

GOVERNMENT OF ANDHRA PRADESH

IRRIGATION AND CAD DEPARTMENT

H.N.S.S. PHASE-2,PACKAGE NO.1

HYDRAULIC PARTICULARS HNSS MAIN CANAL (STAGE-II) FROM KM 216.300 TO 227.500

SL. No	Reach No	Reach in KM			Hydraulic Particulars											Loss (m)			Bed Level		Full Supply Level		Remarks	
		From	To	Distance (IN Mts)	Required Discharge (Cumecs)	Bed Width (In Mts)	F.S.D (IN Mts)	Surface Fall	Side Slopes	A(m2)	P(m)	R(m)	R=2/3	Velocity M/Sec	Designed Discharge (Cumecs)	Due To Bed Fall	Due To CM & CD Structures	Total	AT Start (M)	AT End (M)	AT Start (M)	AT End (M)		
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2	1	216.300	216.700	400	71.300	14.30	3.70	1:10000	1.00:1	66.600	24.765	2.689	1.934	1.074	71.552	0.040	0.00	0.040	460.300	460.260	464.000	463.960	FSL @ Km 216.300 As per Agreement basic Parameters +464.000	Full cutting
3	3	218.025	218.925	900	71.300	14.30	3.70	1:10000	1.00:1	66.600	24.765	2.689	1.934	1.074	71.552	0.090	0.00	0.090	459.933	459.843	463.633	463.543	FULL CUTTING	F.R AND H.D.R
4		218.925	218.975	50	Transition		3.70	1:10000								0.005	0.00	0.005	459.843	459.838	463.543	463.538		
5	4	218.975	219.225	250	71.300	12.90	3.70	1:10000	1.50:1	68.270	26.241	2.602	1.892	1.051	71.737	0.025	0.00	0.025	459.838	459.813	463.538	463.513	PRIAL CUTTING AND FILLING	ALL SOILS,HDR & F.F
6		219.225	219.275	50	Transition		3.70	1:10000								0.005	0.00	0.005	459.813	459.808	463.513	463.508	-	
7	5	219.275	220.175	900	71.300	14.30	3.70	1:10000	1.00:1	66.600	24.765	2.689	1.934	1.074	71.552	0.090	0.00	0.090	459.808	459.718	463.508	463.418	FULL CUTTING	F.R AND H.D.R
8		220.175	220.225	50	Transition		3.70	1:10000								0.005	0.00	0.005	459.718	459.713	463.418	463.413	-	
9	6	220.225	220.550	325	71.300	12.90	3.70	1:10000	1.50:1	68.270	26.241	2.602	1.892	1.051	71.737	0.032	0.00	0.032	459.713	459.681	463.413	463.381	PRIAL CUTTING AND FILLING	ALL SOILS,HDR & F.F
10		220.550	220.600	50	Transition		3.70	1:10000								0.005	0.00	0.005	459.681	459.676	463.381	463.376		
11	7	220.600	221.500	900	71.300	14.30	3.70	1:10000	1.00:1	66.600	24.765	2.689	1.934	1.074	71.552	0.090	0.00	0.090	459.676	459.586	463.376	463.286	FULL CUTTING	F.R AND H.D.R
12		221.500	221.550	50	Transition		3.70	1:10000								0.005	0.00	0.005	459.586	459.581	463.286	463.281	-	
13	8	221.550	221.975	425	71.300	12.90	3.70	1:10000	1.50:1	68.270	26.241	2.602	1.892	1.051	71.737	0.042	0.00	0.042	459.581	459.539	463.281	463.239	PRIAL CUTTING AND FILLING	ALL SOILS,HDR & F.F
14		221.975	222.025	50	Transition		3.70	1:10000								0.005	0.00	0.005	459.539	459.534	463.239	463.234		
15	9	222.025	222.325	300	71.300	14.30	3.70	1:10000	1.00:1	66.600	24.765	2.689	1.934	1.074	71.552	0.030	0.00	0.030	459.534	459.504	463.234	463.204	FULL CUTTING	F.R AND H.D.R
16		222.325	222.375	50	Transition		3.70	1:10000								0.005	0.00	0.005	459.504	459.499	463.204	463.199		
17	10	222.375	223.125	750	71.300	12.90	3.70	1:10000	1.50:1	68.270	26.241	2.602	1.892	1.051	71.737	0.075	0.00	0.075	459.499	459.424	463.199	463.124	PRIAL CUTTING AND FILLING	ALL SOILS,HDR & F.F
18		223.125	223.175	50	Transition		3.70	1:10000								0.005	0.00	0.005	459.424	459.419	463.124	463.119		

