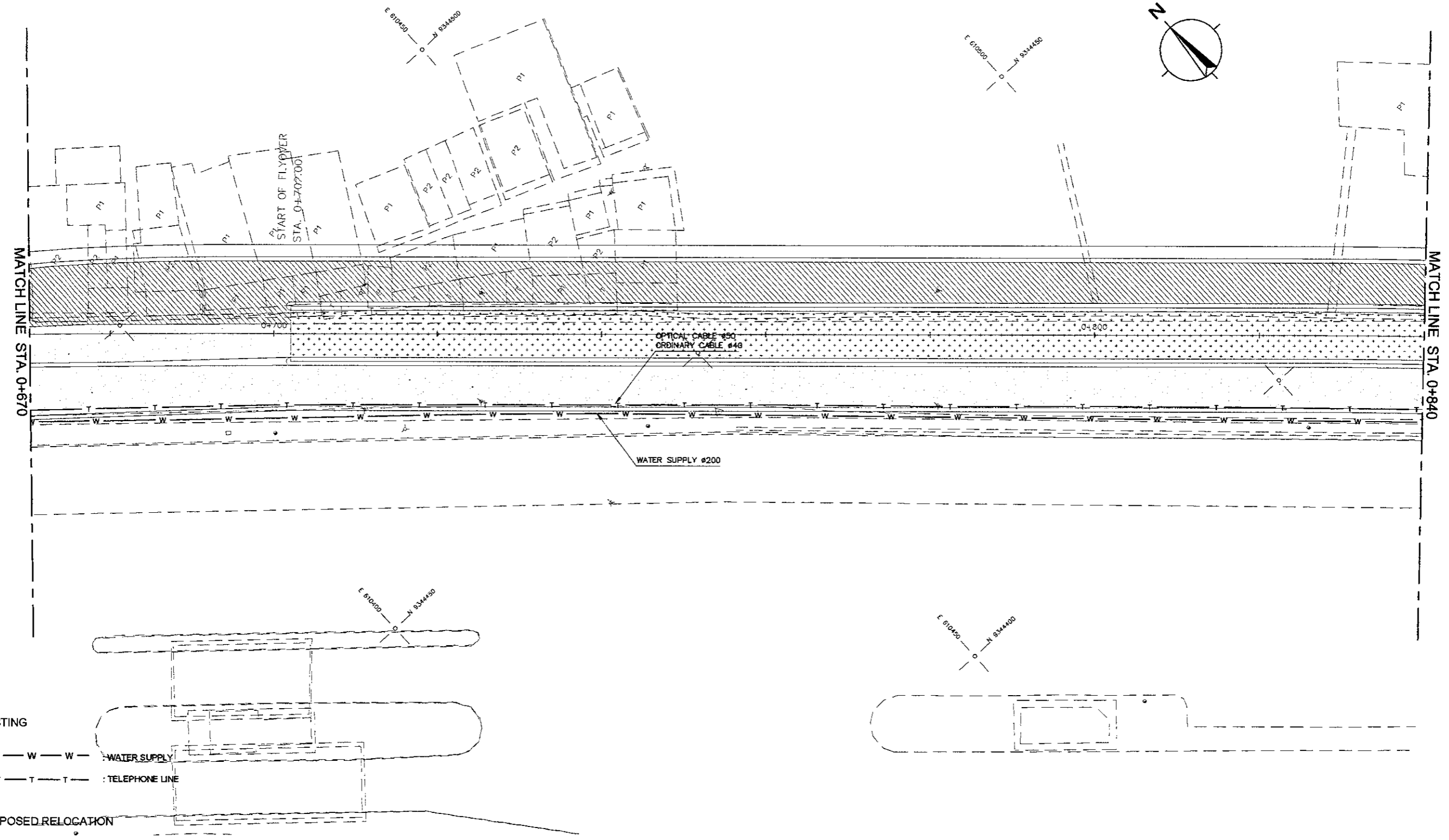


| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |



EXISTING

— W — W — W — : WATER SUPPLY

— T — T — T — : TELEPHONE LINE

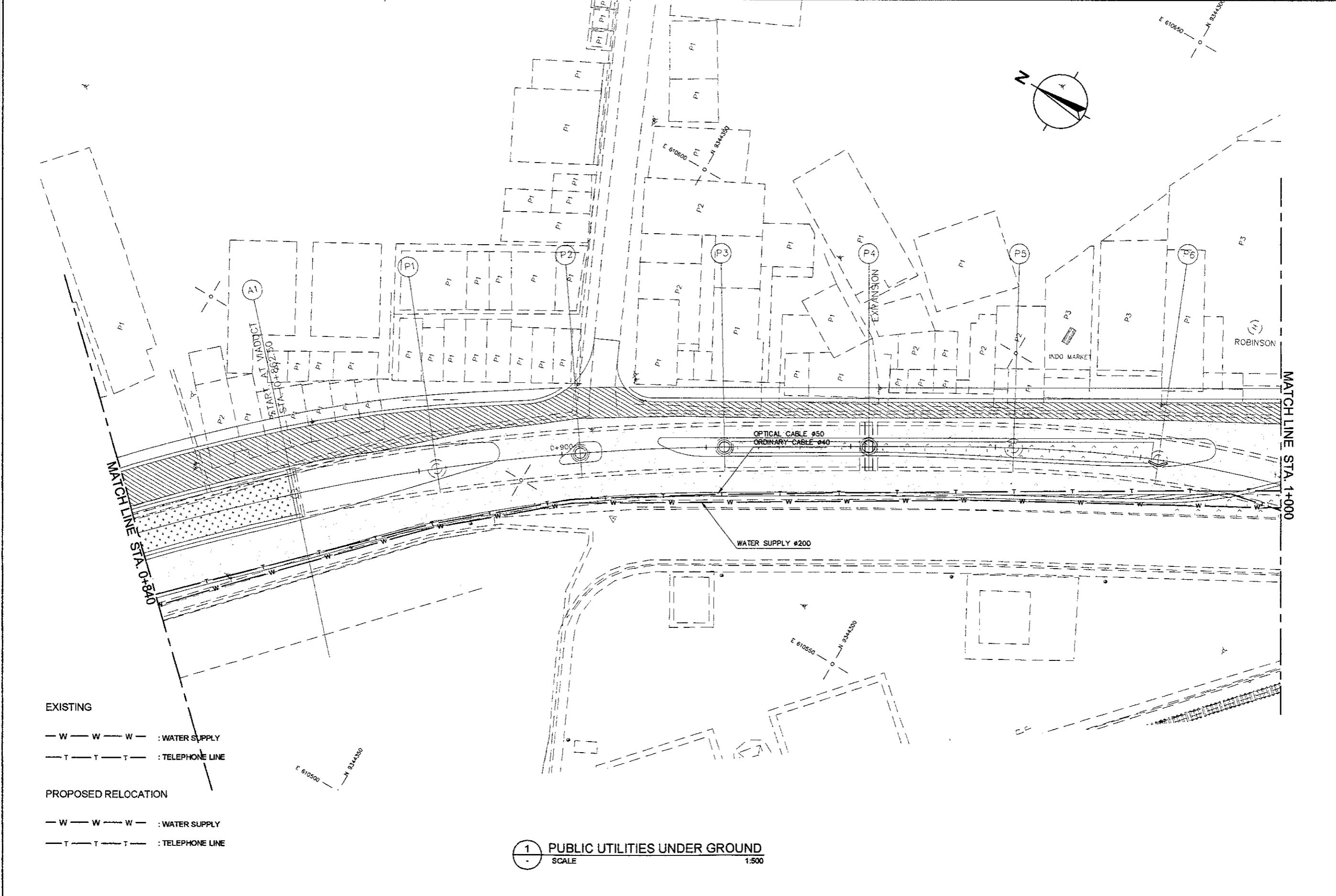
PROPOSED RELOCATION

— W — W — W — : WATER SUPPLY

