submitted to this office within a fortnight positively. Minutes of Coordination meetings held by the SEs/ACEs/CE must also be submitted to this office regularly.

Sd/-  
(K.D. BALI)  
ENGINEERS MEMBER

# LIST OF IMPORTANT ACTIVITIES TO BE INCLUDED IN THE BAR CHART

1. Supply of all preliminary & detailed architectural drawings (all details upto colour scheme).
2. Supply of all structural drawings.
3. Services plans for water supply, sewerage and storm water drains and approval of the same by MCD.
4. Award of internal electrical work.
5. Construction of one or two sample houses of each type of flat under construction.
6. Various items of important building activities:-
  - i. Foundations and plint.
  - ii. Brick work.
  - iii. Procurement on fixing of chokhats
  - iv. Procurement of shutters.
  - v. Casting of RCC slabs.
  - vi. Cutting of chases for electrical works.
  - vii. Internal sanitary and water supply installations and testing of the same.
  - viii. Internal plastering
  - ix. External plastering
  - x. Flooring of Bath rooms and kitchen.
  - xi. Water proofing of Wet acres, toilets and kitchens etc.
  - xii. Flooring including frinding of floors.
  - xiii. Water proofing on roofs and terraces (with mud phuska)
  - xiv. Stair cases including railings
  - xv. Providing and fixing of rain water pipes and soil waste and vent pipes etc.
  - xvi. Other miscellaneous item including finishing items, fixing of glass panes, all white/colour wash etc. fittings and fixtures printing.
7. Construction of underground and overhead tanks & pump houses.
8. Procurement, installation and commissioning of pumping sets.
9. Planning and layout of routes for water supply and sewer lines (including road crossings).
10. Laying of water supply and sewer lines and testing the same.
11. Boring of tubewells and commissioning the same, construction of pump houses and installation of pumping sets..
12. Marking of routes for electrical and telephone cables, including road crossing and provision of RCC pipes at such crossings
13. Construction of roads and paths.

14. Bulk services (i) sewerage:- Laying of outfall sewers/  
construction of oxidation ponds etc. (ii) Construction of  
outfall S.W. Drains where necessary (iii) laying of feeder  
line for Water Supply from MCD mains.
  15. Water and sewer connections from MCD mains.
  16. Site clearance:
  17. Electrical Services:-
    - i. Projection of demand for electrification on DESU
    - ii. Final allocation and handing over of sub-stations sites.
    - iii. Receipt of estimates from DESU
    - iv. Payment by DDA and release of work order by DESU
    - v. Construction of sub-station building.
    - vi. Completion of H.T. Feed and inter connections.
    - vii. Installation and commissioning of sub-station equipment.
    - viii. Completion of L.V. Mains works.
    - ix. Street lighting.
    - x. Service mains.
  18. HORTICULTURE.
    - i. Grill fencing of parks including water supply  
for horticulture purpose.
    - ii. Development of Parks.
-



# BAR CHART

FOR CONSTRUCTION OF \_\_\_\_\_

Name of Division/Sub-Division \_\_\_\_\_

Date of award \_\_\_\_\_

Date of commencement \_\_\_\_\_

Stipulated date of completion \_\_\_\_\_

Target date of completion \_\_\_\_\_

Sl.No. Activities

PERIOD

June July Aug. Sept. Oct. Nov. Dec. Jan. Feb. March Apr. May

1. Architectural Drawings

Target \_\_\_\_\_

Achievement \_\_\_\_\_

2. Structural Drawings.

Target

Foundation

All Floors

Achievement \_\_\_\_\_

3. Sample houses, Target

Achievement \_\_\_\_\_

4. Building work

Target \_\_\_\_\_

Achievement \_\_\_\_\_

5. Water Supply

Design	Approval 23% U/G O/H tank of plans by Tank MCD	Tube well	50% Pump House	Pumping inst- tallment	75% Boost- ing insta- llations	Chlori- nators	100% Test- ing of lines.
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Target  
Achievement

6. Sewer lines

Designs	Approval of Plans by MCD	Execution of Works	Testing of Lines	Pumping Stations	Outfall Sewer	Oxidation Ponds.
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Target  
Achievement

7. Horticulture development

Grill fencing      Plantation.

Target  
Achievement

8. Roads

Target

Achievement

9. S.W. Drains

Target

Achievement

10. Electrification

Project demand to DESU	Allocation of S/S site	Handover Site	Receipt estimate from DESU	Pay to DESU	C/o SS Bldg.	Comp. H.T. feed to SS	Inst. of SS equip. feeder poles.	L.V. mains & feeder poles.	Commissioning.
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Target  
Achievement

11. Other items if any

Target

Achievement

NO.EM.1(10)83/2501

Dated: 17.5.83

## CIRCULAR NO. 11

Sub:- Supervision and checking of works-Tool Kits.

