

**DECISION AND ACTION POINTS OF REVIEW MEETING**  
**DATED 24.08.2016**

A review meeting of field Engineers and Agencies was taken by ACS, WRD and E-in-C WRD on 24.08.2016.

Shri Pankaj Agrawal the P.S., WRD designate witnessed the discussion. Decisions/actions pointed out are as below:

**I. JALPANI COMPLEX:**

- a) Plan for 200 ha./MCM irrigation. As the area is poor and tribal dominated, micro irrigation is not preferable. Plan for flow irrigation. Allow canal / pipe line for gravity flow upto 20 ha. chak.
- b) For irrigating 28000 ha. CCA, Jalpani and Nigri, both reservoirs are required. Plan accordingly.
- c) Exclude area within the river banks for forest permission as land use will not change. If submergence is within river banks and even if outside the State boundary, forest permission for such area is not needed.
- d) Nigri may require special foundation treatment like sheet pile etc.
- e) The beneficiary majority being Gond tribals, the project to be named as 'Gond Major Project.
- f) Chief Engineer BODHI to provide PFR to Commissioner CAD. Commissioner CAD to apply for environment ToR and start collection of rainy season data immediately. Use services of WAPCOS.
- g) Social impact assessment may be carried out simultaneously. May use services of experts enlisted in the Department for SIA/R&R.
- h) Finalise DPR by 30.9.2016.

**II. TIKTOLI (Gwalior) :**

- a) This is extension of Harsi High Command at the tail by Micro Irrigation for 5000 ha. CCA. Chief Engineer, BODHI has examined the proposal and given directions to field officers for submission of DPR.
- b) The project being in the tail of Harsi High Level Canal, water availability will depend upon release from HARSI RESERVOIR into Harsi High Canal.

- c) Past experience is that the farmers in Harsi Command overuse water for Kharif Paddy followed by Rabi crop. Any laxity in regulation of water under pressure of Harsi farmers, would make investment in Tiktoli Project infructuous.
- d) Therefore, submit DPR for canal from Madikheda Reservoir to Harsi High canal (feeder canal) for carrying water independent of the Harsi Reservoir in Harsi High Canal System.
- e) Submit proposal for above Feeder Canal and Tiktoli both by 30.9.2016.

### GANGA BASIN, REWA

#### **I. Teonther flow project:**

- a) The tunnel is likely to be completed in Financial Year 2016-17. The target date assured with contractor is 31.3.2017.
- b) Mahana Canal, upstream of Teonther aqueduct to be completed in all respect by 31.12.2016, so that Rabi irrigation may be done.
- c) For final testing of tunnel, escape should be provided upstream of the aqueduct to ensure that completion of the tunnel is not delayed due to delay in completion of aqueduct.
- d) Aqueduct: Contractor Mr. Vijay Mishra has arranged only 1500 PSC pipes against 3500 required. Earlier promises of arranging 300 pipes per month have failed. The average monthly supply of pipes should be assured as minimum 200 Nos. only.
- e) Pipe supply should be completed latest by 30.4.17, so that laying, carrying and testing is done before rains. If pipes are not supplied in full quantity by April 2017, irrigation would not be possible in 2017.
- f) Therefore, contractor has been asked to arrange  $1400 \times 5 = 7000$  No.s M.S. pipes of 2400 mm diameter and 12 mm thickness. The contractor has promised to setup fabrication factory by 31 October 2016 or submit copy of agreement to supply MS pipe from manufacturer by 31 October 2016. If Contractor fails to comply as above, EE to issue NIT by 10.11.16 for procurement of 7000 number MS pipes of 12 mm thickness of 2400 mm diameter at contractor's cost and debit to the contractor. EE will not require any special permission for procuring pipes in such an event.

#### **II. TEONTHER FLOW CANAL:**

- a) The CCA of 37500 ha., will not include CCA of Loni Minor Project.

- b) 10 wells on Canal Bank to be provided for irrigating command located at higher field.
- c) The irrigation by flow canal should not be less than 36500 ha., Area-wise lift should not increase beyond 2.5% of 37500 ha.
- d) Increase in command behind as 37500 ha. arising from lift from canal wells not to be taken for invoking incentive clause.
- e) Even though contract provides for lining of minor canal of only one cumec and above, the contractor agreed to do lining of minors having flow between 0.7 to 1 cumec in  $\frac{1}{4}$  of the length of such minors. Minor No. 4, 9, 10 and 15 are to be lined upto  $\frac{1}{4}$  of length accordingly.
- f) Minors of one cumec and above are to be lined in total length.
- g) Project completion target date agreed by contractor is 31.5.2017.

