

## Lampiran

Lampiran 1 Data masukan jaringan existing tahun 2019

PAM SUMBER MAKMUR			
DATA PIPA JARINGAN 2019			
	Length	Diameter	Roughness
Link ID	m	mm	
Pipe P1	63	57	140
Pipe P2	106	57	140
Pipe P3	69	109	140
Pipe P4	125	45	140
Pipe P5	61	109	140
Pipe P6	132	30	140
Pipe P7	86	109	140
Pipe P8	72	30	140
Pipe P9	210	109	140
Pipe P10	155	45	140
Pipe P11	221	85	140
Pipe P12	48	109	140
Pipe P13	86	109	140
Pipe P14	40	109	140
Pipe P15	92	109	140
Pipe P16	1300	85	140
Pipe P17	221	85	140
Pipe P18	86	45	140
Pipe P19	48	45	140
Pipe P20	958	45	140
Pipe P21	165	57	140
Pipe P22	123	45	140

Pipe P23	135	45	140
Pipe P24	130	45	140
Pipe P25	64	45	140
Pipe P26	64	45	140
Pipe P27	113	57	140
Pipe P28	100	45	140
Pipe P29	324	30	140
Pipe P30	265	45	140
Pipe P31	135	45	140
Pipe P32	233	45	140
Pipe P33	132	45	140
Pipe P34	124	30	140
Pipe P35	45	57	140
Pipe P36	52	57	140
Pipe P37	315	57	140
Pipe P38	97	45	140
Pipe P39	123	30	140
Pipe P40	52	30	140
Pipe P41	619	45	140
Pipe P42	100	45	140
Pipe P43	124	45	140
Pipe P44	188	45	140
Pipe P45	138	45	140
Pipe P46	1000	30	140
Pipe P47	70	45	140
Pipe P48	130	109	140
Pipe P49	15	30	140
Pipe P50	15	30	140

Pipe P51	1800	57	140
Pipe P52	30	109	140
Pipe P53	310	45	140
Pipe P54	252	45	140
Pipe P55	252	45	140
Pipe P56	155	30	140
Pipe P57	100	45	140
Pipe P58	235	45	140
Pipe P59	100	57	140
Pipe P60	70	45	140
Pipe P61	30	109	140
Pipe P62	30	109	140
Pipe P63	200	45	140
Pipe P64	80	45	140
Pipe P65	80	85	140
Pipe P66	200	72	140
Pipe P67	500	57	140

Sumber: PAM Sumber Makmur

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PAM SUMBER

MAKMUR		
NODE/JUNCTION		
	Elevation	Demand
Node ID	m	LPS
Junc J01	59	0.14
Junc J02	59	0.08
Junc J03	58	0.15
Junc J04	65	0.12
Junc J05	58	0.05
Junc J06	64	0
Junc J07	65	0.12
Junc J08	68	0
Junc J09	69	0.18
Junc J010	67	0
Junc J011	62	0
Junc J012	62	0.15
Junc J013	57	0
Junc J014	74	0
Junc J015	69	0.05
Junc J016	67	0.16
Junc J017	71	0
Junc J018	71	0
Junc J019	69	0.25
Junc J020	65	0.25
Junc J021	63	0.07
Junc J022	63	0.04
Junc J023	71	0
Junc J024	69	0.41

Junc J025	68	0
Junc J026	68	0
Junc J027	69	0.04
Junc J028	69	0.16
Junc J029	70	0.08
Junc J031	69	0.08
Junc J032	69	0.06
Junc J034	66	0.08
Junc J036	75	0
Junc J038	73	0.15
Junc J039	60	0
Junc J040	60	0
Junc J042	60	0.12
Junc J044	60	0
Junc J047	65	0.14
Junc J048	66	0
Junc J049	65	0
Junc J050	70	0.2
Junc J052	69	0.09
Junc J053	65	0
Junc J055	61	0.08
Junc J056	66	0.08
Junc J059	61	0
Junc J060	60	0.05
Junc J061	66	0
Junc J063	68	0.08
Junc J064	67	0.08
Junc J065	75	0.05

Junc J067	64	0	Sumber: EPAN ET 2.0
Junc J069	64	0.18	
Junc J070	57	0.07	
Junc J072	60	0.12	
Junc J073	68	0	
Junc J074	68	0.16	
Junc J075	67	0	
Junc J076	66	0	
Junc J077	65	0	
Junc J079	66	0.06	
Junc J076	61	0	
Junc J077	61	0	
Junc J079	57	0.18	
Junc J076	61	0.18	
Junc J077	61	0	

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Lampiran 2 Hasil Run *NOSUCCES* jaringan eksisting tahun 2019

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*	<i>E P A N E T</i>	*
*	<i>Hydraulic and Water Quality</i>	*
*	<i>Analysis for Pipe Networks</i>	*
*	<i>Version 2.00.12</i>	*