— T — T — T — : TELEPHONE LINE

1 PUBLIC UTILITIES UNDER GROUND
 SCALE 1:500

| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |



EXISTING

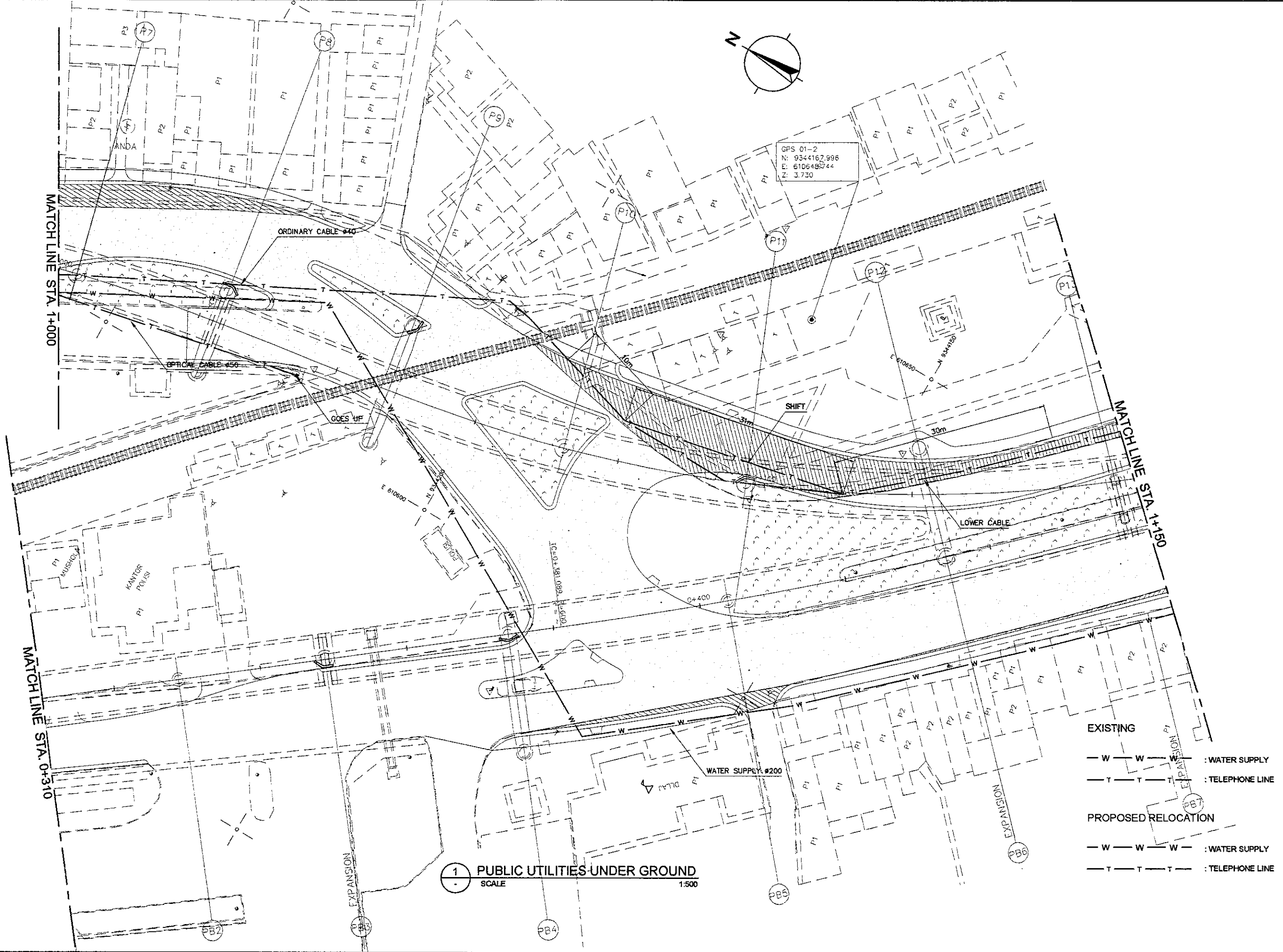
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 — T — T — T — : TELEPHONE LINE

