



महाराष्ट्र वन विभाग
पंजीकृत नं. 022-28692668/ 28692596

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महाराष्ट्र शासन
महसूल व वन विभाग
अपर प्रधान मुख्य वनसंरक्षक
वन्यजीव पश्चिम प्रदेश मुंबई^{३५०}
जुनी एम.एच.बी. कॉलनी, एल.टी.रोड,
बोरीवली (पश्चिम), मुंबई - 400091



जा.क्र.कक्ष-3/जमीन/NBWL/प्र.क्र.107/ ४७१ /2023-24

दिनांक - १४ ऑगस्ट 2023

पत्र/ईमेलवारे

प्रति,

अपर प्रधान मुख्य वनसंरक्षक व केंद्रस्थ अधिकारी,
महाराष्ट्र राज्य, नागपूर.

विषय : Diversion of 16.6846 ha forest land in favour of Central Railway, Ghatkopar for construction of third Railway line between Kalyan to Kasara station of 67.52 Km in Ulhasnagar, Kalyan and Shahapur Talukas in Thane District in the State of Maharashtra – regarding.

- संदर्भ :-**
- 1) मुख्य वनसंरक्षक (प्रादेशिक) ठाणे यांचेकडील पत्र क्र.कक्ष10/वसं/प्र.क्र.67/475, दि.04/12/22
 - 2) शासन पत्र क्र.FC-II/MH-219/2023-NGP/11867, दि.12/07/2023
 - 3) या कार्यालयाकडील पत्र क्र.कक्ष-3/जमीन/FCA/प्र.क्र.107/798, दि.17/07/2023
 - 4) उप वनसंरक्षक (वन्यजीव) ठाणे यांचेकडील पत्र क्र.कक्ष-4/जमीन/FCA/रेल्वे/553, दि.11/08/23

विषयांकित प्रकरणी संदर्भीय पत्र क्र.1 अन्वये त्रुटी पूर्तता अहवाल मुख्य वनसंरक्षक (प्रादेशिक), ठाणे यांनी आपणांस सादर केला होता. सदरहु शासनाने संदर्भीय पत्र क्र.2 अन्वये विषयांकित प्रकरणी सादर केलेल्या अहवालाचे अनुषंगाने 1 ते 7 मुद्यांवर त्रुटी उपस्थित केल्या आहेत. तसेच या कार्यालयाचे संदर्भीय पत्र क्र.3 अन्वये उप वनसंरक्षक (वन्यजीव) ठाणे यांना संदर्भीय पत्र क्र.2 मध्ये उपस्थित केलेल्या मुद्यांपैकी ठाणे वन्यजीव विभागाशी संबंधीत मुद्यांबाबतचा अहवाल सादर करणेबाबत कळविले होते.

2.00 त्याअनुषंगाने मुद्दा क्र. 4 ते 7 हे ठाणे वन्यजीव विभागाशी संबंधीत असल्याने सदरहू मुद्यांबाबतचा अहवाल उप वनसंरक्षक (वन्यजीव) ठाणे यांनी संदर्भीय पत्र क्र.4 अन्वये या कार्यालयास सादर केला असून सदर अहवालाची प्रत पुढील आवश्यक कार्यवाहीसाठी आपलेकडे पाठविण्यात येत आहे.

सहपत्र :- वरीलप्रमाणे.

by me
(डॉ. व्ही. क्लेमेंट बेन) —

अपर प्रधान मुख्य वनसंरक्षक
वन्यजीव पश्चिम प्रदेश
मुंबई

प्रति : उप वनसंरक्षक (वन्यजीव) ठाणे यांना माहिती व योग्य त्या कार्यवाहीसाठी अग्रेषित.

प्रत : उप मुख्य अभियंता, (C) घाटकोपर मध्ये रेल्वे, घाटकोपर, मुंबई यांना माहिती व योग्य त्या कार्यवाहीसाठी.

उपर प्रधान
काला

प्रधान

23 भृत्य
1418123

14 AUG 2023



उप वनसंरक्षक, (वन्यजीव) ठाणे यांचे कार्यालय

एल.बी.एस मार्ग, तीन हात नाका, नौपाडा, ठाणे (प) 400 602

प्रशासकीय अधिकारी दूसर्यांनी नं. 022 2540 2522 ईमेल : dcfwlthane@gmail.com, cfwlthane@mahaforest.gov.in

जा.क्र.कक्ष-4/जमीन/FCA/रेल्वे/ 553 /2023-24

ठाणे 400 602, दिनांक. 11 / 08 /2023

पत्र

प्रति,

मा. अपर प्रधान मुख्य वनसंरक्षक,
(वन्यजीव) पश्चिम मुंबई

विषय : Diversion of 16.6846 ha. Forest land in favour of Central Railway, Ghatkopar for construction of third Railway line between Kalyan to Kasara station of 67.52 km in Ulhasnagar, Kalyan and Shahapur Talukas in Thane District in the State of Maharashtra regarding.

- संदर्भ : 1. मा. मुख्य वनसंरक्षक, (प्रा.) ठाणे यांचे कार्यालयाकडील पत्र क्रमांक कक्ष-10/वसं/प्र.क्र.67/16-17/226 /2023-24 दिनांक 17/07/2023.
2. शासन पत्र क्र. FC-II/MH-219/2023-NGP/11867, दिनांक 12/07/2023.
3. उप वनसंरक्षक, (प्रा.) शहापूर यांचे कार्यालयाकडील पत्र क्रमांक कक्ष-6(3)/20/जमीन/ 1740 /2023-24 दिनांक 18/07/2023
4. उप मुख्य अभियंता, (C) घाटकोपर मध्य रेल्वे, घाटकोपर, मुंबई यांचेकडील पत्र क्रमांक CE/GC/41/Forest/KYN-KSRA दिनांक 04/08/2023.

