



A Maharatna Company

एन टी पी सी लिमिटेड

(भारत सरकार का उद्यम)

NTPC Limited

(A Govt. of India Enterprise)

(Formerly National Thermal Power Corporation Ltd.)

(केंद्रीय कार्यालय नोएडा)

Corporate Center NOIDA

Reference : CC-ENGG-9587-001-151-PVM-P-080

Date : 22/04/2025

From : ANAND KUMAR
ENGINEER

To : BHARAT HEAVY ELECTRICALS LTD
NEW DELHI
110049
IN

Cc : pmgvijay@bhel.in
ksbura@bhel.in

Subject : EPC Package

Please find enclosed following drawings/ documents for necessary action at your end.

Vendor Drg. No. : PY-LP-1-M213-8316-06

Orgn. Drg. No. : 9587-001-151-PVM-P-080

Revision No. : 02

Drg. Title : COMPOSITE LAYOUT OF HYDRANT AND SPRAY SYSTEM INLCUDING
HUME PIPES LOCATION

App. Category : CAT-II

Release Date : 22/04/2025



Scan to verify

Comments : Comments marked on the drawing. Drawing to be submitted after approval of area layout drawings.



Engineering Division
ISO 9001:2008 Certified



अधियंत्रिका कार्यालय परिसर, प्लॉट नं.- ए 8ए, सेक्टर-24, पोस्ट बॉक्स नं.- 13, नोएडा (उ.प्र.) पिन-201 307

टेलिफोन नं.- 0120-2410333, 2410116 फैक्स-0120-2410136, 2410137

पंजीकृत कार्यालय: एनटीपीसी भवन, स्कोप कॉम्प्लेक्स, 7 इन्स्टीट्यूशनल एरिया, लोधी रोड, नई दिल्ली-110 003

टेलिफोन नं.- 011-24361018 फैक्स-011-24361018, वेबसाइट: www.ntpc.co.in

ENGINEERING OFFICE COMPLEX, Plot No: A-8A, Sector-24, Post Box No: 13, Noida (UP), Pin-201 307

Telephone No: 0120-2410333, 2410116 Fax-0120-2410136, 2410137

Registered Office: NTPC Bhawan, Scope Complex, 7 Institutional Area, Lodhi Road, New Delhi-110 003

Telephone No: 011 24360100 Fax: 011 24361018, Website: www.ntpc.co.in

Arund
Kumar

	BHARAT HEAVY ELECTRICALS LIMITED		
PROJECT:			
PACKAGE:	Fire Protection & Detection System	PLs submit drg after finalisation of area layout as lot of difference in plot plan and area layout drgs	
Date:			
BHEL Replies on Composite layout of hydrant & spray system (9587-001-151-PVM-P-080 Rev-01)			
Sl. No.	NTPC Comments on Rev 01	BHEL Replies with Rev 02	
1	The drawing to be prepared on latest layout of various areas. The hydrant (external & inetrnal) and spray valves to be finalized as per Area layout drawing and finalisation of conveyors, cable vault, transformers etc	FDPS layout has been developed on latest PLOT PLAN drawing. All buildings/facilities indicated in FDPS drawing is in line with PLOT PLAN drawing only. Further detailing shall be provided in resperctive AREA LAYOUTs drawings.	
2	No need to show kachcha roads	Same is part of Plot plan drawing referred as input and hence retained in the drawing.	
3	Building like safery control room, FQA labs, etc are not shown and so as per Fire protection	Building as indicated in PLOT PLAN, has been considered for Fire protection Design. Hydrants are provided for safety control room, FQA labs.	
4	Hydrant to be provided	Noted and indicated	
5	pl provide FDPS for IDCT facilties also	FDPS for IDCT facilities already provided as per requirement.	
6	Insert text here	Comment not legible.	
7	Trench shall foul with burried ACW pipe. PI check	Noted and Fire line re-routed.	
8	Bus ducts to be avoided for Fire pipe routing as per contract spec.	Noted and Fire line re-routed.	
9	Provide MVW srpray for DG set	Noted and indicated.	
10	burried not allowed	Noted and Fire line re-routed on pedestal.	
11	protection of IDCT MCC-4 is not from all sides	Noted and hydants points provided.	
12	Hume pipes marked H-25,26,27,108,107,103,104,22 will foul with road side drain.	PI note that, A) At Road crossing without drain, Hume pipe depth shall be min. 1000mm from Top of road to Top of Hume pipe. B) At Drain crossing, Hume pipe depth shall be below the RCC drain or 1000mm from Road top, whichever is greater.	
13	Revise the layout as per latest updated bldg drawing	FDPS layout has been developed on latest PLOT PLAN drawing. All buildings/facilities indicated in FDPS drawing is in line with PLOT PLAN drawing only.	
14	To the extent possible and in line with spec requirements, pipe routing intranches to be avoided in mail plant bldg area, the same to be reviewed in detailed area layout drawings and shall be updated in this drawing in line with approved area layout drawings.	Noted. Drawing to be submitted after approval of area layout drgs.	
15	PI check space feasibility for routing pipes b/w ASPH tank and drain.	PI note that Fire lines are laid through the feasible route after ensuring no fouling is observed.	
16	FDPS to be provided in all facilities of BHEL scope. I.e. Canteen	Noted and provided.	
17	Explore feasibility of providing tapping directly from headers coming from ST-1 (near canteen) to avoid Hume pipes (H-116,117,118,119)	Noted and Fire line re-routed.	
18	Check requirements as Pipe lines are routed over pipe rack. Also these pipes will foul with drain. Revise depth in FGL.	Noted. Hume pipes are provided as reduntants here to route the pipe alternately on pedestals.	

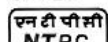
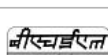
Arund
Kumar

19	Water monitor and Internal hydrant to be provided for conveyor having height above 30 mtrs	Noted. Already provided for conveyor having height above 30 mtrs
20	location of RWPH has been shifted because of Stg-III. PI revise	Noted and revised as per latest plot plan.
21	AWPH to be protected from all sides.	Noted and provided.
22	ESP CR are not protected at this side as hydrant points are at distance.	Noted and provided.
23	try to avoid Hume pipe H-200,201,007 by taking tapp-off from main header.	H-200 could be avoided and same has been removed from that area in the drawing.
24	PI provide hydrant point protection for Sludge PH/ Filter house PH/ DM clarifier/ CW clarifier.	Hydants protection already provided near Pump house area.
25	Bldg layout is not yet finalized.	Noted.
26	Try to avoid crossing by tappin from main header above.	Noted & Fire line re-routed.
27	Protection around GYPSUM storage shed.	Noted and provided.
28	MCC cum CR, TACH bldg, DH pump house, LHP GHP MCC to be protected from all sides	Noted and provided.
29	Which facilities are indicated here.	CSSP area as per latest Plot plan.
30	Hydrant to be provided near CSSP pump house	Noted and provided.
31	TAP-off to be provided as per Site condition	Noted.
32	Wm to be shifted for protection of conveyor also.	Noted and revised.
33	Internal hydrant to be provided at this side of track hopper also.	Noted and provided.
34	Hydrant protection to be provided near Hydrobin	Noted and provided.
35	Size of Cruhser house is revised. PI check	Noted. FDPS provided as per latest Plot plan only.
36	Layout of Ash Handling area is revised. PI check	Noted. FDPS provided as per latest Plot plan only.
37	Hydrant protection Is also required for FOPPH.	Existing Hydrants of Stg -1 & 2 (SH-536 & 537) are in vicinity of FOPPH. Hence, new hydrants are not provided for same.
38	TAP-OFF point is between tank & Pumps	Noted and revised.
39	BOQ of Hydrant & WN to be revised as per comments and finalized area drawings	Noted and revised.
40	This depth is not sufficient for some area where drain depth is more. Refer civil drain drawings. Further as per civil spec, RCC encasing to be provided also. PI indicate revised depth upto top of Hume pipe encasing	PI note that, A) At Road crossing without drain, Hume pipe depth shall be min. 1000mm from Top of road to Top of Hume pipe. B) At Drain crossing, Hume pipe depth shall be below the RCC drain or 1000mm from Road top, whichever is greater.
41	PI superimpose this drawing on latest approved road and drain layout under diff. slopes and check/depth of crossings. Also furnish typical detail for fire line .	For composite layout drawing, Plot Plan drawing (roads & drains included) is already referred to decide the Location of Hume Pipes at Road crossings.

