

**Shantilal Shah Engineering College,  
Bhavnagar**

**Civil Engineering Department**



**A**

**Report**

**on**

**Technical Visit of**

**Lakhanka Dam**

**For B.E. Sem – 6**

**On**

**Date: 23/02/2024**

**Name of Subject : Water Resources Engineering and  
Hydrology (WREH)**

**Subject Code: 3160610**

**Faculty Coordinator: Prof. N. P. Soni**

As a part of the curriculum and under the subject of Water Resources Engineering and Hydrology (WREH), students need to get practical knowledge of Hydraulic structures like Dams. A Technical visit for the B.E. semester 6 was organized and coordinated by **Prof. N. P. Soni** on 23<sup>rd</sup> February 2024 at Lakhanka Dam at Sidsar - Budhel Road, Bhavnagar from 9.00 AM to 12.00 Noon. Prof. N. P. Soni explained the salient features of the dam. Mr Salim, Technical assistant on dam site, explained the functions of the Dam gates in different situations. He also explained the water distribution system to the farmers for irrigation. Total 54 students were present on the site visit.

**GOVERNMENT OF GUJARAT**  
**BHAVNAGAR IRRIGATION PROJECT CIRCLE**  
**BHAVNAGAR IRRIGATION DIVISION**

**LAKHANKA DAM**

**SALIENT FEATURES OF LAKHANKA IRRIGATION PROJECT**

<b>1) LOCATION</b>		<b>4) DAM</b>	
(A) NAME OF RIVER	: MALESHRI	(A) MASONARY DAM LEANGTH	: 43.89 m
(B) NEAR VILLAGE	: LAKHANKA	(B) SPILLWAY	: 43.89 m
(C) TALUKA / DISTRICT	: GHOGHA/BHAVNAGAR	(C) RIGHT EARTHEN DAM	: 725 m
(D) LOCATION OF DAM	: LAT.-21-40 N	(D) LEFT EARTHEN DAM	: 860 m
	LONG.- 72-10 E	(F) TOP OF DAM	: 47.48 m
(E) YEAR OF CONSTRUCTION	: 1985	<b>5) SPILLWAY</b>	
(F) TOTAL EXPENDITURE	: 402.08 LACS	(A) TYPE OF SPILLWAY	: OGGI SHAPE
<b>2) HYDROLOGY</b>		(B) CREST R.L.	: 38.22 m
(A) CATCHMENT AREA	: 49.935. Sq.Km.	(C) NO. AND SIZE OF GATE	: 4 Nos. 30' X 20'(9.14 X 6.10)
(B) AVERAGE ANNUAL RAINFALL	: 499.40 mm	<b>6) MAIN CANAL</b>	
(C) DESIGN FLOOD DISCHARGE	: 1182 Cumecs	(A) CAPACITY	: 26.13 Cusec
<b>3) RESERVOIR</b>		(B) LENGTH	: 1390m
(A) FULL RESERVOIR LEVEL (F.R.L.)	: 44.22 m	(C) INITIAL SECTION	: 0.90 X (0.45 +0.60)
(B) MAXI. WATER LEVEL (H.F.L.)	: 44.98 m	(D) GRADIENT	: 1 : 2500
(C) LOWEST WATER LEVEL (M.D.D.L.)	: 34.98 m	(E) C.C.A. / I.C. A.	(Direct) : 1359 Ha./900 Ha.
(D) GROSS STORAGE AT F.R.L.	: 3.684 Mcum	(F) NO. OF VILLAGE BENEFITED	: 4 Nos.
(E) LIVE STORAGE	: 3.684 Mcum		
(F) AREA AT F.R.L.	: 1.55 Sq.km		
(G) (SUBMERGENCE) NOS. OF VILLAGE	: 0		

**Photo 1 : Salient Features of Lakhanka Irrigation Project**



**Photo 2 : Dam Technical Assistant Explaining about the Functioning of Dam**



**Photo 3 : Prof. N. P. Soni, Explaining the functioning of Dam Gate in different mode ( Electrically, Mechanically and Manually )**