मा. मुख्य वनसंरक्षक, (प्रा.) ठाणे यांचेकडील उपरांक्त संदर्भिय पत्र क्रमांक 1. चे सोबत शासना कडील उपरोक्त संदर्भ क्रमांक 02. चे पत्र या कार्यालयाकडे प्राप्त झालेले आहे. सदरहू शासन पत्रान्वये विषयांकीत प्रकरणी सादर केलेल्या अहवालाचे अनुषंगाने 01 ते 07 मुद्यांवर त्रुटीपूर्तता अहवाल सादर करणे बाबत कळविण्यात आलेले आहे. तसेच उप वनसंरक्षक, (प्रा.) शहापूर कार्यालयाकडील उपरोक्त संदर्भिय पत्र क्रमांक 3. अन्वये संदर्भिय पत्र क्रमांक 2. मध्ये उपस्थित केलेल्या मुद्यांपैकी ठाणे वन्यजीव विभागाशी संबंधीत मुद्यांबाबतचा अहवाल सादर करणे बाबत कळविण्यात आलेले आहे.

मुद्दा क्रमांक 04. ते 07. हे ठाणे वन्यजीव विभागाशी संबंधीत असुन, सदरहू मुद्यांबाबतचा अहवाल खालील प्रमाणे सादर करण्यात येत आहे.

Serial Number	Queries	Compliance
iv.	Iv: Details of structures proposed in the instant proposal for smooth movement of animals are not submitted. The same needs to be submitted along with location details:	iv. Details of structures proposed for smooth movement of animals is submitted by the user agency to this office and attached as annexure I (Toposheet map) and II (list of structures between kalyan Kasara) Along herewith. (2 Copys)
v	State Government has mentioned that the proposed project is within 10kms default Eco sensitive zone of Tansa Wildlife Sanctuary. Since Eco sensitive zone of Tansa Wildlife Sanctuary has not been notified, ESZ is deemed to be 10kms. The State Government shall obtain comments from PCCF(Wildlife) Maharashtra on the importance of area from wildlife point of view and conservation measures, if any shall be submitted.	Tansa Wildlife sanctuary is home to wildlife such as wild boar, hare, peahens hares and common langurs. Already two railway lines are in existence and the third railway line to the east of the existing lines is being proposed in the current proposal hence mitigation measures such as noise barriers within Tansa Wildlife Sanctuary may be prescribed. However, various structures which will act as mitigation structures for effective wildlife crossing is being submitted for your perusal and consideration. However, DCF Shahpur/Thane may comment on the importance of the Eco sensitive zone from wildlife point of view.
vi	The scale of toposheet submitted by Thane Wildlife division needs to be verified	The toposheet of 1:75000 scale depicting the Tansa wildlife sanctuary along with the proposed railway and the boundaries of the Eco sensitive zone, attested by concerned authorities is attached as annexure
vii	The DCF Thane Wildlife has mentioned in the part II(xi) that" No rare/endangered/unique species of flora and fauna found in the proposed area during inspection " which needs clarity whether there are no rare/endangered/unique species of flora and fauna in the area at all. Clarification from Chief Wildlife warden is needed.	No rare/endangered/ unique species of flora and fauna is found in the area of 0.1366 of Tansa Wildlife Sanctuary proposed to be diverted in the said proposal.

वरीलप्रमाणे ठाणे वन्यजीव विभागाशी संबंधीत मुद्दा क्रमांक 04. ते 07. बाबतचा अहवाल सादर करण्यात येत आहे. तरी कृपया आपले मार्फत सदरहू प्रकरणी पुढील कार्यवाही होणेस विनंती आहे.

सहपत्र : वरीलप्रमाणे.

(अक्षय गाजामिय)