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*Analysis begun Mon Nov 16 14:51:40 2020*



*WARNING: Negative pressures at 0:00:00 hrs.*

*WARNING: Negative pressures at 1:00:00 hrs.*

*WARNING: Negative pressures at 2:00:00 hrs.*

*WARNING: Negative pressures at 3:00:00 hrs.*

*WARNING: Negative pressures at 4:00:00 hrs.*

*WARNING: Negative pressures at 5:00:00 hrs.*

*WARNING: Negative pressures at 6:00:00 hrs.*

*WARNING: Negative pressures at 7:00:00 hrs.*

*WARNING: Negative pressures at 8:00:00 hrs.*

*WARNING: Negative pressures at 9:00:00 hrs.*

*WARNING: Negative pressures at 10:00:00 hrs.*

*WARNING: Negative pressures at 11:00:00 hrs.*

*WARNING: Negative pressures at 12:00:00 hrs.*

*WARNING: Negative pressures at 13:00:00 hrs.*

*WARNING: Negative pressures at 14:00:00 hrs.*

*WARNING: Negative pressures at 15:00:00 hrs.*

*WARNING: Negative pressures at 16:00:00 hrs.*

*WARNING: Negative pressures at 17:00:00 hrs.*

*WARNING: Negative pressures at 18:00:00 hrs.*

*WARNING: Negative pressures at 19:00:00 hrs.*

*WARNING: Negative pressures at 20:00:00 hrs.*

*WARNING: Negative pressures at 21:00:00 hrs.*

*WARNING: Negative pressures at 22:00:00 hrs.*

*WARNING: Negative pressures at 23:00:00 hrs.*

*WARNING: Negative pressures at 24:00:00 hrs.*

*Analysis ended Mon Nov 16 14:51:41 2020*

**Halaman ini sengaja dikosongkan**

Lampiran 3 Perubahan diameter pipa jaringan tahun 2025

Perubahan ini mengacu pada setandar dari

Permen\_PU\_No\_18\_Tahun\_2007\_Penyelenggaraan SPAM.

LINK ID	TAHUN 2019	TAHUN 2025
	mm	mm
Pipe P01	57	72.7
Pipe P02	57	72.7
Pipe P03	109	72.7
Pipe P04	45	72.7
Pipe P05	109	72.7
Pipe P06	30	72.7
Pipe P07	109	72.7

Pipe P08	30	72.7
Pipe P09	109	72.7
Pipe P010	45	72.7
Pipe P011	85	72.7
Pipe P012	109	72.7
Pipe P013	109	72.7
Pipe P014	109	72.7
Pipe P015	109	72.7
Pipe P016	85	72.7
Pipe P017	85	72.7
Pipe P018	45	72.7
Pipe P019	45	72.7
Pipe P020	45	72.7
Pipe P021	57	72.7
Pipe P022	45	72.7
Pipe P023	45	72.7
Pipe P024	45	72.7
Pipe P025	45	72.7
Pipe P036	45	72.7
Pipe P027	57	72.7
Pipe P028	45	72.7
Pipe P029	12	72.7
Pipe P030	45	72.7
Pipe P031	45	72.7
Pipe P032	45	72.7
Pipe P033	45	72.7
Pipe P034	30	72.7
Pipe P035	57	72.7

Pipe P3	57	72.7
Pipe P037	57	72.7
Pipe P038	45	72.7
Pipe P039	30	72.7
Pipe P040	30	72.7
Pipe P041	45	72.7
Pipe P042	45	72.7
Pipe P043	45	72.7
Pipe P044	45	72.7
Pipe P045	45	72.7
Pipe P046	12	72.7
Pipe P047	45	72.7
Pipe P048	109	72.7
Pipe P049	30	72.7
Pipe P050	30	72.7
Pipe P051	57	72.7
Pipe P052	85	72.7
Pipe P053	109	72.7
Pipe P054	45	72.7
Pipe P055	45	72.7
Pipe P056	45	72.7
Pipe P057	30	72.7
Pipe P058	45	72.7
Pipe P059	45	72.7
Pipe P060	57	72.7
Pipe P061	45	72.7
Pipe P062	109	72.7
Pipe P063	109	72.7

Pipe P064	57	72.7
Pipe P065	57	72.7
Pipe P066	45	72.7
Pipe P067	109	72.7
Pipe P068	109	72.7
Pipe P069	45	72.7
Pipe P070	45	72.7
Pipe P071	85	72.7
Pipe P072	57	72.7
Pipe P073	57	72.7
Pipe P074	57	72.7
Pipe P075	57	72.7
Pipe P076	57	72.7
Pipe P077	85	72.7
Pipe P078	57	109
Pipe P079	85	85.9
Pipe P080	109	85.9
Pipe P081	109	85.9
Pipe P082	109	72.7

Sumber: EPANET 2.0

Lampiran 4 Penambahan jumlah kebutuhan air bersih tahun 2025.

