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நீர்ப்பாசனத் திணைக்களம IRRIGATION DEPARTMENT



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2014.12.01

Asset Management Sub Department,

Land & Legal unit,

DEPARTMENTAL CIRCULAR NO: 08/2014 (Assets Management)

All Directors of Irrigation in Head office,

All /onal Directors of Irrigation,

All Directors of Irrigation in Ranges / Districts,

All Divisional Irrigation Engineers.

Irrigation Reservation limits, procedure to protect and release the Departmental Lands

This circular is issued to re-define the limits of irrigation reservations and define the procedure to be adopted to protect the departmental lands. This will supersede all earlier instructions inconsistent with this circular.

1.0 Identification of Irrigation Reservations and limits

- If there are well defined reservation limits included in original design plans of an Irrigation scheme, then such reservation limits are legalized and it should be well kept and should be well protected.
- If there is gazette notification, which states the reservation limits of an Irrigation scheme, then that reservation limits are legalized and should be well kept and well protected.
- If there are reservation boundary stones, marked by Survey Department, which still exist in the field, then that Reservation limits are legalized and should be well kept and well protected.
- However in older schemes, where reservations have been cultivated and it is impossible to legally recover the full reservation width, and then reduced reservation limits are defined below.

2.0 Reservation limits associated with Irrigation structures

The reservations specified in this circular should be included in the O & M Manual and Standing Or respective scheme.

2.1 Reservoir or Anicut Embankments (Bunds):

The purposes of the reservation are for stability of earthen dams, provision for maintenance improvement works, provision of adequate downstream drainage, for monitoring seepage and future modification or heightening of dam.

a. When the toe line is well defined,

Reservation limit = 4 h on the d/s measured from the toe line

Where, h= Height of dam / bund at that particular section

b. When the toe line cannot be located or defined,

Reservation limit should be obtained by estimating the toe-line from the center line of as follows:

For h > = 10m (33ft) $\frac{1}{2}$ bund top width + 2 $\frac{1}{2}$ h

For $h \le 10m$ (33ft) $\frac{1}{2}$ bund top width + 2 h

2.2 Reservoir or Anicut Bed:

All areas falling below the BTL contour should be considered as reservoir or anicut bed reserv

However, in cases of reservoirs / anicuts with large water spreads and in developed flat terrain may be limited to,

- > 0.5 m (1.6ft) above the HFL contour or,
- In hilly areas, additional 100m horizontal lengths away from the HFL contour.

Greater value of above two will be considered as the reservoir/anicut bed reserv

2.3 Irrigation canals, drainage canals streams and O&M Roads:

Reservations are defined in the I.D. Technical Note No. 1, section 3 and in Drg. No. C 503 B-2-of 04.01.84. However in older schemes where reservations have been encroached or cultivated a impossible to recover the full reservation width, reduced reservations limits as defined below managed. These minimum widths should be strictly enforced.

1.3.1 Irrigation Canals

	Item	Essential M	inimum	Reservation		Remarks
ng Order		Total	Road Side	Other Side		
1		(m)	(m)	(m)		
ance &	2.3.1.1 Canals with roads					
ige and f	Main Canal (b > 12m)	40	25	15	7 T	- 17
	Main Canal (8m < b< 12m)	37	20	· 17	2	This is measured from, center line of
	Main Canal (b < 8m)	30	18	12		the canal. And center line can be
	Branch Canal	20	12	8		located, in center of the bed width.
	(Smaller than above sizes)	1				of the bed width.
	Distributary Canal	14	10	4		
r line of	Field channel	10	7	3.		
I IIIC OI					- F 6	wam the maximum wat

Exception: In Single bank canals, pooling side reservation is up to 5m away from the maximum water spread area. Maximum water spread area is the area inundated when the canal is flowing with maximum discharge.

1.3.1.2 Canals without roads

	1tem - Land	Essential Minis	num Reservation	Remark
ed reserva	Distributary Canal	Total (m) 8	For one side (m)	This is measured from, center line of
at terrains	Field channel	6	3	the canal for both sides.
	1.1.2 Drainage System			Sides.
	Dem	Essential Mini	mum Reservation	Remarks
our.		Total (m)	For one side (m)	
ed reserv	turn out drain	3	1.5	
	he ondary drain	6	3 - 1 - 3 - 1 - 3 - 1 - 3 - 1 - 3 - 3 -	
C 503 B-2	1.1.1 O&M Roads witho	out canals		And the second

d below 1

Hom Es	ssential Mini	mum Ke	eservation		Remarks
	Total (m)	For on	e side (m)	and an area of the same	
Waad 4m width	10	5			This is for roads without canals. If there is O&M
final om width	14	7			road along the canal then above limits are to be
Haad 8m width	20	10			considered.

2.4 Irrigation Structures, Pump Houses, Diversion weirs, Flood & SWE bunds, Sea Outfall structures, Spill Tail Channels:

In cases where these are not already specified in designed plans or plans of acquired lands following reservation limits may be adopted.

- > Irrigation Structures, Pump Houses, Diversion weirs & Sea Outfall structure Director of Irrigation (District / Range) may appoint a committee & fix limits individual locations, based on following guidelines and keep Head Office info
 - Allow reasonable afflux for water pooling structures like regulators, small diversion weirs etc.
 - Pooling side reservation should be at least 5m away from the maximum. spread area
 - Consider a reasonable afflux above the designed flood level (maximum) of pump house for both upstream & downstream.

