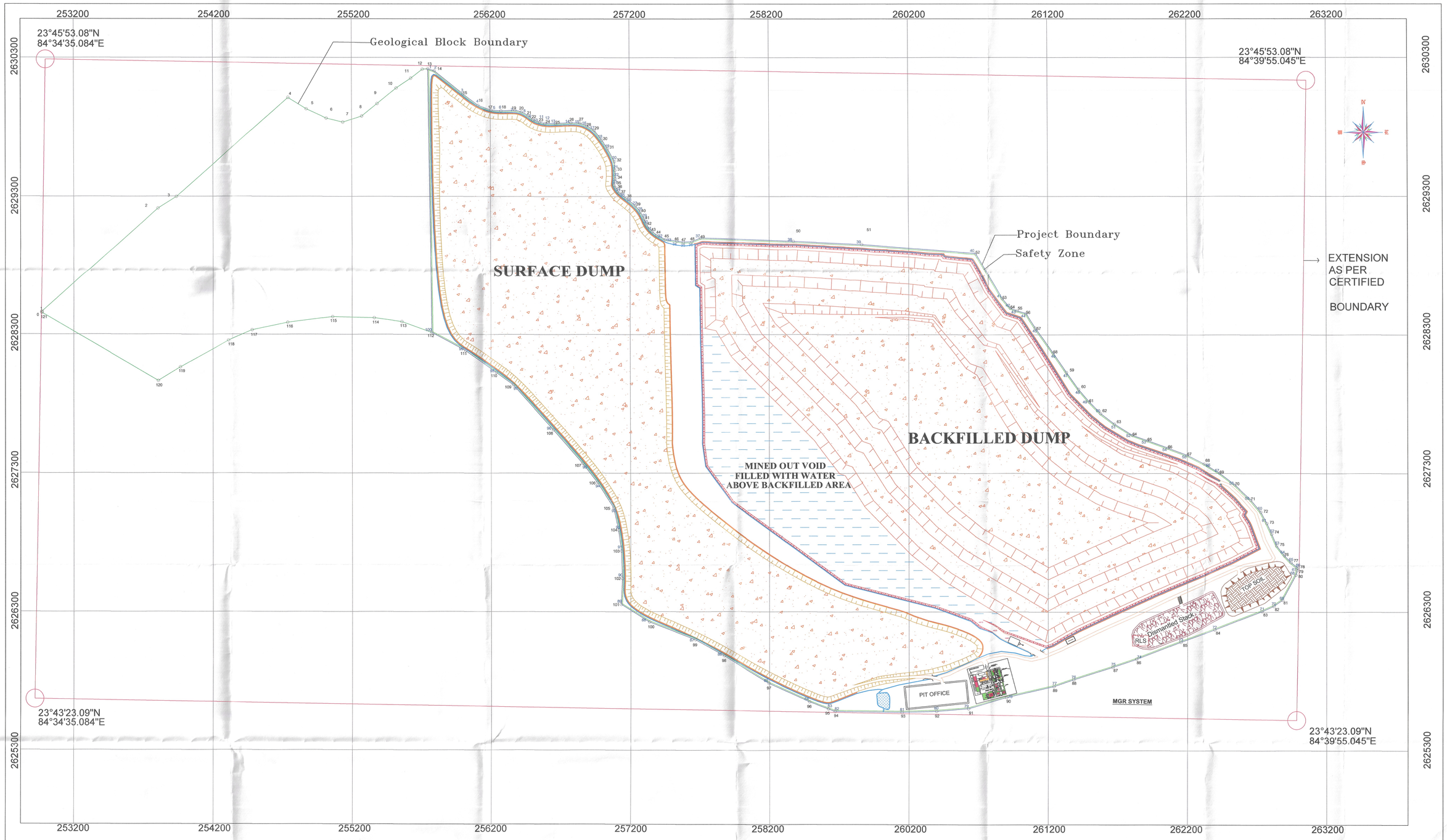

GEOLOGICAL BOUNDARY COORDINATES

POINT ID	Longitude	Latitude	POINT ID	Longitude	Latitude
0	84°34'35.146"E	23°45'53.07"N	61	84°39'13.17"E	23°44'56.80"N
1	84°34'35.146"E	23°45'53.18"N	62	84°39'16.08"E	23°44'54.22"N
2	84°34'35.146"E	23°45'53.49"N	63	84°39'18.99"E	23°44'51.64"N
3	84°34'35.146"E	23°45'53.49"N	64	84°39'21.88"E	23°44'49.04"N
4	84°34'35.146"E	23°45'56.08"N	65	84°39'21.09"E	23°44'18.09"N
5	84°34'36.488"E	23°45'56.48"N	66	84°39'21.31"E	23°44'16.36"N
6	84°34'36.61"E	23°45'56.49"N	67	84°39'26.24"E	23°44'14.78"N
7	84°34'37.84"E	23°45'56.49"N	68	84°39'29.23"E	23°44'12.81"N
8	84°34'38.69"E	23°45'56.49"N	69	84°39'34.09"E	23°44'10.08"N
9	84°34'39.48"E	23°45'56.49"N	70	84°39'38.55"E	23°44'11.98"N
10	84°34'40.28"E	23°45'56.48"N	71	84°39'38.55"E	23°44'14.55"N
11	84°34'41.07"E	23°45'56.48"N	72	84°39'38.55"E	23°44'15.09"N
12	84°34'41.86"E	23°45'56.48"N	73	84°39'38.55"E	23°44'15.64"N
13	84°34'42.65"E	23°45'56.48"N	74	84°39'38.55"E	23°44'16.18"N
14	84°34'43.44"E	23°45'56.48"N	75	84°39'38.55"E	23°44'16.73"N
15	84°34'44.23"E	23°45'56.48"N	76	84°39'38.55"E	23°44'17.27"N
16	84°34'45.04"E	23°45'56.48"N	77	84°39'38.55"E	23°44'17.82"N
17	84°34'48.48"E	23°45'56.09"N	78	84°39'38.55"E	23°44'18.18"N
18	84°34'51.03"E	23°45'56.09"N	79	84°39'38.55"E	23°44'18.54"N
19	84°34'54.58"E	23°45'56.09"N	80	84°39'38.55"E	23°44'18.89"N
20	84°34'56.89"E	23°45'56.34"N	81	84°39'38.55"E	23°44'19.25"N
21	84°34'59.19"E	23°45'56.59"N	82	84°39'38.55"E	23°44'19.61"N
22	84°35'01.49"E	23°45'56.84"N	83	84°39'38.55"E	23°44'19.97"N
23	84°35'03.79"E	23°45'57.09"N	84	84°39'38.55"E	23°44'20.33"N
24	84°35'06.09"E	23°45'57.34"N	85	84°39'38.55"E	23°44'20.69"N
25	84°35'08.39"E	23°45'57.59"N	86	84°39'38.55"E	23°44'21.05"N
26	84°35'08.89"E	23°45'57.59"N	87	84°39'38.55"E	23°44'21.41"N
27	84°35'11.22"E	23°45'57.59"N	88	84°39'38.55"E	23°44'21.68"N
28	84°35'13.82"E	23°45'57.59"N	89	84°39'35.38"E	23°44'20.16"N
29	84°35'14.70"E	23°45'58.05"N	90	84°39'35.45"E	23°44'20.27"N