Penambahan kebutuhan ini mengarah ke wilayah yang masih jarang penduduk, sedangkan wilayah padat penduduk kebutuhan air bersih tidak ada perubahan .

Node ID	Elevation	TAHUN 2019 Demand	TAHUN 2025 Demand
	m	LPS	LPS
Junc J01	59	0.14	0.14
Junc J02	59	0.08	0.08
Junc J03	58	0.15	0.15
Junc J04	65	0.12	0.12
Junc J05	58	0.05	0.05
Junc J06	64	0	0



Junc J07	65	0.12	0.12
Junc J08	69	0	0.18
Junc J09	67	0.18	0
Junc J010	62	0	0
Junc J012	62	0	0.15
Junc J013	57	0.15	0.21
Junc J014	74	0	0
Junc J015	69	0	0.05
Junc J016	67	0.05	0.16
Junc J017	71	0.16	0.2
Junc J018	71	0	0
Junc J019	69	0	0.25
Junc J020	65	0.25	0.25
Junc J021	63	0.25	0.07
Junc J022	63	0.07	0.04
Junc J023	71	0.04	0
Junc J024	69	0	0.41
Junc J026	68	0.41	0
Junc J027	69	0	0.04
Junc J028	69	0	0.16
Junc J029	70	0.04	0.08
Junc J030	69	0.16	0.08
Junc J031	69	0.08	0.08
Junc J033	66	0.08	0
Junc J034	75	0.06	0
Junc J035	73	0.08	0.15
Junc J036	60	0	0
Junc J037	60	0.15	0.12

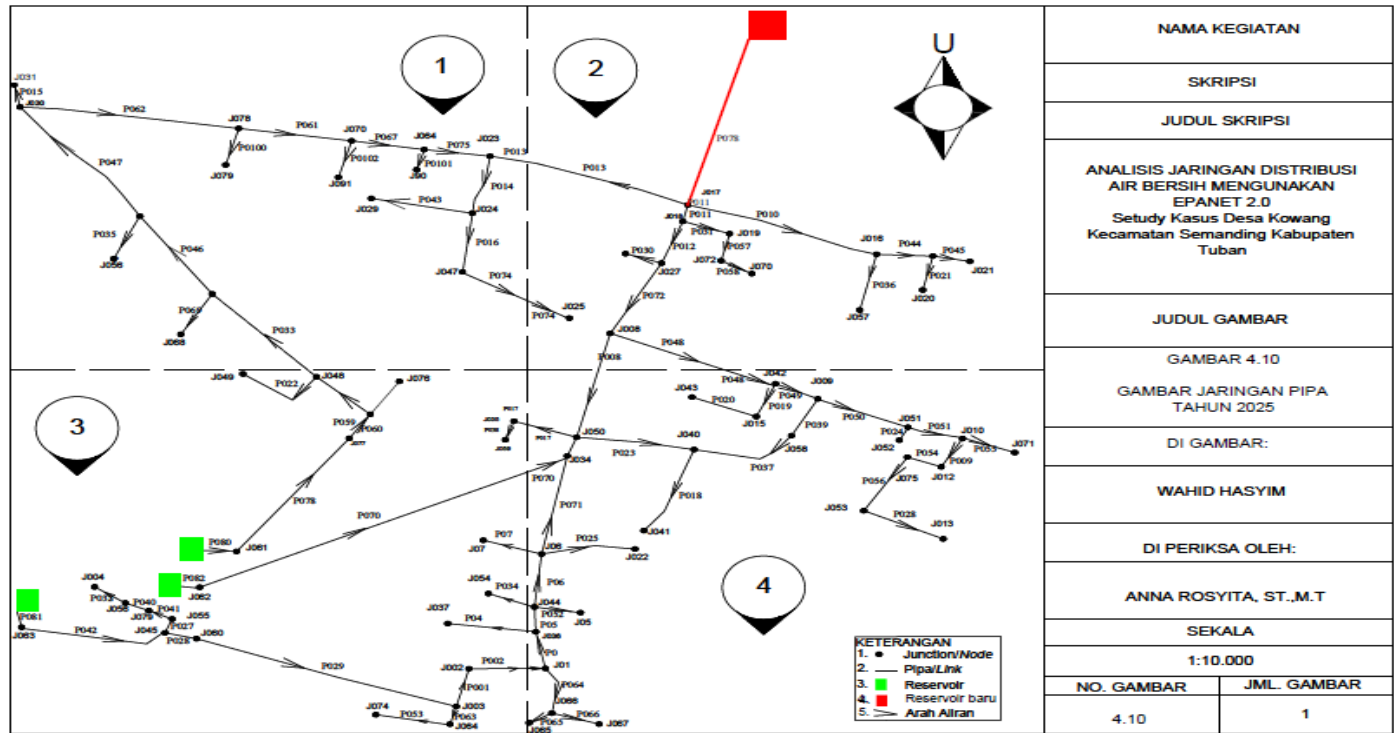
Junc J038	60	0	0
Junc J039	65	0	0.14
Junc J040	66	0.12	0.14
Junc J041	65	0	0.12
Junc J042	70	0.14	0.2
Junc J043	69	0	0.09
Junc J044	65	0	0
Junc J045	61	0.2	0.08
Junc J046	66	0.09	0.08
Junc J047	61	0	0
Junc J060	60	0.08	0.05
Junc J048	68	0.08	0.08
Junc J049	67	0	0.08
Junc J050	75	0.05	0.05
Junc J051	64	0	0
Junc J052	64	0.08	0.18
Junc J053	57	0.08	0.21
Junc J054	60	0.05	0.12
Junc J055	68	0	0
Junc J056	68	0.18	0.16
Junc J057	67	0.07	0.2
Junc J058	66	0.12	0.22
Junc J059	65	0	0.07
Junc J079	66	0.16	0.07
Junc J061	61	0	0
Junc J062	61	0	0
Junc J063	57	0	0
Junc J064	59	0.06	0.04

