सत्यमेव जयते

भारतीय राष्ट्रीय राजमार्ग प्राधिकरण
(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)
National Highways Authority of India
(Ministry of Road Transport & Highways, Government of India)
प.का.ई. अलीगढ़, ग्राम-भीकमपुर, एन.एच-34 के कि०मी० 132.400 (आर०एच०एस०)
अलीगढ़ बाईपास, अलीगढ़-202001 (उ०प्र०)
PIU Aligarh, Village-Bhikampur, At KM 132.400 (RHS) on NH-34,
Aligarh Bypass, Aligarh - 202001 (U.P.)
ई-मेल/Email : aligarh@nhai.org | nhaipiubsr001@gmail.com

NHAI/PIU-ALG/44016/GAP/2024/D- 23178

09.12.2024

Invitation of Public Comments

Sub: Proposal for Overhead road Crossing by 132 KV Etah(220) M/s Shree Cement Transmission Line at 220 KV S/S Etah at Chainage 228+562, location no. 40-41 on NH-34 (Aligarh – Kanpur Section), near Aaspur, District – Etah.

Executive Engineer, UPPTCL, Mainpuri submitted the proposal for permission of O/H road crossing by 132KV ETah (220) M/s Shree Cement Transmission Line at 220 KV S/S Etah at Ch.228+562, at location no. 40-41 on NH-34 (Aligarh-Kanpur Section), near Aaspur, District- Etah in the state of Uttar Pradesh.

2. From the submitted proposal, it is seen that the overhead crossing length is 46m. Distance from centre of tower to road boundary is 70.00m (LHS) and 150.00m (RHS).

3. As per the guidelines, issued by the Ministry vide OM No.RW/NH-33044/29/ 2015/ S&R(R) dated 22.11.2016, the application shall be put out in the public domain for 30 days for seeking claims and objections (on grounds of public inconvenience, safety and general public interest).

4. In view of the above, comments of the public on the above application is invited to the below mentioned address, which should reach by this office within 30 days from the date of publication beyond which no comments shall be entertained.

The Project Director,
National Highways Authority of India
Project Implementation Unit- Aligarh
Village- Bhikampur, At Km. 132.400 (RHS) on NH-34,
Aligarh Bypass, Aligarh -202001 (U.P.)

Encl: As above.

(Indresh Kumar)
Project Director

Copy to:
1. Web Admin, NHAI-HQ- with request for uploading on the NHAI website.
2. Technical Director, NIC, Transport Bhawan, New Delhi– with request for uploading on the Ministry's website. (Email: mansoor@nic.in)
3. Regional Officer (W-UP), NHAI-Lucknow for kind information.
4. Executive Engineer, UPPTCL, Mainpuri for information. (Email: eeetdmnpri@upptcl.org).

प्रधान कार्यालय : जी–5 एवं 6, सेक्टर–10, द्वारका, नई दिल्ली–110075 ● दूरभाष : 91–11–25074100, 200 ● वेबसाइट : www.nhai.gov.in
Corporate Office : G-5 & 6, Sector-10, Dwarka, New Delhi-110075 ● Phone · 91-11-25074100, 200 ● Website: www.nhai.gov.in

CHECK-LIST

FOR NH –34 ROAD CROSSING BY 132 KV SC (TOWER ON DC) ETAH GANGANPUR (220 KV SS) SHREE CEMENT FACTORY TRANSMISSION LINE

S.NO.	DESCRIPTION	DETAILS
1.	National Highway Number	NH-34
2.	Name of Crossing	Aligarh - Kanpur
3.	SYSTEM OF SUPPLY (i.e VOLTAGE) FREQUENCY NO.OF PHASES,WHETHER NEUTRAL IS EARHTED OR NOT	132 KV S/C 3 phase 50 cycles A.C. AND 1 EARTHWIRE/ 24 Fiber OPGW
4.	Position of towers	BETWEEN LOC. NO.AP-21 (DC+10) & AP-22(DC+10)
5.	NORMAL SPAN ATLAPWING CONDUCTOR	380 M.
6.	MAX.SAG AT NORMAL SPAN	10.475 M.
7.	CROSSING SPAN	220 M.
8.	Preceding span	345 M.
9.	Succeeding span	290 M.
10.	Height of structure above ground and below ground separately and details of foundation	A) Location No.AP-21 (DC+10) height above GL 40.849 M depth below GL 3.00M. B) Location No.AP-22 (DC+10) height above GL 40.849 M depth below GL 3.00M
11.	SAG OF 3*3 Panther CONDUCTOR SIZE 30/3.00 + 7/3.00MM	$8.843*(220)^2/(380)^2+0.30$(sag error)=2.284
12.	CLEARANCE OVER ROAD	20.00 M.
13.	Height above ground level of (1) Lowest conductor on insulator and (2) guard wire on bracket above ground level	20.00 M.
14.	Height of road level above ground level measured at the foot of the structure.	Location No. 21 (DC+10) =3.60 M. Location No. 22 (DC+10) = 3.60 M