PROPOSED RELOCATION

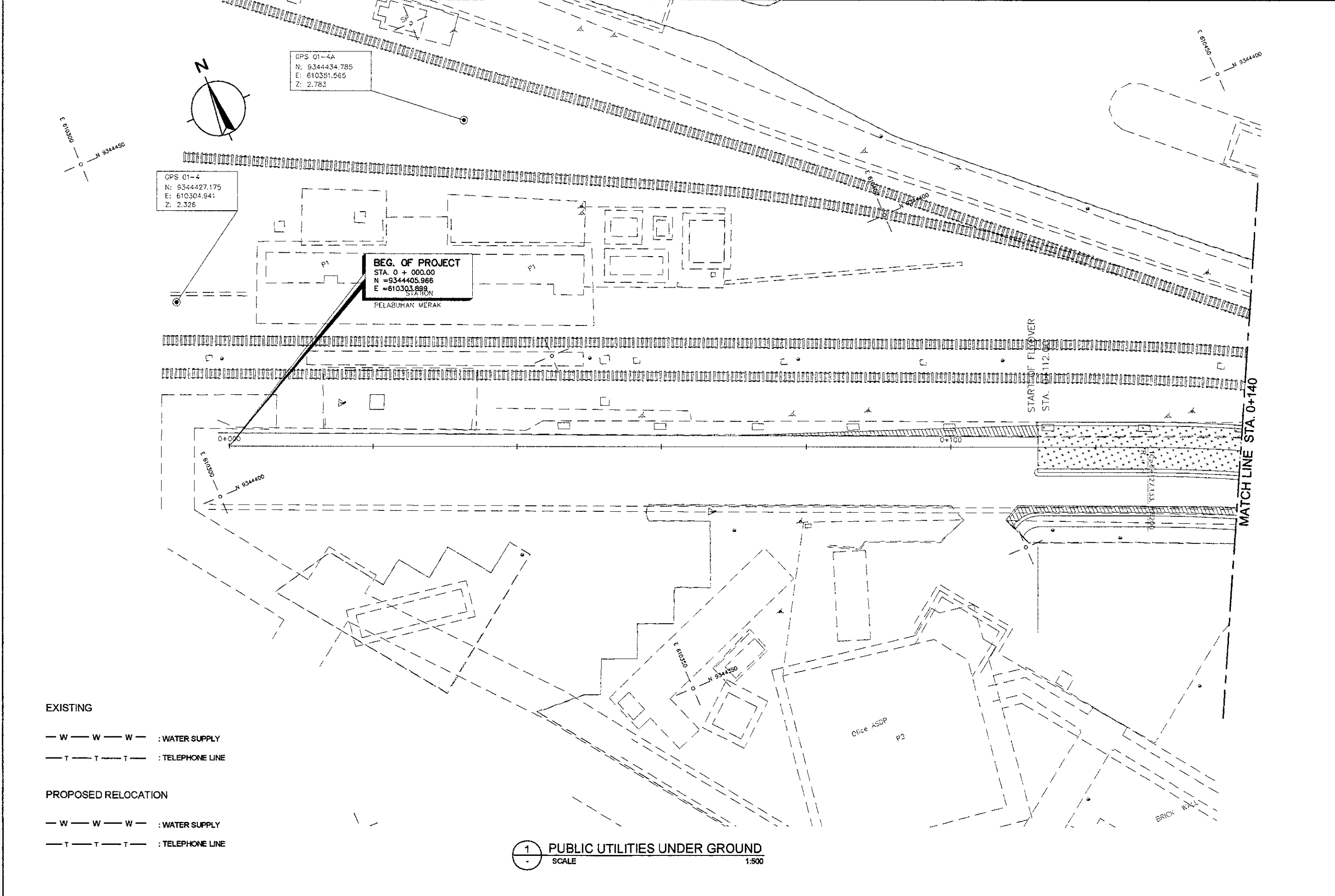
— W — W — W — : WATER SUPPLY
 — T — T — T — : TELEPHONE LINE

1 PUBLIC UTILITIES UNDER GROUND
 SCALE 1:500

| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |



| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |



- EXISTING**
- W — W — W — : WATER SUPPLY
 - T — T — T — : TELEPHONE LINE
- PROPOSED RELOCATION**
- W — W — W — : WATER SUPPLY
 - T — T — T — : TELEPHONE LINE

