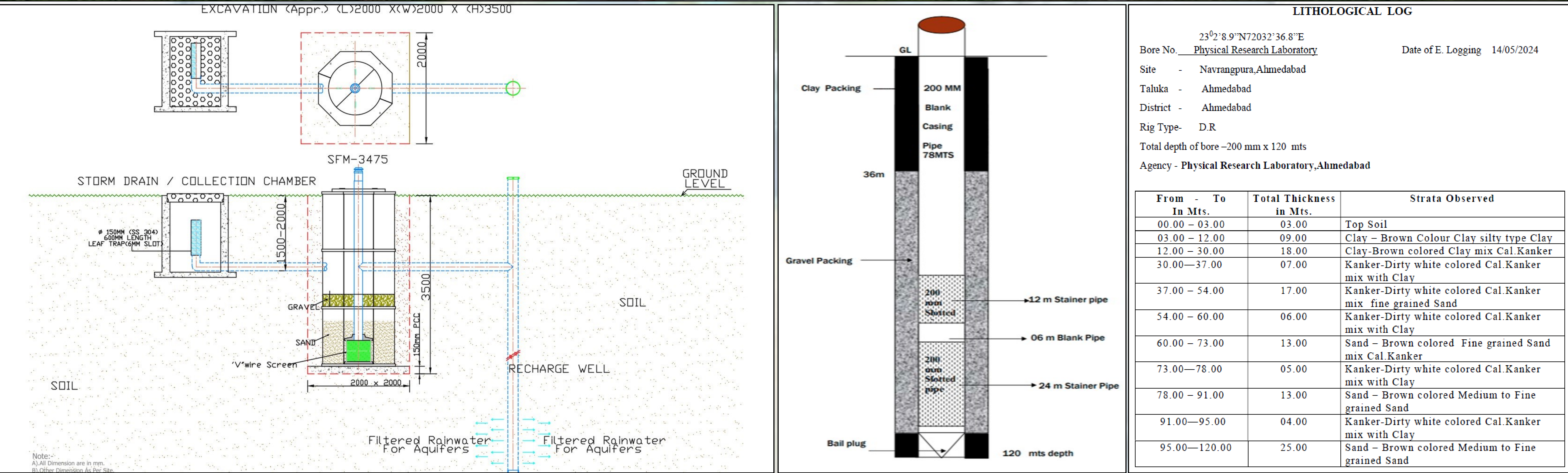# Save Water, Save Earth: Rainwater Harvesting System
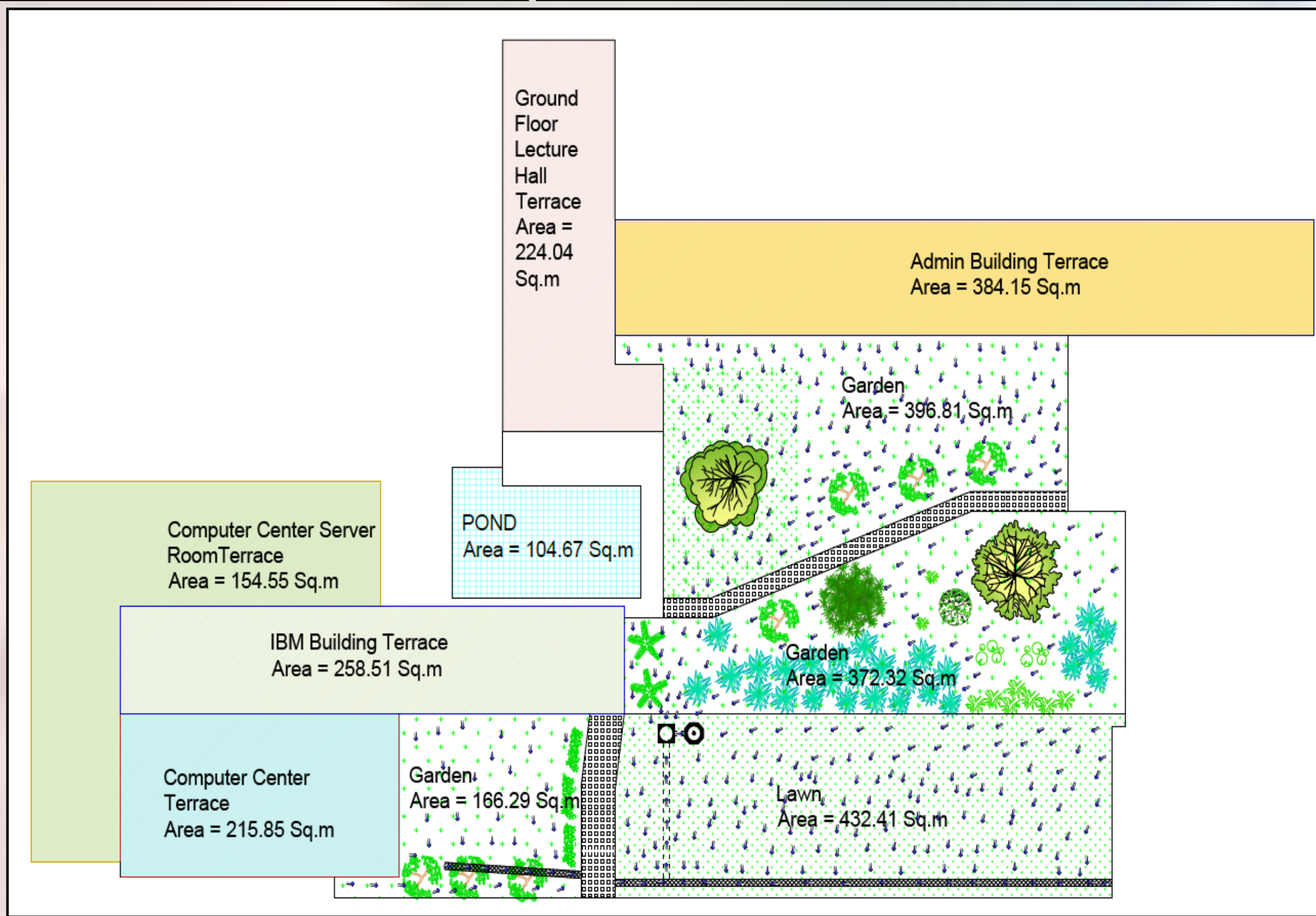
Harness the Power of Rain!