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Elect.Transmission Division
Mainpuri

15.	Angle of road crossing	81^0 00' 00"
16.	Distance from NH Boundary From center of tower	Loc. No. 21 (DC+10) =70 M. Loc. No. .22(DC+10) = 130M
17.	Perpendicular distance from center of tower to center of road	Loc. No. 21 (DC+10) =80 M. Loc. No. 22 (DC+10) = 140M
18.	Protection of assembly to the line	Anti Climbing devices provided
19.	No. of stay required	NO.
20.	Minimum Factor of Safety	2.
21.	Size of power conductor mm.	ACSR Panther (Conductor dia.21.00 MM
22.	Size of Earth Wire/OPGW	Steel 7/3.15 (Overall Diameter - 9.45 mm)/ 24 Fiber Optic Cable
23.	FOUNDATION TYPE	FS
24.	PLAN PAPER DIAGRAM	PROFILE(ENCLOSED)
25.	EARTHING	PIPE TYPE EARTHED

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Mainpuri

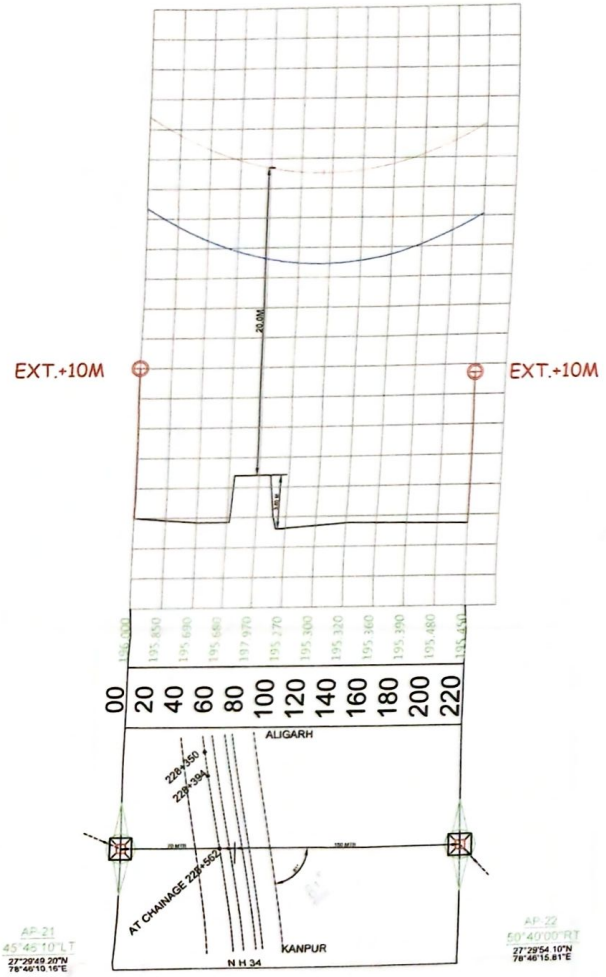
132 KV SC (TOWER ON DC) ETAH GANGANPUR(220 KV S/S) - SHREE CEMENT FACTORY TRANSMISSION LINE.

