

# **LAMPIRAN 1**

**Data-data Administrasi Laporan Akhir**

# **LAMPIRAN 2**

**Dokumentasi Survei Sarana dan Prasarana  
di Kecamatan Sako**

## 1. Sarana Pendidikan









## 2. Sarana Peribadatan





### 3. Sarana Kesehatan







#### 4. Sarana Olahraga dan Kesenian





## 5. Sarana Perkantoran











## 6. Sarana Perkoperasian



## 7. Sarana Rumah Makan/Restoran





## 8. Sarana Pasar





## 9. Sarana Supermarket/Swalayan



## 10. Sarana Ruko





## 11. Sarana Salon dan Pangkas Rambut

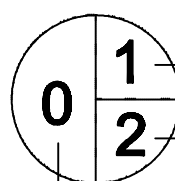
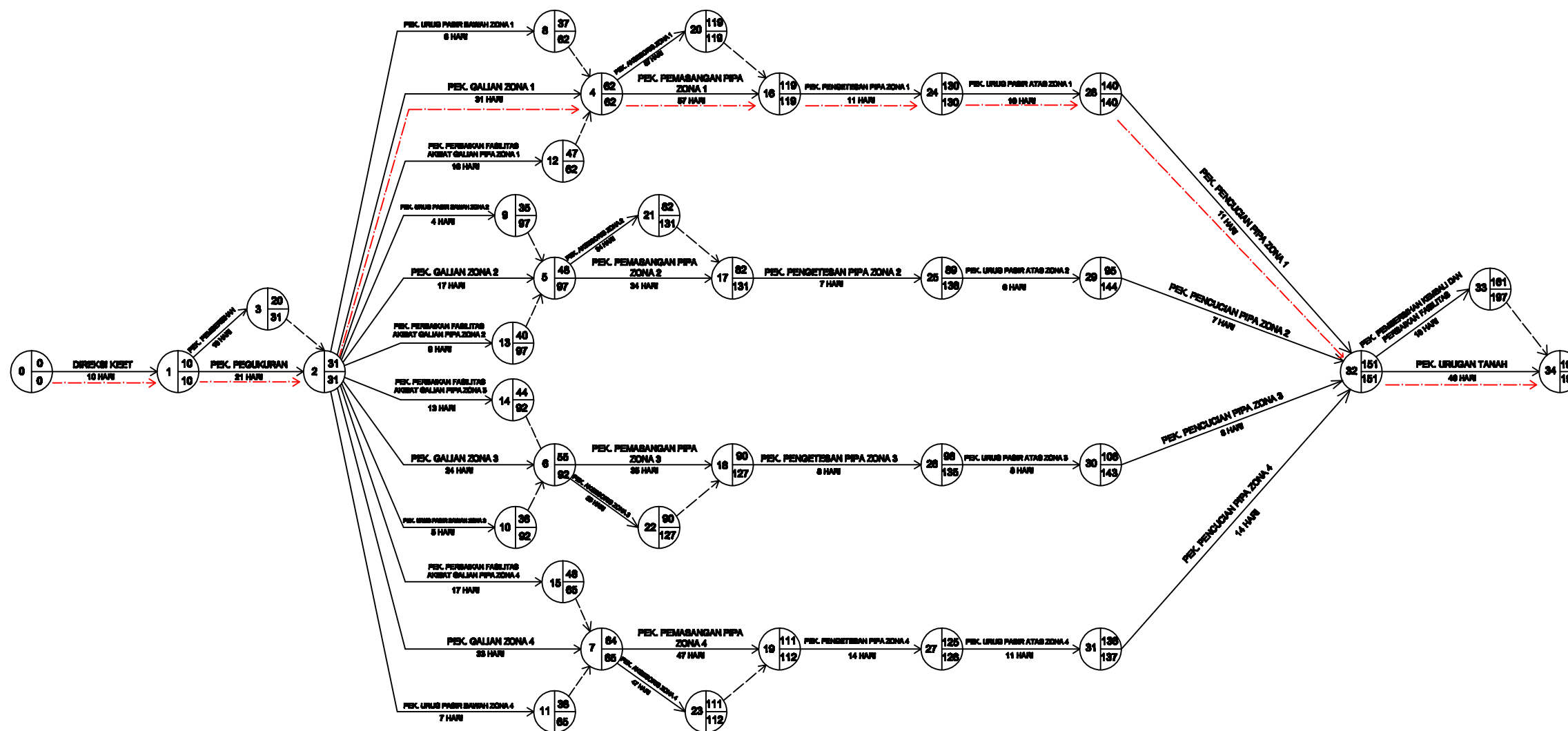




# **LAMPIRAN 3**

**Kurva S dan *Network Planning* (CPM)**

# NETWORK PLANNING METODE CPM



Earliest Even Time (EET) : Waktu penyelesaian paling awal

Latest Even Time (EET) : Waktu penyelesaian paling lambat

Kejadian (Event) : Urutan pekerjaan

Normal : Menunjukkan mulainya pekerjaan hingga akhir pekerjaan

Kegiatan Semu / Dummy : Menyatakan bahwa antara kegiatan satu dengan yang lain masih ketergantungan

Lintasan Kritis : Menunjukkan pekerjaan yang tidak boleh terlambat satu hari pun, karena akan menghambat waktu penyelesaian proyek secara keseluruhan

## CATATAN

## REVISI

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POLITEKNIK NEGERI SRIWIJAYA  
PALEMBANG  
2016



JURUSAN TEKNIK SIPIL  
KONSENTRASI AIR

## JUDUL LAPORAN AKHIR

PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG

## PERENCANA

ANGGI DIO MEILANDO  
NIM. 061330100028

ROCKY WIJAYA  
NIM. 061330100046

## DIPERIKSA

| DOSEN PEMBIMBING I                              | PARAF |
|---|-------|
| MAHMUDA, S.T., M.T.<br>NIP. 196207011966032002  |       |
| DOSEN PEMBIMBING II                             | PARAF |
| Dr. Siwa Indra, M.T.<br>NIP. 195501201966031001 |       |

## JUDUL GAMBAR

NETWORK PLANNING METODE CPM

| KODE    | SKALA | NO. GBR | JLH. GBR |
|---------|-------|---------|----------|
| SPAB-SK | -     | 1       | -        |

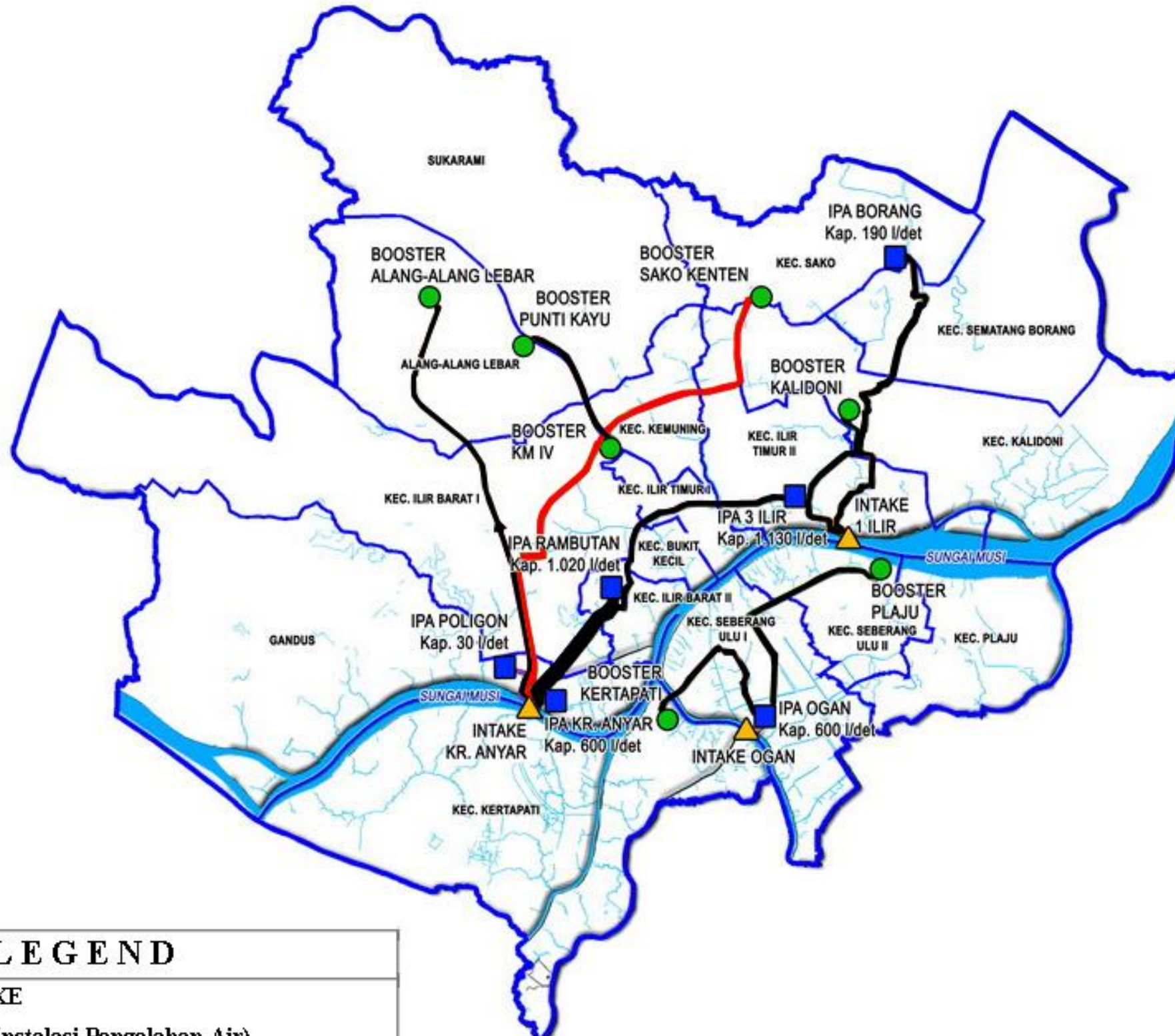


# **LAMPIRAN 4**

**Gambar Kerja**



# SKEMATIK INTAKE, IPA & BOOSTER KOTA PALEMBANG



| LEGEND |  |
|--------|--|
|        | : INTAKE                                   |
|        | : IPA (Instalasi Pengolahan Air)           |
|        | : BOOSTER                                  |
|        | : Jalur Pipa Ke Daerah Rencana (kec. Sako) |
|        | : Jalur Pipa Ke Daerah Lain                |
|        | : Batas Wilayah                            |



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JURUSAN TEKNIK SIPIL  
KONSENTRASI GEDUNG

JUDUL LAPORAN AKHIR

PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG

PERENCANA

ANGGI DIO MEILANDO  
NIM. 061330100028

ROCKY WIJAYA  
NIM. 061330100046

DIPERIKSA

| DOSEN PEMBIMBING I                                | PARAF |
|---|-------|
| MAHMUDA, S.T., M.T.<br>NIP. 196207011989032002    |       |
| DOSEN PEMBIMBING II                               | PARAF |
| Drs. Siswa Indra, M.T.<br>NIP. 195801201986031001 |       |