CONTINUED IN SHEET NO 02

Pls check with buried raw water pipe beneath the trestle may foul with fire pipes

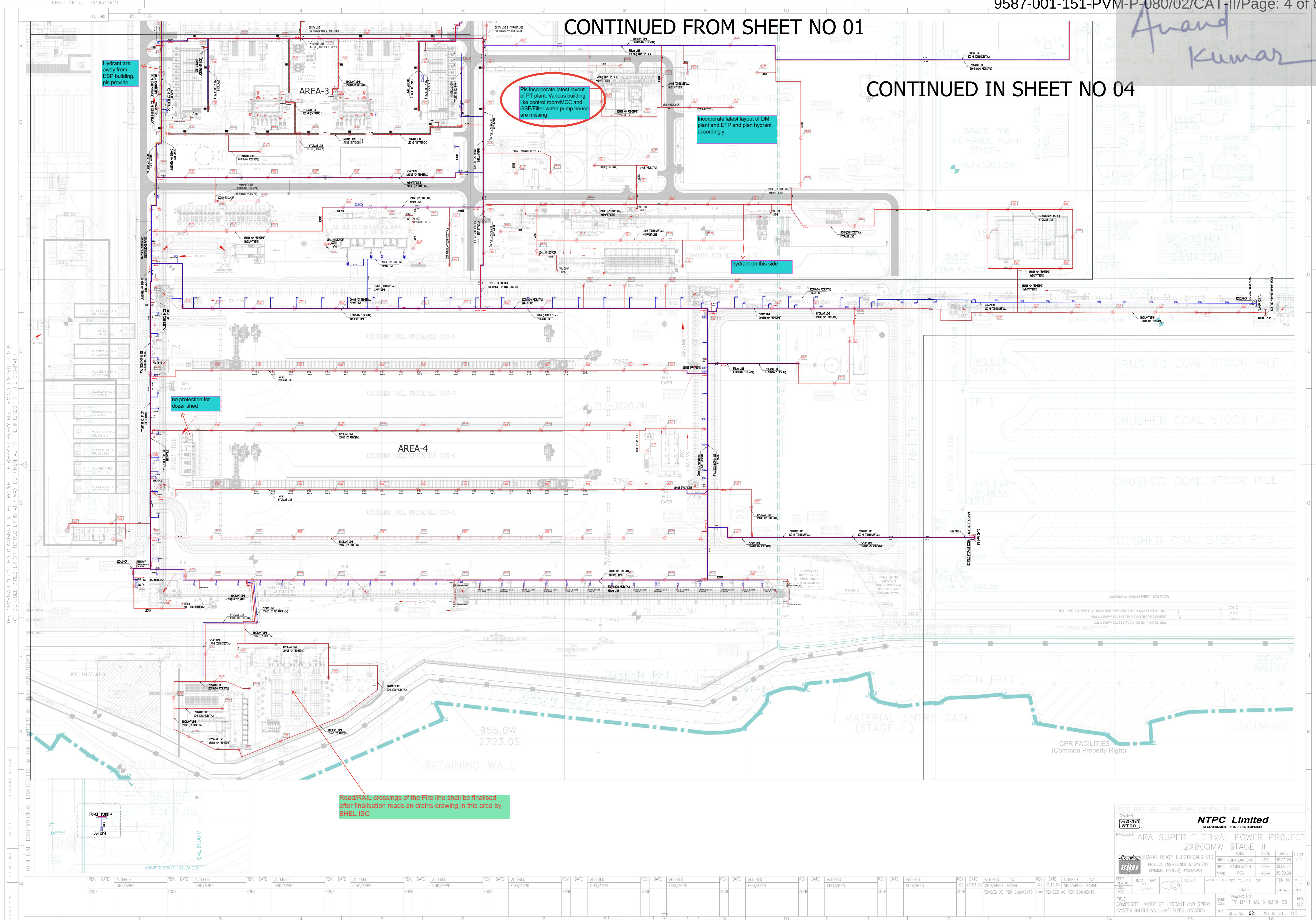
AREA-2

ORDER NO. 9587-061-151-PVM-P-050															
		NTPC Limited (A GOVERNMENT OF INDIA ENTERPRISE)													
PROJECT		LARA SUPER THERMAL POWER PROJECT 2X800MW STAGE-II													
		BHARAT HEAVY ELECTRICALS LTD. PROJECT ENGINEERING & SYSTEMS DIVISION, (F&S) HYDERABAD				DRN. NAME KULMARJAN / N		SISON. DATE -SD- 30.09.24		NO. OF VOLS.					
APPD. PCS -SD- 30.09.24		CHD. KAMALUDIN -SD- 30.09.24		APPD. PCS -SD- 30.09.24											
DEPT. PL&SD NO. 450		UNTOL. DMS. GR.				SCALE		WEIGHT (KG)		REF. TO ASSY.		ITEM NO.		NO. OF ITEMS	
														M	
TITLE COMPOSITE LAUNCH OF HYDROANT AND SPRAY SYSTEM INCLUDING HUME PIPES LOCATION		CARD NO. N.A.		DRAWING NO. PLY-PL-1-M213-8316-06				N.A.				REV. 02			
						SHT. NO. 01				NO. OF SHT. 06					