उप वनसंरक्षक

(वन्यजीव) ठाणे

M/2/2

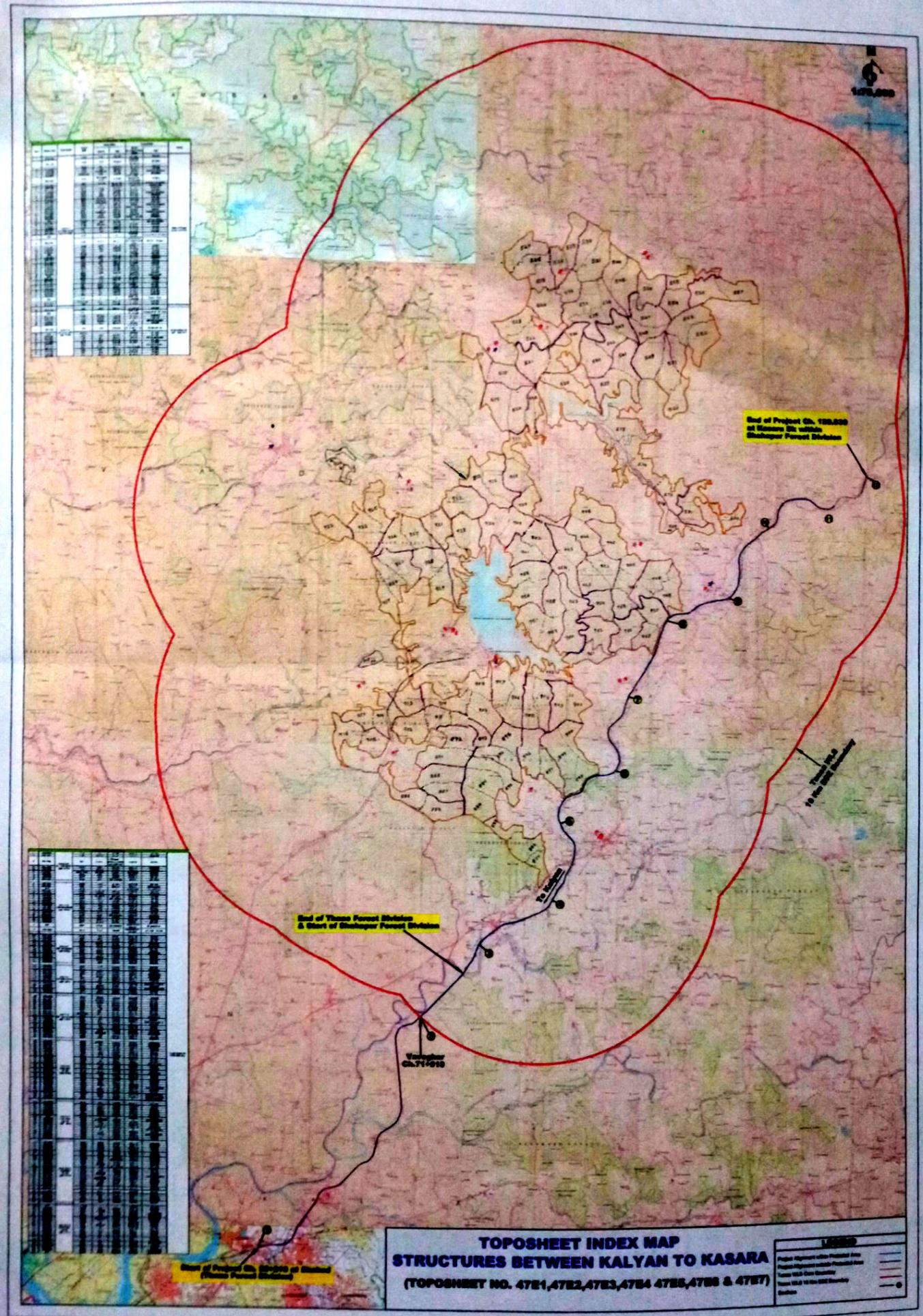
प्रतिलिपी : मा. मुख्य वनसंरक्षक, (प्रा.) ठाणे यांचेकडे माहितीसाठी सविनय सादर.

प्रतिलिपी : मा. संचालक, चंद्रपूर वन अकादमी, चंद्रपूर यांचेकडे माहिती तथा जरुरी कार्यवाहीसाठी सविनय सादर.

2/- मा. प्रधान सचिव, वने, महाराष्ट्र राज्य, मंत्रालय, मुंबई यांचे अध्यक्षतेखाली दिनांक 11/08/2023 रोजी विषयांकीत प्रकरणी आयोजित व्ही.सी. मध्ये प्रकल्प यंत्रणे मार्फत सादर करण्यात येणा-या उपशमन योजनांचा आराखडा (Mitigation Plan) आपले मार्फत पडताळणी करणेकामी आपले कार्यालयाकडे सादर करणेबाबत सुचना दिलेल्या आहेत. त्यानुषंगाने प्रकल्प यंत्रणेमार्फत सादर करणेत आलेला उपशमन योजनांचा आराखडा (Mitigation Plan) पुढील कार्यवाहीसाठी सोबत सादर करण्यात आलेला आहे. कृपया अवलोकन होऊन पुढील आवश्यक कार्यवाही होणेस विनंती.

प्रतिलिपी : उप वनसंरक्षक, (प्रा.) शहापूर यांचेकडे माहिती व जरुरी कार्यवाहीसाठी सस्नेह अग्रणीत.

प्रत : उप मुख्य अभियंता, (C) घाटकोपर मध्य रेल्वे, घाटकोपर, मुंबई यांचेकडे माहिती व जरुरी कार्यवाहीसाठी.