Junc J065	60		0.08
Junc J066	68	0	0
Junc J067	59	0.18	0.21
Junc J068	56	0.18	0.21
Junc J069	71	0	0
Junc J070	70	0	0
Junc J071	60	0.04	0.08
Junc J072	70	0.01	0.04
Junc J073	68	0.04	0.08
Junc J074	60	0.01	0.04
Junc J075	62	0.01	0.04
Junc J076	67	0.04	0.08
Junc J077	68	0	0
Junc J078	68	0	0
Junc JJ079	0	0.18	0.21
Junc J090	71	0.04	0.08
Junc J091	0	0.04	0.08
Resvr R01	150		
Resvr R02	150		
Resvr R03	150		
Resvr R04	150		

Sumber: EPANET 2.0



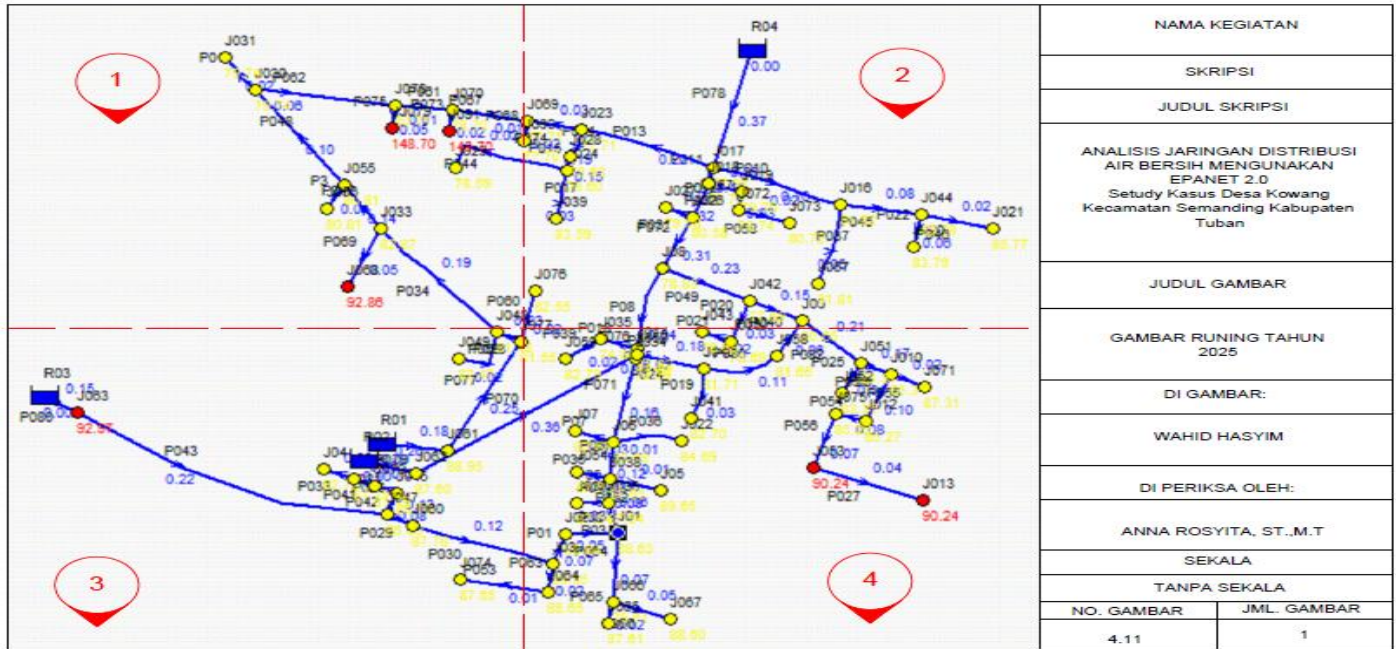
Lampiran 5 peta Jaringan Epanet 2.0 tahun 2025