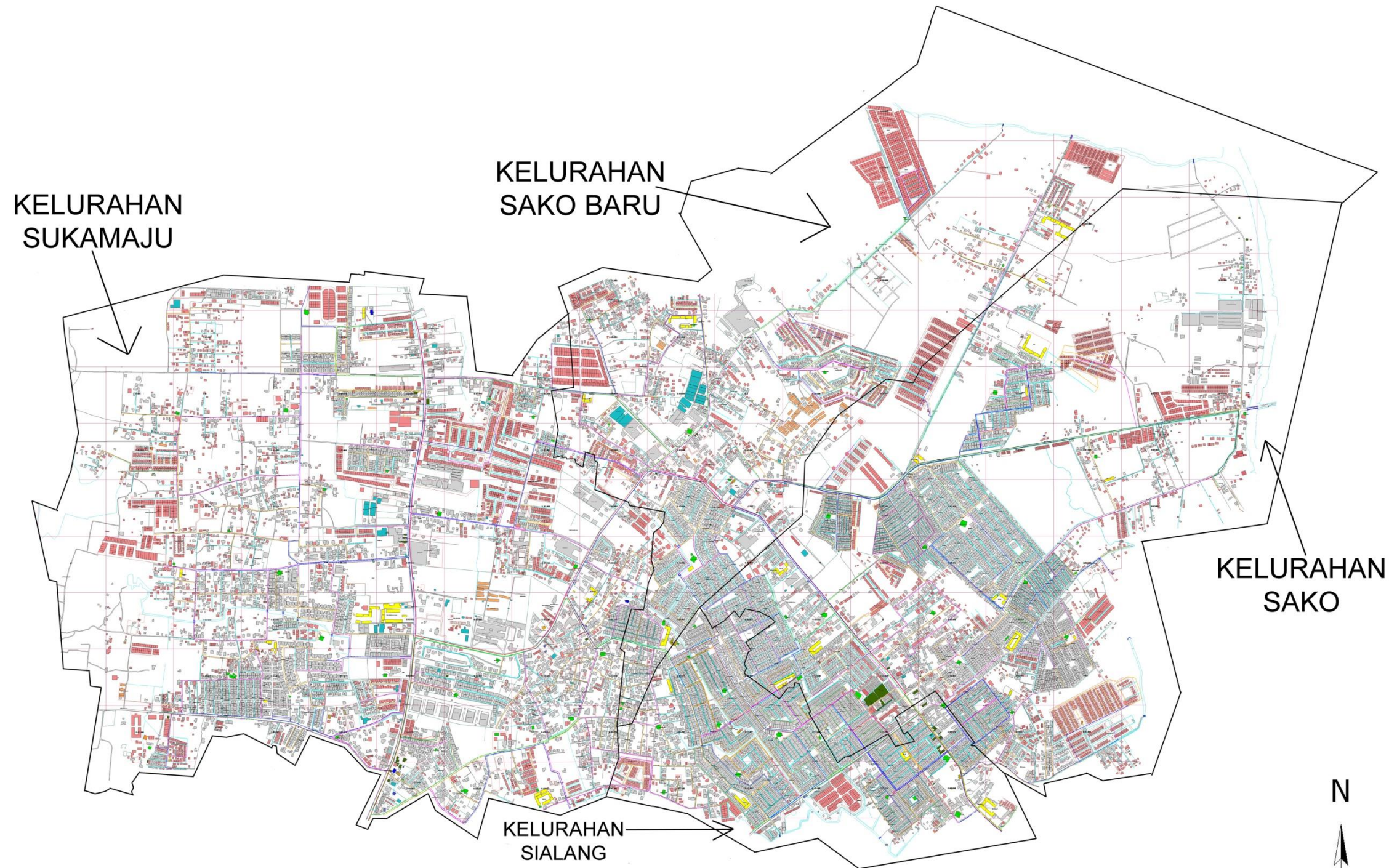
JUDUL GAMBAR

SKEMATIK INTAKE, IPA DAN BOOSTER  
KOTA PALEMBANG

| KODE    | SKALA      | NO. GBR | JLH. GBR |
|---------|------------|---------|----------|
| SPAB-SK | 1 : 50.000 | 0       | -        |



# PETA WILAYAH KECAMATAN SAKO PALEMBANG DAN PEMBAGIAN KELURAHANNYA



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|----|-----|------|-------|
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JURUSAN TEKNIK SIPIL  
KONSENTRASI AIR

JUDUL LAPORAN AKHIR

PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG

PERENCANA

**ANGGI DIO MELANDO**  
NIM. 061330100028

**ROCKY WIJAYA**  
NIM. 061330100046

DIPERIKSA

|  |       |
|--|-------|
| DOSEN PEMBIMBING I                                       | PARAF |
| <b>MAHMUDA, S.T., M.T.</b><br>NIP. 196207011989032002    |       |
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| <b>Drs. Siswa Indra, M.T.</b><br>NIP. 195801201986031001 |       |







JUDUL GAMBAR

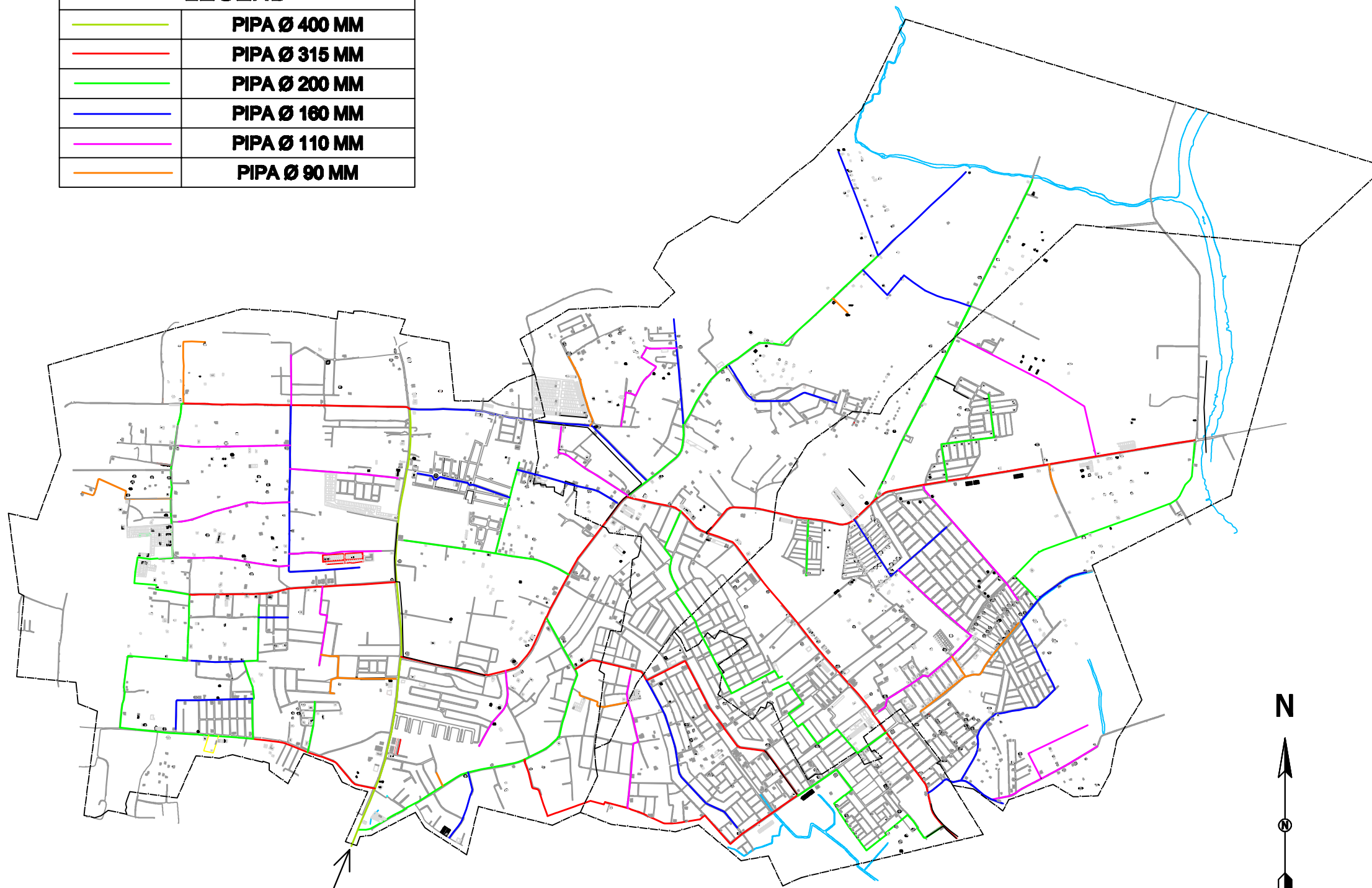
PETA WILAYAH  
KECAMATAN SAKO

| KODE    | SKALA      | NO. GBR | JLH. GBR |
|---------|------------|---------|----------|
| SPAB-SK | 1 : 20.000 | 1       | -        |



# PETA JARINGAN PIPA PDAM KECAMATAN SAKO, PALEMBANG

| LEGEND  |               |
|---|---------------|
|  | PIPA Ø 400 MM |
|  | PIPA Ø 315 MM |
|  | PIPA Ø 200 MM |
|  | PIPA Ø 160 MM |
|  | PIPA Ø 110 MM |
|  | PIPA Ø 90 MM  |



Q = 229,8139 liter/detik



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2016



JURUSAN TEKNIK SIPIL  
KONSENTRASI AIR

## JUDUL LAPORAN AKHIR

PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG

## PERENCANA

**ANGGI DIO MEILANDO**  
NIM. 061330100028

**ROCKY WIJAYA**  
NIM. 061330100046

## DIPERIKSA


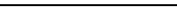
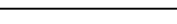


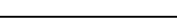
| DOSEN PEMBIMBING I                                      | PARAF |
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| DOSEN PEMBIMBING II                                     | PARAF |
| <b>Dra. Siwa Indra, M.T.</b><br>NIP. 195601201966031001 |       |

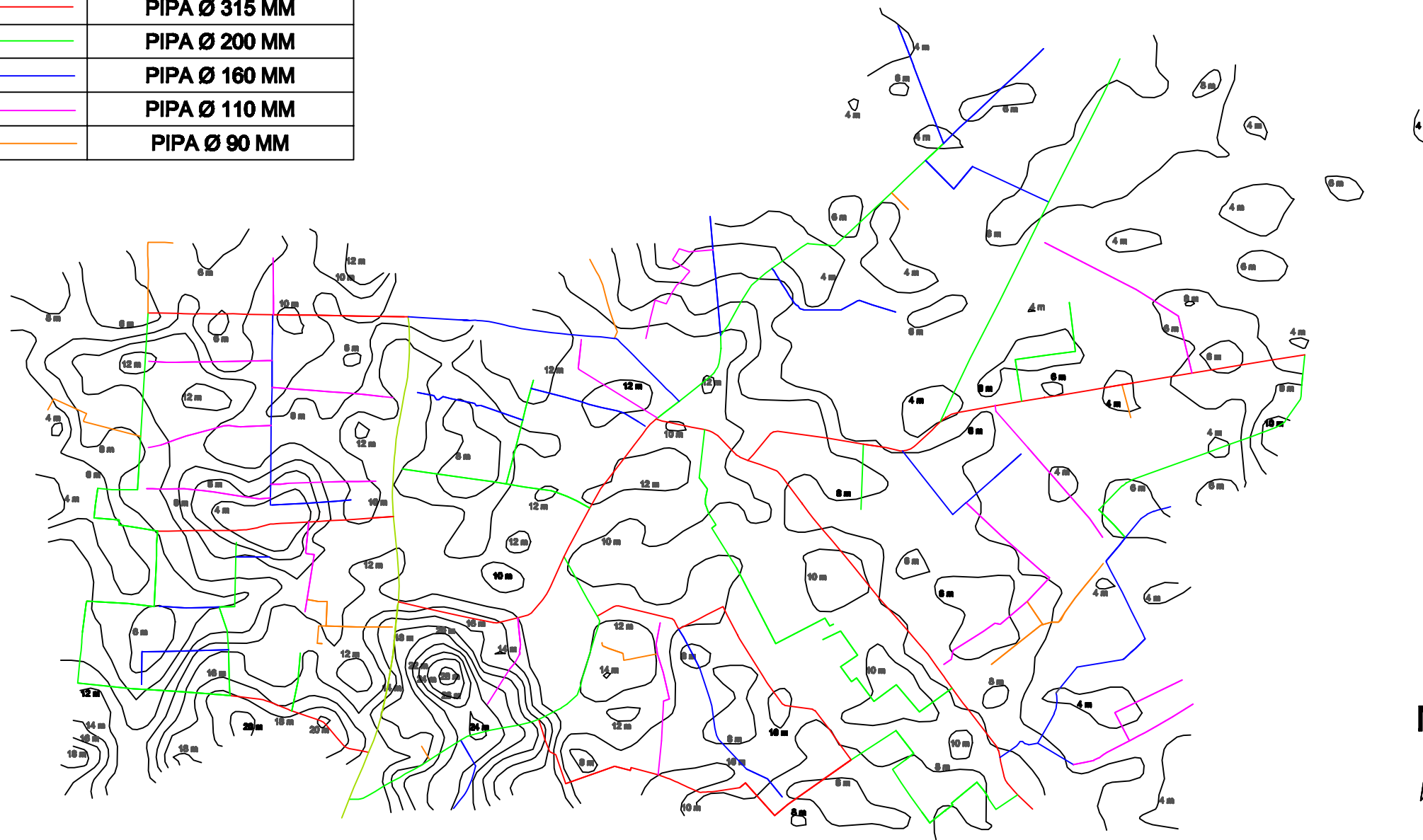
## JUDUL GAMBAR

PETA JARINGAN PIPA PDAM  
KECAMATAN SAKO

| KODE    | SKALA      | NO. GBR | JLH. GBR |
|---------|------------|---------|----------|
| SPAB-SK | 1 : 20.000 | 2       | -        |