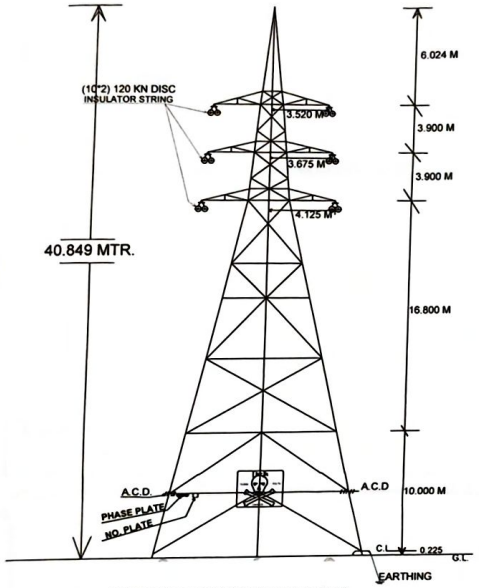
NATIONAL HIGHWAY- 34 CROSSING PROPOSAL

PRO.LOC. NO. -: 40	DC+10		
WIND SPAN -:	282		
WEIGHT SPAN (COLD) -:	205	116	321
WEIGHT SPAN (HOT) -:	195	114	309

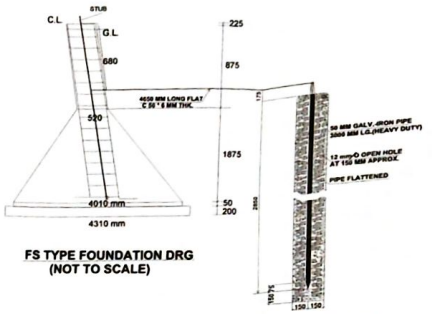
220

PRO.LOC. NO. -: 41	DC+10		
WIND SPAN -:	255		
WEIGHT SPAN (COLD) -:	104	188	292
WEIGHT SPAN (HOT) -:	106	176	282





SINGLE LINE DIAGRAM "C+10" TOWER
(NOT TO SCALE)



FS TYPE FOUNDATION DRG
(NOT TO SCALE)

(NOT TO SCALE)

1. ANCHOR SHACKLE
2. CHAIN LINK
3. YOKE PLATET.S. & L.S.
4. BALL CLEVIS
5. TOWER SIDE ARCHING HORN
6. SOCKET CLEVIS
7. LINE SIDE ARCHING HORN
8. CLEVIS
9. COMPRESSION DEAD END CLAMP

EARTHING DETAILS
(NOT TO SCALE)

DANGER PLATE (TYPICAL)
(NOT TO SCALE)

ANTI CLIMBING DEVICE (TYPICAL)
(NOT TO SCALE)

conductor properties		
overall diameter d =	0.021	m
gross sec area a =	0.0002613	m^2
weight of wire w_1 =	0.974	kg/meter
u.t.s U=	9144	kg
mod. of elasticity E =	8E+09	kg/m2
coeff of lin expn e=	0.0000178	per° C
Wind pr. on wire w_2=	136.5	$kg/meter^2$
span length L=	220	meter

SUMMARY OF SAG TENSION

	SAG (m)	TENSION (kg)
EVERYDAY TEMP NO WIND	8.738	2012
EVERYDAY TEMP FULL WIND		4574
EVERYDAY TEMP 75% OF FULL WIND		3833
MIN TEMP 36% OF FULL WIND		3004
MAXIMUM TEMP NO WIND	10.452	1682
MIN TEMP NO WIND	7.407	2373

SAG TENSION CALCULATION (ACSR PANTHER CONDUCTOR)

प्रबंधक (तकनी) / Manager (Tech.)
राष्ट्रीय राजमार्ग प्राधिकरण / National Highways Authority of India
परियोजना कार्यान्वयन इकाई-अलीगढ़ / Project Implementation Unit-Aligarh

U.P.POWER TRANSMISSION CORPORATION LIMITED

132 KV SC (TOWER ON DC) ETAH GANGANPUR(220 KV S/S) - SHREE CEMENT FACTORY TRANSMISSION LINE.

SCALE - NTS. | LENGTH : 220 MTR. DATE :

M/S GUPTA CONSTRUCTION COMPANY

PREPARED BY

FOR- U. P. P. T. C. L.

Executive Engineer
Proj. Transmission Division

CHECKED BY | CHECKED & SUBM...

FOR- NHAI

परियोजना निदेशक / Project Director
राष्ट्रीय राजमार्ग प्राधिकरण / National Highways Authority of India
परियोजना कार्यान्वयन इकाई-अलीगढ़ / Project Implementation Unit-Aligarh