NAMA KEGIATAN	
SKRIPSI	
JUDUL SKRIPSI	
ANALISIS JARINGAN DISTRIBUSI AIR BERSIH MENGGUNAKAN EPANET 2.0 Setudy Kasus Desa Kowang Kecamatan Semanding Kabupaten Tuban	
JUDUL GAMBAR	
GAMBAR 4.10	
GAMBAR JARINGAN PIPA TAHUN 2025	
DI GAMBAR:	
WAHID HASYIM	
DI PERIKSA OLEH:	
ANNA ROSYITA, ST.,M.T	
SEKALA	
1:10.000	
NO. GAMBAR	JML. GAMBAR
4.10	1

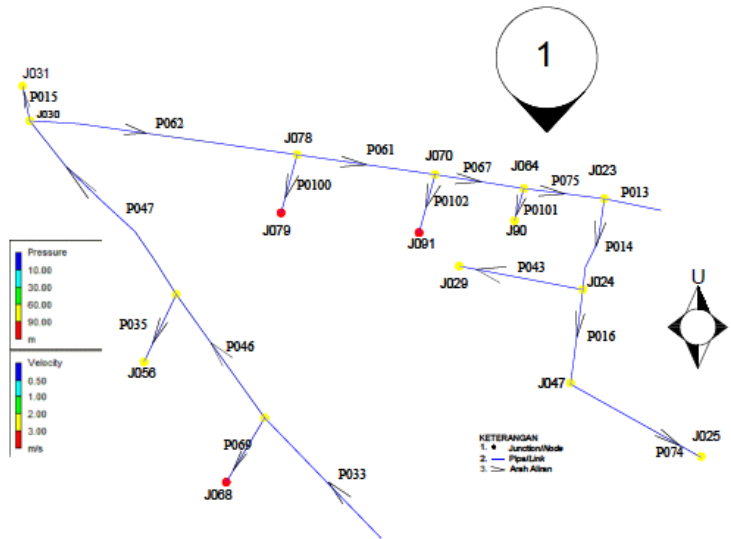
Sumber: EPANET 2.0

Lampiran 6 layout Epanet tahun rencana 2025



Sumber: EPANET 2.0

Lampiran 7 detail jaringan dan hasil Runing tahun rencana 2025



Gambar Detail Ijaringan tahun 2025

Sumber: EPANET 2.0

Tabel A.1 detail 1

SUMBER MAKMUR		Diameter	Flow	Velocity	Unit Headloss	Friction Factor
Links	Length					
Link ID	m	mm	LPS	m/s	m/km	
Pipe P0100	60	72.7	0.21	0.05	0.08	0.047
Pipe P013	221	72.7	0.9	0.22	1.22	0.037
Pipe P014	86	72.7	0.8	0.19	0.96	0.037
Pipe P015	165	72.7	0.08	0.02	0.01	0.052

Lanjutan tabel A.1 detail 1

SUMBER MAKMUR						
Links	Length	Diameter	Flow	Velocity	Unit Headloss	Friction Factor
Link ID	m	mm	LPS	m/s	m/km	
Pipe P016	123	72.7	0.14	0.03	0.04	0.048
Pipe P034	619	72.7	-0.8	0.19	0.98	0.037
Pipe P035	124	72.7	0.16	0.04	0.05	0.047
Pipe P043	310	72.7	0.08	0.02	0.01	0.052
Pipe P046	100	72.7	0.59	0.14	0.56	0.039
Pipe P047	235	72.7	0.43	0.1	0.31	0.041
Pipe P061	145	72.7	0.06	0.01	0.01	0.055
Pipe P062	283	72.7	0.27	0.06	0.13	0.044
Pipe P067	210	72.7	0.03	0.01	0.01	0.062
Pipe p101	60	72.7	0.08	0.02	0.01	0.052
Pipe P069	170	72.7	0.21	0.05	0.08	0.045
Pipe P0102	60	72.7	0.08	0.02	0.01	0.052
Pipe P075	170	72.7	0.11	0.03	0.02	0.05
Pipe P100	60	72.7	0.21	0.05	0.08	0.045