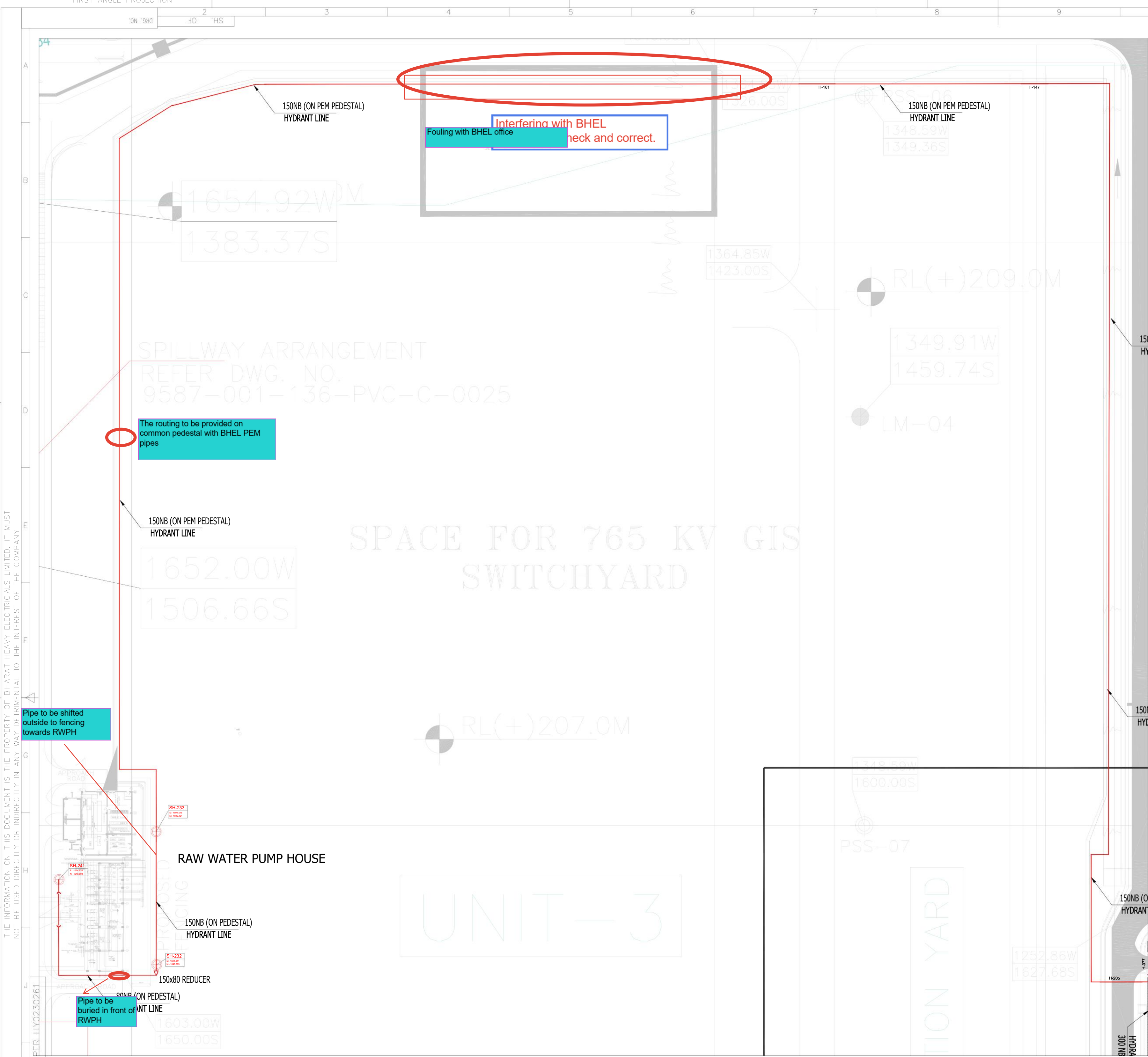
CONTINUED FROM SHEET NO 01

CONTINUED IN SHEET NO 04

Arund
Kumar



Arund
Kumar



CONTINUED FROM SHEET NO 01

GENERAL DIMENSIONAL LIMITS, FITS & TOLERANCES AS PER HYD-30261															
REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.	DATE	ALTERED	REV.
ZONE	CHD/APPD	CHD/APPD	ZONE	CHD/APPD	CHD/APPD	ZONE	CHD/APPD	CHD/APPD	ZONE	CHD/APPD	CHD/APPD	ZONE	CHD/APPD	CHD/APPD	ZONE
1			2			3			4			5			6
7			8			9			10			11			12
13			14			15			16			17			18

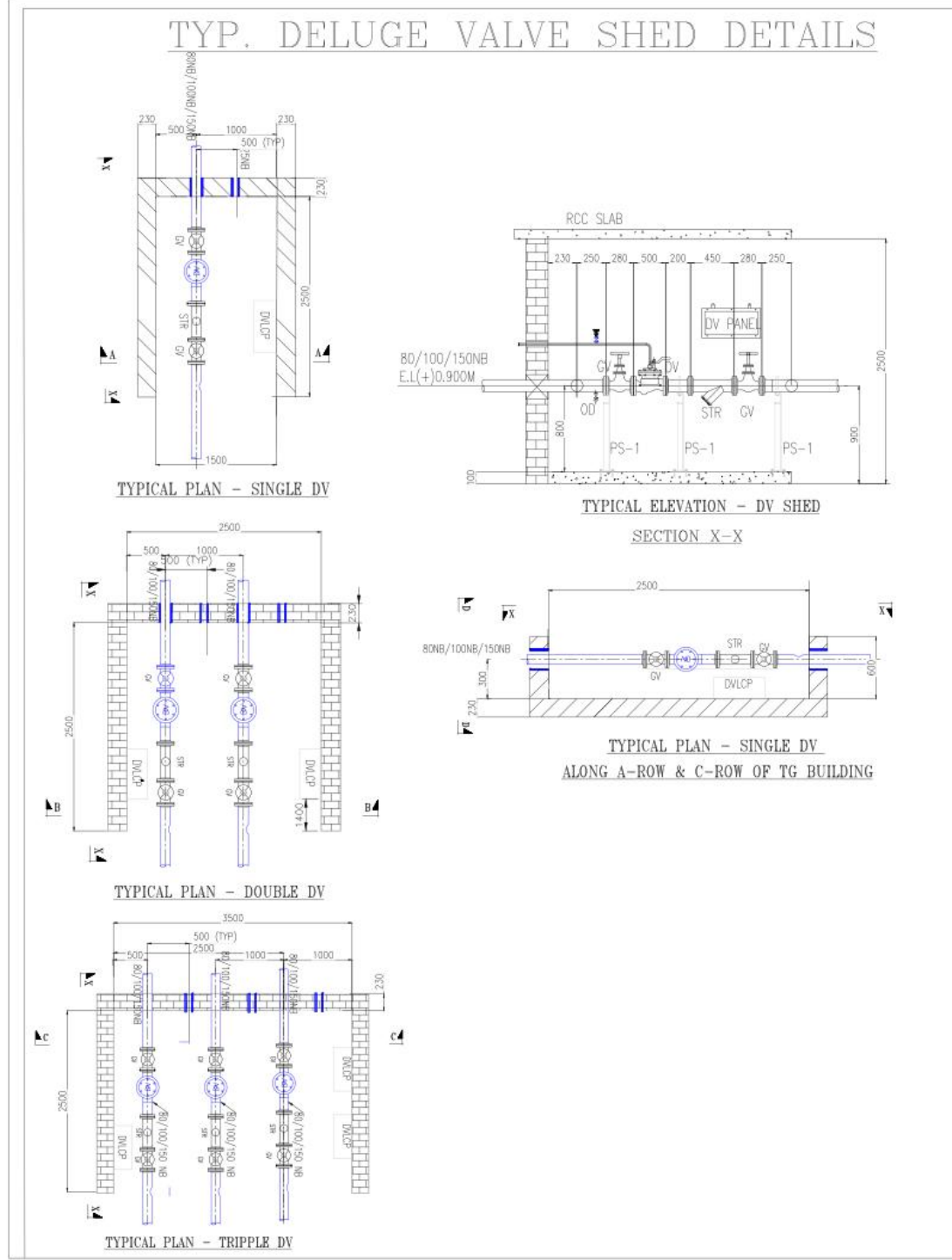
OWNER	NTPC Limited	PROJECT	LARA SUPER THERMAL POWER PROJECT 2X800MW STAGE-II
DESIGNER	BHARAT HEAVY ELECTRICALS LTD.	DATE	30.09.24
CHECKED	KAMALUDIN	DATE	30.09.24
APPROVED	PCS	DATE	30.09.24
DEPT.	PE&SD	SCALE	1:100
UNITS	MM	WEIGHT	KG
NO. OF SHEETS	03	NO. OF ITEMS	06
TITLE	COMPOSITE LAYOUT OF HYDRANT AND SPRAY SYSTEM INCLUDING HUME PIPES LOCATION	REV.	02

LEGENDS

1. HYDRANT PIPE	
2. SPRAY PIPE	
3. HYDRANT BOOSTER PIPE	
4. PIPE RUNNING IN TRENCH	
5. HUME PIPE	
6. SINGLE HEAD HYDRANT VALVE (SH)	
7. WATER MONITOR (WM)	
8. WET RISER	
9. DELUGE VALVE (DV) IN HOUSE	
10. ISOLATION VALVE (GATE VALVE)	
11. REDUCER/ENLARGER	
15. BUTTERFLY VALVE	
16. HOSE HOUSE	
17. AG	
18. PIPE ON RACK	
19. SPRAY BOOSTER PIPE	
20. HOSE BOX	