30	84°35'16.03"E	23°45'58.40"N	91	84°39'35.81"E	23°44'24.49"N
31	84°35'18.40"E	23°45'58.44"N	92	84°39'35.79"E	23°44'25.71"N
32	84°35'18.68"E	23°45'58.44"N	93	84°39'35.79"E	23°44'26.93"N
33	84°35'18.97"E	23°45'58.44"N	94	84°39'35.79"E	23°44'28.15"N
34	84°35'19.25"E	23°45'58.44"N	95	84°39'35.79"E	23°44'29.37"N
35	84°35'19.54"E	23°45'58.44"N	96	84°39'35.79"E	23°44'30.59"N
36	84°35'19.82"E	23°45'58.44"N	97	84°39'35.79"E	23°44'31.81"N
37	84°35'20.11"E	23°45'58.44"N	98	84°39'35.79"E	23°44'33.03"N
38	84°35'20.39"E	23°45'58.44"N	99	84°39'35.79"E	23°44'34.25"N
39	84°35'20.68"E	23°45'58.44"N	100	84°39'35.79"E	23°44'35.47"N
40	84°35'20.96"E	23°45'58.44"N	101	84°39'35.79"E	23°44'36.69"N
41	84°35'21.25"E	23°45'58.44"N	102	84°39'35.79"E	23°44'37.91"N
42	84°35'21.53"E	23°45'58.44"N	103	84°39'35.79"E	23°44'39.13"N
43	84°35'21.82"E	23°45'58.44"N	104	84°39'35.79"E	23°44'40.35"N
44	84°35'22.10"E	23°45'58.44"N	105	84°39'35.79"E	23°44'41.57"N
45	84°35'22.39"E	23°45'58.44"N	106	84°39'35.79"E	23°44'42.79"N
46	84°35'22.67"E	23°45'58.44"N	107	84°39'35.79"E	23°44'44.01"N
47	84°35'22.96"E	23°45'58.44"N	108	84°39'35.79"E	23°44'45.23"N
48	84°35'23.25"E	23°45'58.44"N	109	84°39'35.79"E	23°44'46.44"N
49	84°35'23.54"E	23°45'58.44"N	110	84°39'35.79"E	23°44'47.66"N
50	84°35'45.52"E	23°45'53.44"N	111	84°39'35.81"E	23°44'49.16"N
51	84°38'11.88"E	23°45'53.16"N	112	84°39'34.47"E	23°44'50.49"N
52	84°38'11.88"E	23°45'53.16"N	113	84°39'31.60"E	23°44'50.69"N
53	84°38'11.88"E	23°45'53.16"N	114	84°39'28.73"E	23°44'50.89"N
54	84°38'11.88"E	23°45'53.16"N	115	84°39'25.86"E	23°44'51.09"N
55	84°38'11.88"E	23°45'53.16"N	116	84°39'22.99"E	23°44'51.29"N
56	84°38'11.88"E	23°45'53.16"N	117	84°39'20.09"E	23°44'51.49"N
57	84°38'11.88"E	23°45'53.16"N	118	84°39'16.74"E	23°44'48.83"N
58	84°38'11.88"E	23°45'48.16"N	119	84°39'16.74"E	23°44'45.32"N
59	84°38'11.88"E	23°45'43.16"N	120	84°39'16.74"E	23°44'38.16"N
60	84°38'11.88"E	23°45'39.16"N	121	84°39'16.74"E	23°44'35.15"N