Rainwater harvesting is the collection and storage of rainwater, which will eventually help to recharge groundwater and increase the level of the water table. It's a sustainable practice that helps reduce water wastage and conserves our precious water resources. Rainwater harvesting is an effective and sustainable solution to address contemporary water challenges. By leveraging this technique, individuals and communities can contribute to water conservation, environmental protection and economic efficiency. As global water issues intensify, adopting rainwater harvesting systems becomes increasingly important for promoting resilience and sustainability.

EXCAVATION (Appr.) (L)2000 X(W)2000 X (H)3500

SFM-3475

STORM DRAIN / COLLECTION CHAMBER

GROUND LEVEL

Ø 150MM (SS 304) 600MM LENGTH LEAF TRAP(6MM SLOT)

GRAVEL — SAND — 'V'wire Screen

2000 X 2000

SOIL — RECHARGE WELL

Filtered Rainwater for Aquifers

Note:
A) All Dimension are in mm.
B) Other Dimension As Per Site.

LITHOLOGICAL LOG

23°2'8.9"N72032'36.8"E
Bore No.   Physical Research Laboratory   Date of E. Logging   14/05/2024
Site   - Navrangpura,Ahmedabad
Taluka   - Ahmedabad
District   - Ahmedabad
Rig Type-   D.R.
Total depth of bore −200 mm x 120 mts
Agency - Physical Research Laboratory,Ahmedabad