BOQ OF MAJOR COMPONENTS

SL.NO.	LEGENDS	DESCRIPTION	TAG NOS.	QUANTITY	UNIT
1	SH	SINGLE HEADED HYDRANT VALVE (EXT)	SH 01 TO SH 252	252	NOs.
2	WM	WATER MONITOR	WM 01 TO 44	44	NOs.
3	GVH	GATE VALVE HYDRANT	GTV 01 TO 65	65	NOs.
4	GVS	GATE VALVE WITH LIMIT SWITCH (SPRAY)	GVS 01 TO 24	25	NOs.
5	BFV	BUTTERFLY VALVE	BFV 01 TO 38	38	NOs.
6	HH	HOSE HOUSE	HH 01 TO 05	05	NOs.
7	300NB :MS PIPE	OUTSIDE DIA 323.9MM, WALL THK. 7.1MM (AS PER IS 3589, GRADE 410)	----	14000	MTRs.
8	200NB :MS PIPE	OUTSIDE DIA 219.1MM, WALL THK. 6.3MM (AS PER IS 3589, GRADE 410)	----	1360	MTRs.
9	150NB :MS PIPE	AS PER IS 1239 PART-1, MED. GRADE	----	11600	MTRs.
10	100NB :MS PIPE	AS PER IS 1239 PART-1, MED. GRADE	----	1000	MTRs.
11	80NB :MS PIPE	AS PER IS 1239 PART-1, MED. GRADE	----	1100	MTRs.



Sl no	Hydrant Pipe Size (Inch)	Hydrant Pipe OD (in MM)	Hydrant/Spray Pipe size in NB	Hume Pipe (NP3, NP4) Internal Diameter MM
01	3	88.9	80	150
02	4	114.3	100	200
03	6	168.3	150	250
04	8	219.1	200	300
05	10	273.05	250	350
06	12	323.8	300	400

HP TAG	HP NB	HP Length	East	North
H-001	300	15	-1069.51	-2185.5
H-002	300	15	-1069.51	-2185.98
H-003	300	6.3	-1158.22	-2185.5
H-004	300	16.2	-111.173	-2180.53
H-005	300	16.3	-911.173	-2180.94
H-006	250	6.3	-963.705	-2177.96
H-007	250	16.2	-910.976	-2178.43
H-008	250	8.5	-1147.14	-1666.18
H-009	250	8.5	-1147.14	-1665.76
H-010	400	8.5	-1132.06	-1665.76
H-011	400	2.6	-1114.73	-1665.75
H-012	250	2.3	-912.8	-2114.59
H-013	250	9.3	-912.806	-2052.57
H-014	400	16.1	-888.568	-2046.44
H-015	400	16.1	-888.05	-2046.44
H-016	400	14	-919.119	-2022.6
H-017	400	14.6	-918.698	-2022.03
H-018	400	8.1	-814.325	-2041.16
H-019	400	8.1	-814.346	-2041.84
H-020	250	11.5	-1088.27	-2024.77
H-021	400	16	-1245.35	-2020.27
H-022	400	16.1	-1245.86	-2020.27
H-023	250	5.5	-1013.08	-2217.97
H-024	250	5.6	-1013.08	-2218.39
H-025	400	15.8	-1267.84	-1966.51
H-026	400	15.8	-1267.83	-1966.97
H-027	400	17.9	-1267.67	-1935.75
H-028	400	15.8	-1267.67	-1771.35
H-029	400	15.8	-1267.67	-1770.8
H-029A	300	12.8	-1179.37	-1919.53
H-029B	250	12.8	-1179.37	-1919.53
H-030	250	15.5	-1087.91	-1919.96
H-031	400	12.7	-974.968	-1919.6
H-031A	250	12.7	-974.968	-1919.59
H-032	400	13.9	-1083.05	-1935.67
H-033	400	4.9	-931.603	-1935.67
H-034	400	15.7	-912.332	-1920.67
H-035	400	15.8	-911.9	-1920.67
H-036	250	5.8	-1087.89	-1862.66
H-037	400	18.6	-249.614	-1825.89
H-037A	400	12.8	-1250.51	-1775.17
H-038	400	8.1	-1228.952	-1776.58
H-039	400	8.3	-1228.52	-1776.56
H-040	250	8.3	-1201.69	-1776.56
H-041	250	8.3	-1179.46	-1776.56
H-042	250	8.3	-1163.24	-1776.56
H-043	250	8.3	-1093.92	-1776.56
H-043A	250	8.3	-1000.07	-1654.26
H-044	250	8.3	-1111.21	-1776.56
H-045	250	8.3	-1105.26	-1776.56
H-046	250	5.1	-1245.35	-1835.44
H-047	250	8.3	-1078.48	-1776.56
H-048	250	8.3	-1070.41	-1776.56
H-049	250	8.3	-1057.92	-1776.56
H-050	250	8.3	-1017.55	-1776.56
H-051	250	8.3	-1004.45	-1776.56
H-052	250	8.3	-995.613	-1776.56
H-053	250	8.3	-964.187	-1776.56
H-054	400	5.1	-1245.85	-1835.17
H-055	250	8.3	-974.239	-1776.56
H-056	400	5.4	-1245.36	-1835.21
H-057	250	8.3	-934.438	-1776.56
H-058	250	8.3	-924.308	-1776.56
H-059	250	8.3	-916.341	-1776.56
H-060	400	10.2	-912.314	-1775.73
H-061	400	10.2	-911.894	-1775.84
H-062	250	3.5	-1118	-1815.75
H-063	250	3.5	-1118	-1816.08
H-064	250	3.5	-1118	-1816.32
H-065	250	8.5	-1015.07	-1653.87
H-066	250	8.3	-1067.08	-1815.5
H-067	250	6.3	-1067.08	-1815.8
H-068	400	3.6	-1168.54	-1637.75
H-069	250	4.4	-1040.27	-1815.48
H-070	250	4.4	-1040.27	-1815.82
H-071	400	7.9	-1103.64	-1787.58
H-072	400	7.9	-1103.64	-1787.95
H-073	400	7.9	-1103.64	-1788.32
H-074	400	7.9	-1103.64	-1788.74
H-075	400	9.4	-1250.52	-1703.53
H-076	400	8.3	-1250.99	-1703.52
H-077	400	6.7	-1250.99	-1643.87