# Student Attendance Sheet

**Shantilal Shah Engineering College, Bhavnagar**  
**Civil Engineering Department**  
**Industrial Site Visit**

**BE SEM - 6 Date of Visit : 23/2/20234**

**Venue : Lakhanka Dam, Sidsar -Budhel Road, Bhavnagar**  
**Student Attendance Sheet**

Sr. No.	Enrollment No	Name	Student signature
1	22043306068	SATANI PARTH PRAVINBHAI	<i>Satani Parth</i>
2	200430106046	Mathukiya parth rajeshbhai	<i>Mathukiya Parth</i>
3	210430106003	Vikas bhat	<i>Vikas Bhat</i>
4	210430106007	MISHRA CHINTANKUMAR	<i>Mishra Chintankumar</i>
5	210430106009	Prajapati Rahul Rameshbhai	<i>Prajapati Rahul</i>
6	210430106011	Deep Khorava	<i>Deep Khorava</i>
7	210430106012	CHAUHAN VIMAL BATUKBHAI	<i>Chauhan Vimal</i>
8	210430106015	Munjpara Aditya Satishbhai	<i>Munjpara Aditya</i>
9	210430106016	GUNA KISHAN SURESHBHAI	<i>Guna Kishan</i>
10	210430106017	Ambaliya Akshit	<i>Ambaliya Akshit</i>
11	210430106018	Kalsariya Jaysukh Kanjibhai	<i>Kalsariya Jaysukh</i>
12	210430106019	Thakar Mahim bhadreshkumar	<i>Thakar Mahim</i>
13	210430106021	Hirapara Axit jayeshbhai	<i>Hirapara Axit</i>
14	210430106024	Parmar Abhay Rameshbhai	<i>Parmar Abhay</i>
15	210430106026	CHAUHAN HITEN BHAI SURESH BHAI	<i>Chauhan Hitendra</i>
16	210430106031	DUMARALIYA MAYANK CHANDUBHAI	<i>Dumaraliya Mayank</i>
17	210430106032	Chudasama Krish Prakash	<i>Chudasama Krish</i>
18	210430106033	Sidhdhapura Viraj S	<i>Sidhdhapura Viraj</i>
19	210430106035	baraiya rakesh dineshbhai	<i>Baraiya Rakesh</i>
20	210430106039	CHAUHAN MAYUR	<i>Chauhan Mayur</i>
21	210430106042	Kinnari Prakash Bhatt	<i>Kinnari Prakash</i>
22	210430106047	Pankaj	<i>Pankaj</i>
23	210430106050	Shaktiraj mallah	
24	210430106052	Shailesh Zapadiya	<i>S.M. Zapadiya</i>
25	210430106053	Parmar Soham Sanjaybhai	<i>Parmar Soham</i>
26	220433106001	AHALPANA JAY DINESHBHAI	<i>Ahalpana Jay</i>
27	220433106004	Manas Badlani	<i>M. Badlani</i>
28	220433106005	Baldaniya Ashish Bharat Bhai	<i>Baldaniya Ashish</i>
29	220433106006	Baldaniya Krunal D.	<i>Baldaniya Krunal</i>
30	220433106007	BARAIYA GAURAV	
31	220433106009	Mayur baraiya	<i>M.C. Baraiya</i>
32	220433106010	Bhatt Harsh Mahendrabhai	<i>H.M. Bhatt</i>
33	220433106017	Dihora Darsh	<i>D.R. Dihota</i>
34	220433106019	Gajjar vaishnavi BharatBhai	<i>Gajjar Vaishnavi</i>
35	220433106028	Gohil yash s.	<i>Gohil Yash</i>

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Sr. No.	Enrollment No	Name	Student signature
36	220433106033	Joshi krutika pravinbhai	Krutika
37	220433106035	kuldipkamaliya54@gmail.com	K.K.D.
38	220433106036	Kanada Meet c.	Meet
39	220433106037	Kanada rahul RajnikanthBhai	Rahul
40	220433106041	vivek khodiyar	Vivek
41	220433106042	Makwana Gopal	Gopal
42	220433106044	MODHAKIYA MILAN	Milan
43	220433106045	Nandan Vasoya	Nandan
44	220433106046	Otaradi Sarjankumar bavkubhai	Sarjankumar
45	220433106047	Pandya Dhruva Jigneshbhai	Dhruva
46	220433106048	HARSH PANDYA	Harsh
47	220433106049	Parmar Devarsh B.	Devarsh
48	220433106051	KETANBHAI HARESHBHAI PARMAR	Ketan
49	220433106058	PATEL ZUBER HUSSAIN . D	Zuber
50	220433106060	Rathod Dharen U.	D. U. Rathod
51	220433106062	Ritu Rathod	R.B. Rathod
52	220433106063	Saiyad mahamad taha	Mahamad
53	220433106065	Kuldip Sarvaiya	Kuldip
54	220433106069	Romil Shah	Romil
55	220433106074	SOLANKI PARTHKUMAR DIPAKBHAI	Parth
56	220433106077	Soni vansh sagarbhai	Vansh
57	220433106082	Vora urvisha Dineshbhai	V. D. Vora
58	220433106085	Zala Jeetrajsinh Mayursinh	J.M. Zala

59) 220433106075 Butthvipal Solanki

R. Naulin