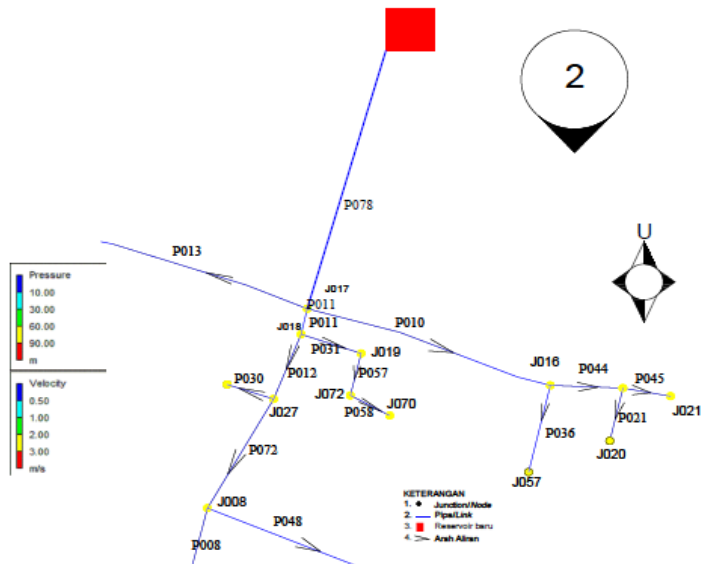
Sumber: EPANET 2.0



Tabel A.2 Node Detail 1

PAM SUMBER MAKMUR	Elevation	Base Demand	Pressure
Network Table - Nodes			
Node ID	m	LPS	m
Junc J031	69	0.07	79.74
Junc J030	69	0.07	79.74
Junc J055	68	0	80.81
Junc J033	66	0	82.87
Junc J056	68	0.14	80.81
Junc J068	56	0.18	92.86
Junc J078	68	0	80.71
Junc JJ079	68	0.18	80.7
Junc J091	68	0.07	80.7
Junc J070	70	0	78.7
Junc J064	59	0.03	88.65
Junc J90	71	0.07	77.7
Junc J029	70	0.07	78.59
Junc J024	69	0.35	79.6
Junc J023	71	0	77.71
Junc J047	61	0	86.8

Sumber: EPANET 2.0



Gambar detail 2 jaringan tahun 2025  
 Sumber: EPANET 2.0

Tabel A.3 detail 2 pipa jaringan 2025

SUMBER MAKMUR		Diameter	Flow	Velocity	Unit Headloss	Friction Factor
Table – Links	Length					
Link ID	m	mm	LPS	m/s	m/km	
Pipe P10	221	72.7	0.68	0.16	0.72	0.038
Pipe P11	48	72.7	1.69	0.41	3.87	0.033
Pipe P12	86	72.7	1.33	0.32	2.47	0.035
Pipe P13	221	72.7	0.9	0.22	1.22	0.037

Lanjutan Tabel A.3

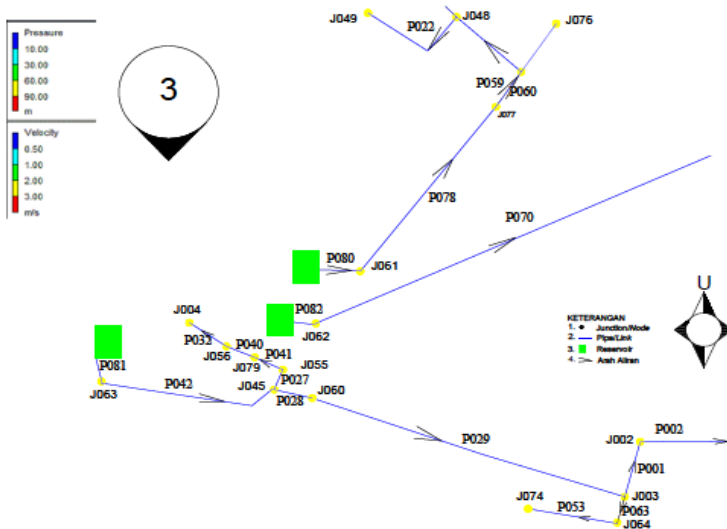
SUMBER MAKMUR						
Table – Links	Length	Diameter	Flow	Velocity	Unit Headloss	Friction Factor
Link ID	m	mm	LPS	m/s	m/km	
Pipe P015	165	72.7	0.08	0.02	0.01	0.052
Pipe P016	123	72.7	0.14	0.03	0.04	0.048
Pipe P021	113	72.7	0.25	0.06	0.11	0.044
Pipe P030	97	72.7	0.04	0.01	0.01	0.059
Pipe P031	123	72.7	0.36	0.09	0.22	0.042
Pipe P034	619	72.7	-0.8	0.19	0.98	0.037
Pipe P078	500	109	3.47	0.37	2.04	0.032