# PETA PIPA PDAM DAN KONTUR KECAMATAN SAKO

| LEGEND  |               |
|---|---------------|
|  | PIPA Ø 400 MM |
|  | PIPA Ø 315 MM |
|  | PIPA Ø 200 MM |
|  | PIPA Ø 160 MM |
|  | PIPA Ø 110 MM |
|  | PIPA Ø 90 MM  |



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**POLITEKNIK NEGERI SRIWIJAYA  
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2016**



**JURUSAN TEKNIK SIPIL  
KONSENTRASI AIR**

## JUDUL LAPORAN AKHIR

**PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG**

## PERENCANA

**ANGGI DIO MEILANDO  
NIM. 061330100028**

**ROCKY WIJAYA  
NIM. 061330100046**

## DIPERIKSA

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| <b>Dra. Siwa Indra, M.T.<br/>NIP. 195501201986031001</b> |       |

## JUDUL GAMBAR

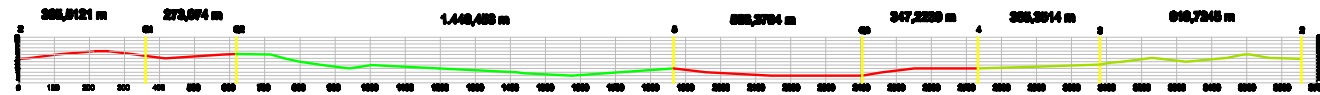
**PETA PIPA PDAM DAN KONTUR  
KECAMATAN SAKO**

| KODE    | SKALA      | NO. GBR | JLH. GBR |
|---------|------------|---------|----------|
| SPAB-SK | 1 : 20.000 | 3       | -        |

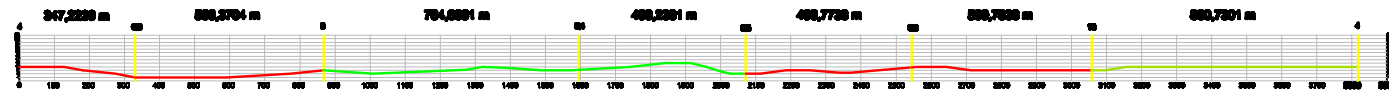
# POTONGAN MEMANJANG RUAS PIPA TIAP LOOP BERDASARKAN KONTUR

LOOP

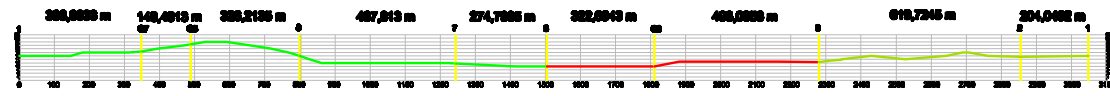
1



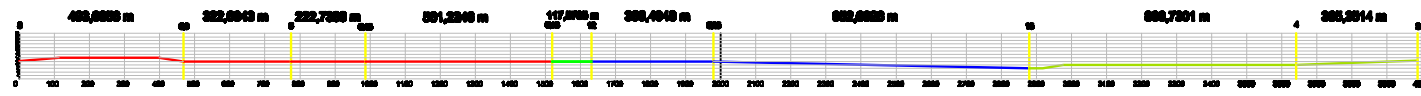
2



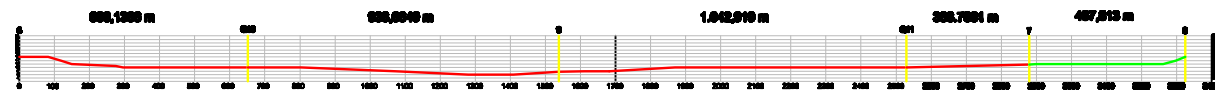
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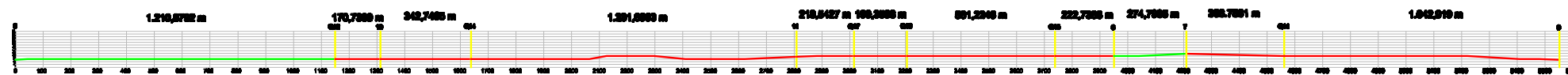
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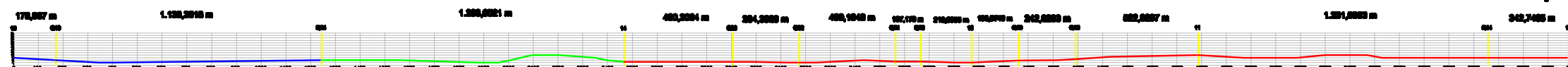
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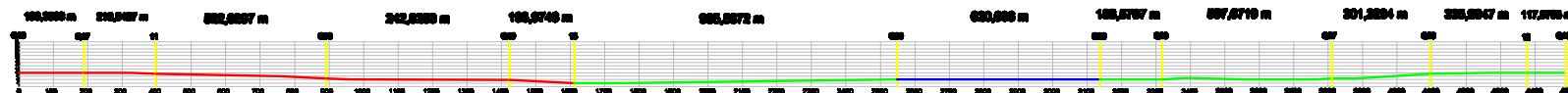
6



7



8



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PALEMBANG  
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| Dra. Siwa Indra, M.T.<br>NIP. 195501201986031001 |       |

JUDUL GAMBAR

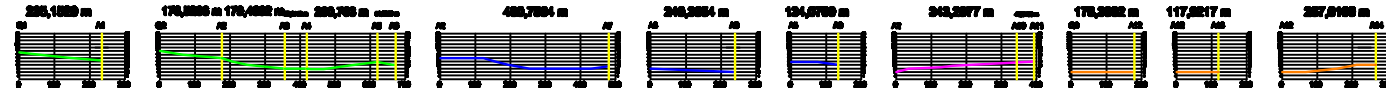
POTONGAN MEMANJANG RUAS  
PIPA TIAP LOOP

| KODE    | SKALA   | NO. GBR | JLH. GBR |
|---------|---|---------|----------|
| SPAB-SK | HORIZONTAL = 1 : 20,000<br>VERTICAL = 1 : 2,000 | 4       | -        |

# POTONGAN MEMANJANG PIPA (DALAM TIAP LOOP) BERDASARKAN KONTUR

**LOOP**

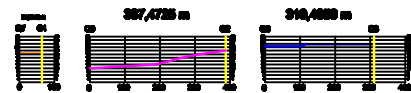
**1**



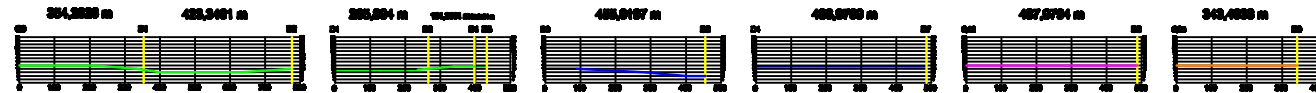
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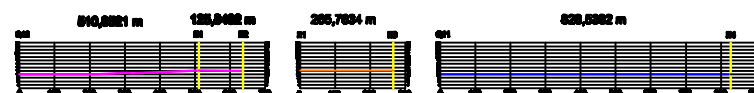
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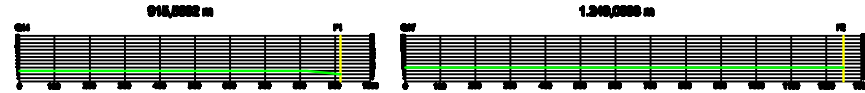
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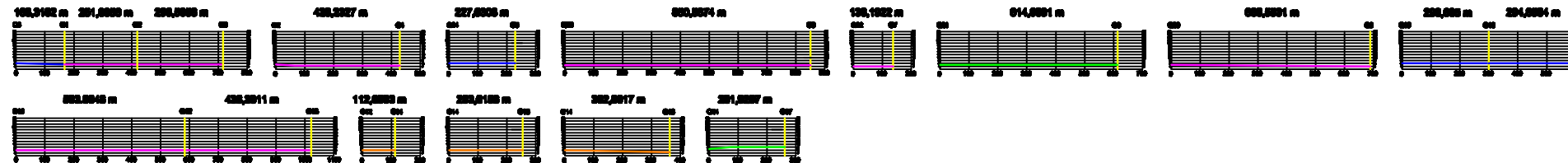
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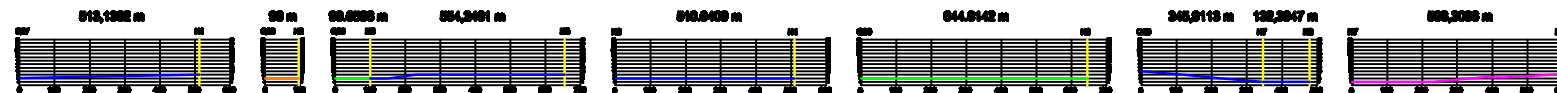
**6**



**7**



**8**



**CATATAN**

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| NO | TGL | KET. | PARAF |
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PALEMBANG  
2016**



**JURUSAN TEKNIK SIPIL  
KONSENTRASI AIR**

**JUDUL LAPORAN AKHIR**

**PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG**

**PERENCANA**

**ANGGI DIO MEILANDO**  
NIM. 061330100028

**ROCKY WIJAYA**  
NIM. 061330100046

**DIPERIKSA**

|   |              |
|---|--------------|
| <b>DOSEN PEMBIMBING I</b>                               | <b>PARAF</b> |
| <b>MAHMUDA, S.T., M.T.</b><br>NIP. 196207011966032002   |              |
| <b>DOSEN PEMBIMBING II</b>                              | <b>PARAF</b> |
| <b>Dra. Siwa Indra, M.T.</b><br>NIP. 195501201965031001 |              |



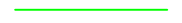



**JUDUL GAMBAR**

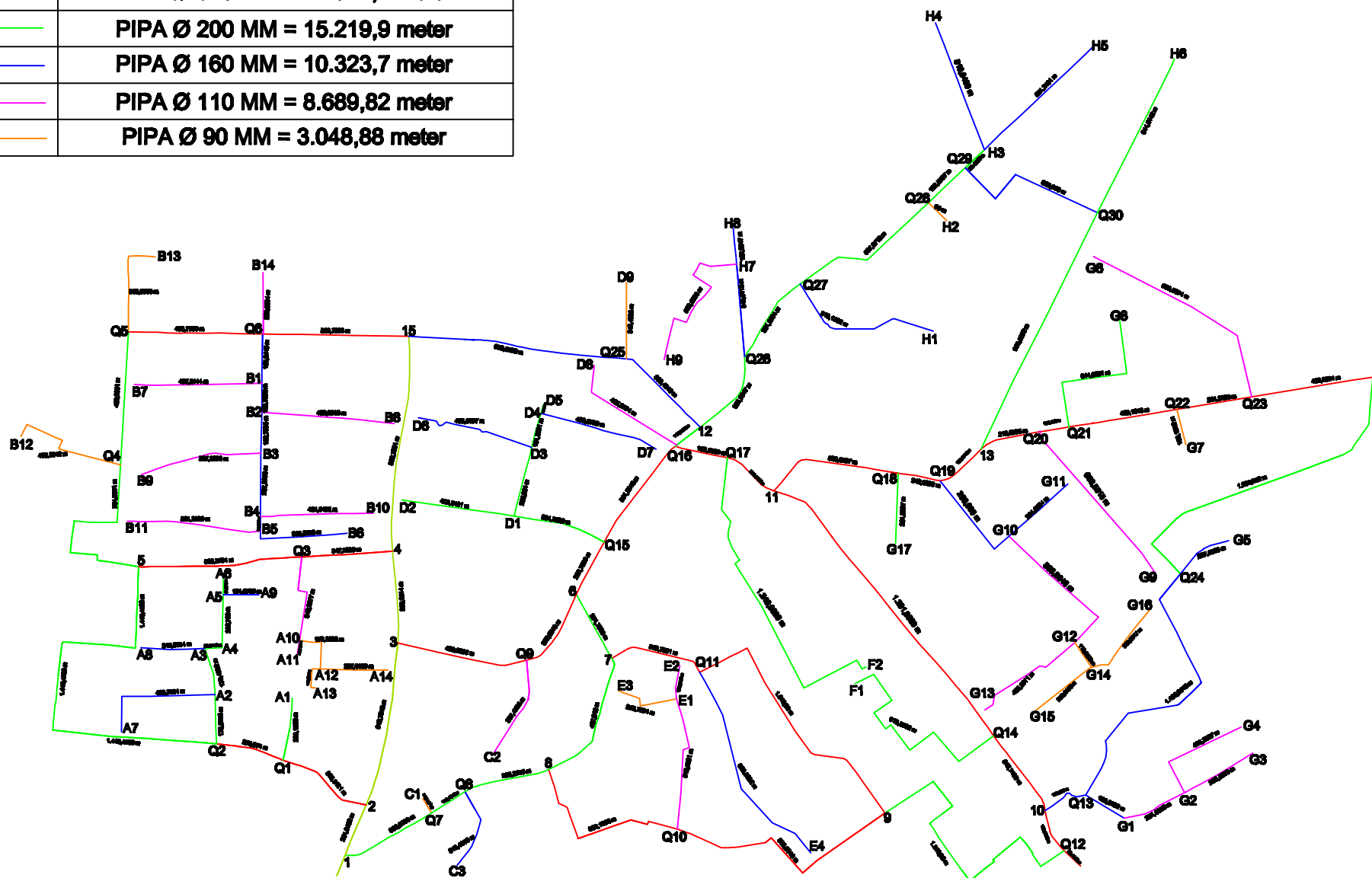
**POTONGAN MEMANJANG PIPA  
(DALAM TIAP LOOP)  
BERDASARKAN KONTUR**

| KODE    | SKALA                                   | NO. GBR | JLH. GBR |
|---------|---|---------|----------|
| SPAB-SK | HORIZONTAL - 1:2000<br>VERTICAL - 1:500 | 5       | -        |