1 PUBLIC UTILITIES UNDER GROUND
 SCALE 1:500



JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS
 INTERNATIONAL

| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |



REPUBLIC OF INDONESIA
 MINISTRY OF PUBLIC WORKS
 DIRECTORATE GENERAL OF HIGHWAYS

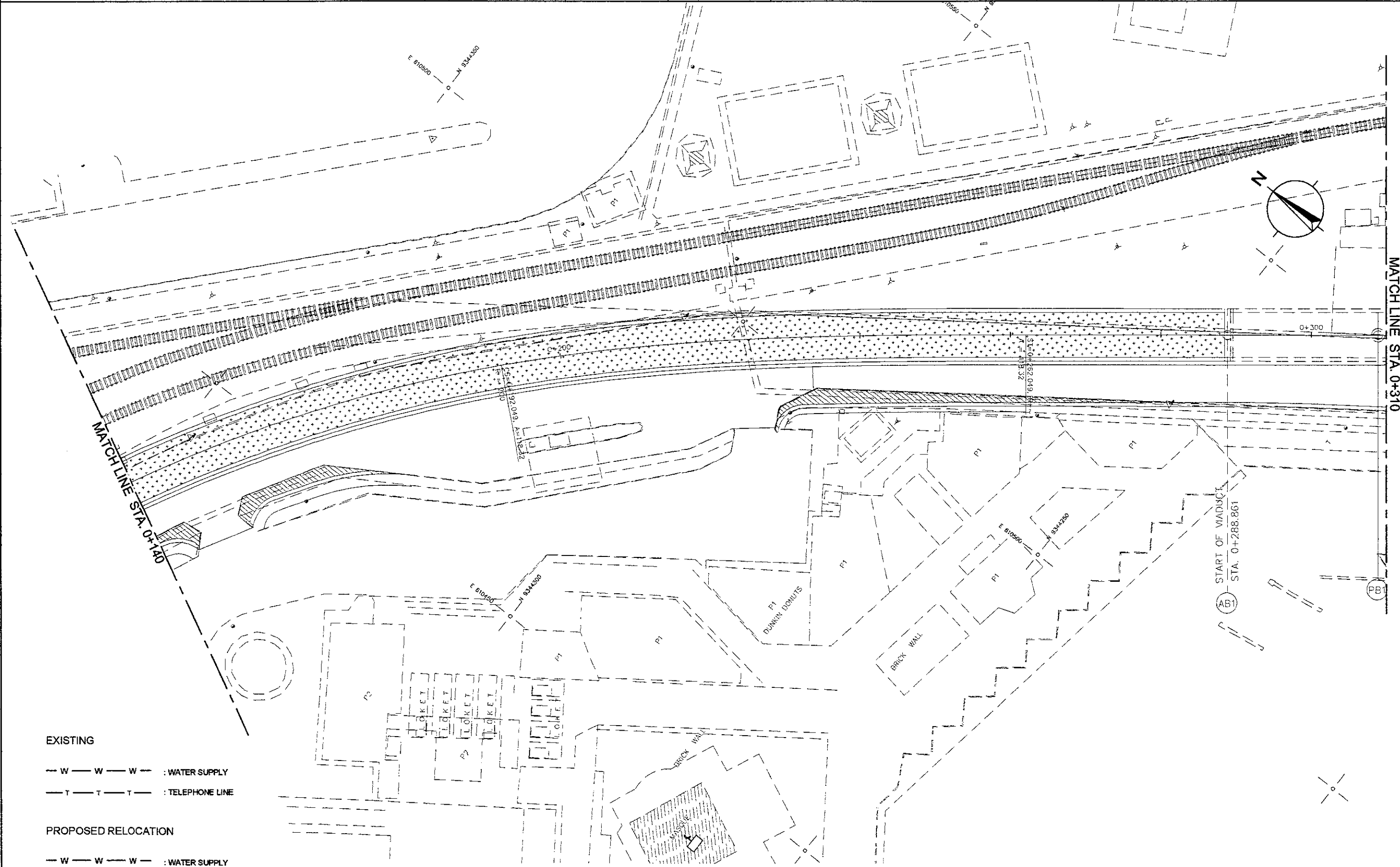
| APPROVED BY | |
|-------------------------|------|
| Ir. HERRY VAZA M,Eng.Sc | Sign |
| NIP. : 110038400 | Date |

PROJECT AND LOCATION :
 DETAILED DESIGN STUDY OF
 NORTH JAVA CORRIDOR FLYOVER PROJECT
 MERAK FLYOVER - CONTRACT PACKAGE 1
 (MERAK - BALARAJA)
 BANTEN PROVINCE

SCALE :
 1 : 500
 FULL SIZE A3

DRAWING TITLE :
PUBLIC UTILITIES UNDER GROUND
 6 OF 9

DRAWING NO :
MUT-015
 SHEET NO :
 15 / 19



EXISTING

— W — W — W — : WATER SUPPLY
 — T — T — T — : TELEPHONE LINE

PROPOSED RELOCATION

— W — W — W — : WATER SUPPLY
 — T — T — T — : TELEPHONE LINE

1 PUBLIC UTILITIES UNDER GROUND
 SCALE 1:500

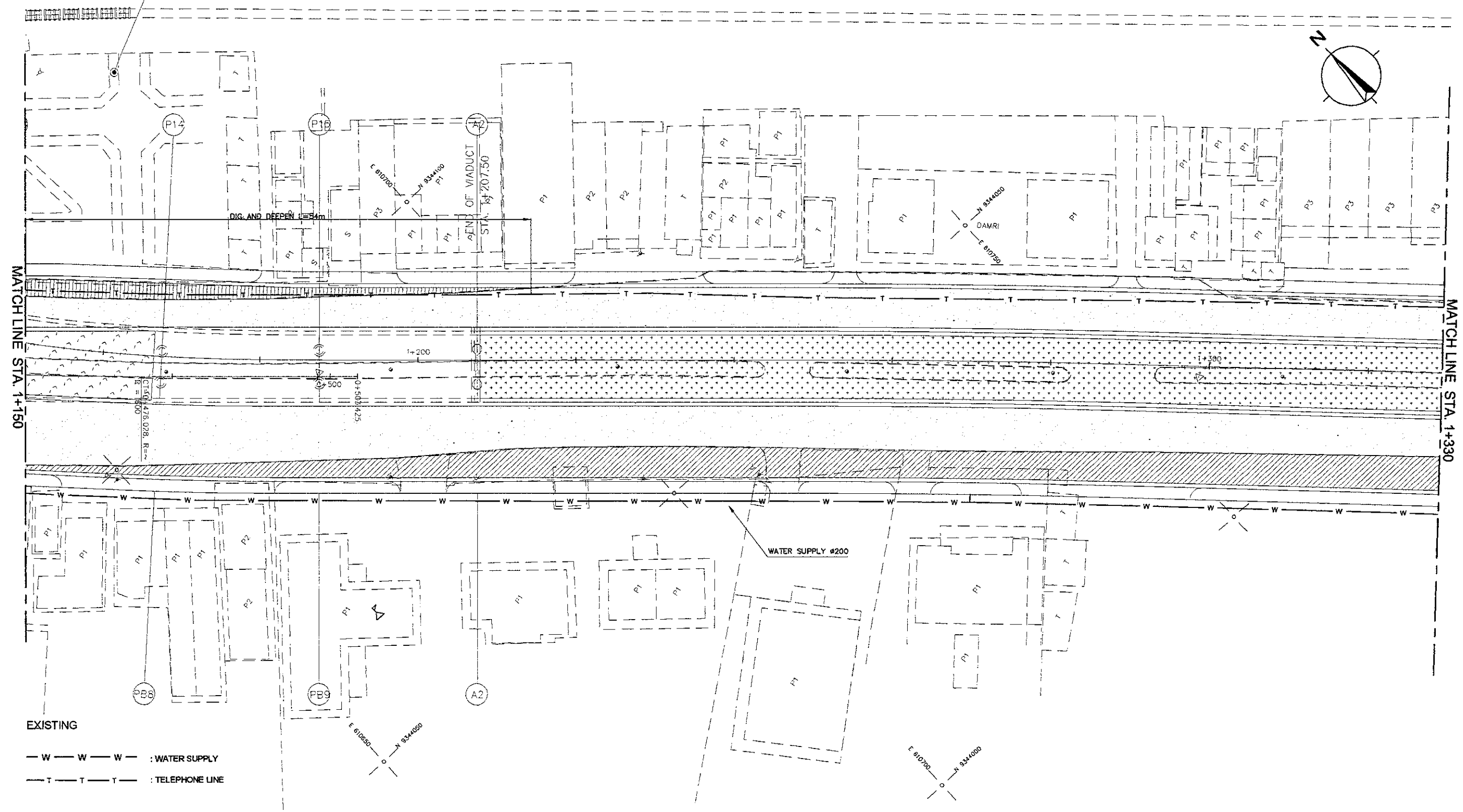
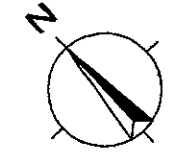
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|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |