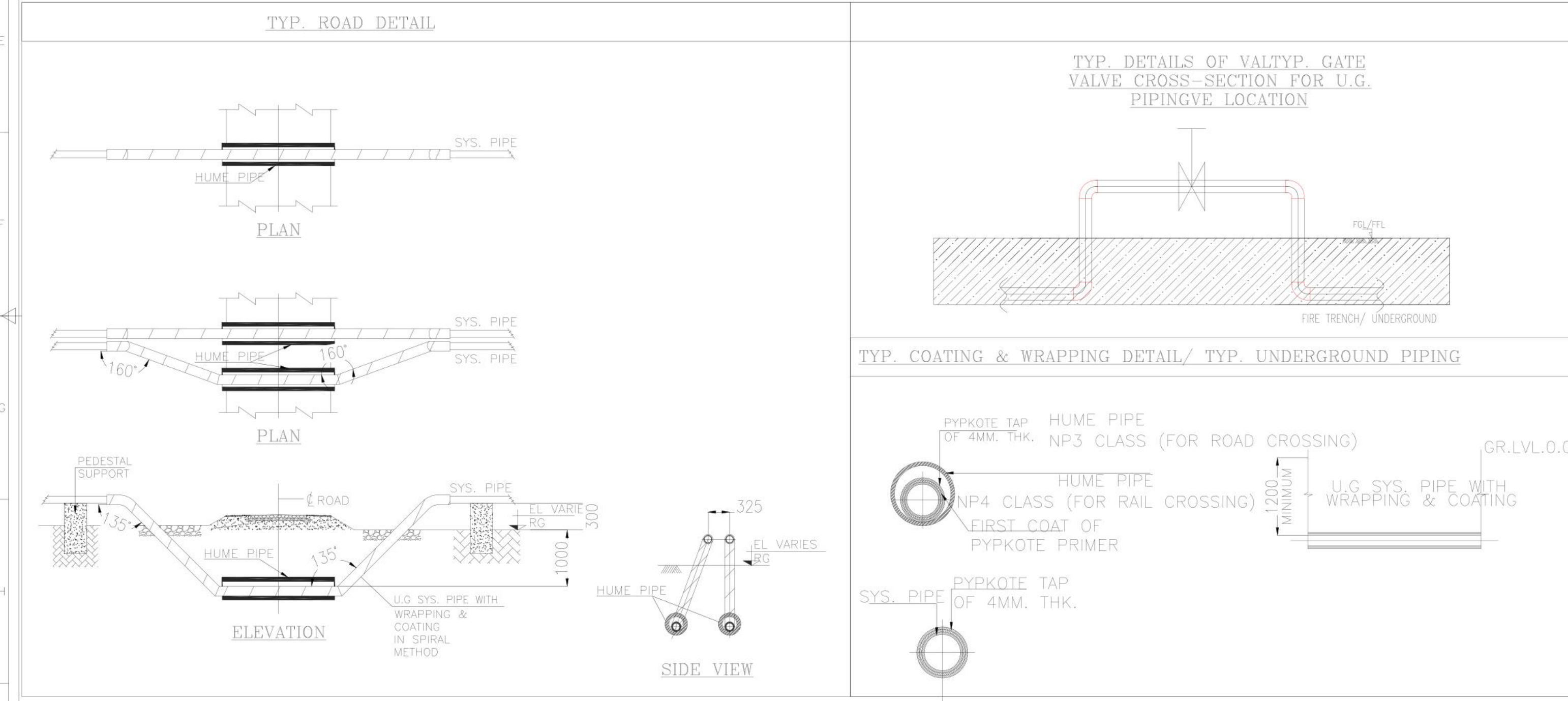
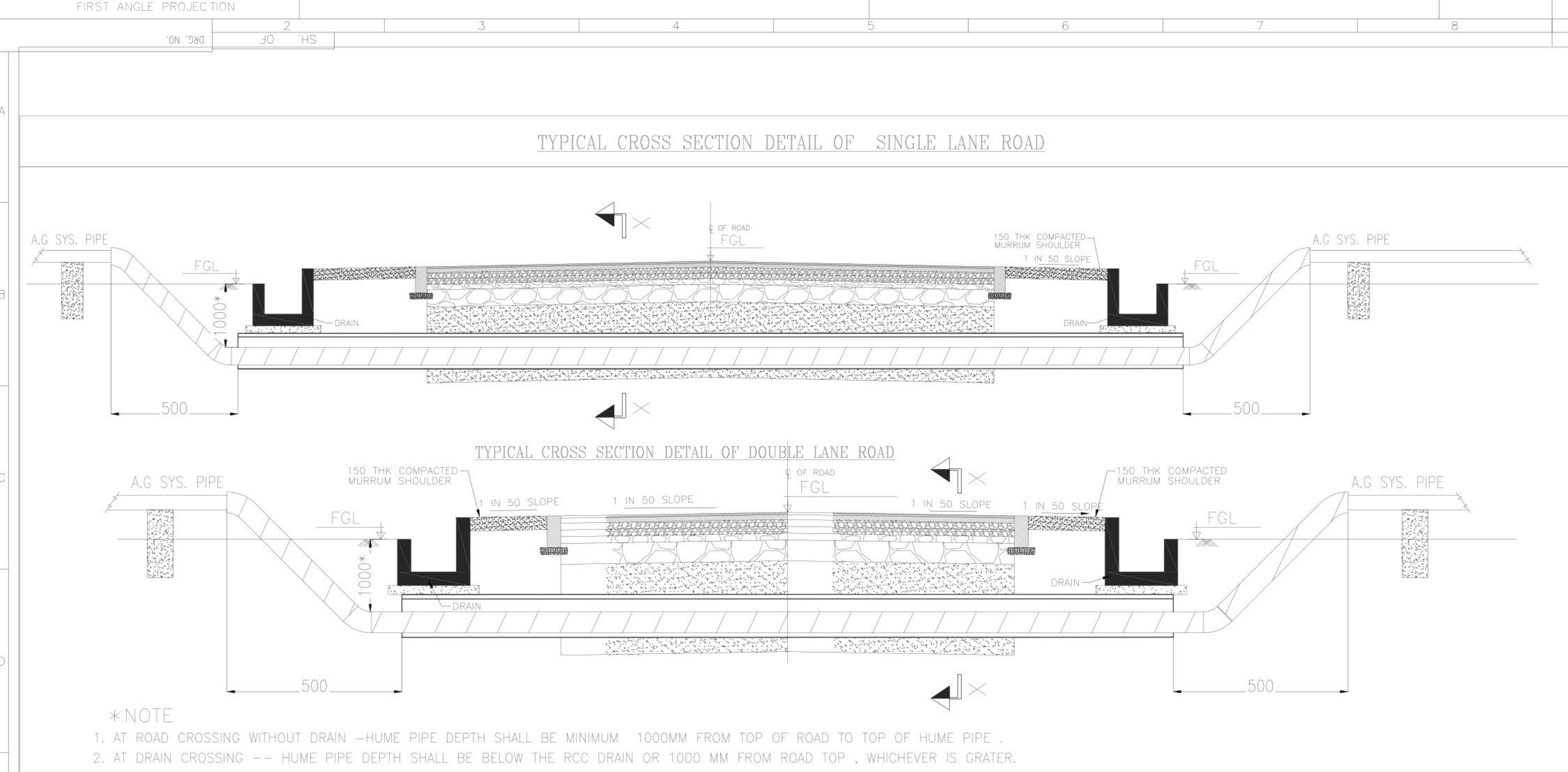
HP TAG	HP NB	HP Length	East	North
H-078	400	6.8	-1250.56	-1643.88
H-079	400	15.8	-1204.96	-1637.85
H-080	400	15.7	-1204.96	-1638.24
H-081	400	10.9	-1068.92	-1637.85
H-082	400	10.9	-1068.86	-1638.27
H-083	400	11.8	-915.787	-1708.7
H-084	250	8.3	-1142.86	-1776.56
H-085	400	8.5	-926.689	-1725.61
H-086	400	8.4	-926.689	-1726.07
H-087	400	8.9	-1069.07	-1725.56
H-088	400	8.9	-1069.09	-1726.02
H-089	400	8.9	-1205.08	-1725.67
H-090	400	8.9	-1205.06	-1726.11
H-091	400	15.9	-1152.23	-1619.8
H-092	400	15.9	-939.473	-1619.79
H-092A	250	5.2	-1076.51	-1705.42
H-093	400	15.9	-958.679	-1619.8
H-093A	250	6.9	-1059.13	-1680.21
H-095	250	2.2	-1027.48	-1653.7
H-096	200	5.3	-961.656	-1695.45
H-097	200	5.3	-961.34	-1695.45
H-098	200	4.9	-971.395	-1694.02
H-099	250	6.3	-1022.67	-1749.19
H-100	250	8.5	-1015.07	-1654.24
H-101	250	6.3	-1067.08	-1816.17
H-102	250	4.4	-1040.26	-1816.2
H-103	350	15.8	-1267.67	-1967.6
H-104	400	15.8	-1267.67	-1990.4
H-105	150	4.6	-1176.51	-2211.52
H-106	400	15.8	-1267.67	-1814.79
H-107	350	20.1	-1267.67	-1934.98
H-108	400	17.7	-1267.67	-1936.34
H-109	400	13.9	-1083.05	-1935
H-110	400	13.9	-1083.05	-1936.2
H-111	400	4.9	-931.603	-1935.16
H-112	400	4.9	-931.603	-1936.19
H-113	200	10.3	-1079.69	-1858.02
H-114	300	11	-1067.48	-1704.7
H-115	200	2.3	-912.264	-2103.97
H-116	200	2.5	-912.247	-2114.5
H-117	250	8.5	-1155.08	-1810.94
H-118	200	17.9	-911.36	-1819.23
H-119	200	17.9	-911.36	-1727.15
H-120	200	17.9	-911.36	-1754.72
H-121	250	9.8	-1004.23	-1735.97
H-122	250	3.5	-1186.85	-1816.67
H-123	250	3.5	-1186.85	-1816.31
H-124	250	3.5	-1186.85	-1816.07
H-125	400	3.6	-1168.54	-1638.07
H-126	250	8.5	-1015.07	-1654.62
H-127	250	3.5	-971.248	-1816.67
H-128	250	3.5	-971.248	-1816.38
H-129	250	3.5	-971.242	-1816.06
H-130	400	16.8	-1245.31	-1817.83
H-131	400	16.8	-1245.86	-1817.83
H-132	400	28	-1251.91	-2329.75
H-133	400	28	-1252.4	-2329.75
H-134	400	12.2	-1251.92	-2401.42
H-135	400	12.6	-1252.4	-2401.42
H-136	400	27	-1251.91	-2528.8
H-137	400	27.7	-1252.4	-2528.77
H-138	300	8.1	-1157.63	-2695.16
H-139	300	8.1	-1057.83	-2695.16
H-140	400	32.9	-644.015	-2572.97
H-141	400	32.9	-644.47	-2572.97
H-142	400	14.1	-643.56	-2567.46
H-143	400	14.1	-643.56	-2567.92
H-144	250	14.1	-643.456	-2526.26
H-145	250	14.1	-643.456	-2388.76
H-146	250	14.1	-643.45	-2389.15
H-147	250	9.3	-1294.71	-1345.37
H-148	250	13	-483.359	-2342.47
H-149	400	18.9	-453.01	-2579.21
H-150	400	18.9	-453.01	-2578.75
H-151	400	15.5	-413.308	-2579.23
H-152	400	15.5	-413.308	-2578.77
H-153	250	21.7	-454.909	-2338.56
H-154	400	13.2	-446.538	-2319.17
H-155	400	15	-412.529	-2319.17
H-156	250	17.7	-413.543	-2220.75
H-157	250	17.7	-447.588	-2220.75
H-158	250	15.9	-552.141	-2214.19
H-159	250	14.9	-721.523	-2214.19
H-160	200	16	-1181.44	-2203.92