# PETA GAMBAR PANJANG PIPA

| LEGEND  |                                |
|---|--------------------------------|
|  | PIPA Ø 400 MM = 1.990 meter    |
|  | PIPA Ø 315 MM = 11.911,1 meter |
|  | PIPA Ø 200 MM = 15.219,9 meter |
|  | PIPA Ø 160 MM = 10.323,7 meter |
|  | PIPA Ø 110 MM = 8.689,82 meter |
|  | PIPA Ø 90 MM = 3.048,88 meter  |



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KONSENTRASI AIR

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DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG

## PERENCANA

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NIM. 061330100028

ROCKY WIJAYA  
NIM. 061330100046

## DIPERIKSA

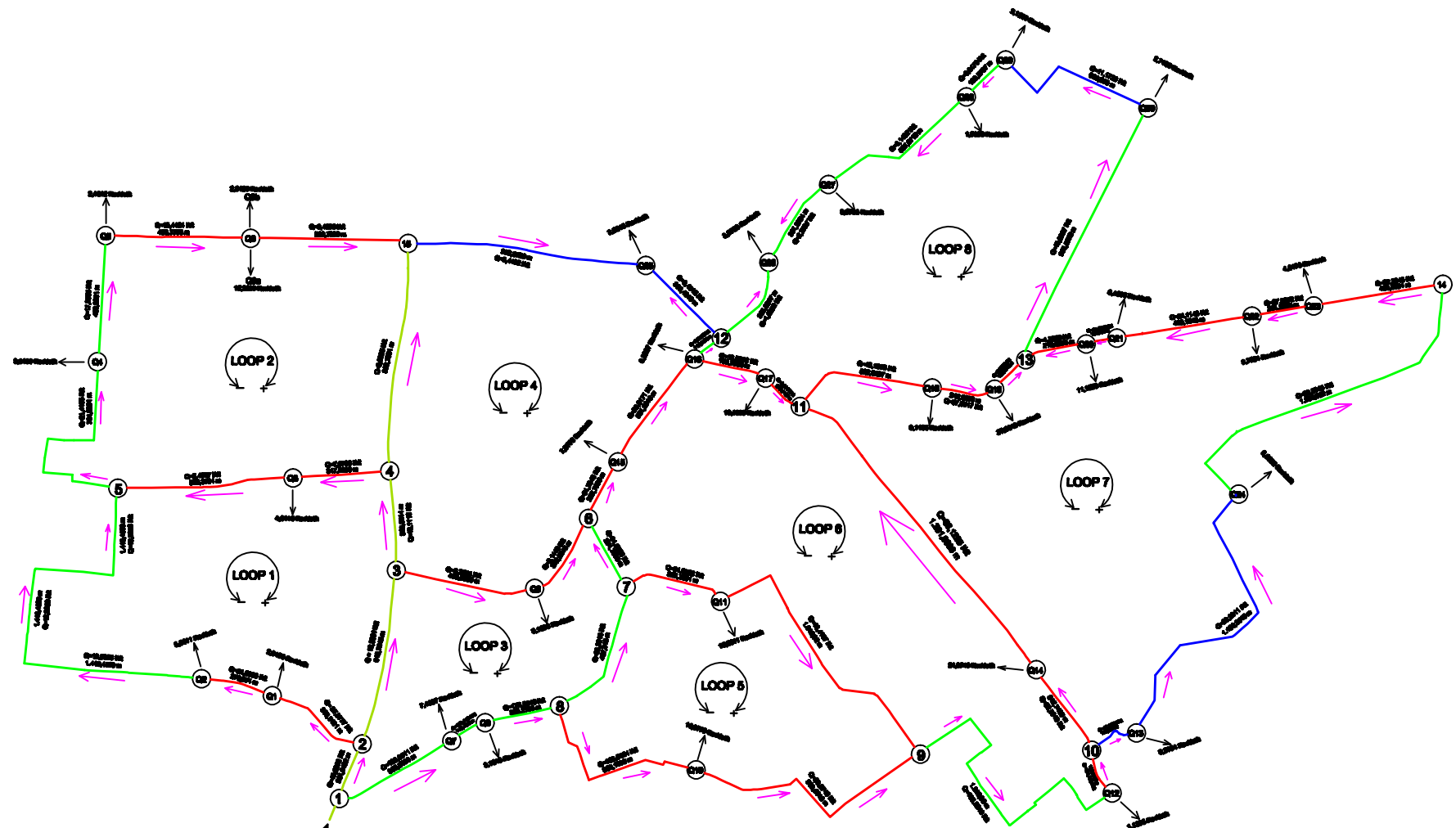
| DOSEN PEMBIMBING I                               | PARAF |
|--|-------|
| MAHMUDA, S.T., M.T.<br>NIP. 196207011966032002   |       |
| DOSEN PEMBIMBING II                              | PARAF |
| Dra. Siwa Indra, M.T.<br>NIP. 195501201966031001 |       |

## JUDUL GAMBAR

PETA GAMBAR PANJANG PIPA

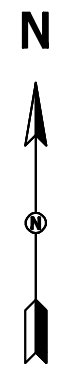
| KODE    | SKALA      | NO. GBR | JLH. GBR |
|---------|------------|---------|----------|
| SPAB-SK | 1 : 20.000 | 6       | -        |

# PETA JARINGAN PIPA UNTUK PERHITUNGAN HARDY CROSS AWAL WILAYAH KECAMATAN SAKO, PALEMBANG



$Q = 229,8139$  liter/detik

| LEGEND |               |
|--------|---------------|
|        | PIPA Ø 400 MM |
|        | PIPA Ø 315 MM |
|        | PIPA Ø 200 MM |
|        | PIPA Ø 160 MM |



**CATATAN**

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2016**



JURUSAN TEKNIK SIPIL  
KONSENTRASI AIR

**JUDUL LAPORAN AKHIR**

**PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG**

**PERENCANA**

**ANGGI DIO MEILANDO**  
NIM. 061330100028

**ROCKY WIJAYA**  
NIM. 061330100046

**DIPERIKSA**

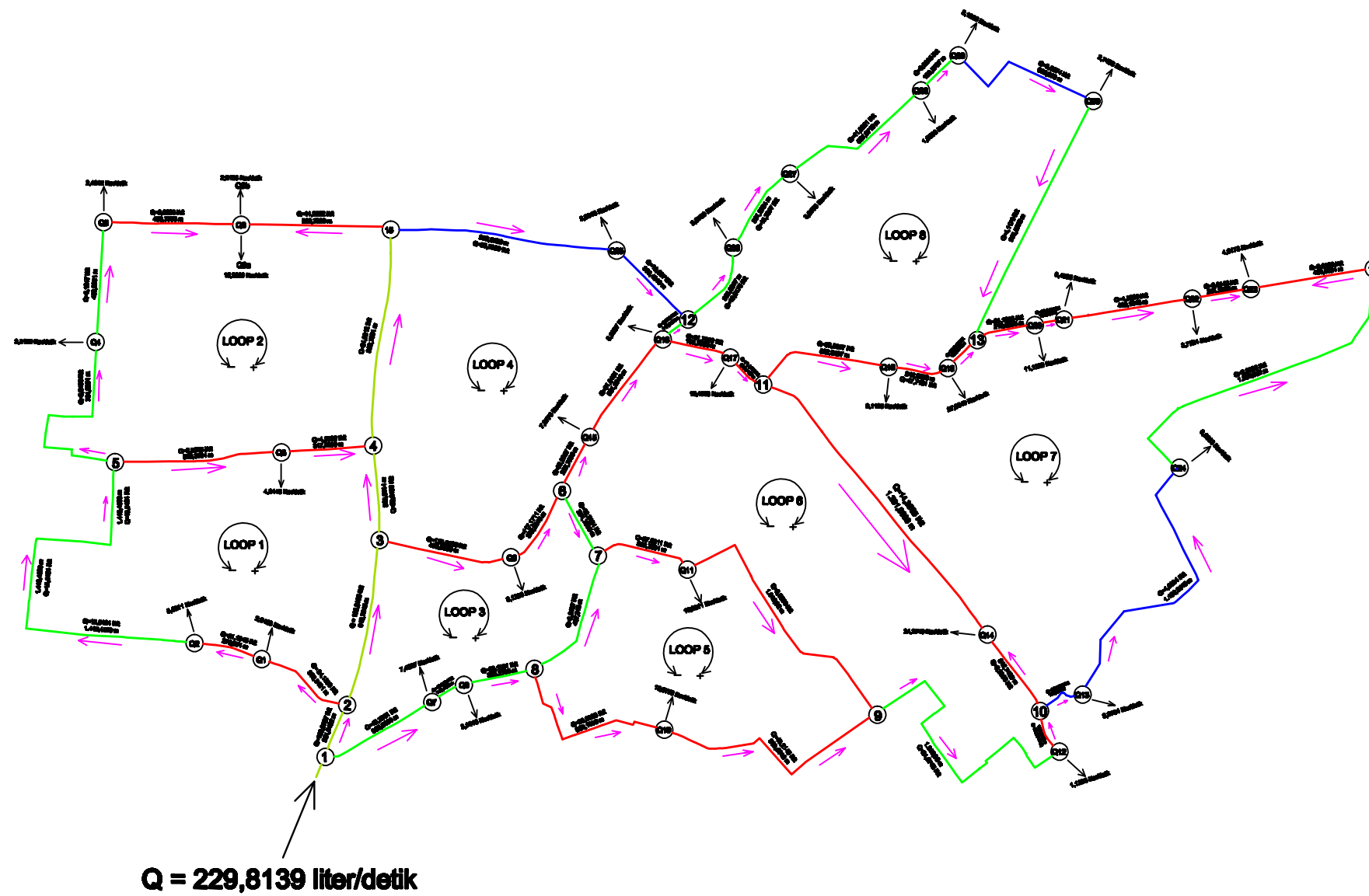
|   |       |
|---|-------|
| DOSEN PEMBIMBING I                                      | PARAF |
| <b>MAHMUDA, S.T., M.T.</b><br>NIP. 196207011966032002   |       |
| DOSEN PEMBIMBING II                                     | PARAF |
| <b>Dra. Siwa Indra, M.T.</b><br>NIP. 195601201966031001 |       |

**JUDUL GAMBAR**

PETA JARINGAN PIPA UNTUK  
PERHITUNGAN HARDY CROSS AWAL  
KECAMATAN SAKO  
PALEMBANG

| KODE    | SKALA      | NO. GBR | JLH. GBR |
|---------|------------|---------|----------|
| SPAB-SK | 1 : 20.000 | 7       | -        |

# PETA JARINGAN PIPA UNTUK PERHITUNGAN HARDY CROSS SETELAH ITERASI WILAYAH KECAMATAN SAKO, PALEMBANG



$Q = 229,8139$  liter/detik

| LEGEND |               |
|--------|---------------|
|        | PIPA Ø 400 MM |
|        | PIPA Ø 315 MM |
|        | PIPA Ø 200 MM |
|        | PIPA Ø 160 MM |



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JURUSAN TEKNIK SIPIL  
KONSENTRASI AIR

### JUDUL LAPORAN AKHIR

**PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
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| <b>Dra. Siwa Indra, M.T.</b><br>NIP. 195601201966031001 |       |