PROJECT BOUNDARY COORDINATES

POINT ID	Longitude	Latitude	POINT ID	Longitude	Latitude
1	84°34'11.00"E	23°45'31.27"N	51	84°39'18.85"E	23°44'21.81"N
2	84°34'11.00"E	23°45'11.22"N	52	84°39'11.66"E	23°44'20.24"N
3	84°34'11.00"E	23°45'06.62"N	53	84°39'11.66"E	23°44'18.00"N
4	84°34'11.00"E	23°45'02.02"N	54	84°39'11.66"E	23°44'15.76"N
5	84°34'11.00"E	23°44'57.42"N	55	84°39'11.66"E	23°44'13.52"N
6	84°34'11.00"E	23°44'52.82"N	56	84°39'11.66"E	23°44'11.28"N
7	84°34'11.00"E	23°44'48.22"N	57	84°39'11.66"E	23°44'09.04"N
8	84°34'11.00"E	23°44'43.62"N	58	84°39'11.66"E	23°44'06.80"N
9	84°34'11.00"E	23°44'39.02"N	59	84°39'11.66"E	23°44'04.56"N
10	84°34'11.00"E	23°44'34.42"N	60	84°39'11.66"E	23°44'02.32"N
11	84°34'11.00"E	23°44'29.82"N	61	84°39'11.66"E	23°44'00.08"N
12	84°34'11.00"E	23°44'25.22"N	62	84°39'11.66"E	23°43'57.84"N
13	84°34'11.00"E	23°44'20.62"N	63	84°39'11.66"E	23°43'55.60"N
14	84°34'11.00"E	23°44'16.02"N	64	84°39'11.66"E	23°43'53.36"N
15	84°34'11.00"E	23°44'11.42"N	65	84°39'11.66"E	23°43'51.12"N
16	84°34'11.00"E	23°44'06.82"N	66	84°39'11.66"E	23°43'48.88"N
17	84°34'11.00"E	23°44'02.22"N	67	84°39'11.66"E	23°43'46.64"N
18	84°34'11.00"E	23°43'57.62"N	68	84°39'11.66"E	23°43'44.40"N
19	84°34'11.00"E	23°43'53.02"N	69	84°39'11.66"E	23°43'42.16"N
20	84°34'11.00"E	23°43'48.42"N	70	84°39'11.66"E	23°43'39.92"N
21	84°34'11.00"E	23°43'43.82"N	71	84°39'11.66"E	23°43'37.68"N
22	84°34'11.00"E	23°43'39.22"N	72	84°39'11.66"E	23°43'35.44"N
23	84°34'11.00"E	23°43'34.62"N	73	84°39'11.66"E	23°43'33.20"N
24	84°34'11.00"E	23°43'30.02"N	74	84°39'11.66"E	23°43'30.96"N
25	84°34'11.00"E	23°43'25.42"N	75	84°39'11.66"E	23°43'28.72"N
26	84°34'11.00"E	23°43'20.82"N	76	84°39'11.66"E	23°43'26.48"N
27	84°34'11.00"E	23°43'16.22"N	77	84°39'11.66"E	23°43'24.24"N
28	84°34'11.00"E	23°43'11.62"N	78	84°39'11.66"E	23°43'22.00"N
29	84°34'11.00"E	23°43'07.02"N	79	84°39'11.66"E	23°43'19.76"N
30	84°34'11.00"E	23°43'02.42"N	80	84°39'11.66"E	23°43'17.52"N
31	84°34'11.00"E	23°42'57.82"N	81	84°39'11.66"E	23°43'15.28"N
32	84°34'11.00"E	23°42'53.22"N	82	84°39'11.66"E	23°43'13.04"N
33	84°34'11.00"E	23°42'48.62"N	83	84°39'11.66"E	23°43'10.80"N
34	84°34'11.00"E	23°42'44.02"N	84	84°39'11.66"E	23°43'08.56"N
35	84°34'11.00"E	23°42'39.42"N	85	84°39'11.66"E	23°43'06.32"N
36	84°34'11.00"E	23°42'34.82"N	86	84°39'11.66"E	23°43'04.08"N
37	84°34'11.00"E	23°42'30.22"N	87	84°39'11.66"E	23°43'01.84"N
38	84°34'11.00"E	23°42'25.62"N	88	84°39'11.66"E	23°42'59.60"N
39	84°34'11.00"E	23°42'21.02"N	89	84°39'11.66"E	23°42'57.36"N
40	84°34'11.00"E	23°42'16.42"N	90	84°39'11.66"E	23°42'55.12"N
41	84°34'11.00"E	23°42'11.82"N	91	84°39'11.66"E	23°42'52.88"N
42	84°34'11.00"E	23°42'07.22"N	92	84°39'11.66"E	23°42'50.64"N
43	84°34'11.00"E	23°42'02.62"N	93	84°39'11.66"E	23°42'48.40"N
44	84°34'11.00"E	23°41'58.02"N	94	84°39'11.66"E	23°42'46.16"N
45	84°34'11.00"E	23°41'53.42"N	95	84°39'11.66"E	23°42'43.92"N
46	84°34'11.00"E	23°41'48.82"N	96	84°39'11.66"E	23°42'41.68"N
47	84°34'11.00"E	23°41'44.22"N	97	84°39'11.66"E	23°42'39.44"N
48	84°34'11.00"E	23°41'39.62"N	98	84°39'11.66"E	23°42'37.20"N
49	84°34'11.00"E	23°41'35.02"N	99	84°39'11.66"E	23°42'34.96"N
50	84°34'11.00"E	23°41'30.42"N	100	84°39'11.66"E	23°42'32.72"N