GPS 01-2A

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 Z: 3.697

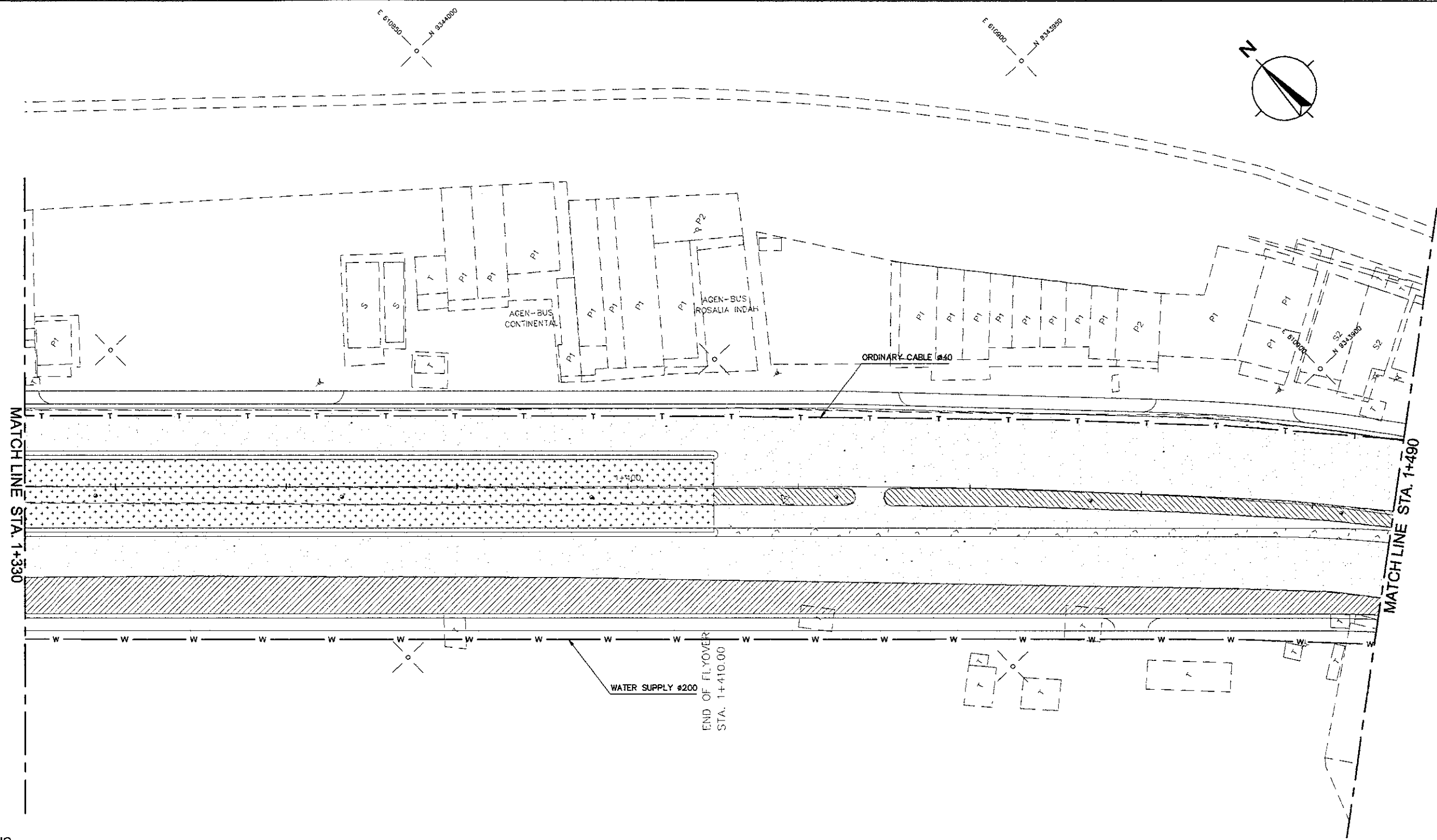


- EXISTING
- W — W — W — : WATER SUPPLY
 - T — T — T — : TELEPHONE LINE
- PROPOSED RELOCATION
- W — W — W — : WATER SUPPLY
 - T — T — T — : TELEPHONE LINE