### JUDUL GAMBAR

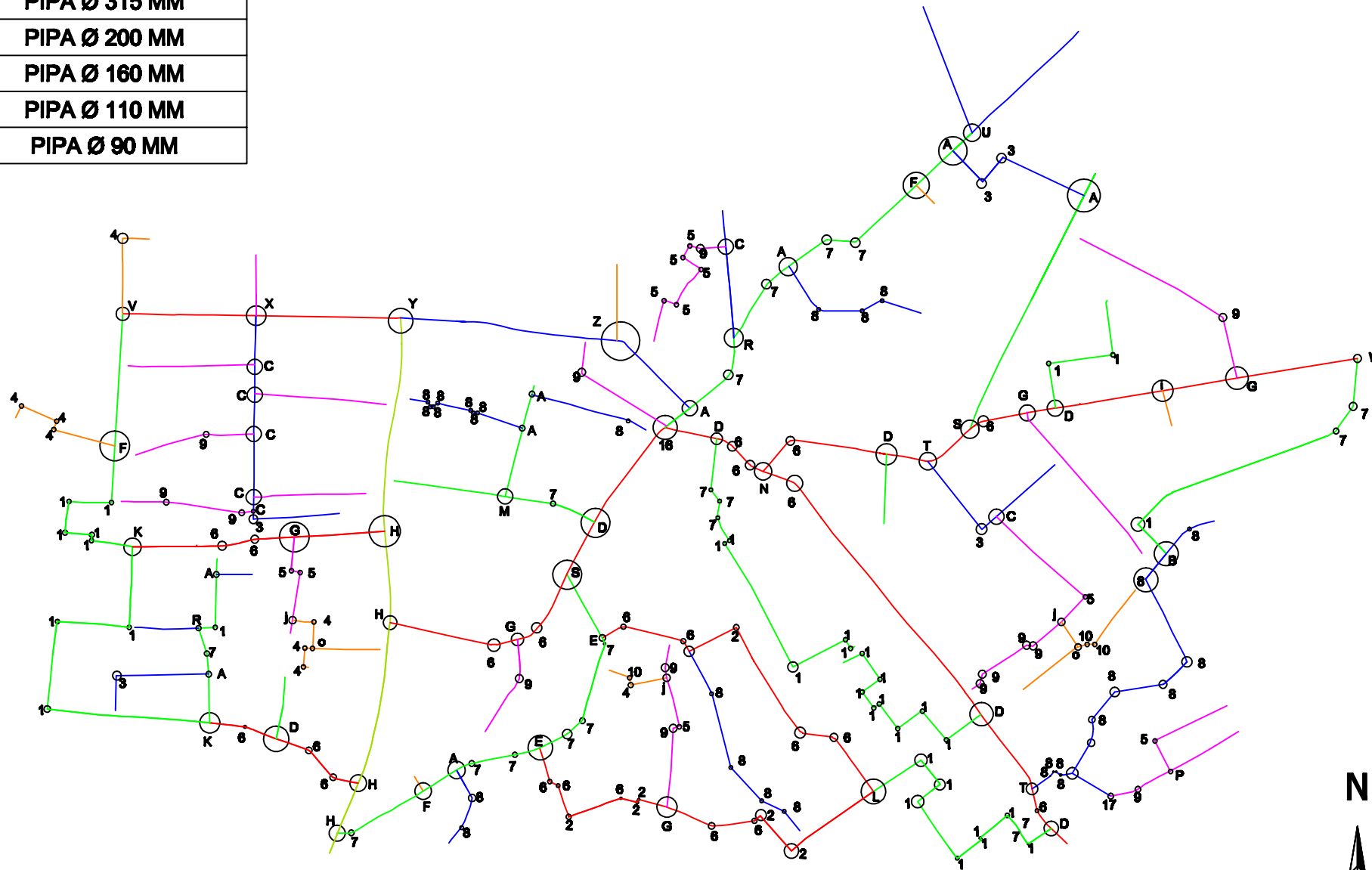
PETA JARINGAN PIPA UNTUK PERHITUNGAN  
HARDY CROSS SETELAH ITERASI  
KECAMATAN SAKO  
PALEMBANG

| KODE    | SKALA      | NO. GBR | JLH. GBR |
|---------|------------|---------|----------|
| SPAB-SK | 1 : 20.000 | 8       | -        |



# PETA LETAK SAMBUNGAN PIPA

| LEGEND  |               |
|---|---------------|
|  | PIPA Ø 400 MM |
|  | PIPA Ø 315 MM |
|  | PIPA Ø 200 MM |
|  | PIPA Ø 160 MM |
|  | PIPA Ø 110 MM |
|  | PIPA Ø 90 MM  |



## CATATAN

## REVISI

| NO | TGL | KET. | PARAF |
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|    |     |      |       |

POLITEKNIK NEGERI SRIWIJAYA  
PALEMBANG  
2016



JURUSAN TEKNIK SIPIL  
KONSENTRASI AIR

## JUDUL LAPORAN AKHIR

PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG

## PERENCANA

ANGGI DIO MEILANDO  
NIM. 061330100028

ROCKY WIJAYA  
NIM. 061330100046

## DIPERIKSA

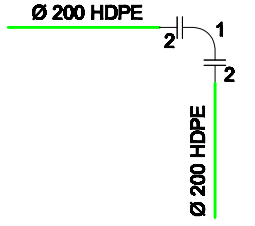
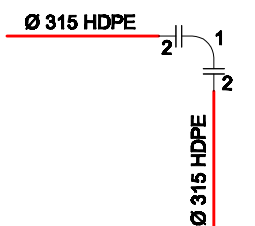
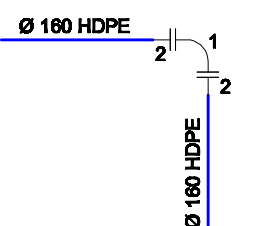
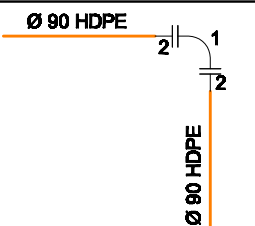
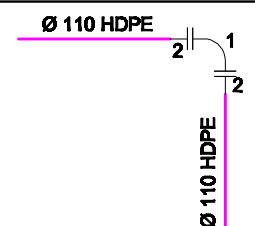
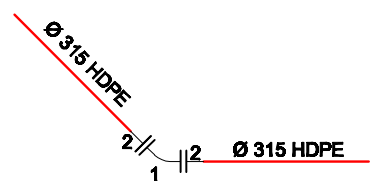
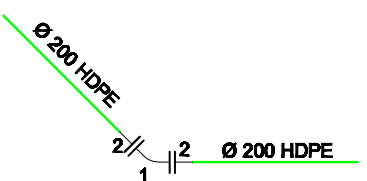
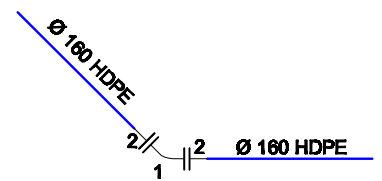
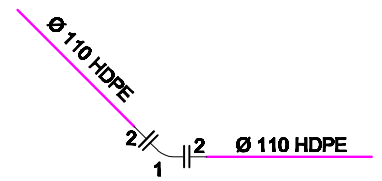
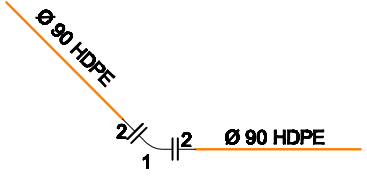


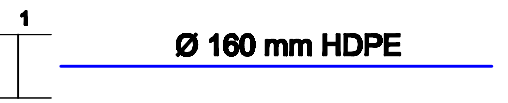
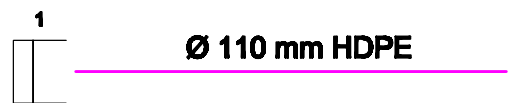

| DOSEN PEMBIMBING I                               | PARAF |
|--|-------|
| MAHMUDA, S.T., M.T.<br>NIP. 196207011986032002   |       |
| DOSEN PEMBIMBING II                              | PARAF |
| Dra. Siwa Indra, M.T.<br>NIP. 195601201986031001 |       |

## JUDUL GAMBAR

PETA LETAK SAMBUNGAN PIPA

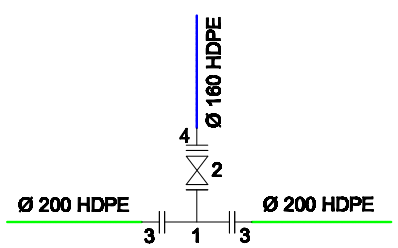
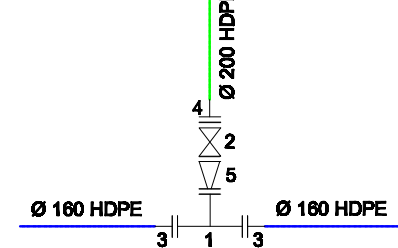
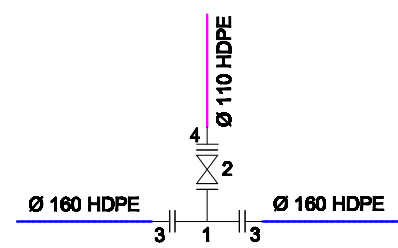
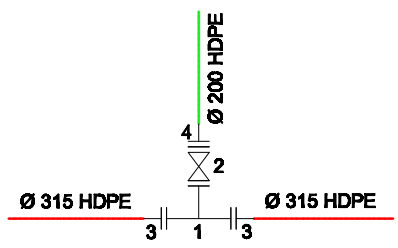
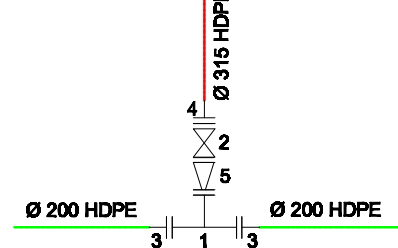
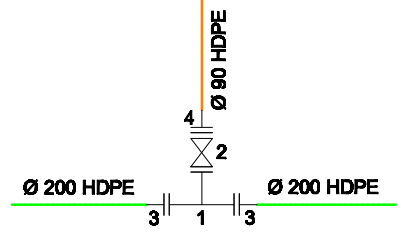
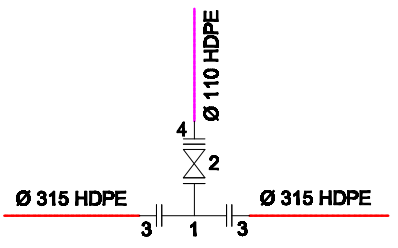
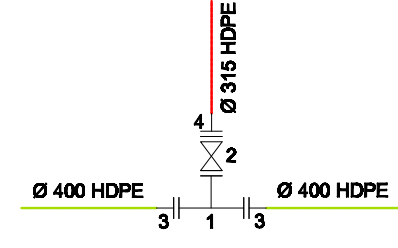
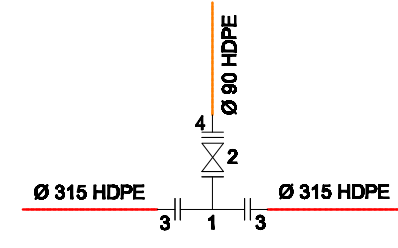
| KODE    | SKALA      | NO. GBR | JLH. GBR |
|---------|------------|---------|----------|
| SPAB-SK | 1 : 20.000 | 9       | -        |