Sumber: EPANET 2.0

Tabel A.4 Node detail 2

PAM SUMBER MAKMUR			
Network Table - Nodes	Elevation	Base Demand	Pressure
Node ID	m	LPS	m
Junc J017	71	0.17	77.98
Junc J018	71	0	77.79
Junc J019	69	0.21	79.76
Junc J072	70	0.03	78.74
Junc J070	70	0	78.7
Junc J016	67	0.14	81.82
Junc J057	67	0.17	81.81
Junc J044	65	0	83.78
Junc J020	65	0.21	83.76
Junc J021	63	0.06	85.77
Junc J027	69	0.03	79.58
Junc J026	68	0	80.58
Junc J08	69	0.15	78.83

Sumber: EPANET 2.0



Gambar Detail 3 jaringan 2025

Sumber: Epanet 2.0

Tabel A.5 Detail 3 jaringan pipa tahun 2025

SUMBER MAKMUR	Length	Diameter	Flow	Velocity	Unit Headloss	Friction Factor
Table – Links						
Link ID	m	mm	LPS	m/s	m/km	
Pipe P001	63	72.7	0.28	0.07	0.14	0.044
Pipe P002	106	72.7	-0.2	0.05	0.07	0.046
Pipe P022	265	72.7	0.08	0.02	0.01	0.052
Pipe P027	45	72.7	0.35	0.08	0.21	0.042
Pipe P028	52	72.7	0.55	0.13	0.48	0.039
Pipe P029	315	72.7	0.5	0.12	0.41	0.04
Pipe P032	52	72.7	0.12	0.03	0.03	0.049

Lanjutan Tabel A.5

SUMBER MAKMUR						
Table – Links	Length	Diameter	Flow	Velocity	Unit Headloss	Friction Factor
Link ID	m	mm	LPS	m/s	m/km	
Pipe P040	15	72.7	-0.2	0.05	0.07	0.046
Pipe P041	15	72.7	-0.27	0.06	0.13	0.044
Pipe P042	1800	72.7	0.9	0.22	1.2	0.037
Pipe P053	65	72.7	0.04	0.01	0.01	0.06
Pipe P063	100	72.7	0.07	0.02	0.01	0.053
Pipe P070	250	72.7	-1.51	0.36	3.15	0.034
Pipe P078	250	72.7	1.05	0.25	1.61	0.036
Pipe P080	70	85.9	1.05	0.18	0.71	0.037
Pipe P081	60	85.9	0.9	0.15	0.53	0.037
Pipe P082	1000	85.9	1.51	0.26	1.4	0.035

Sumber: EPANET 2.0

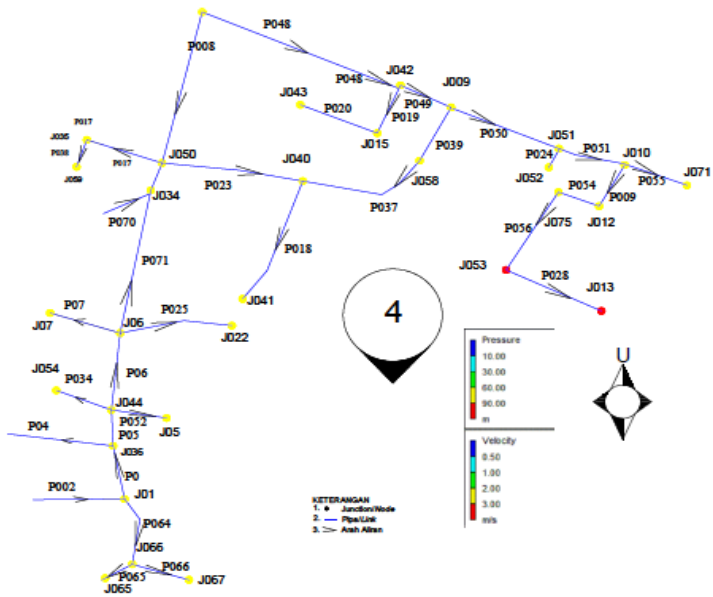
Tabel A.6 Detail 3 Node/junction jaringan 2025

PAM SUMBER MAKMUR			
Network Table - Nodes	Elevation	Base Demand	Pressure
Node ID	m	LPS	m
Junc J076	67	0.07	82.55
Junc J049	67	0.07	82.47
Junc J048	68	0.07	81.48
Junc J077	68	0	81.55
Junc J061	61	0	88.95

Lanjutan tabel A.6

PAM SUMBER MAKMUR	Elevation	Base Demand	Pressure
Network Table - Nodes			
Node ID	m	LPS	m
Junc J062	61	0	87.6
Junc J04	65	0.1	82.79
Junc J046	66	0.07	81.79
Junc J045	61	0.07	86.79
Junc J079	68	0.18	80.7
Junc J063	57	0	92.97
Junc J060	60	0.04	87.78
Junc J074	60	0.03	87.65
Junc J064	59	0.03	88.65
Junc J03	58	0.13	89.65
Junc J02	59	0.07	88.64