List of Structures between Kalyan to Kasara

Sl. No.	Structure Types	Project Section	Location (KM)	Existing Bridge		Proposed Bridge		Remark
				Span (m)	Type	(No. of Span x Width x Height)	Types	
1	Minor bridge		53.678	2X0.23	Hume Pipe	1x1.2 x 1.2	HUME PIPE	
2	Major bridge		55.294	3x9.15	Steel girder	1x9.15x2.445 + 3x9.15x5.485 + 1x9.15x3.415	PSC Girder	
3	Minor bridge		55.253	0.5 m	Stone Slab	1x1.2 x 1.2	HUME PIPE	
4	Minor bridge		55.943	1x2.0	Stone Arch	1x1.2x1.45	RCC BOX	
5	Minor bridge		56.800	1X3.0MX2.4M	PSC Slab	1x3.1x2.4	SLAB AND ABUTMENT	
6	Minor bridge		57.102/ 59.097	0.45m	stone slab	1x1.2 x 1.2	HUME PIPE	
7	Major bridge		57.739	5x12.2+1x18.3+ 5x12.2	steel girder	6 x 13.7 x 9.625+ 1 x 19.98 x 13.520 + 6 x 13.7 x 9.335	PSC Girder	
8	Minor bridge		57.865	1.8M+0.5M	Pipe Line Xing	1x9.15 x 4.497	SLAB AND ABUTMENT	
9	Major bridge		57.908	Pipe Line Xing	Pipe Line Xing	1 x 24.40 x 2.967	Composite Girder	
10	Minor bridge		58.276	2X0.75 m	Stone Slab	1x1.2 x 1.2	HUME PIPE	
11	Minor bridge		58.399	1x1.20	Hume Pipe	1x1.2 x 1.2	HUME PIPE	
12	Minor bridge		59.706	1x3.65	PSC Slab	1x4.75x4.5	SLAB AND ABUTMENT	
13	Minor bridge		59.819	2x0.76	Stone slab	1x1.2 x 1.2	HUME PIPE	
14	Minor bridge		60.445	2X0.76 m	Stone slab	1x1.2 x 1.2	HUME PIPE	
15	Minor bridge		60.553	1x3.0 x 2.15	RCC Box	1x3.0 x 2.15	RCC BOX	
16	Minor bridge		60.583	2X0.60 mx0.25m	Stone slab	1x1.2 x 1.2	HUME PIPE	
17	Minor bridge		61.028	1x2.1	RCC Box	1x2.1x1.2	SLAB AND ABUTMENT	
18	Minor bridge		61.288	2X0.76 m	Stone slab	1x1.2x1.2/ 1x1.8 x 1.8	HUME PIPE	
19	Minor bridge		61.887	1x2.0	RCC Box	1x2.0x1.35	RCC BOX	
20	Minor bridge		61.902	1x2.0mx2.0M	RCC Box	1x6.1x2.0	SLAB AND ABUTMENT	
21	Minor bridge		62.076	1x2.25	RCC Slab	1x2.25x2.771	RCC BOX	
22	Minor bridge		63.199	3 x 0.80 m	Stone slab	1x1.2x1.2/ 1x1.8 x 1.8	HUME PIPE	
23	ROB	Ch. 53+210 to 71+610 Length = 18.400 Km	63/21-22	---	---	1x50.0 x 7.54	Composite Girder	
24	Minor bridge		63.369	1x0.23	Hume pipe	---	EXT NOT REQUIRED	
25	Minor bridge		63.596	1X0.46 m	Stone slab	1x1.2 x 1.2	HUME PIPE	
26	Minor bridge		63.700	1x0.5	Stone slab	1x1.2x1.422	RCC BOX	
27	Minor bridge		64.43	1x0.76	Stone slab	1x1.2x1.35	RCC BOX	
28	Minor bridge		64.55	1x0.95	Stone slab	1x1.2x1.35	RCC BOX	
29	ROB		66.567	---	---	1x36.0x6.445 + 2x1.8x0x2.0	Composite Girder + PSC Girder	
30	Major bridge		64.935	12 x 9.14	Stone arch	1x9.15 x 5.65 +6 x 21.04 x 13.912 +1x9.15 x 7.35	PSC Slab + PSC Girder	
31	Minor bridge		65.596	3X0.70	Stone slab	1X2.90x1.35	RCC BOX	
32	Minor bridge		65.827	1x0.45	Stone slab	1x1.2x1.35	RCC BOX	
33	Minor bridge		66.926	1x0.80	Stone slab	1x1.2x1.35	RCC BOX	
34	RUB		67/24-26	---	---	1x6.0x4.0m	RCC BOX	
35	Minor bridge		67.027	1x0.60	Stone slab	1x1.2x1.35	RCC BOX	
36	Minor bridge		67.561	0.47 m	Stone slab	1x1.2 x 1.2	HUME PIPE	
37	Minor bridge		67.837	1x0.47	Stone slab	1x1.2x1.35	RCC BOX	
38	Minor bridge		67.951	1x0.51	Stone slab	1x1.2x1.35	RCC BOX	
39	Minor bridge		68.929	1x3.2	PSC Slab	1x3.2x2.40	RCC BOX	
40	Minor bridge		69.364	2X3.05	PSC Slab	2X3.30x2.794	RCC D BOX	
41	Minor bridge		69.42	1x3.55	PSC Slab	1x3.55x3.527	RCC BOX	
42	Minor bridge		69.612	1x0.60	Stone slab	1x1.2x1.31	RCC BOX	
43	ROB		69.694	---	---	1x36.0 x 6.449	Composite Girder	
44	Minor bridge		69.954	1x0.77	Stone slab	1x1.2x1.355	RCC BOX	
45	Minor bridge		70.024	1x1.23	Stone arch	1x1.23x1.35	RCC BOX	
46	Minor bridge		70.133	1x1.50	Stone arch	1x1.55x1.60	RCC BOX	