# DETAIL SAMBUNGAN PIPA

|   |   |   |
|---|---|---|
|  <p style="text-align: center; font-size: 2em; font-weight: bold;">1</p> <p>1. Bend Flange Ø 200 mm x 90° = 33 buah<br/>2. Stub End Flange Ø 200 mm = 66 buah</p>  |  <p style="text-align: center; font-size: 2em; font-weight: bold;">2</p> <p>1. Bend Flange Ø 315 mm x 90° = 6 buah<br/>2. Stub End Flange Ø 315 mm = 12 buah</p>   |  <p style="text-align: center; font-size: 2em; font-weight: bold;">3</p> <p>1. Bend Flange Ø 160 mm x 90° = 5 buah<br/>2. Stub End Flange Ø 160 mm = 10 buah</p>   |
|  <p style="text-align: center; font-size: 2em; font-weight: bold;">4</p> <p>1. Bend Flange Ø 90 mm x 90° = 8 buah<br/>2. Stub End Flange Ø 90 mm = 16 buah</p>     |  <p style="text-align: center; font-size: 2em; font-weight: bold;">5</p> <p>1. Bend Flange Ø 110 mm x 90° = 10 buah<br/>2. Stub End Flange Ø 110 mm = 20 buah</p>  |  <p style="text-align: center; font-size: 2em; font-weight: bold;">6</p> <p>1. Bend Flange Ø 315 mm x 45° = 22 buah<br/>2. Stub End Flange Ø 315 mm = 44 buah</p>  |
|  <p style="text-align: center; font-size: 2em; font-weight: bold;">7</p> <p>1. Bend Flange Ø 200 mm x 45° = 19 buah<br/>2. Stub End Flange Ø 200 mm = 38 buah</p> |  <p style="text-align: center; font-size: 2em; font-weight: bold;">8</p> <p>1. Bend Flange Ø 160 mm x 45° = 27 buah<br/>2. Stub End Flange Ø 160 mm = 54 buah</p> |  <p style="text-align: center; font-size: 2em; font-weight: bold;">9</p> <p>1. Bend Flange Ø 110 mm x 45° = 14 buah<br/>2. Stub End Flange Ø 110 mm = 28 buah</p> |
|  <p style="text-align: center; font-size: 2em; font-weight: bold;">10</p> <p>1. Bend Flange Ø 90 mm x 45° = 3 buah<br/>2. Stub End Flange Ø 90 mm = 6 buah</p>   |  <p style="text-align: center; font-size: 1.2em; font-weight: bold;">Ø 315 mm HDPE</p> <p>1. Blind Flange Ø 315 mm = 1 buah</p>                                  |  <p style="text-align: center; font-size: 1.2em; font-weight: bold;">Ø 200 mm HDPE</p> <p>1. Blind Flange Ø 200 mm = 9 buah</p>                                  |
|  <p style="text-align: center; font-size: 1.2em; font-weight: bold;">Ø 160 mm HDPE</p> <p>1. Blind Flange Ø 160 mm = 14 buah</p>                                 |  <p style="text-align: center; font-size: 1.2em; font-weight: bold;">Ø 110 mm HDPE</p> <p>1. Blind Flange Ø 110 mm = 16 buah</p>                                 |  <p style="text-align: center; font-size: 1.2em; font-weight: bold;">Ø 90 mm HDPE</p> <p>1. Blind Flange Ø 90 mm = 11 buah</p>                                   |

|  |       |  |          |
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| CATATAN  |       |  |          |
|  |       |  |          |
| REVISI   |       |  |          |
| NO   | TGL   | KET.   | PARAF    |
|  |       |  |          |
| <p><b>POLITEKNIK NEGERI SRIWIJAYA</b><br/><b>PALEMBANG</b><br/><b>2016</b></p>   |       |  |          |
|  <p><b>JURUSAN TEKNIK SIPIL</b><br/><b>KONSENTRASI AIR</b></p> |       |  |          |
| JUDUL LAPORAN AKHIR  |       |  |          |
| <p><b>PERENCANAAN SISTEM JARINGAN PIPA</b><br/><b>DISTRIBUSI</b><br/><b>AIR BERSIH KECAMATAN SAKO</b><br/><b>PALEMBANG</b></p>                     |       |  |          |
| PERENCANA  |       |  |          |
| <p><b>ANGGI DIO MEILANDO</b><br/>NIM. 061330100028</p>   |       | <p><b>ROCKY WIJAYA</b><br/>NIM. 061330100046</p> |          |
| DIPERIKSA  |       |  |          |
| DOSEN PEMBIMBING I   |       | PARAF  |          |
| <p><b>MAHMUDA, S.T., M.T.</b><br/>NIP. 196207011966032002</p>  |       |  |          |
| DOSEN PEMBIMBING II  |       | PARAF  |          |
| <p><b>Dra. Siwa Indra, M.T.</b><br/>NIP. 195601201966031001</p>  |       |  |          |
| JUDUL GAMBAR   |       |  |          |
| <p><b>DETAIL SAMBUNGAN PIPA</b></p>  |       |  |          |
| KODE   | SKALA | NO. GBR  | JLH. GBR |
| SPAB-SK  | -     | 10   | -        |

# DETAIL SAMBUNGAN PIPA

|  |   |  |
|--|---|--|
| <p style="text-align: right;"><b>A</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 200 x 160 mm = 9 buah</li> <li>2. Valve Flange Ø 160 mm = 9 buah</li> <li>3. Stub End Flange Ø 200 mm = 18 buah</li> <li>4. Stub End Flange Ø 160 mm = 9 buah</li> </ol>   | <p style="text-align: right;"><b>B</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 160 x 160 mm = 1 buah</li> <li>2. Valve Flange Ø 200 mm = 1 buah</li> <li>3. Stub End Flange Ø 160 mm = 2 buah</li> <li>4. Stub End Flange Ø 200 mm = 1 buah</li> <li>5. Reducer Flange Ø 200 x 160 mm = 1 buah</li> </ol>  | <p style="text-align: right;"><b>C</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 160 x 110 mm = 7 buah</li> <li>2. Valve Flange Ø 110 mm = 7 buah</li> <li>3. Stub End Flange Ø 160 mm = 14 buah</li> <li>4. Stub End Flange Ø 110 mm = 7 buah</li> </ol> |
| <p style="text-align: right;"><b>D</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 315 x 200 mm = 7 buah</li> <li>2. Valve Flange Ø 200 mm = 7 buah</li> <li>3. Stub End Flange Ø 315 mm = 14 buah</li> <li>4. Stub End Flange Ø 200 mm = 7 buah</li> </ol>  | <p style="text-align: right;"><b>E</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 200 x 200 mm = 2 buah</li> <li>2. Valve Flange Ø 315 mm = 2 buah</li> <li>3. Stub End Flange Ø 200 mm = 4 buah</li> <li>4. Stub End Flange Ø 315 mm = 2 buah</li> <li>5. Reducer Flange Ø 315 x 200 mm = 2 buah</li> </ol> | <p style="text-align: right;"><b>F</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 200 x 90 mm = 3 buah</li> <li>2. Valve Flange Ø 90 mm = 3 buah</li> <li>3. Stub End Flange Ø 200 mm = 6 buah</li> <li>4. Stub End Flange Ø 90 mm = 3 buah</li> </ol>    |
| <p style="text-align: right;"><b>G</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 315 x 110 mm = 5 buah</li> <li>2. Valve Flange Ø 110 mm = 5 buah</li> <li>3. Stub End Flange Ø 315 mm = 10 buah</li> <li>4. Stub End Flange Ø 110 mm = 5 buah</li> </ol> | <p style="text-align: right;"><b>H</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 400 x 315 mm = 4 buah</li> <li>2. Valve Flange Ø 315 mm = 4 buah</li> <li>3. Stub End Flange Ø 400 mm = 8 buah</li> <li>4. Stub End Flange Ø 315 mm = 4 buah</li> </ol>   | <p style="text-align: right;"><b>i</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 315 x 90 mm = 1 buah</li> <li>2. Valve Flange Ø 90 mm = 1 buah</li> <li>3. Stub End Flange Ø 315 mm = 2 buah</li> <li>4. Stub End Flange Ø 90 mm = 1 buah</li> </ol>   |

## CATATAN

## REVISI

| NO | TGL | KET. | PARAF |
|----|-----|------|-------|
|    |     |      |       |

**POLITEKNIK NEGERI SRIWIJAYA  
PALEMBANG  
2016**



JURUSAN TEKNIK SIPIL  
KONSENTRASI AIR

## JUDUL LAPORAN AKHIR

**PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG**

## PERENCANA

**ANGGI DIO MEILANDO**  
NIM. 061330100028

**ROCKY WIJAYA**  
NIM. 061330100046

## DIPERIKSA

| DOSEN PEMBIMBING I                                      | PARAF |
|---|-------|
| <b>MAHMUDA, S.T., M.T.</b><br>NIP. 196207011966032002   |       |
| DOSEN PEMBIMBING II                                     | PARAF |
| <b>Dra. Siwa Indra, M.T.</b><br>NIP. 195801201966031001 |       |

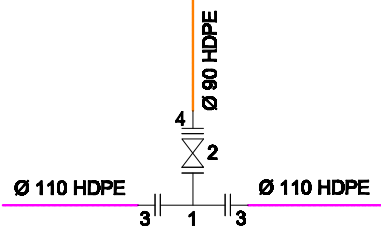
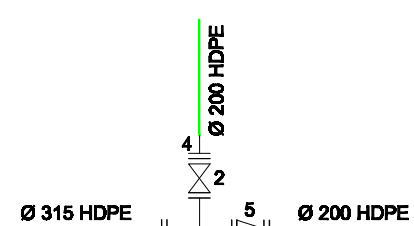
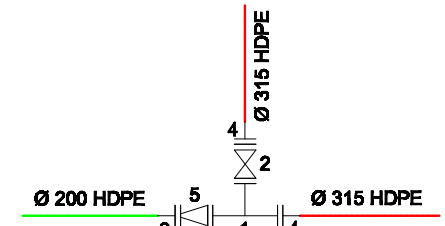
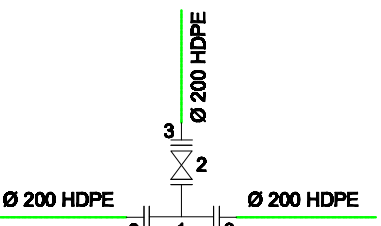
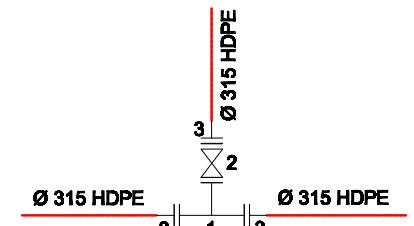
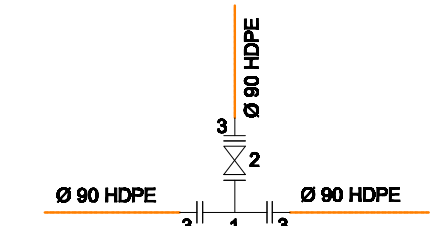
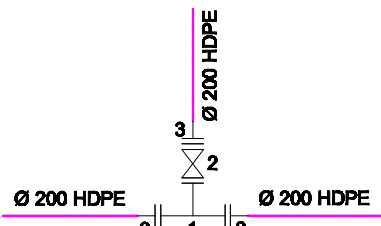
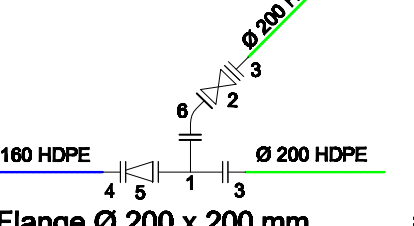
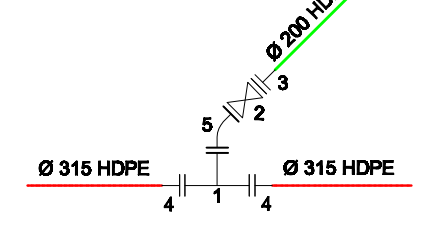
## JUDUL GAMBAR

**DETAIL SAMBUNGAN PIPA**

| KODE    | SKALA | NO. GBR | JLH. GBR |
|---------|-------|---------|----------|
| SPAB-SK | -     | 11      | -        |