Flood & SWE bunds:

Reservation limit = 2 h for one side of the bund, measured from the toe.

Where, h = Height of Flood or SWE bund at that particular section

Spill Tail Channels:

Bed width (b)	Reservation
Minor channels $b \le 3m$.	1m (3ft) for each bank measured from edge of the maximum w
Medium channels 3m< b≤16m	3m (10ft) for each bank measured from edge of the maximum v
Major channel b≥16m surface	5m (16ft) for each bank measured from edge of the maximum w

2.5 Streams & Rivers

Bed width (b)	Reservation (According to the Land Manual)
Minor rivers $b \le 15$ ft (4.5m)	66ft (1 Chain / 20m) for each bank measured from ban
Medium rivers 15 ft $(4.5$ m $) < b \le 50$ ft $(15$ m $)$	132ft (2 Chains /40m) for each bank measured from ba
Major rivers b≥ 50ft (15m)	198ft (3 Chains / 60m) for each bank measured from be

However, in some rivers in urban areas, where reservations have been developed or cultivated and encroached, it is impossible to legally recover the full reservation width, then Director of Irrigation (Range) along with respective Divisional Secretary shall appoint a committee including Central Envir Authority, Urban Development Authority, Forest Department (if needed), Wild Life Department (if Coast Conservation Department (if needed) and other relevant agencies to fix limits to suit individua locations in the river and keep Head of the Department informed. Those limits will be in force to part river/stream and to particular river stretch.

This reduced minimum reservations limits should be strictly enforced, after written confirmation of Director denoral of Irrigation.

101 and Reserved for Irrigation Department Use.

It is addition to the above reservations for structural considerations, lands have been set apart for the use of the Irrigation Department to establish Camps, Depots, Maintenance units, metal & gravel quarries etc. within the respective schemes. It is equally important to administer and protect these lands by the Department for the imposes for which they have been so reserved.

- 1.2 Each Division should be asked to prepare a map showing the reservation of this category available in their respective Divisions and schemes to a suitable scale.
- 1) Releases of this type of lands to outside agencies whenever there is a request or local demand for any other purpose, should be done only when the conditions in section 5 hereof has been fulfilled.

1.0 Action to be taken for the protection and administration of the Reservations.

- Where the reservations as maintained now conform to the requirements stipulated in Section 2 above, they should continue to be so maintained.
- Where the reservation limits as available and maintained now falls short of these limits DI (District/Range) must take action in consultation with the District Secretary/ Divisional Secretary to recover / acquire the land.
- Where the desired reservations are private land, and where they are deemed absolutely necessary for the safety and protection of Irrigation work, the acquisition proceedings should be commenced to acquire them for the State.
- 1.4 The reservation should be surveyed and formalized in the field with buried monuments spaced at 100m formals along straight sections and at points of intersection for changes in alignment. The monuments will be 1.5 m x 0.15 m x 1.0 m of precast concrete containing reinforcement bars centered length wise.
- Where feasible barbed wire fencing or live fencing, particularly demarcating reservoir embankment reservations should be provided.
- In order to safeguard these reservations from further encroachments or allocations, it is necessary to depict such irrigation reservation in F.V.PP. and F.T.PP. Action should be pursued with the Survey Department to get this done.

Il Release of Irrigation Reservations to other users.

- Whenever there is a request or a local demand for the releases of Irrigation Department held reservation, much requests should be entertained only when it is absolutely confirmed that the Department does not need the land any longer or for future use from the point of view of possible structural modifications, languagements, augmentation proposals, rehabilitation & future expansion needs etc.
- As regards land adjacent to irrigation works & structures, such releases should be agreed to only when the simulations in section 5.1 are satisfied and after a review of the safety of the works.
- Where excess land is available, and where they are needed to remain under the care of the Department for any purpose described above, a Development plan should be prepared and kept for reference.
- A Personal approval of Director General of Irrigation, should be received for all instances when lands are

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- 5.5 Procedures to be applied for the release of state lands to other users by District Secretary, specially Irrigation Department held reservations are laid down in the Ministry of Land & Lands Development No 01/200 of 11.02.1985 (Copy attached)
- 5.6 Procedure to release departmental lands and buildings is mentioned in the Asset Management Cl 01/2008 of 05.03.2008 (Copy attached)

6.0 Encroachments.

- 6.1 Constant vigilance and prompt remedial action is necessary to keep the Irrigation Reservations for encroachments.
- 6.2 Regularizations of encroachments should be agreed to only when it is definitely advisable and has from a technical point of view. In all other instances they should be prevented.
- 6.3 Where any encroachment is found to be definitely detrimental to the safety and proper O & M of Irrigation works, specific the actions should be initiated and continued to free the reservations from obstructions.

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Eng. Badra Kamaladasa

Director General of Irrigation.

Eng. BADRA KAMALADASA Director General of Irrigation Irrigation Department Bauddhaioka Mawatha

Copy to: Bauddhaloka Mawatha Colombo 07.

1. Secretary, Ministry of Irrigation & Water Resources Management

- for kind information pla

2.Addl. DGI (System Management)

- for kind information pla

3.Addl. DGI (Investigation, Planning & Designs)

- for kind information pla

4.Addl. DGI (Construction & Development)

- for kind information ple

5.Addl. DG (Admin)

- for kind information pla

6. Chief Financial Officer

for kind information ple

7. Director of Irrigation (ITI)

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