HP TAG	HP NB	HP Length	East	North
H-245	400	19.7	-1252.03	-2445.64
H-246	250	14.6	-1203.56	-2461.96
H-247	250	6.7	-1180.57	-2810.31
H-248	250	20.4	-905.544	-2288.57
H-249	250	5.7	-1201.17	-2285.24
H-250	250	6.9	-698.874	-2215.13
H-251	250	6.9	-685.957	-2254.24
H-252	250	16	-910.801	-1503.95
H-253	400	16	-910.801	-1503.6
H-254	400	16	-1267.96	-2233.5
H-255	400	16	-1100.65	-2204.75
H-256	300	3	-1099.4	-1637.74
H-257	300	3	-1099.4	-1638.09
H-94	150	5.8	-872.889	-1787.95

HP TAG	HP NB	HP Length	East	North
H-161	250	12.6	-1371.07	-1345.39
H-162	400	20.4	-888.049	-2216.76
H-163	400	20.4	-888.552	-2216.76
H-164	200	16	-773.518	-2062.53
H-165	250	16.8	-694.089	-2063.43
H-166	250	5.9	-953.691	-2218.34
H-167	400	20	-414.369	-2056.72
H-168	400	19.8	-414.327	-2057.54
H-169	400	23.9	-210.688	-1822.85
H-170	400	22.9	-211.033	-1824.61
H-171	350	13.3	-1252.85	-2400.55
H-172	350	27.7	-1252.84	-2528.28
H-173	350	16.8	-1246.35	-2187.45
H-174	350	28.3	-1246.35	-2187.45

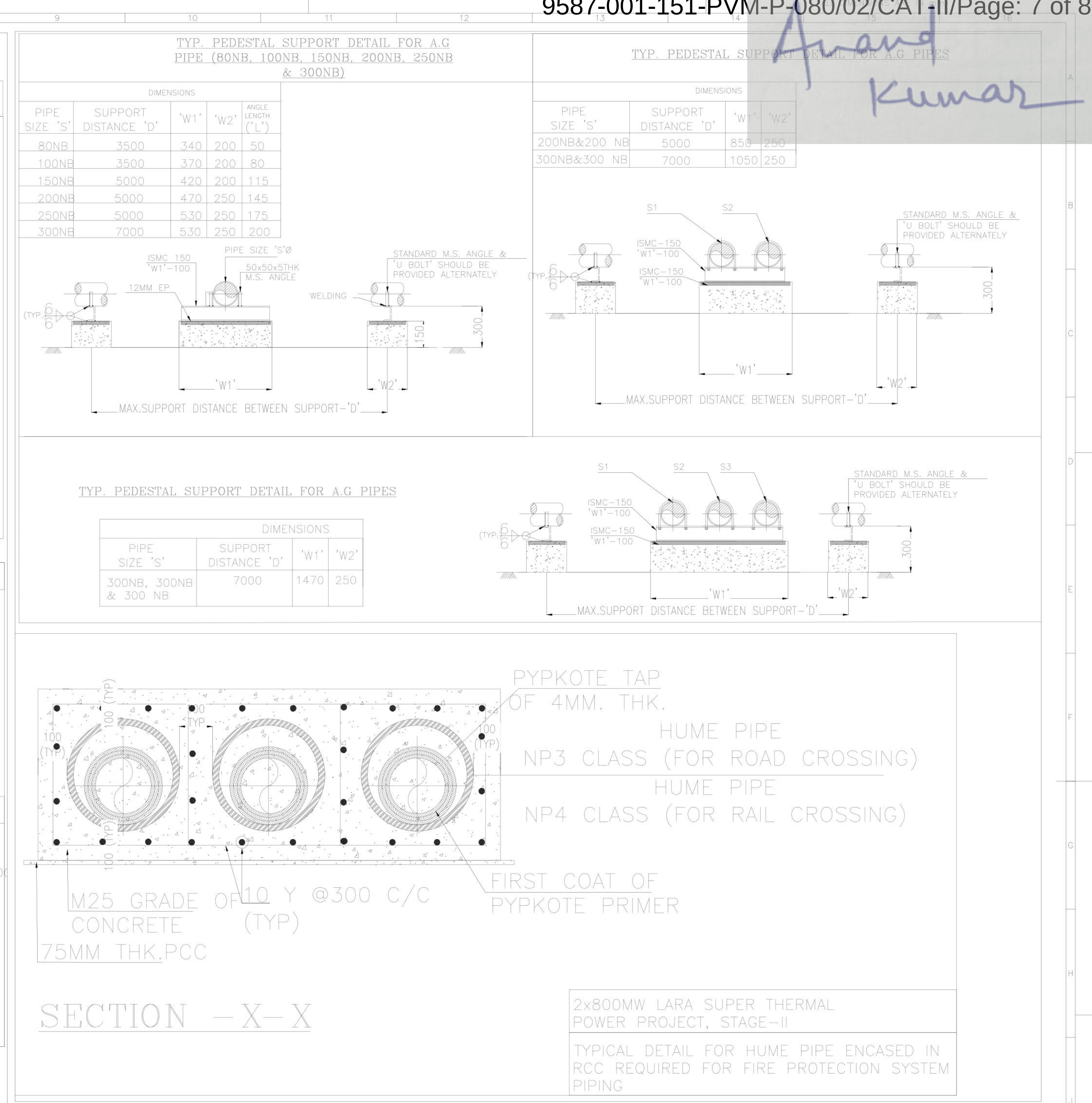
THE INFORMATION ON THIS DOCUMENT IS THE PROPERTY OF BHARAT HEAVY ELECTRICALS LIMITED. IT MUST NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO THE INTEREST OF THE COMPANY.