# DETAIL SAMBUNGAN PIPA

|  |  |  |
|--|--|--|
| <p style="text-align: right;"><b>j</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 110 x 90 mm = 3 buah</li> <li>2. Valve Flange Ø 90 mm = 3 buah</li> <li>3. Stub End Flange Ø 110 mm = 6 buah</li> <li>4. Stub End Flange Ø 90 mm = 3 buah</li> </ol> | <p style="text-align: right;"><b>K</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 315 x 200 mm = 2 buah</li> <li>2. Valve Flange Ø 200 mm = 2 buah</li> <li>3. Stub End Flange Ø 315 mm = 2 buah</li> <li>4. Stub End Flange Ø 200 mm = 4 buah</li> <li>5. Reducer Flange Ø 315 x 200 mm = 2 buah</li> </ol>   | <p style="text-align: right;"><b>L</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 315 x 315 mm = 1 buah</li> <li>2. Valve Flange Ø 315 mm = 1 buah</li> <li>3. Stub End Flange Ø 200 mm = 1 buah</li> <li>4. Stub End Flange Ø 315 mm = 2 buah</li> <li>5. Reducer Flange Ø 315 x 200 mm = 1 buah</li> </ol> |
| <p style="text-align: right;"><b>M</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 200 x 200 mm = 1 buah</li> <li>2. Valve Flange Ø 200 mm = 1 buah</li> <li>3. Stub End Flange Ø 200 mm = 3 buah</li> </ol>   | <p style="text-align: right;"><b>N</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 315 X 315 mm = 1 buah</li> <li>2. Valve Flange Ø 315 mm = 1 buah</li> <li>3. Stub End Flange Ø 315 mm = 3 buah</li> </ol>   | <p style="text-align: right;"><b>O</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 90 X 90 mm = 2 buah</li> <li>2. Valve Flange Ø 90 mm = 2 buah</li> <li>3. Stub End Flange Ø 90 mm = 6 buah</li> </ol>   |
| <p style="text-align: right;"><b>P</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 110 x 110 mm = 1 buah</li> <li>2. Valve Flange Ø 110 mm = 1 buah</li> <li>3. Stub End Flange Ø 110 mm = 3 buah</li> </ol>  | <p style="text-align: right;"><b>R</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 200 x 200 mm = 2 buah</li> <li>2. Valve Flange Ø 200 mm = 2 buah</li> <li>3. Stub End Flange Ø 200 mm = 4 buah</li> <li>4. Stub End Flange Ø 160 mm = 2 buah</li> <li>5. Reducer Flange Ø 200 x 160 mm = 2 buah</li> <li>6. Bend Flange Ø 200 mm x 45° = 2 buah</li> </ol> | <p style="text-align: right;"><b>S</b></p>  <ol style="list-style-type: none"> <li>1. Tee Flange Ø 315 x 200 mm = 2 buah</li> <li>2. Valve Flange Ø 200 mm = 2 buah</li> <li>3. Stub End Flange Ø 200 mm = 2 buah</li> <li>4. Stub End Flange Ø 315 mm = 4 buah</li> <li>5. Bend Flange Ø 200 mm x 45° = 2 buah</li> </ol>  |

## CATATAN

## REVISI

| NO | TGL | KET. | PARAF |
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|    |     |      |       |

**POLITEKNIK NEGERI SRIWIJAYA  
PALEMBANG  
2016**



JURUSAN TEKNIK SIPIL  
KONSENTRASI AIR

## JUDUL LAPORAN AKHIR

**PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG**

## PERENCANA

**ANGGI DIO MEILANDO**  
NIM. 061330100028

**ROCKY WIJAYA**  
NIM. 061330100046

## DIPERIKSA

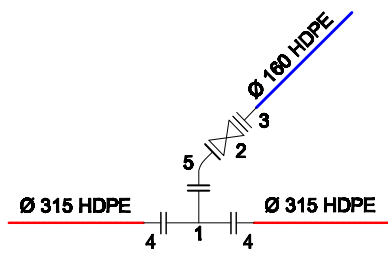
| DOSEN PEMBIMBING I                                      | PARAF |
|---|-------|
| <b>MAHMUDA, S.T., M.T.</b><br>NIP. 196207011966032002   |       |
| DOSEN PEMBIMBING II                                     | PARAF |
| <b>Dra. Siwa Indra, M.T.</b><br>NIP. 195801201966031001 |       |

## JUDUL GAMBAR

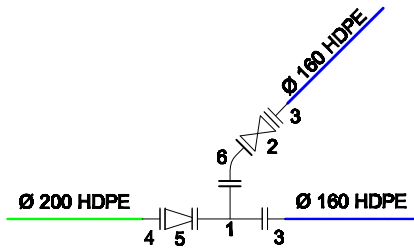
**DETAIL SAMBUNGAN PIPA**

| KODE    | SKALA | NO. GBR | JLH. GBR |
|---------|-------|---------|----------|
| SPAB-SK | -     | 12      | -        |

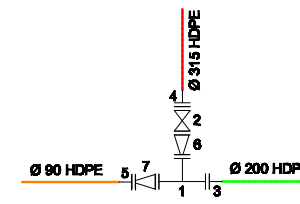
# DETAIL SAMBUNGAN PIPA



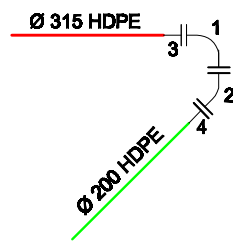
- T**
1. Tee Flange Ø 315 x 160 mm = 2 buah
  2. Valve flange Ø 160 mm = 2 buah
  3. Stub End Flange Ø 160 mm = 2 buah
  4. Stub End Flange Ø 315 mm = 4 buah
  5. Bend Flange Ø 160 mm x 45° = 2 buah



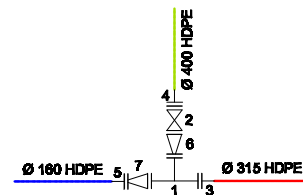
- U**
1. Tee Flange Ø 160 x 160 mm = 1 buah
  2. Valve flange Ø 160 mm = 1 buah
  3. Stub End Flange Ø 160 mm = 2 buah
  4. Stub End Flange Ø 200 mm = 1 buah
  5. Reducer Flange Ø 200 x 160 mm = 1 buah
  6. Bend Flange Ø 160 mm x 45° = 1 buah



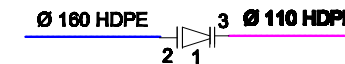
- V**
1. Tee Flange Ø 200 x 200 mm = 1 buah
  2. Valve flange Ø 315 mm = 1 buah
  3. Stub End Flange Ø 200 mm = 1 buah
  4. Stub End Flange Ø 315 mm = 1 buah
  5. Stub End Flange Ø 90 mm = 1 buah
  6. Reducer Flange Ø 315 x 200 mm = 1 buah
  7. Reducer Flange Ø 200 x 90 mm = 1 buah



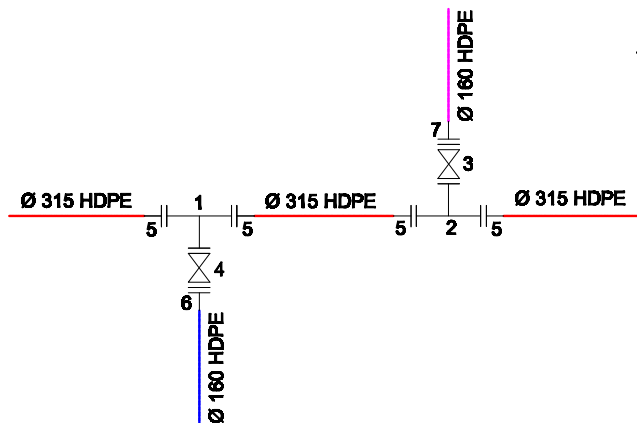
- W**
1. Bend Flange Ø 315 mm x 90° = 1 buah
  2. Bend Flange Ø 200 mm x 45° = 1 buah
  3. Stub End Flange Ø 315 mm = 1 buah
  4. Stub End Flange Ø 200 mm = 1 buah



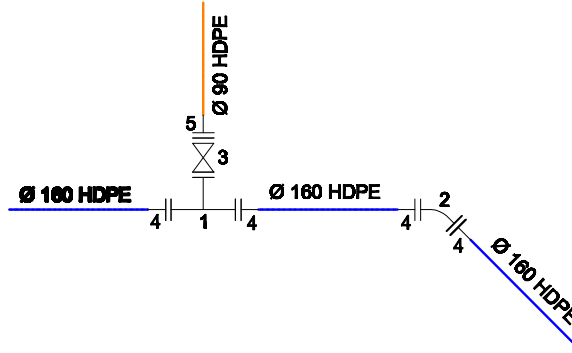
- Y**
1. Tee Flange Ø 315 x 315 mm = 1 buah
  2. Valve flange Ø 400 mm = 1 buah
  3. Stub End Flange Ø 315 mm = 1 buah
  4. Stub End Flange Ø 400 mm = 1 buah
  5. Stub End Flange Ø 160 mm = 1 buah
  6. Reducer Flange Ø 400 x 315 mm = 1 buah
  7. Reducer Flange Ø 315 x 160 mm = 1 buah



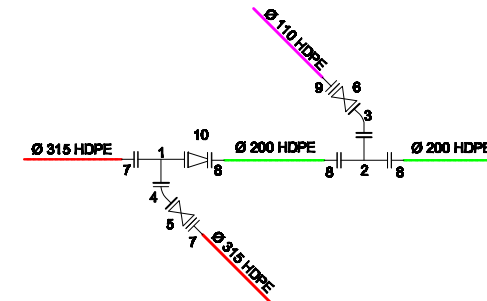
- 17**
1. Reducer Flange Ø 160 x 110 mm = 1 buah
  2. Stub End Flange Ø 160 mm = 1 buah
  3. Stub End Flange Ø 110 mm = 1 buah



- X**
1. Tee Flange Ø 315 x 160 mm = 1 buah
  2. Tee Flange Ø 315 x 110 mm = 1 buah
  3. Valve flange Ø 110 mm = 1 buah
  4. Valve flange Ø 160 mm = 1 buah
  5. Stub End Flange Ø 315 mm = 4 buah
  6. Stub End Flange Ø 160 mm = 1 buah
  7. Stub End Flange Ø 110 mm = 1 buah



- Z**
1. Tee Flange Ø 160 x 90 mm = 1 buah
  2. Bend Flange Ø 160 x 45° = 1 buah
  3. Valve flange Ø 90 mm = 1 buah
  4. Stub End Flange Ø 160 mm = 4 buah
  5. Stub End Flange Ø 90 mm = 1 buah



- 16**
1. Tee Flange Ø 315 x 315 mm = 1 buah
  2. Tee Flange Ø 200 x 110 mm = 1 buah
  3. Bend Flange Ø 110 mm x 45° = 1 buah
  4. Bend Flange Ø 315 mm x 45° = 1 buah
  5. Valve flange Ø 315 mm = 1 buah
  6. Valve flange Ø 110 mm = 1 buah
  7. Stub End Flange Ø 315 mm = 2 buah
  8. Stub End Flange Ø 200 mm = 3 buah
  9. Stub End Flange Ø 110 mm = 1 buah
  10. Reducer Flange Ø 315 x 200 mm = 1 buah

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POLITEKNIK NEGERI SRIWIJAYA  
PALEMBANG  
2016



JURUSAN TEKNIK SIPIL  
KONSENTRASI AIR

JUDUL LAPORAN AKHIR

PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG

PERENCANA

ANGGI DIO MEILANDO  
NIM. 061330100028

ROCKY WIJAYA  
NIM. 061330100046

DIPERIKSA

| DOSEN PEMBIMBING I                               | PARAF |
|--|-------|
| MAHMUDA, S.T., M.T.<br>NIP. 196207011966032002   |       |
| DOSEN PEMBIMBING II                              | PARAF |
| Dra. Siwa Indra, M.T.<br>NIP. 195601201966031001 |       |

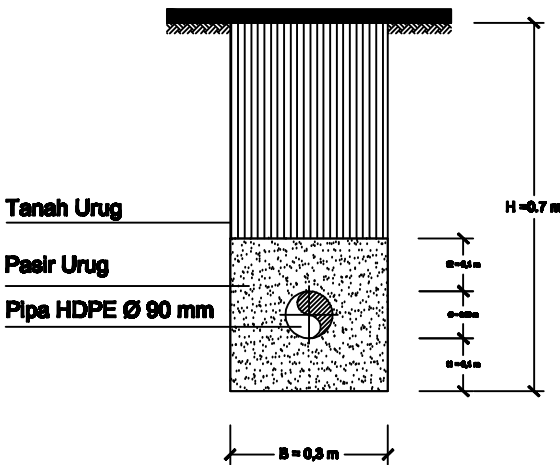
JUDUL GAMBAR

DETAIL SAMBUNGAN PIPA

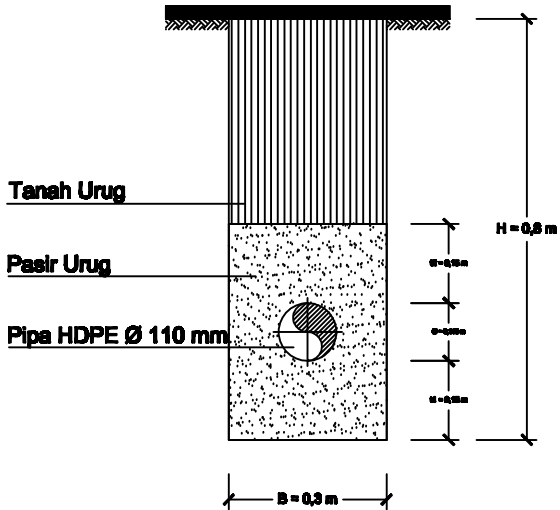
| KODE    | SKALA | NO. GBR | JLH. GBR |
|---------|-------|---------|----------|
| SPAB-SK | -     | 13      | -        |