It is certified that:

- The geographical coordinates (Latitude and longitude) used in the preparation of Mining Plan are in accordance to the working order and the geographical coordinates covered by the Mining plan do not encroach into any adjacent coal block.
- There is no CBM boundary overlap.

The certificate issued hereby is based on the inputs and self certified copies of plans submitted by the party. CMPDI neither vouches for accuracy and authenticity of the information provided by the party nor is responsible for it.

16/3/2020

महा प्रबंधक (गवेषणा)
GENERAL MANAGER (EXPLORATION)
सीएमपीडीआई लि०, रांची-31
C.M.P.D.I. LTD., RANCHI-31

Authorised Signatory

Faiz Tayab
उप महाप्रबंधक / Faiz Tayab
Dy. General Manager
अउ. महाप्रबंधक(सीएमएम)
Add. General Manager(CMFM)
पी वी यू वी एन / PVUNL

Legend

- EXTENSION AS PER CERTIFIED
- CARDINAL POINTS OF GEOLOGICAL BOUNDARY
- CARDINAL POINTS OF PROJECT BOUNDARY
- GEOLOGICAL BLOCK BOUNDARY
- PROJECT BOUNDARY
- SAFETY ZONE
- SURFACE DUMP
- QUARRY
- PIT OFFICE
- BACKFILLED DUMP
- RAPID LOADING SYSTEM
- EXTENT
- HAUL ROAD
- GARLAND DRAIN
- DISMANTLED STACKYARD
- TOP SOIL
- SETTLING POND
- WEIGH BRIDGE
- INFRASTRUCTURE
- VIEW POINT
- ROAD
- TOE WALL
- ACCESS TRENCH

SUBODH JOHN PURTI
Sr. Manager (Civil/Coal Mine)
PATRATU VIDYUT UTPADAN NIGAM LTD.
(A Subsidiary of NTPC Ltd. in Joint Venture with JBVNL)
Patratu, Dist.-Ramgarh-829119

Plate–II

पीवीयूएन PVUN

PATRATU VIDYUT UTPADAN NIGAM LIMITED
A Subsidiary of NTPC Ltd. in JV with JBVNL

JOB TITLE : MINING PLAN INCLUDING MINE CLOSURE PLAN FOR BANHARDIH COAL MINE, AURANGA COALFIELD, BLOCK–CHANDWA, DISTRICT–LATEHAR, JHARKHAND, INDIA

SUBJECT : CONCEPTUAL PLAN

RF – 1:10000

Prepared by–
United Exploration India Pvt. Ltd.
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Newtown, West Bengal–700156