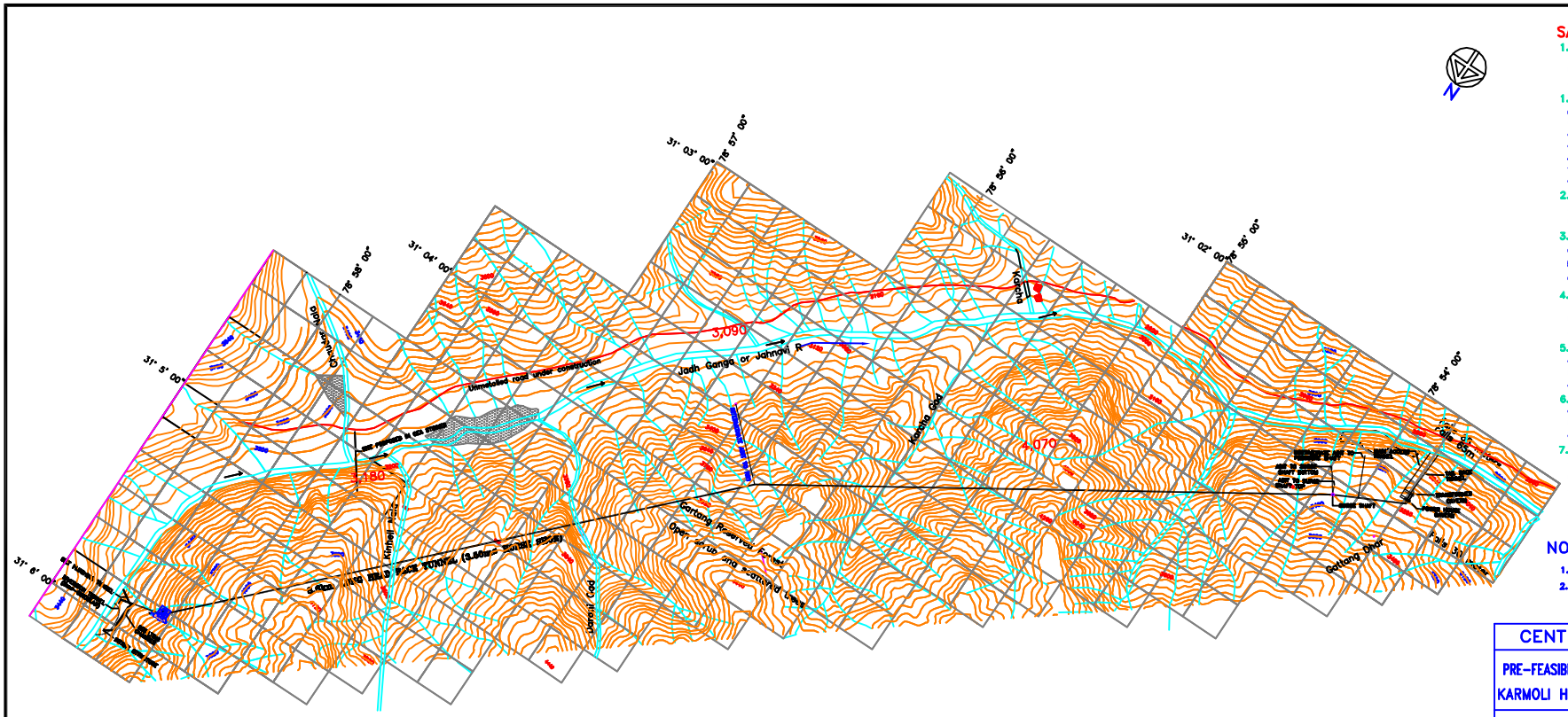
PFR STAGE DRAWING



SALIENT FEATURES

1. DIVERSION TUNNEL

a) LENGTH	350.0m
b) DIAMETER	5mø
c) DIVERSION FLOOD	80 cumec

1. DIVERSION STRUCTURE–GRAVITY DAM

a) FRL	EL 3268.5m
b) MDDL	EL 3254.0m
c) RIVER BED LEVEL	EL 3225.0m
d) TOP OF THE DAM	EL 3271.0m
e) SIZE & No. OF BAYS	4 (12.5m X 11.5m)
f) OGEE SPILLWAY CREST	EL 3244.5m
g) DESIGN FLOOD	5905 cumec

2. INTAKE

a) No. OF INTAKES	01
b) CAPACITY OF INTAKE	45 cumec

3. DESILTING CHAMBER

a) No. OF CHAMBER	01
b) SIZE	200m x 10m x 15m
c) MINIMUM PARTICLE SIZE TO BE REMOVED	0.2mm

4. HEAD RACE TUNNEL

a) LENGTH	6.6 km
b) DIAMETER	3.5m.ø HORSE SHOE
c) DESIGN DISCHARGE	37.11 cumec

5. SURGE SHAFT

a) DIAMETER	8m
b) MAXIMUM SURGE LEVEL	EL 3305.0m
c) MINIMUM SURGE LEVEL	EL 3210.0m

6. PRESSURE SHAFT

a) No.	01
b) DIAMETER	2.8m
c) INCLINATION	51°

7. POWER HOUSE

a) TYPE	UNDERGROUND
b) INSTALLED CAPACITY	2 X 70 MW (FRANCIS)
c) RATED HEAD	419.67m
d) MAXIMUM TWL	EL 2820.0m
e) MINIMUM TWL	EL 2818.0m

NOTES:

1. ALL DIMENSIONS AND ELEVATIONS ARE IN METRES
2. CONTOURS ARE BASED ON SOI TOPO SHEET NO.53 I/16(1:50000 SCALE)

CENTRAL ELECTRICITY AUTHORITY

PRE-FEASIBILITY REPORT
KARMOLI H.E. PROJECT

CONSULTANTS
WAPCOS
WATER AND POWER CONSULTANCY SERVICES (INDIA) LTD.

LAYOUT PLAN

DRAWN BY:	DESIGN BY:	APPROVED BY:	SCALE
CHATAR SINGH			

SECTOR-18 ,GURGAON,HARYANA
JAN. 2004

DRG. NO. WAP/ PFR/KARMOLI/1001/R1