From - To In Mts.	Total Thickness in Mts.	Strata Observed
00.00 – 03.00	03.00	Top Soil
03.00 – 12.00	09.00	Clay – Brown Colour Clay silty type Clay
12.00 – 30.00	18.00	Clay-Brown colored Clay mix Cal.Kanker
30.00—37.00	07.00	Kanker-Dirty white colored Cal.Kanker mix with Clay
37.00 – 54.00	17.00	Kanker-Dirty white colored Cal.Kanker mix fine grained Sand
54.00 – 60.00	06.00	Kanker-Dirty white colored Cal.Kanker mix with Clay
60.00 – 73.00	13.00	Sand – Brown colored Fine grained Sand mix Cal.Kanker
73.00—78.00	05.00	Kanker-Dirty white colored Cal.Kanker mix with Clay
78.00 – 91.00	13.00	Sand – Brown colored Medium to Fine grained Sand
91.00—95.00	04.00	Kanker-Dirty white colored Cal.Kanker mix with Clay
95.00—120.00	25.00	Sand – Brown colored Medium to Fine grained Sand

ELECTRO – LOGGING RESULTS

23°2'8.9"N72032'36.8"E
Bore No.   Physical Research Laboratory   Date of E. Logging   14/05/2024
Site   Navrangpura,Ahmedabad
Taluka   Ahmedabad
District Ahmedabad

Rig Type   D.R.
Total depth of bore   120.00   mts.
Depth of E. Logging   120.00   mts.
Diameter of _____
Pilot Bore Hole   10   inches
                   250   m.m.

Drilling Mud
Temperature   60°F
Resistivity   3.90 ohm/m
T.D.S. In P.P.M.   1100

Drilling Water
Temperature   60°F
Resistivity   3.90 ohm/m
T.D.S. In P.P.M.   1100
SP. Scale   2/5 M V/cm
Resistivity Scale2/5 Ohm m/cm.

Reference : Physical Research Laboratory,Ahmedabad

Zone inferred by Elec. Logging in mts. From	To	Dev. Of Sp. In mv.	Rmf. R(w)e	(Rw)e in Chm. Mt.	Expected T.D.S. of formation water (P.P.M.)	Production Tube well Result
1		2	3	4	5	6
37 -- 54 (mix-weak)		- 03	1.10	3.54	1200	S. W. L. 54 mts
60 – 73		-05	1.17	3.33	1300	
78—91		-02	1.06	3.67	1175	
95—120		-01	1.02	3.82	1125	

Ground Floor Lecture Hall Terrace Area = 224.04 Sq.m

Admin Building Terrace Area = 384.15 Sq.m

Garden Area = 396.81 Sq.m

Computer Center Server RoomTerrace Area = 154.55 Sq.m

POND Area = 104.67 Sq.m

IBM Building Terrace Area = 258.51 Sq.m

Garden Area = 372.32 Sq.m

Computer Center Terrace Area = 215.85 Sq.m

Garden Area = 166.29 Sq.m

Lawn Area = 432.41 Sq.m

Average and Extremes of rainfall over Ahmedabad (2010 to 2019)

Ref. :–Report dated 01.01.2022 on Climate of Ahmedabad by Meterological Centre,Ahmedabad

Month	Monthly average	Highest in 24-hours(mm)		Highest in a month(mm)	
		Highest	Date and year	Rainfall	Year
January	1.49	6.9	22 Jan 2015	7.6	2015
February	0.02	0.2	16 Feb 2016	0.2	2016
March	3.07	19.2	1 March 2015	26.3	2015
April	4.59	21.6	13 April 2015	22.1	2015
May	1.03	6.7	14 May 2015	6.7	2015
June	59.01	130.4	25 June 2015	135.5	2015
July	338.93	288.1	30 July 2014	607.9	2014
August	215.91	237.4	8 Aug 2010	534.3	2010
September	145.96	80.8	25 Sep 2013	343.3	2019
October	21.98	36.9	9 Oct 2016	99.4	2016
November	3.6	12.8	23 Nov 2010	31.1	2010
December	1.37	11	6 Dec 2017	12	2017

Catchment Area=2700 sqm || Module Filtration Capacity = 25,000 litres/hour || Groundwater recharge rate achieved at site=9375 litres/hour