Sumber: EPANET 2.0



Gambar detail 4 jaringan 2025

Sumber:Epanet 2.0

Tabel A.7 Detail 4 jaringan pipa tahun 2025

PAM SUMBER MAKMUR						
Network Table – Links	Length	Diameter	Flow	Velocity	Unit Headloss	Friction Factor
Link ID						
Pipe P002	106	72.7	-0.2	0.05	0.07	0.046
Pipe P005	69	72.7	0.24	0.06	0.1	0.045
Pipe P034	125	72.7	0.12	0.03	0.03	0.05
Pipe P007	72	72.7	0.12	0.03	0.03	0.05

Lanjutan Tabel A.8

PAM SUMBER MAKMUR	Length	Diameter	Flow	Velocity	Unit Headloss	Friction Factor
Network Table – Links						
Link ID	m	mm	LPS	m/s	m/km	
Pipe P008	210	72.7	-0.16	0.04	0.05	0.047
Pipe P017	135	72.7	0.22	0.05	0.09	0.045
Pipe P018	130	72.7	0.12	0.03	0.03	0.05
Pipe P019	64	72.7	0.14	0.03	0.04	0.048
Pipe P020	64	72.7	0.09	0.02	0.02	0.051
Pipe P023	135	72.7	0.73	0.18	0.81	0.038
Pipe P024	233	72.7	0.18	0.04	0.06	0.047
Pipe P025	132	72.7	0.04	0.01	0.01	0.06
Pipe P028	124	85.9	0.21	0.04	0.04	0.046
Pipe P037	138	72.7	0.47	0.11	0.36	0.04
Pipe P038	1000	72.7	0.07	0.02	0.01	0.054
Pipe P039	70	72.7	0.25	0.06	0.11	0.044
Pipe P048	100	72.7	0.96	0.23	1.35	0.036
Pipe P049	70	72.7	0.62	0.15	0.6	0.039
Pipe P051	80	72.7	0.69	0.17	0.74	0.038
Pipe P052	132	72.7	0.05	0.01	0.01	0.057
Pipe P054	60	85.9	0.46	0.08	0.15	0.041
Pipe P055	70	72.7	0.08	0.02	0.01	0.053
Pipe P056	138	85.9	0.42	0.07	0.13	0.042
Pipe P064	130	72.7	0.29	0.07	0.15	0.043
Pipe P065	20	72.7	0.08	0.02	0.01	0.053
Pipe P066	120	72.7	0.21	0.05	0.08	0.045
Pipe P070	250	72.7	-1.51	0.36	3.15	0.034
Pipe P050	250	72.7	0.87	0.21	1.12	0.037

Sumber: EPANET 2.0



Tabel A.9 Detail 4 Node /junction jaringan 2025

PAM SUMBER MAKMUR	Elevation	Base Demand	Pressure
Network Table - Nodes			
Node ID	m	LPS	m
Junc J01	59	0.12	88.63
Junc J05	58	0.04	89.65
Junc J06	64	0	83.69
Junc J07	65	0.1	82.69
Junc J09	67	0	80.65
Junc J010	62	0	85.31
Junc J012	62	0.13	85.27
Junc J013	57	0.18	90.24
Junc J014	74	0	73.82
Junc J015	69	0.04	78.69
Junc J022	63	0.03	84.69
Junc J028	69	0.14	79.63
Junc J034	75	0	72.78
Junc J035	73	0.13	74.8
Junc J036	60	0	87.64
Junc J037	60	0.1	87.64
Junc J038	60	0	87.65
Junc J039	65	0.12	83.59
Junc J040	66	0.12	81.71
Junc J041	65	0.1	82.7
Junc J042	70	0.17	77.69
Junc J043	69	0.08	78.69
Junc J050	75	0.04	72.82
Junc J051	64	0	83.37

Lanjutan Tabel A.9

PAM SUMBER MAKMUR	Elevation	Base Demand	Pressure
Network Table - Nodes			
Node ID	m	LPS	m
Junc J052	64	0.15	83.35
Junc J053	57	0.18	90.24
Junc J054	60	0.1	87.65
Junc J058	66	0.19	81.66
Junc J059	65	0.06	82.79
Junc J079	66	0.06	81.79
Junc J065	60	0.07	87.61
Junc J066	68	0	79.61
Junc J067	59	0.18	88.6
Junc J0067	71	0	77.71
Junc J071	60	0.07	87.31
Junc J073	68	0.07	80.72
Junc J075	62	0.03	85.26

Sumber: EPANET 2.0

## BIOGRAFI PENULIS



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