### III. TEONTER LIFT :

- a) E-in-C emphasized that all issues of Teonther lift have been resolved on past 3 occasions. Further some issues are being repeated or new issues are generated. Therefore, today all issues should be raised and get resolved with finality.
- b) Superintending Engineer confirmed that the developing CCA is verified and found to be more than the agreed CCA.
- c) The project has water capacity to irrigate approximately 20% additional area. SE to explore additional command and wherever feasible, issue NIT for taking up additional minors / sub minors.
- d) The issue of supplementary lift was deliberated at length. Farmers are not interested to form society. Nearest electric line is 10 to 12 Kms away. Area is theft prone and security of assets is always a problem. Contractor has constructed 17 wells on canal banks as advised earlier and two intake wells near farmer's fields. Contractor is willing to construct pump houses and install pumps. Electrification is going to cost very high and schemes are not likely to run because of unwillingness of farmers to pay energy bills.
- e) Therefore, it was suggested to the contractor to provide 4 Solar Pumps of 10 hp each and demonstrate their successful commissioning. The EE/SE could remove the pump and Solar pump and keep in store, and to be handedover to

for farmers, on written assurance to take responsibility the safety, security and operation.

- f) Contractor assured that he has completed the turnkey contract. However after deliberation it was agreed that contractor would line minor No. 1 and 3 in full length.
- g) Completion certificate to be issued by EE, withholding Rs. 2 Crores towards lining of above 2 minors and providing pumps and Solar panels.

#### IV. MAHI EXTENSION

- a) Review of minor irrigation planning and execution was taken. No issue related to drawing, design, technology, specification for functionality is required, any decision from CE BODHI or higher level. NITI AYOJ, MOWR and officers of other States visited and appreciated.
- b) Targets – By 30.11.16, 5000 ha and thereafter 1000 ha each month. Project to be completed before 2017 rains.
- c) Laying of dedicated electric transmission line is under progress and satisfactory.
- d) Water User Association to be framed. Since it is a micro irrigation project, let there be one WUA for one minor/sub minor with approximately 500 to 600 ha. CCA.
- e) Each group of farmers belonging to one pump should nominate its representative by consensus. Such person is to be known as "Mukhiya". Mukhiya to enter in MoU with WUA for upkeep, maintenance, water regulation and payment of energy bills on behalf of its members. ACS WRD approved a draft for such MoU.
- f) To reduce market price of sprinkler, nozzles and accessories for purchase by farmers, EE to provide shop space on WRD land/building until 3 months beyond the completion of the project at nominal rent of Rs. 1000/- per month.
- g) Irrigation on the government land under encroachment. Pipelines and wells to be provided but pumps and electrification is not to be done. This is to ensure that the encroachers don't damage the project assets.

h) The project required many changes during execution being first of its kind in the country. Availability of land also caused delay. The permission for crossing HBJ gas pipeline to considerable time and stringent conditions are still delaying the work. Keeping all these in view, time extension upto December 2017 could be given without any claim on escalation on receipt of request for time extension from contractor.

#### V. BAHUTI CANALS

- a) As per agreement contractor is to shift pumps for Gurh LIS to Bahuti Canal Head. It was noted that Gurh Pumps would not suffice in view of design capacity increase for irrigating 50000 ha area of Nai Garhi, which is a new project. Contractor and EE suggested that the department may procure submersible pumps which could reduce power consumption by 1/3. S.E., Bansagar Canal stated that Gurh pumps could be used for Majghawan canal irrigation of 20000 ha instead of procuring new pumps. In this background, it is decided to use Gurh pumps for Majghawan system and procure efficient pumps for Bahuti System.
- b) The contractor will provide pump specifications by 30.9.2016. CE BODHI and E-in-C would examine and finalise pump requirement and specifications with assistance from pump experts including ADB consultants for Kundaliya Project. Thereafter N.I.T. for pump, accessories and fittings to be issued. Water Resources Department would provide pumps alongwith material and control panel etc. Contractor will do installation and commissioning.
- c) Contractor and EE suggested that a booster pump of approximately 0.8 to 1.2 MW could be installed at the approach channel to provide required velocity for canal flow where water level reduces to 8 m. This way energy consumption for last one or two watering could be reduced to approximately 1/10 compared to operation of the pump set at the end of the feeder channel. ACS WRD suggested that contractor should find out the best booster mechanism and do it as the part of the project without any additional claim of cost. To this, contractor agreed.
- d) EE E&M to come to Bhopal on 29.8.16 so that E-in-C can finalise most economical power transmission line connectivity. Thereafter power line erection be taken up in consultation with MP TRANSCO on priority.