List of Structures between Kalyan to Kasara

Sl. No.	Structure Types	Project Section	Location (KM)	Existing Bridge		Proposed Bridge		Remark
				Span (m)	Types	(No. of Span x Width x Height)	Types	
47	Minor bridge	Section 1 to 2 Ch. 53+210 to 71+610	70.371	2X0.78	Stone slab	1x2.0x1.35	RCC BOX	
48	Minor bridge		70.375	1X3.05	PSC Slab	1x3.05x2.65	RCC BOX	
49	Minor bridge		70.638	0.47	Stone slab	1x1.2x1.1.2	HUME PIPE	
50	Minor bridge		70.751	0.46	Stone slab	1x1.2x1.1.2	HUME PIPE	
51	Minor bridge		70.932	0.46	Stone slab	1x1.2x1.1.2	HUME PIPE	Shahad to Vaveghar (Outsite 10 Km ESZ)
52	ROB		71.048	---	---	2x36.0 x 6.63 + 4x18.0x5.558	Composite Girder	
53	Minor bridge		71.226 /71.221	0.8 m	Stone slab	1x1.2x1.1.2	HUME PIPE	
54	Minor bridge		71.447	1x0.91	Hume pipe	1x1.2x1.35	RCC BOX	
55	Minor bridge	Section 2 to 3 Ch.71+610 to 77+000 Length =5.39 Km	71.932	2x0.76	Stone arch	1x1.97x1.481	RCC BOX	
56	ROB		72.021	---	---	1x51.0 x 6.551 + 9x18.0 x 4.43	Composite Girder + PSC Girder	
57	Minor bridge		72.516	1X0.76 m	Stone slab	1x1.2x1.1.2	HUME PIPE	
58	Minor bridge		72.592	3X0.8 m	Stone slab	1x1.2x1.1.2	HUME PIPE	
59	Minor bridge		72.962	3X0.80 m	Stone slab	---	EXT NOT REQUIRED	
60	Minor bridge		73.165	1x1.20	Stone arch	1x1.2x2.0	RCC BOX	
61	Major bridge		73.446	1 x 12.2	steel girder	1x 9.15 x 4.14+ 1 x 13.7 x4.508+1x 9.15 x 1.916	PSC Slab and Girder	Vaveghar to Kasara Bk (Within 10 Km ESZ)
62	RUB		74/20-22	---	---	1x6.0x4.5m	RCC BOX	
63	Minor bridge		74.042	1x0.90	Stone arch	1x1.2x2.25	RCC BOX	
64	Minor bridge		74.364	1x6.1	Stone arch	1x6.1x3.5	PSC slab and Abutment	
65	Minor bridge		75.022	1x0.60	Stone slab	1x1.2x1.35	RCC BOX	
66	Minor bridge		75.267	1x0.76	Stone slab	1x1.2x1.35	RCC BOX	
67	Minor bridge		75.638	0.85 m	Stone slab	---	EXT NOT REQUIRED	
68	Major bridge		76.041	15 x 7.62	Stone arch	9 x 21.0x3x15.02	PSC Girder	
69	Minor bridge		76.297	2x0.61	Stone slab	1x1.2x1.35	RCC BOX	
70	Minor bridge		76.55	1x0.46	Stone slab	1x1.2x1.525	RCC BOX	
71	Minor bridge		76.771	1x0.76	Stone slab	1x1.2x1.35	RCC BOX	

List of Structures between Kalyan to Kasara

Sl. No.	Structure Types	Project Section	Location (KM)	Existing Bridge		Proposed Bridge		Remark
				Span (m)	Types	(No. of Span x Width x Height)	Types	
72	Minor bridge		77.735	1x2.0	RCC Box	1x2.0x2.15	RCC BOX	
73	Minor bridge		77.951	3x0.76 m	Stone slab	2x1.2 x 1.2	HUME PIPE	
74	Major bridge	Section 3 to 4 Ch.77+000 to 82+000 Length =5.00 Km	78.104	6 x 3.4 m	3 x 9.14 m steel Girder(converted into 6 x 3.4 m RCC Box)	6x4.0x5.79	RCC Box	
75	Minor bridge		78.449	0.60m	Stone slab	1x1.2 x 1.2	HUME PIPE	
76	Minor bridge		79.49	2x0.75 m	Stone slab	2x1.2 x 1.2	HUME PIPE	
77	Major bridge		79.678/ 79.681	1X7.75x3.8	Stone arch	1X12.20x5.77	RCC BOX	
78	Minor bridge		80.828	2x2.21	RCC Box	1x4.87x3.15	RCC BOX	
79	Minor bridge		81.129	1x0.60	Stone slab	1x1.20x1.70	RCC BOX	
80	Minor bridge		81.418	2x3.9	RCC Double Box	2x3.9x3.0	RCC D BOX	
81	Minor bridge		82.005	1x0.60	Stone slab	1x1.20x1.35	RCC BOX	
82	Minor bridge		82.314	1x1.2	Hume pipe	1x1.2 x 1.2	HPC/Syphon Pipe	
83	ROB		82.328	---	---	1x 3.60 x 6.409	Composite Girder	
84	Minor bridge		82.429	1x1.65x1.65	RCC arch	1x1.65x1.80	RCC BOX	
85	Minor bridge		82.602	1x0.6x0.6	Stone slab	1x1.2 x 1.2	HUME PIPE	
86	Minor bridge		82.794	1x1.80x3.10	RCC arch	1x1.80x3.25	RCC BOX	
87	Minor bridge		83.019	2x2.4	RCC Double Box	1x5.20x2.55	RCC BOX	
88	Minor bridge		83.330	1x0.65	Stone slab	1x1.20x1.35	RCC BOX	
89	Minor bridge		83.408	1x0.65	Stone slab	1x1.20x1.537	RCC BOX	
90	Minor bridge		83.437	1x0.65	Stone slab	1x1.20x1.35	RCC BOX	
91	Minor bridge	Section 4 to 5 Ch.82+000 to 87+000 Length =5.00 Km	83.861	1x2.30	Stone arch	1x2.3 x 3.15	RCC BOX	
92	Minor bridge		84.136	1x1.50	Stone arch	1x1.5x1.40	RCC BOX	
93	Minor bridge		84.250	1x2.10	Stone arch	1x2.10x3.40	RCC BOX	
94	Minor bridge		84.501	2x1.66	RCC Double Box	2x1.80x1.35	RCC D BOX	
95	Minor bridge		85.282	0.61	Stone slab	1x1.2 x 1.2	HUME PIPE	
96	Minor bridge		85.409	2x0.61	Stone slab	1x1.80x1.35	RCC BOX	
97	Minor bridge		85.793	1x2.1x2.85	RCC Box	1X2.1x3.0	RCC BOX	
98	ROB		85.943	1x 18.3m	Composite Girder	1x24.0x6.71 + 1x 36.0x7.072	Composite Girder	
99	Major bridge		86.138	7 x 7.62	Stone arch	4x19.94 x4.93 + 2 x 9.15x5.62	PSC Girder + PSC slab	
100	Major bridge		87.297	1x0.60	Stone slab	1x1.20x1.35	RCC BOX	
101	Minor bridge		88.13	1x0.60	Stone slab	1x1.20x1.35	RCC BOX	
102	Minor bridge		88.245	1x1.20	Stone arch	1x1.20x1.35	RCC BOX	
103	Minor bridge		88.513	2x0.65 m	Stone slab	2x1.2 x 1.2	HUME PIPE	
104	Minor bridge	Section 5 to 6 Ch.87+000 to 92+000 Length =5.00 Km	89.218	1x4.5 m	Stone arch	1X4.0x4.5	ARCH BRIDGE	
105	Minor bridge		89.704	1x1.85	Stone arch	1x1.85x2.85	RCC BOX	
106	Minor bridge		90.154	1x1.80 m	Stone arch	1X1.85x1.4	RCC BOX	
107	Minor bridge		90.347	1x6.65 m	Stone arch	1x6.50x5.85	ARCH BRIDGE	
108	Minor bridge		90.972	1x1.52	Stone arch	1x1.52x1.636	RCC BOX	
109	Minor bridge		91.233	1x3.66 m	Stone arch	1x3.66x5.62	RCC BOX	
110	Minor bridge		91.536	1x1.65 m	Stone arch	1x1.65x3.40	RCC BOX	
111	Minor bridge		91.875	1x0.91	Stone arch	1x1.2x1.55	RCC BOX	