 PUBLIC UTILITIES UNDER GROUND

 SCALE 1:500

| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |



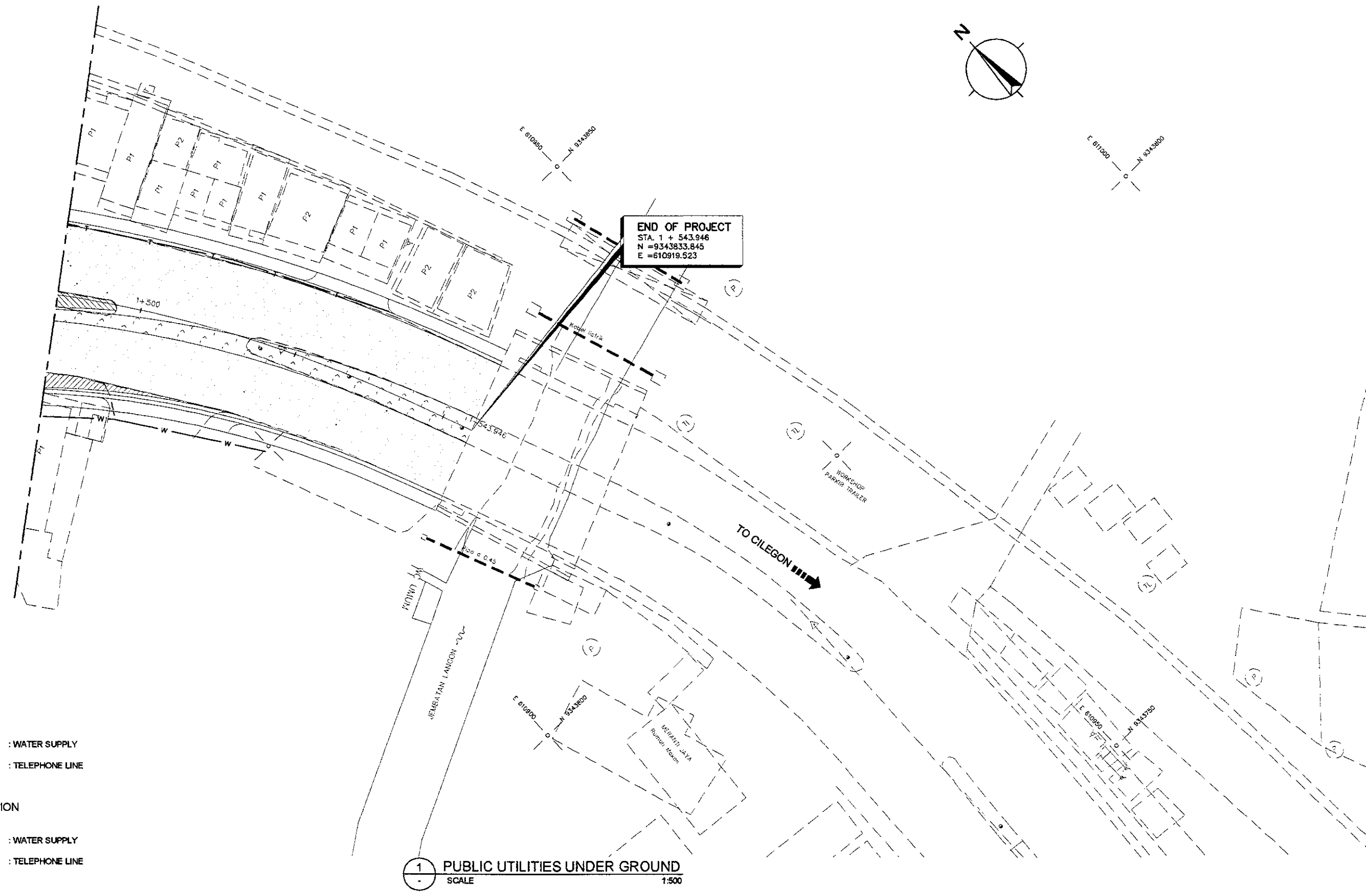
EXISTING

— W — W — W — : WATER SUPPLY
 — T — T — T — : TELEPHONE LINE

PROPOSED RELOCATION

— W — W — W — : WATER SUPPLY
 — T — T — T — : TELEPHONE LINE

| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |



EXISTING

— W — W — W — : WATER SUPPLY
 — T — T — T — : TELEPHONE LINE

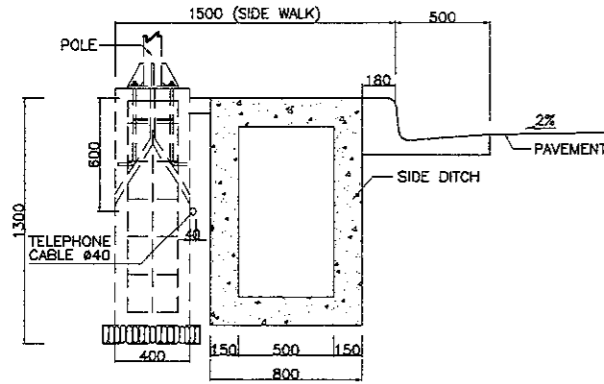
PROPOSED RELOCATION

— W — W — W — : WATER SUPPLY
 — T — T — T — : TELEPHONE LINE