- c) Commissioner CAD to follow up forest permission for 7.28 ha. to provide tunnel and canal connectivity.
- f) M/s. J.P. Cements has re-opened the issue of canal alignment. ACS WRD spoke to MD of M/s JP Cement to resolve the issue. The issue will be resolved on 26.8.16.
- g) **Tunnel** – Tunnel progress is 1180 m out of 3700 m. Monthly progress being good, tunnel is likely to be completed in 7 months. Target for completion of tunnel and issue of CC is fixed as 30.6.17.
- h) Progress of canal to be reviewed separately to ensure irrigation of entire canal Rabi 2017.

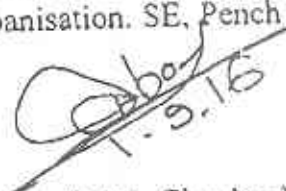
#### VI. MAJHGAWAN CANAL SYSTEM

- a) Pumps motors and accessories of Gurh LIS to be used.
- b) Pump house to be constructed by Contractor. Dismantling of Gurh Pumps and installation to be done by contractor. Department to provide pumps, motors, accessories, fittings and fixtures only. Cost of repair, accessories and additional requirement of pumps, motors, accessories to be borne by WRD.
- c) SE, Bansagar Canal, informed that electric transmission line from Kotar for 2.85 MW would be required. SE to get the most economical proposal ready and arrange for transmission line under guidance of E-in-C.
- d) Target time lines -
  - i. For land 5000 ha. CCA - 15.10.2016
  - ii. Canal system to be completed - 30.6.2017.
  - iii. Contractor to start work in full speed - latest by 1.10.2016.

#### VII. PENCH CANALS :

- a) Target for Rabi 2016-17 irrigation - 50000 ha.
  - i. First 30000 ha. by - 10.11.2016
  - ii. Next 10000 ha. by - 10.12.2016
  - iii. Next 10000 ha. by - 15.01.2017

- b) Since there is no major structure design drawing is left, henceforth SE, Pench is authorised to finalise Canal alignment and structure design for upto 6000 ha canal system. After approval, a copy be sent to CE for information.
- c) Alignment of D<sub>3</sub> and D<sub>4</sub> to be finalised by 30.9.2016.
- d) Inability of MASS INFRA to execute hard rock excavation in the canal is a major impediment to above Rabi irrigation targets. MASS INFRA has been continuously failing to deliver. Therefore, EE has been asked in Video Conference to withdraw 2/3 of remaining rock excavation and issue NIT to appoint other agencies.
- e) Despite the above, MASS INFRA has not mobilised resources on machinery. In this situation, EE to get canal hard rock excavation done by any agency at the augmented rates of MASS INFRA and levy 10% supervision charges on MASS INFRA. Any third agency which may agree to execute the work on the lower of the rates of MASS INFRA or rates which are approved under the NIT issued should be preferred.
- f) EE to ensure that in no circumstances canal operation should be impeded due to hard rock excavation problem.
- g) Areas in and around Sconi city - Sconi city land within 2 KM of the radius of the city are likely to be used for urban purposes. Canal if constructed might become urban drains with time, as happened in Satna and Bhind City. Therefore, investment in canal should not be made in areas which are likely to come with non-agriculture use because of urbanisation. SE, Pench to keep this in mind while approving the alignment.



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Endt. No. 330/EE (W)/REW/2013/

Bhopal, Dated: 1 Sept., 2016

Copy is forwarded to :

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2. Project Director, World Bank Projects, Water Resources Department, Bhopal.
3. The Chief Engineer, Mohanpura Project, Office of the Project Director, World Bank Projects, Water Resources Department, Bhopal.
4. The Chief Engineer, Chambal Betwa Basin, Water Resources Department, Bhopal
5. The Chief Engineer, Ganga Basin, Water Resources Department, Rewa
6. The Chief Engineer, Narmada Tapti Basin, Water Resources Department, Indore.
7. The Chief Engineer, Rajghat Canal Project, Water Resources Department, Datia
8. The Chief Engineer, Wainganga Basin, Water Resources Department, Seoni.
9. The Chief Engineer, BODHI, Water Resources Department, Bhopal
10. The Chief Engineer (E/M), Water Resources Department, Bhopal
11. The Superintending Engineer, Water Resources Circle, Deoland.
12. The Superintending Engineer, Water Resources Circle, Rajgarh.
13. The Superintending Engineer, Water Resources Circle, Jhansi.
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