Vaveghar to Kasara Bk
(Within 10 Km ESZ)

List of Structures Between Katsina to Kaura

Sl. No.	Structure Types	Project Section	Location (KM)	Existing Bridge		Proposed Bridge		Remarks
				Span (m)	Type	Span (m)	Type	
112	Minor bridge	Section 6 to 7 Ch.82+000 to 97+000 Length =5.00 Km	92.153	1x1.55	Stone arch	1x1.55x2.15	RCC BOX	
113	Minor bridge		92.552	1.55 m	Stone arch	1X1.55x2.1	ARCH BRIDGE	
114	Minor bridge		92.821	2x0.60m	Stone slab	1x 1.8x 1.8	HUME PIPE	
115	Minor bridge		93.173	3x1.55x1.8	Stone arch	3X1.6x1.8	PRECAST ARCH	
116	Minor bridge		93.555	1x1.55 m	Stone arch	1x1.5x1.45	ARCH BRIDGE	
117	Minor bridge		93.73	1x0.7	Hume pipe	1x1.2 x 1.2	HUME PIPE	
118	Minor bridge		94.321	4.0 m	Stone arch	1X3.9x3.8	ARCH BOX	
119	Minor bridge		94.583	1x6.1	PSC Slab	1X6.1x2.45	SLAB AND ABUTMENT	
120	Minor bridge		95.524	2X0.60 m	Stone slab	1x1.2 x 1.2	HUME PIPE	
121	Minor bridge		95.682	1x7.6 x4.0	Stone arch	1X7.6x4.15	ARCH BRIDGE/ RCC BOX	
122	Minor bridge		95.985	1x3.66	RCC Box	1x3.66x4.9	RCC BOX	
123	Minor bridge		96.477	1x1.20 m	Stone arch	1X1.2x1.35	RCC BOX	
124	Minor bridge	Section 7 to 8 Ch.97+000 to 102+000 Length =5.00 Km	97.182	1x2.10 m	Stone arch	1x2.1x3.65	RCC BOX	
125	Minor bridge		97.474	1x3.90x4.15	Stone arch	1X3.9x4.25	RCC BOX	
126	Minor bridge		98.342	1x2.25 m	Stone arch	1x2.25x3.45	RCC BOX	
127	Minor bridge		98.551	2.3 m	Stone arch	1x2.3x3.85	RCC BOX	
128	Minor bridge		98.818	2.25 m	Stone arch	1x2.25x4.707	RCC BOX	
129	Minor bridge		99.297	1x1.50	RCC Box	1x1.50x2.45	RCC BOX	
130	Minor bridge		99.383	0.60 m	Stone slab	1x1.2x1.35	RCC BOX	
131	Minor bridge		99.701/99.696	0.61 m	Stone slab	1x1.2 x 1.2	HUME PIPE	
132	Minor bridge		99.818	1.15 m	Stone arch	1X1.2X1.2	ARCH BRIDGE	
133	Minor bridge		99.992	1.25 m	Stone arch	1x1.25x1.65	RCC BOX	
134	Minor bridge		100.206	0.76	RCC Slab	1x1.22x1.2	SLAB AND ABUTMENT	
135	Minor bridge		100.424	0.67 m	Stone slab	1x1.2 x 1.2	HUME PIPE	
136	Minor bridge		100.519	1.50 m	Stone arch	1X1.50x2.05	RCC Box	
137	Minor bridge		100.768	1x1.20	Stone arch	1x1.20x1.35	RCC BOX	
138	Minor bridge		101.176	2x0.92	Stone arch	2X1.2x1.70	RCC D BOX	
139	Minor bridge		101.285	1X3.60 Mx3.60	Stone arch	1X3.60x3.75	ARCH BRIDGE	
140	Minor bridge		101.687	1x0.90	Stone arch	1x1.20x1.35	RCC BOX	
141	Minor bridge		101.864	0.76 m	Stone slab	1x1.2 x 1.2	HUME PIPE	