1 PUBLIC UTILITIES UNDER GROUND
 SCALE 1:500

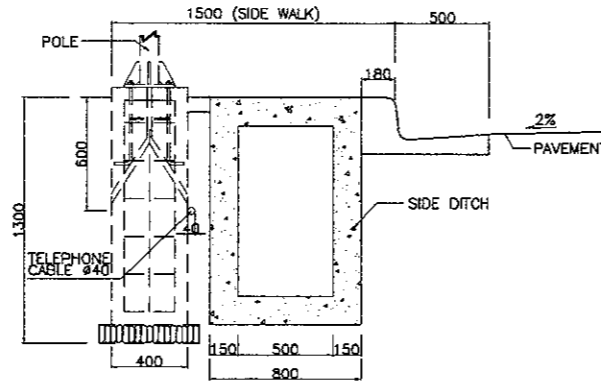
OPTION 1

LEFT SIDE
 STA 0+200

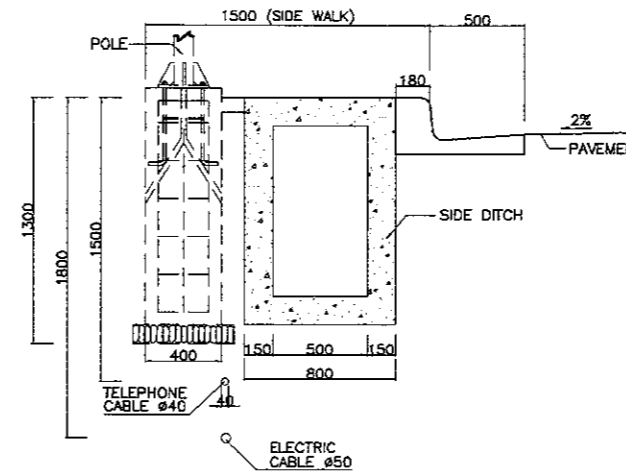


OPTION 2

LEFT SIDE
 STA 0+200

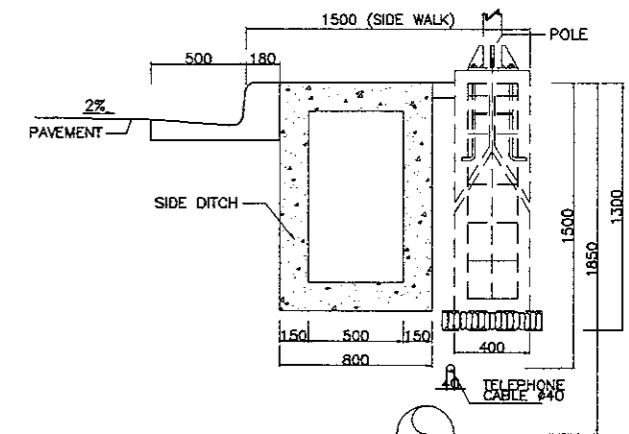


LEFT SIDE
 STA 1+300

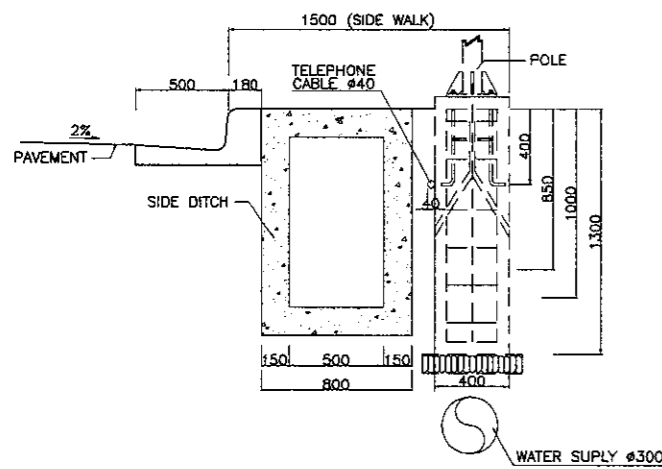


OPTION - 1

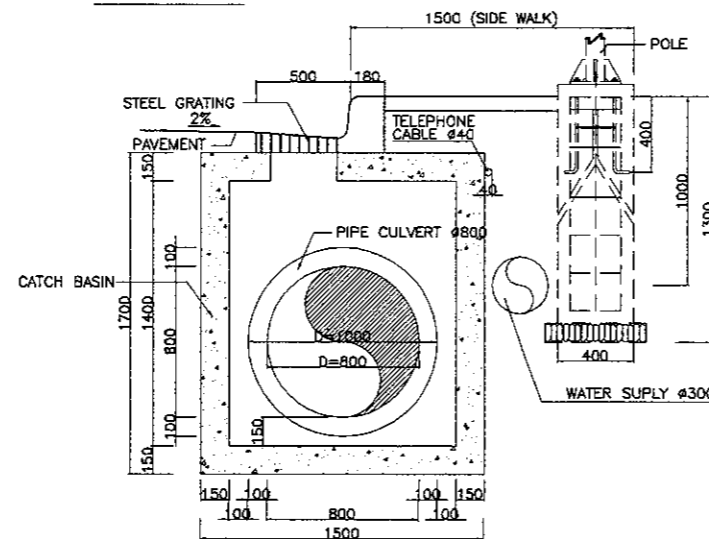
RIGHT SIDE
 STA 0+800



RIGHT SIDE

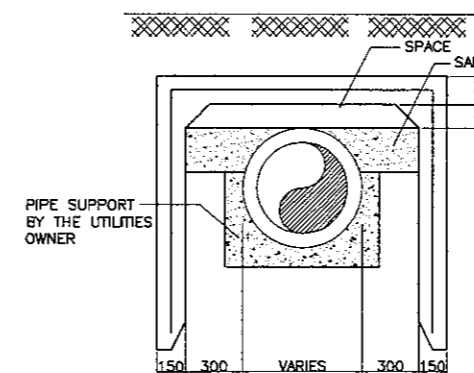
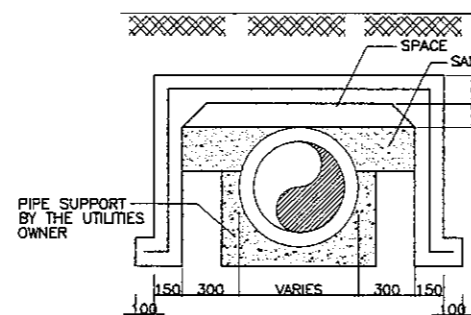
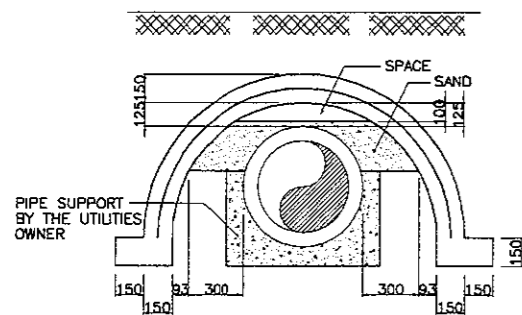
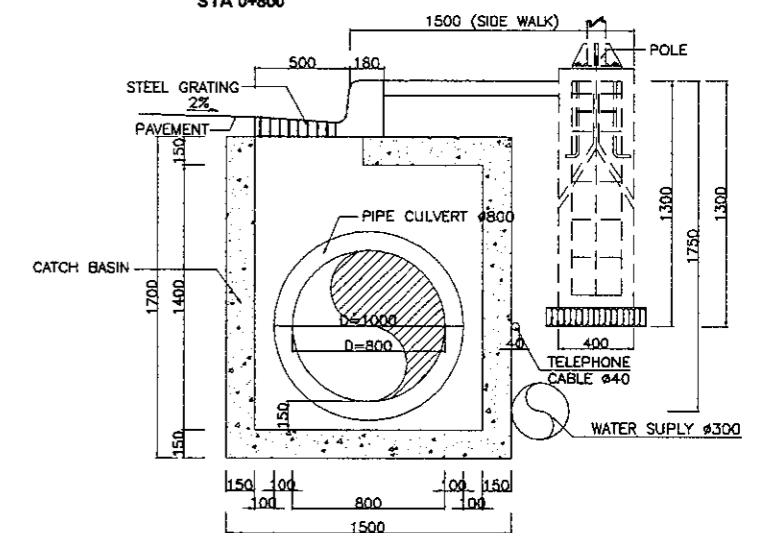