SL. No	Reach No	Reach in KM			Hydraulic Particulars										Loss (m)			Bed Level		Full Supply Level		Remarks		
		From	To	Distance (IN Mts)	Required Discharge (Cumecs)	Bed Width (In Mts)	F.S.D (IN Mts)	Surface Fall	Side Slopes	A(m2)	P(m)	R(m)	R=2/3	Velocity M/Sec	Designed Discharge (Cumecs)	Due To Bed Fall	Due To CM & CD	Total	AT Start (M)	AT End (M)	AT Start (M)			AT End (M)
19	11	223.175	223.900	725	71.300	14.30	3.70	1:10000	1.00:1	66.600	24.765	2.689	1.934	1.074	71.552	0.075	0.00	0.075	459.419	459.347	463.119	463.047	FULL CUTTING	F.R AND H.D.R
20		223.900	223.950	50	Transition		3.70	1:11250								0.004	0.00	0.004	459.347	459.343	463.047	463.043		
21	12	223.950	225.850	1900	71.300	14.70	3.70	1:12500	1.50:1	74.930	28.041	2.672	1.926	0.957	71.690	0.152	0.00	0.152	459.343	459.191	463.043	462.891	PRTIAL CUTTING AND FILLING	ALL SOILS,HDR & F.F
22		225.850	225.900	50	Transition		3.70	1:12500								0.004	0.00	0.004	459.191	459.187	462.891	462.887		
23	13	225.900	226.725	825	71.300	16.10	3.70	1:12500	1.00:1	73.260	26.565	2.758	1.967	0.977	71.588	0.066	0.00	0.066	459.187	459.121	462.887	462.821	FULL CUTTING	F.R AND H.D.R
24		226.725	226.775	50	Transition		3.70	1:12500								0.004	0.00	0.004	459.121	459.117	462.821	462.817		
25	14	226.775	227.025	250	71.300	14.70	3.70	1:12500	1.50:1	74.930	28.041	2.672	1.926	0.957	71.690	0.020	0.00	0.020	459.117	459.097	462.817	462.797	PRTIAL CUTTING AND FILLING	F.F
26		227.025	227.075	50	Transition		3.70	1:12500								0.004	0.00	0.004	459.097	459.093	462.797	462.793		
27	15	227.075	227.500	425	71.300	16.10	3.70	1:12500	1.00:1	73.260	26.565	2.758	1.967	0.977	71.588	0.034	0.00	0.034	459.093	459.059	462.793	462.759	FULL CUTTING	F.R AND H.D.R

1) Co-efficient of Rugosity :0.018

2) THE H.P.S PROPOSALS FURNISHED BY THE CE(P), ATP FROM KM. 216.300 TO 216.700 AND FROM KM 218.025 TO 227.500 ARE VETTED AND APPROVED.

3) THE H.P.S OF THE REACH FROM Km. 216 700 TO 218.025 SHALL BE FINALISED SEPARATELY ON RECEIPT OF PROPOSALS OF AQUEDUCT ACROSS PENNA RIVER AND EMBANKMENT PORTIONS AS PER SITE CONDITIONS FROM THE CE(P), AT P AS DISCUSSED IN JOINT INSPECTION Dt. 24-10-07.

4) THE LIST OF STRUCTURES SHALL BE FINALISED ON RECEIPT OF PROPOSALS FROM CE(P), ANANTAPUR AS PER SITE CONDITIONS AND AGREEMENT.

// t.c.f //

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GOVERNMENT OF ANDHRA PRADESH

IRRIGATION AND CAD DEPARTMENT

(H.N.S.S. PHASE-2, PACKAGE NO.1 FROM KM 216.300 TO 228.700/230.000)

HYDRAULIC PARTICULARS HNSS MAIN CANAL(STAGE-II) FROM KM 227.500 TO 228.700/230.000

SL.No	Reach No	Reach in KM			Hydraulic Particulars											Loss (m)			Bed Level		Full Supply Level		Remarks
		From	To	Distance (In Mts)	Required Discharge (Cumecs)	Bed Width (In Mts)	F.S.D (In Mts)	Surface Fall	Side Slopes	A(m2)	P(m)	R(m)	R=2/3	Velocity M/Sec	Designed Discharge (Cumecs)	Due To Bed Fall	Due to CM & CD Structures	Total	AT Start (M)	AT End (M)	AT Start (M)	AT End (M)	
1		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1		227.500	227.550	50	Transition		3.70	1:14600								0.003	0.00	0.003	459.059	459.056	462.759	462.756	
2	1	227.550	228.650	1100	71.300	18.70	3.70	1:16700	1.00 : 1	82.88	29.165	2.842	2.006	0.863	71.484	0.066	0.00	0.066	459.056	458.990	462.756	462.690	
3		228.650	228.700/300.000	50	Transition	18.70 To 14.30	3.70	1:13350								0.003	0.00	0.003	458.990	458.987	462.690	462.687	FSL At KM 230.000 as per Pkg-2 Agreement Basic Parameters +462.687

1) Co-efficient of Rugosity :0.018

THE H.P'S AND ALIGNMENT PROPSALS FURNISHED BY ENC/TGP/SKHT VIDE LR Dt:28-2-2008 ARE VETTED AND APPROVED

// t.c.f //

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