Via ephar to Kaura St.
(Within 10 Km ESE)

List of Structures between Kalyan to Karjat

Sl. No.	Structure Types	Project Section	Location (KM)	Existing Bridge		Proposed Bridge		Remarks
				Span (m)	Type	(No. of spans x Width x Height)	Size (m)	
142	Minor bridge		102.033	1x2.32x3.8 m	Stone arch	1x2.3x3.8		ARCH BRIDGE
143	Minor bridge		102.669	1.30 m	Stone arch	1x1.3x1.35		ARCH BRIDGE
144	Minor bridge		102.837	0.61 m	Stone slab	1x1.8x1.8		HUME PIPE
145	Minor bridge		102.902	0.60 m	Stone slab	1x1.2 x 1.2		HUME PIPE
146	Minor bridge		102.94	1x0.92	Stone arch	1x1.20x1.4		RCC BOX
147	Minor bridge		103.07	2x1.8m	Stone arch	2x1.72x1.45		RCC BOX
148	Minor bridge		103.498	1x1.35	Stone arch	1x1.35x1.50		RCC BOX
149	Minor bridge		103.654	1x1.85	RCC box	1x1.85x2.70		RCC BOX
150	Minor bridge		104.003	1x3.0	RCC box	1x3.0x2.7		RCC BOX
151	Minor bridge		104.085	3x1.6 m	Stone arch	3x1.6x2.60		PREFAST ARCH
152	Minor bridge		104.176	1x1.20	Stone arch	1x1.20x1.35		RCC BOX
153	Minor bridge		104.276	1x0.6m	Stone slab	1x1.2 x 1.2		HUME PIPE
154	Minor bridge	Section 8 to 9 Ch.102+000 to 107+000 Length =5.00 Km	104.334	1x1.60	Stone arch	1x1.60x2.15		RCC BOX
155	Minor bridge		104.706	2x1.45 m	Stone arch	2X1.45x2.5		ARCH BRIDGE
156	Minor bridge		105.096	1x0.47	Stone slab	1x1.20x1.35		RCC BOX
157	Minor bridge		105.234	1x1.50	Stone arch	1x1.50x1.65		RCC BOX
158	Minor bridge		105.351	1x0.6 m	Stone slab	1x1.2 x 1.2		HUME PIPE
159	Minor bridge		105.42	1x0.4 m	Hume pipe	1x1.2 x 1.2		HUME PIPE
160	Minor bridge		105.497	1x0.5 m	Stone slab	1X1.22x1.35		RCC BOX
161	Minor bridge		105.627	1x5.0	PSC Slab	1X6.1x3.564	SLAB AND ABUTMENT	
162	Minor bridge		105.824	1x0.46 m	Stone slab	1x1.2 x 1.2	HUME PIPE	
163	Minor bridge		106.084	1x1.50 m	Stone arch	1X1.50x2.50		RCC BOX
164	Minor bridge		106.424	1x0.46 m	Stone slab	1X1.22 x 1.2	SLAB AND ABUTMENT	
165	Minor bridge		106.56	1x0.8 m	Stone slab	1x1.22 x 1.2	SLAB AND ABUTMENT	
166	Minor bridge		106.973	1.2 m	Stone slab	---	EXT NOT REQUIRED	
167	Minor bridge		107.162	1x0.60	Stone slab	1x1.20x1.35		RCC BOX
168	Minor bridge		107.848	1x2.1x6.0	Stone arch	1x2.15x6.15		RCC BOX
169	Minor bridge		108.234	1x3.0x4.55	Stone arch	1x3.0x4.55		RCC BOX
170	Minor bridge		108.348	1x0.60 m	Stone slab	1x1.8x1.8		HUME PIPE
171	Minor bridge		108.44	1x0.61 m	Stone slab	1x1.8x1.8		HUME PIPE
172	Minor bridge		108.868	1x4.5x6.15	Stone arch	1X4.5x6.15		ARCH BRIDGE
173	RUB		109/8-10	---	---	1x6.0x4.5m		RCC BOX
174	Minor bridge	Section 9 to 10 Ch.107+000 to 112+000 Length =5.00 Km	109.169	1X4.50MX5.70M	Stone arch	---	EXT NOT REQUIRED	
175	Minor bridge		109.542	2.29 m	Stone arch	1x2.3x5.55		RCC BOX
176	Minor bridge		110.167	1x1.25	Stone arch	1x1.25x1.95		SLAB AND ABUTMENT
177	Minor bridge		110.409	2 x 6.10 x 7.15 m	Stone arch	2 x 6.90 x 7.30		ARCH BRIDGE
178	Minor bridge		111.148	1.95 m	Stone arch	---	EXT NOT REQUIRED	
179	Minor bridge		111.572	1x1.05	Stone arch	1x1.90x3.77		RCC BOX
180	Minor bridge		111.68	1x0.76 m	Stone arch	1x1.22x1.2		SLAB AND ABUTMENT
181	Minor bridge		111.779	1x1.10	Stone arch	1x1.20x1.77		RCC BOX
182	Minor bridge		111.878	1x2.3	RCC Box	1x2.30x2.525		RCC BOX

Vaveghar to Kasara Bk
(Within 10 Km ESZ)