INVENTORY NO. SIGN AND DATE. COMPUTER FILE NAME. REF. DES. NO.



NOTE:

1) REFER GA OF DELUGE VALVE HOUSING AND CENTRAL HOSE STATION: DRG. NO. 4540-001-151-PVM-B-006



Arund Kumar

GENERAL DIMENSIONAL LIMITS/FITS & TOLERANCES AS PER HY0230261

REV.	DATE	ALTERED	CHD/APPD	ZONE
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

NTPC DRG. NO. 9587-001-151-PVM-P-080

OWNER: NTPC Limited (A GOVERNMENT OF INDIA ENTERPRISE)

PROJECT: LARA SUPER THERMAL POWER PROJECT 2X800MW STAGE-II

BHARAT HEAVY ELECTRICALS LTD. PROJECT ENGINEERING & SYSTEMS DIVISION, (PEXSD) HYDERABAD

DRN. HUMAR/MT/AV -SD- 30.09.24
CHD: KAMALUDON -SD- 30.09.24
APPD: PCS -SD- 30.09.24

DEPT. HEAD CODE: 450

UNTOOL OR: 450

SCALE: 1:100

WEIGHT (KGS): 450

REF. TO ASSY. DRG. -N.A.-

ITEM NO. -N.A.-

NO. OF ITEMS -N.A.-

TITLE: COMPOSITE LAYOUT OF HYDRANT AND SPRAY SYSTEM INCLUDING HUME PIPES LOCATION

CARD CODE: PY-LP-1-M213-8316-06

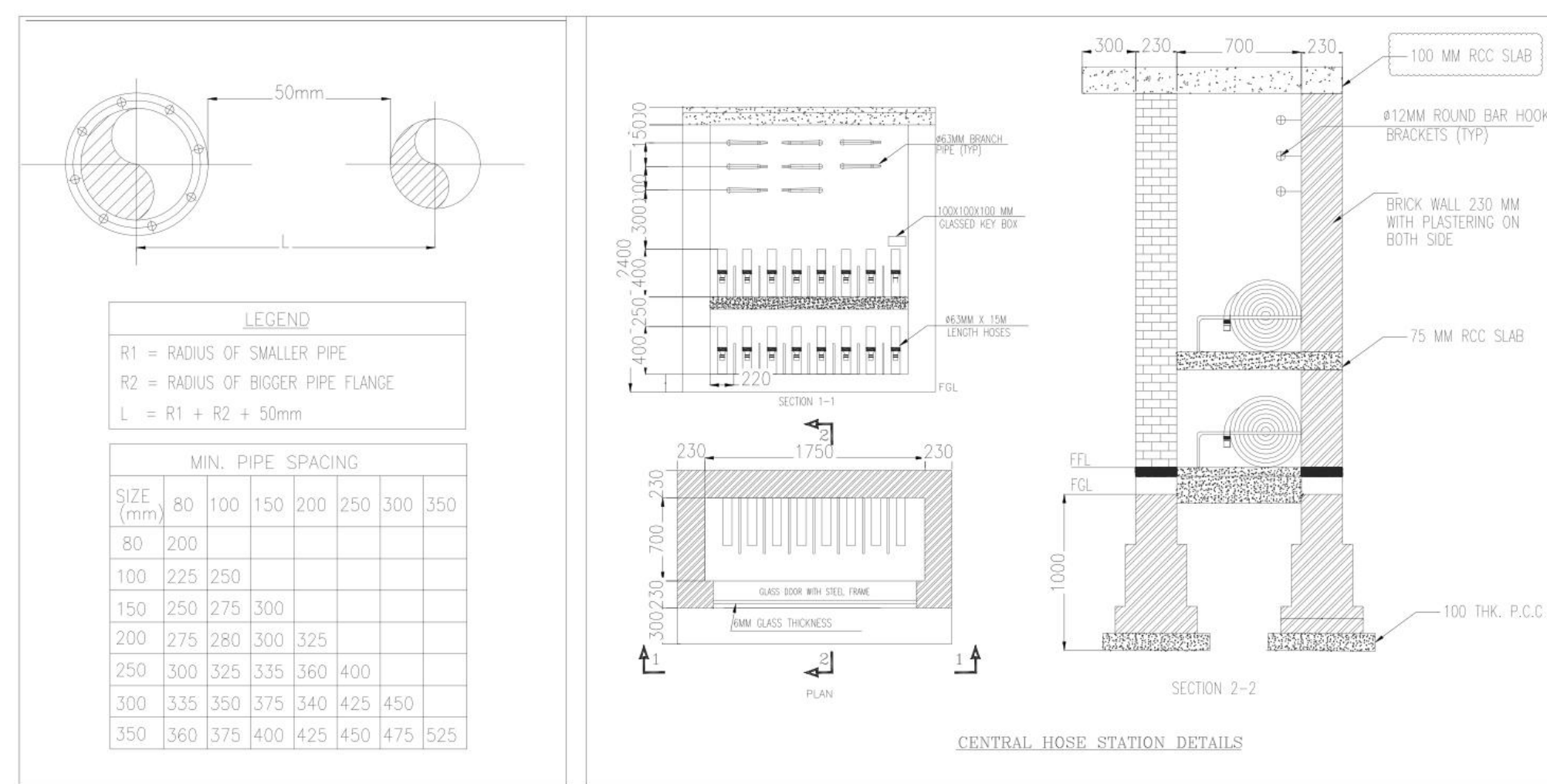
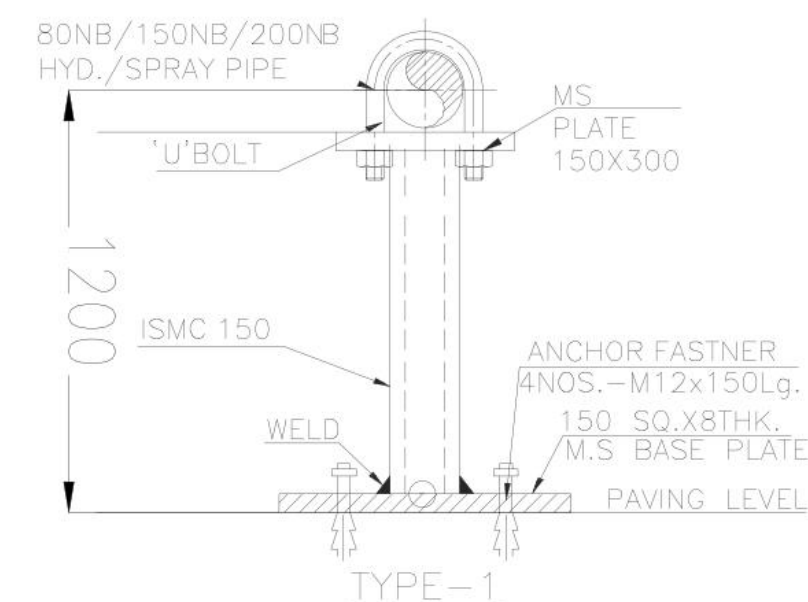
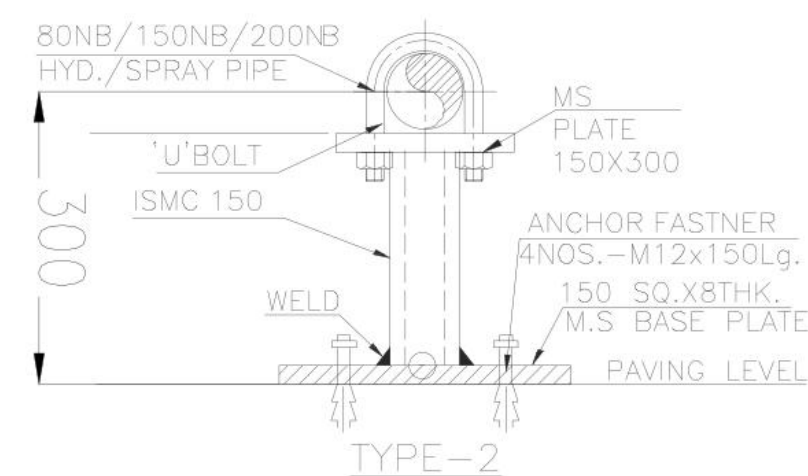
REV. 02