# DETAIL GALIAN TANAH

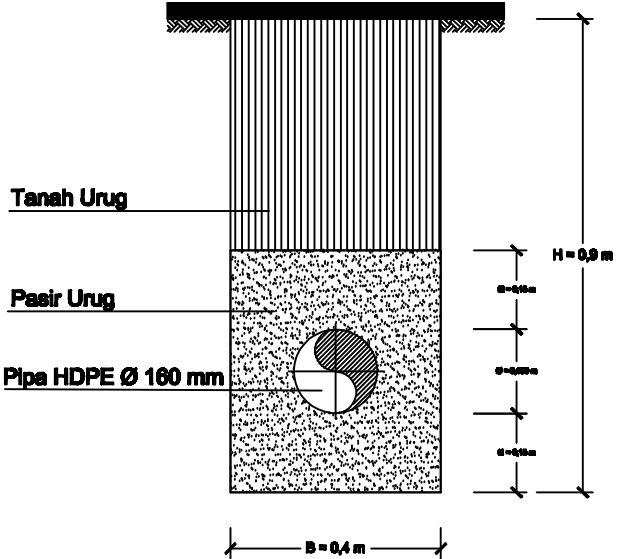
**Pipa HDPE Ø 90 mm**



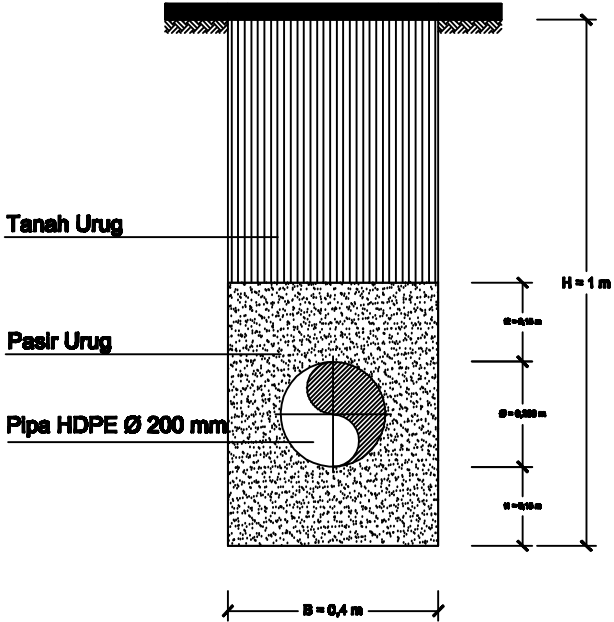
**Pipa HDPE Ø 110 mm**



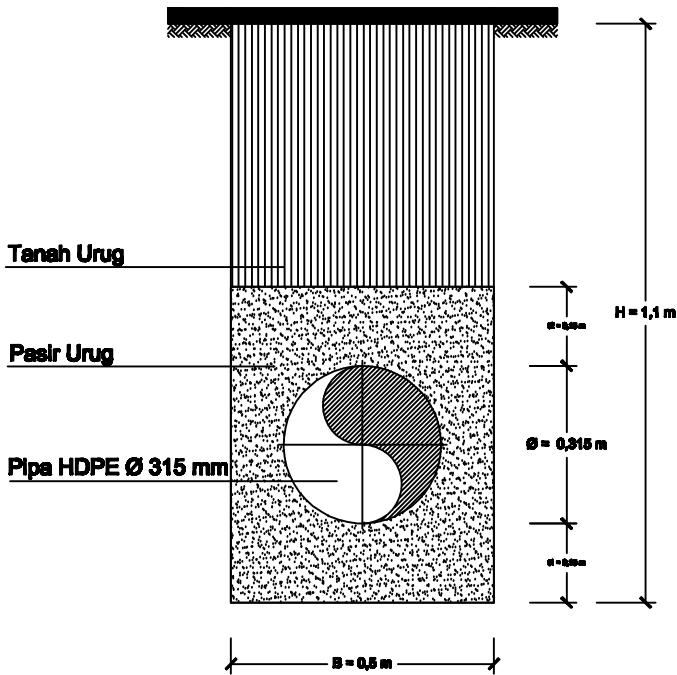
**Pipa HDPE Ø 160 mm**



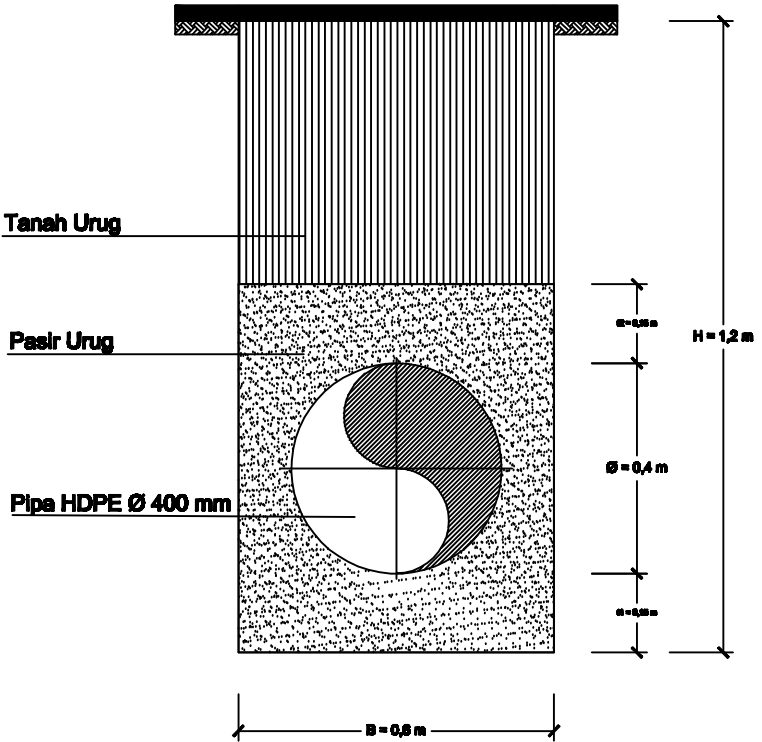
**Pipa HDPE Ø 200 mm**



**Pipa HDPE Ø 315 mm**



**Pipa HDPE Ø 400 mm**



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JUDUL LAPORAN AKHIR

PERENCANAAN SISTEM JARINGAN PIPA  
DISTRIBUSI  
AIR BERSIH KECAMATAN SAKO  
PALEMBANG

PERENCANA

|  |  |
|--|--|
| <b>ANGGI DIO MEILANDO</b><br>NIM. 061330100028 | <b>ROCKY WIJAYA</b><br>NIM. 061330100046 |
|--|--|

DIPERIKSA

|   |       |
|---|-------|
| DOSEN PEMBIMBING I                                      | PARAF |
| <b>MAHMUDA, S.T., M.T.</b><br>NIP. 196207011966032002   |       |
| DOSEN PEMBIMBING II                                     | PARAF |
| <b>Dra. Siwa Indra, M.T.</b><br>NIP. 195601201966031001 |       |



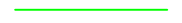



JUDUL GAMBAR

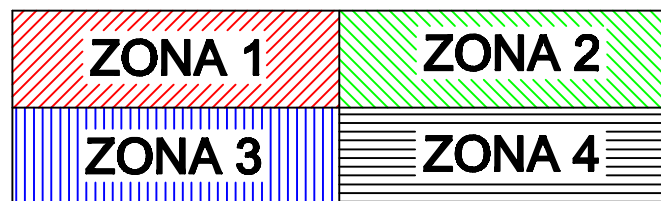
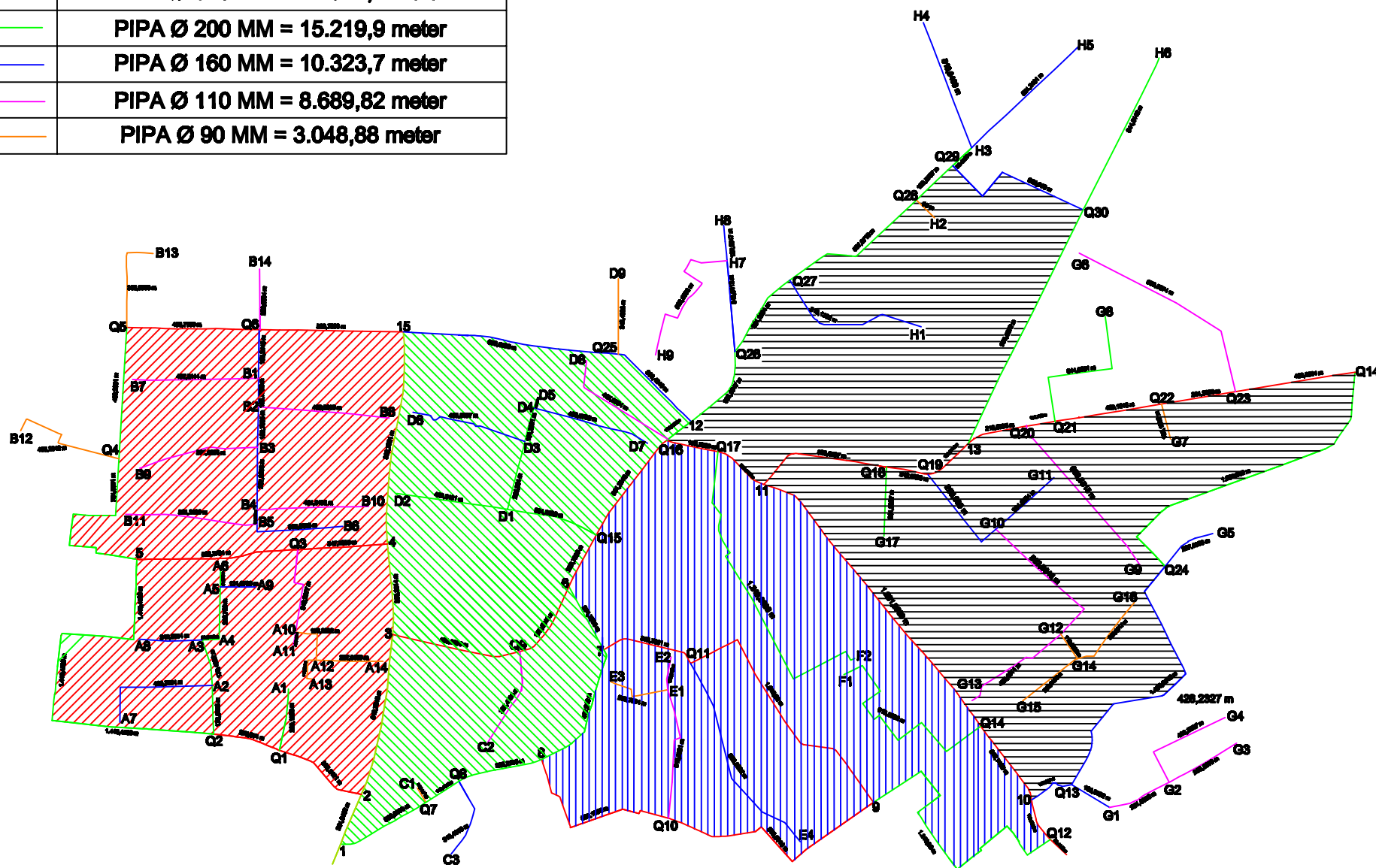
DETAIL GALIAN TANAH

| KODE    | SKALA  | NO. GBR | JLH. GBR |
|---------|--------|---------|----------|
| SPAB-SK | 1 : 14 | 14      | -        |



# GAMBAR ZONA PEMASANGAN PIPA

| LEGEND  |                                |
|---|--------------------------------|
|  | PIPA Ø 400 MM = 1.990 meter    |
|  | PIPA Ø 315 MM = 11.911,1 meter |
|  | PIPA Ø 200 MM = 15.219,9 meter |
|  | PIPA Ø 160 MM = 10.323,7 meter |
|  | PIPA Ø 110 MM = 8.689,82 meter |
|  | PIPA Ø 90 MM = 3.048,88 meter  |



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PALEMBANG

## PERENCANA

ANGGI DIO MEILANDO  
NIM. 061330100028

ROCKY WIJAYA  
NIM. 061330100046

## DIPERIKSA

| DOSEN PEMBIMBING I                               | PARAF |
|--|-------|
| MAHMUDA, S.T., M.T.<br>NIP. 196207011966032002   |       |
| DOSEN PEMBIMBING II                              | PARAF |
| Dra. Siwa Indra, M.T.<br>NIP. 195501201966031001 |       |

## JUDUL GAMBAR

GAMBAR ZONA PEMASANGAN PIPA

| KODE    | SKALA      | NO. GBR | JLH. GBR |
|---------|------------|---------|----------|
| SPAB-SK | 1 : 20.000 | 15      | -        |