List of Structures between Kalyan to Kasara

Sl. No.	Structure Types	Project Section	Location (KM)	Existing Bridge		Proposed Bridge		Remark
				Span (m)	Types	(No. of Span x Width x Height)	Types	
183	Minor bridge		112.133	1x0.60m	Stone slab	1x1.2 x 1.2	HUME PIPE	
184	Minor bridge		112.202	1x0.60 m	Stone slab	1x1.2 x 1.2	HUME PIPE	
185	Minor bridge		112.506	6 x 0.60m	Stone slab	2X2.875x1.45	RCC BOX	
186	Minor bridge		112.632	1x0.60m	Stone slab	1x1.2x1.35	RCC BOX	
187	Minor bridge		112.729	1x1.50	Stone arch	1x1.82x3.637	RCC BOX	
188	Minor bridge		112.776	1x0.45m	Stone slab	1x1.2 x 1.2	HUME PIPE	
189	Minor bridge		112.828	1x0.7 m	Stone slab	1x1.2 x 1.2	HUME PIPE	
190	Minor bridge		112.896	2x3.55	RCC Double Box	2x4.70x3.70	RCC D BOX	
191	Minor bridge		113.031	1x0.65 m	Stone slab	1x1.2 x 1.2	HUME PIPE	
192	Minor bridge		113.22	1x0.6mX0.9m	Stone slab	1x1.2 x 1.2	HUME PIPE	
193	Minor bridge		113.395	2x3.85	RCC Double Box	2x4.85x2.45	RCC D BOX	
194	Minor bridge	Section 10 to 11 Ch.112+000 to 117+000 Length = 5.00 Km	113.747	2x1.20	Hume pipe	1x3.40x2.812	RCC BOX	
195	Minor bridge		113.777	1x3.4	Stone arch	1x3.40x2.75	RCC BOX	
196	Minor bridge		114.365	1X3.0X4.6M	Stone arch	1X3.0X4.6	RCC BOX	
197	Minor bridge		114.536	1x1.55	RCC Slab	1X1.83x1.2	SLAB AND ABUTMENT	
198	Minor bridge		114.791	1X1.3mX0.80M	Stone arch	1X1.3X1.35	RCC BOX	
199	Minor bridge		114.870	1x1.55 m	RCC Slab	1x1.2 x 1.2	HUME PIPE	
200	Minor bridge		115.057	1x0.7 m	Stone slab	1x1.2x0.9	RCC BOX	
201	Minor bridge		115.212	1x5.8x7.8	RCC Arch	1X5.8x7.95	RCC BOX	
202	Minor bridge		115.478	1x0.62	Stone slab	1x1.2 x 1.2	HUME PIPE	
203	Minor bridge		115.551	3x1.1m	Stone arch	1x5.53x2.38	RCC BOX	
204	Minor bridge		116.141	1x0.60 m	Stone slab	1x1.2x1.35	RCC BOX	
205	Minor bridge		116.31	0.90 m	Stone arch	1x1.2 x 1.2	HUME PIPE	
206	Minor bridge		116.521	0.9 m	Stone arch	1x1.2 x 1.2	HUME PIPE	
207	Minor bridge		116.857	0.9 m	Stone arch	1X1.2x1.40	RCC BOX	
208	RUB		117/24-26	--	--	1x6.0x4.5m	RCC BOX	
209	Minor bridge		117.329	0.90m	Stone arch	1x1.2 x 1.2	HUME PIPE	
210	Minor bridge		117.436	1x3.5MX3M	RCC Box	1X3.5 x 3.15	RCC BOX	
211	Minor bridge		117.45	1.20 m	Stone arch	1X1.2 x 1.3	PRECAST ARCH	
212	Minor bridge		117.607	1.30 m	Stone arch	1X1.4x1.45	PRECAST ARCH	
213	Minor bridge		117.711	1X10.65mx8.25m	Stone arch	1x10.65x8.40	ARCH BRIDGE	
214	Minor bridge		117.931	0.91 m	Stone arch	1x1.2 x 1.2	HUME PIPE	
215	Minor bridge		118.001	1.2m	RCC box	1X1.21 x 4.28	RCC BOX	
216	Minor bridge		118.2	1x7.8 x 4.40	steel girder	1X18.3 x 4.46	U- GIRDER	
217	Minor bridge		118.246	1.50 m	Stone arch	1X1.5 x 1.65	RCC BOX	
218	Minor bridge		118.424	0.91 m	Stone arch	1x1.2 x 1.2	HUME PIPE	
219	Minor bridge		118.662	1.65	RCC Slab	1x1.2X0.9	RCC BOX	
220	Minor bridge		118.712	0.78	RCC Slab	1x1.2X0.9	RCC BOX	
221	Minor bridge		118.794	0.7 m	Stone slab	1x1.2 x 1.2	HUME PIPE	
222	Minor bridge		119.14	0.7	RCC Slab	1x1.2 x 1.2	HUME PIPE	
223	Minor bridge		119.362	1.30 m	Stone arch	1x1.3x1.45	PRECAST ARCH	
224	Minor bridge		119.572	2.35 m	Stone arch	1x2.35x6.64	RCC BOX	
225	Minor bridge		119.768	1x0.76	Hume Pipe	1x1.2x1.35	RCC BOX	
226	Minor bridge		119.828	2x1.20	Hume Pipe	2x1.2 x 1.2	2x1.2M HUME PIPE	
227	ROB		119.828	3x10.8	Steel Girder	1x60.0 x 7.75	Composite Girder	