SH. No. 05

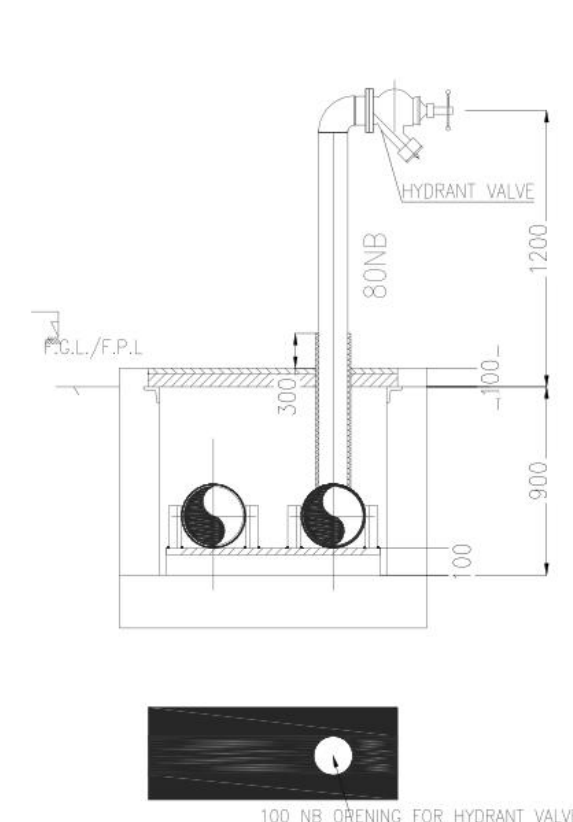
NO. OF SH. 06

Arund
Kumar

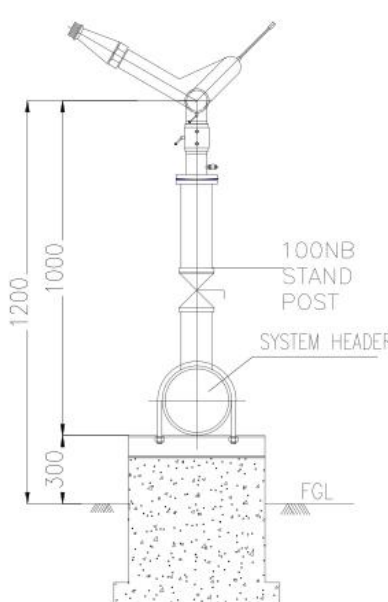
TYP. MOUNTING DETAIL FOR HOSE
BOX STAND (FOR EXTERNAL
HYDRANT)



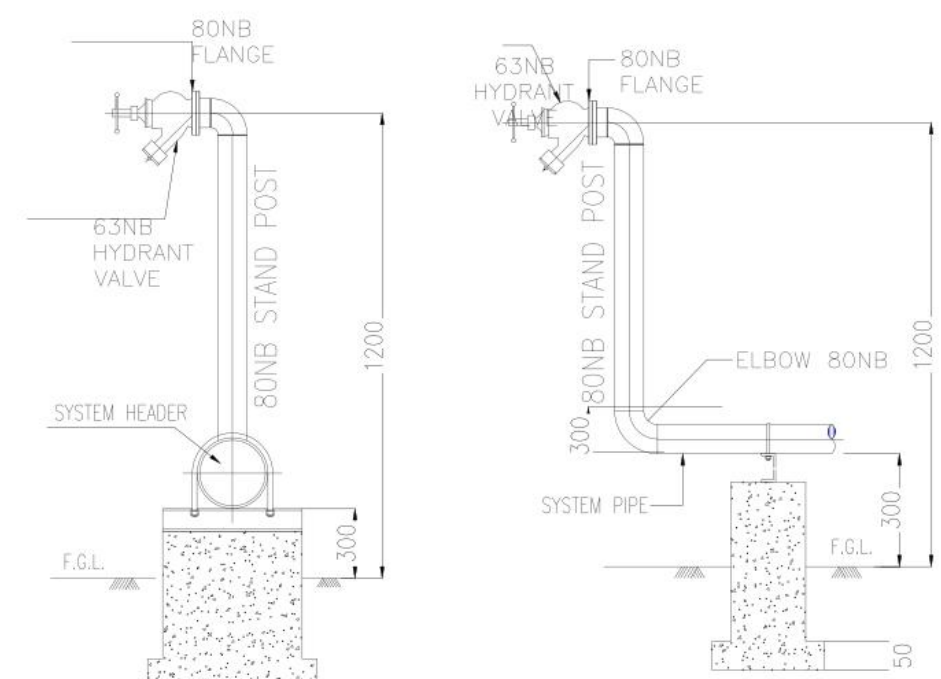
TYPICAL MOUNTING ARRANGEMENT
SINGLE HEADED HYDRANT VALVE



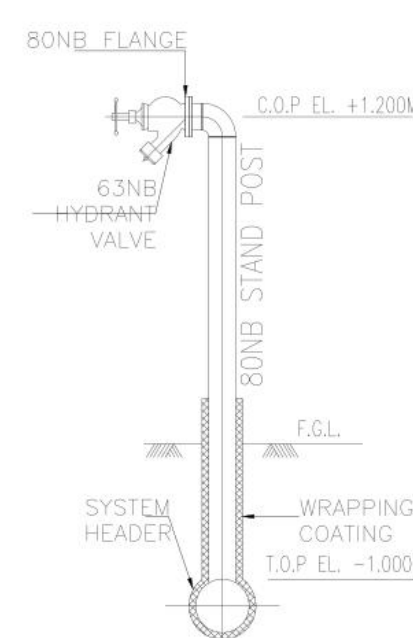
TYPICAL MOUNTING
ARRANGEMENT
OF WATER MONITOR



TYPICAL MOUNTING ARRANGEMENT FOR SINGLE
HEADED HYDRANT VALVE (A.G. TERMINAL)



TYPICAL MOUNTING
ARRANGEMENT FOR SINGLE
HEADED HYDRANT VALVE (U.G.)



NTPC DRC. NO. 9587-001-F51-PYM-P-080												1
OWNED 		NTPC Limited (A GOVERNMENT OF INDIA ENTERPRISE)										
PROJECT: LARA SUPER THERMAL POWER PROJECT 2X800MW STAGE-II												
		BHARAT HEAVY ELECTRICALS LTD. PROJECT ENGINEERING & SYSTEMS DIVISION, (PE&SD) HYDERABAD				NAME DIN. CD. KUMARAJI/AV CD. KUMARAJI/AV		DATE -SD- 30.09.24		NO. OF VAR.		
DEPT. PE&SD CODE 450		UNTOL. DMS. 		SCALE		WEIGHT (KG) -N.A.-		TIT. TO. ASSY. DRC. -N.A.-		ITEM NO. -N.A.-		
TITLE COMPOSITE LAYOUT OF HYDRANT AND SPRAY SYSTEM INCLUDING HUME PIPES LOCATION						CARD CODE N.A.		DRAWING NO. P.T. (P-1)-M213-8316-06		REV. 02		
						N.A.		06		06		