During my inspection of various works, it has been observed that in many case, our supervisory staff(JEs,AEs) do not even have the minimum tools required for checking of works. For effective supervision, it is very important that frequent checks are carried out by the supervisory staff for maintaining the lines and levels, verticality of walls, evenness of plastered surface and floors, straight edges, right angles at corners etc. The strength of concrete and mortar, proper filling up of joints is needed to be checked by use of hammers, screw drivers etc, The thickness of various members have to be verified by appropriate scales, gauges or micrometer.

It has, therefore, been decided that at every site of work, one full set of tools must be kept by every JE/AE consisting of the following:-

1. A plump bob with a minimum of 15 mts. long thread.
2. Hammers.
3. Chesel.
4. Screw Drivers.
5. Aluminium Channel straight edge 2.5 mtr.
6. Mason's right angle.
7. Spirit level.
8. 30 mts long thread ball
9. Gauges/micrometers & calipers.
10. Measuring tapes 15 mts. & 30 mts.
11. Veriner scale/calipers.
12. Any other special tools, which are considered necessary for proper checking of the work (after obtaining necessary approval of the EE concerned).

Sd/-  
(K.D. BALD)  
ENGINEER MEMBER

NO.EM.1(10)83/2602

Dated: 17.5.83

## CIRCULAR NO. 12

Sub: Survey & rectification of defects in an organised and systematic manner-maintenance of register-recording of certificates.

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During my recent inspection to various works it has been observed that in many cases the work of rectification of defects is going on in a rather haphazard and adhoc manner. For proper & effective rectification, it is necessary to organise this in a systematic manner.

It has been decided that the following procedure may be followed for rectification of defects:-

1. To start with, a complete survey of all defective work shall be made by the AEs personally with the help of his JEs. The results of this survey will be recorded in a register of defects maintained at site in the proforma enclosed. After the survey is completed by the AEs & recorded in the register, EE shall also inspect the work thoroughly and check whether all the defects have been correctly surveyed and recorded or not.
2. The register of defects should clearly indicates the defects noticed in the work, itemwise, for each flat separately. For example, while checking the masonry work he may notice the defects like poor mortar in some particular walls. These walls should be clearly identified cracks, use of inferior bricks, inadequacy of lintal beams, out of plumb etc. Similarly, for other items also the nature of the defects and their location should be noted.
3. After the survey is completed, the rectification of defects should be taken up in an organised manner from one end. The rectification work done should also be recorded in the register of defects at the appropriate place and flat by flat. Record entries must be made wall by wall to indicate that in these particular walls & flats, the rectification work has been fully completed.
4. After completing the rectification work, the JE, AE & EE must record a certificate in the register of defects regarding completion of the rectification work satisfactorily.

The SE incharge must also countersign this register after the rough inspection, before payment is made for any work. These registers shall be kept on record & will be frequently checked by SEs/ACEs/CE.

5. Chief Engineer/Addl. Chief Engineers will please ensure that:-

- i. All defective items are completely identified & put on record.
- ii. The work of rectification is carried out in a systematic and time-bound manner.
- iii. No covering work (like plastering) shall proceed until the defective work is properly rectified/replaced by work of good quality.
- iv. SEs clear certificate shall be required for structural soundness & proper quality for all blocks.
- v. Rectification work is actually done and the aforesaid directions are not allowed to boil down to paper certificates.

Officials found guilty of negligence in compliance of the above instruction for rectification of defective work shall render themselves liable for disciplinary action.

Sd/-  
(K.D. BALI)  
ENGINEER MEMBER



SAMPLE PROFORMA FOR SURVEY AND RECTIFICATION OF DEFECTS

(24)

Name of Division \_\_\_\_\_  
 Name of work \_\_\_\_\_  
 Name of Contractor \_\_\_\_\_

Name of EE \_\_\_\_\_  
 Name of AE \_\_\_\_\_  
 Name of JE \_\_\_\_\_

Reference to inspection reports of:-

1. C.T.E. \_\_\_\_\_
2. C.E.(QC) \_\_\_\_\_
3. CE/ACE \_\_\_\_\_
4. SE/EE \_\_\_\_\_

Sl.No.	Block & Flat No.	Item of work	Location of defect	Nature of defects	Date of rectification	Certification of JE/AE/EE	Remarks
1.	Block No. 2	Walls	No. 1	Out of plumb			
			No. 4	Weak mortar vertical joints hollow			
			No.7	Inferior bricks and out of plumb.			
			No.11	Crack at lintel level. Lintel bearing not proper			
		Slabs	No.3	Cracked			
			No.6	Weak concrete			
		Stair case	1st flight	Lesser thickness of waist slab weak concrete			
			1st Landing	Cracks.			
		Plastering		Bath room-weak mortar			
		Internal		Room No. 1			
		External		Room No.2 Uneven			
		Flooring		Defective slab, grinding not proper, poor finishing			

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Terraces & roofs	Slope defective, grinding, not done properly.
Water and sanitary installations	-
RCC Tanks	-
Other miscellaneous Items	-