RIGHT SIDE



OPTION - 2

RIGHT SIDE
 STA 0+800





JAPAN INTERNATIONAL
COOPERATION AGENCY



DIRECTORATE GENERAL OF HIGHWAY
MINISTRY OF PUBLIC WORKS
REPUBLIC OF INDONESIA

ROAD LIGHTING

 **KEI** KATAHIRA & ENGINEERS INTERNATIONAL

| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |







| | | | |
|-------------|-------------------------|------|--|
| APPROVED BY | Ir. HERRY VAZA M,Eng.Sc | Sign | |
| | NIP. : 110038400 | Date | |

| | | |
|--|--------------|------------------|
| PROJECT AND LOCATION : | SCALE : | DRAWING TITLE : |
| DETAILED DESIGN STUDY OF NORTH JAVA CORRIDOR FLYOVER PROJECT MERAK FLYOVER - CONTRACT PACKAGE 1 (MERAK - BALARAJA) BANTEN PROVINCE | N T S | LEGEND AND NOTES |
| | FULL SIZE A3 | |

| |
|--------------|
| DRAWING NO : |
| MRL - 001 |
| SHEET NO : |
| 01 / 15 |

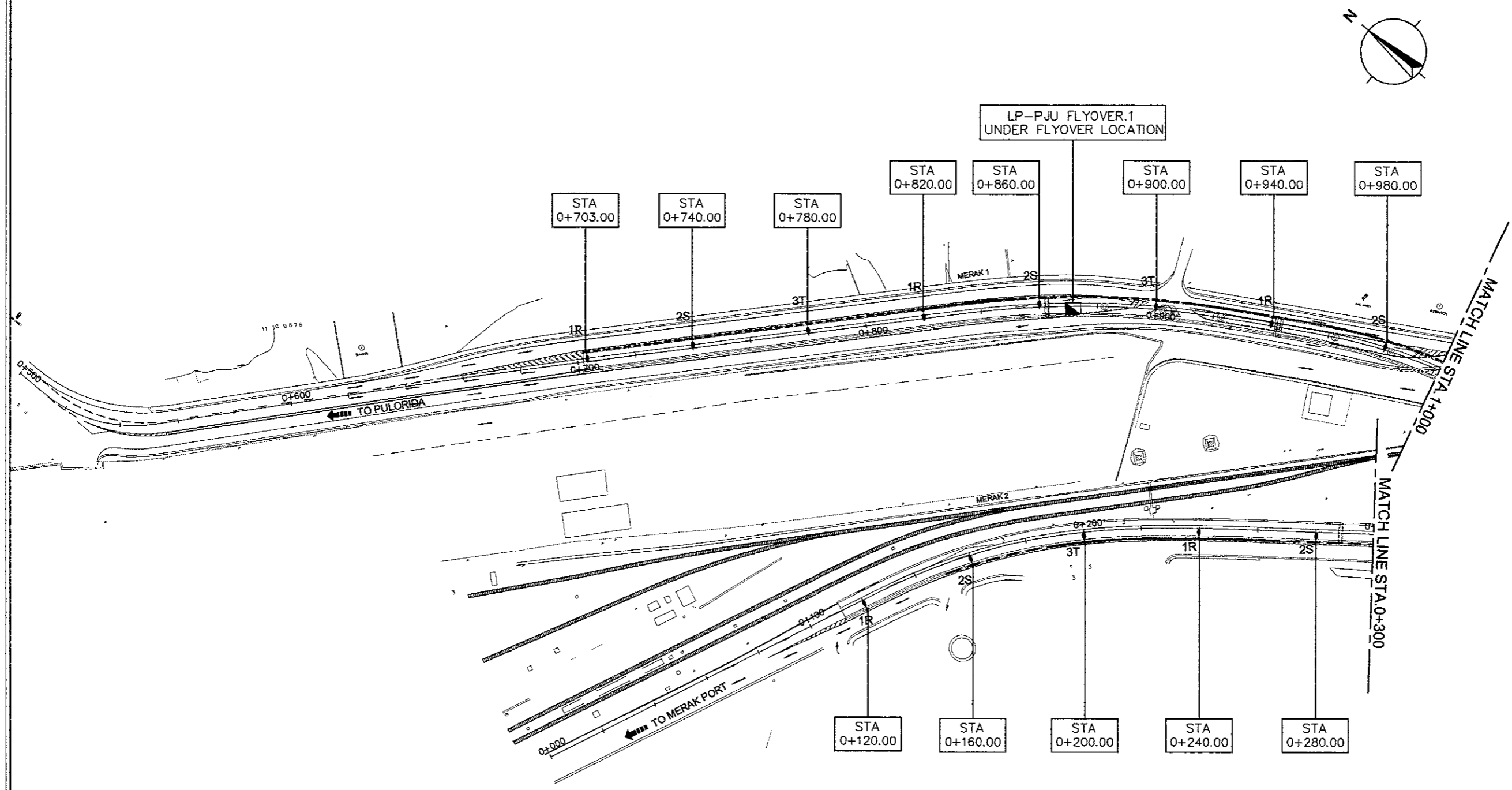
LEGEND

| SYMBOL | DESCRIPTION | REMARKS |
|---|---------------------------------|---------------|
|  | ROAD LIGHTING POLE TYPE - A | SEE NOTES : 1 |
|  | LIGHTING UNDER VIADUCT TYPE - B | SEE NOTES : 2 |
|  | ROAD LIGHTING PANEL | |
|  | CABLE INSTALLATION | |

NOTES

1. TYPE A : POLE IS 11 m HIGH OCTAGONAL GALVANIZED HOT.DIP TYPE STEEL POLE WITH SINGLE ARM, 250 HIGH PRESSURE SODIUM LAMP (SON - TP 250 W)
2. TYPE B : LIGHTING UNDER VIADUCT SURFACE MOUNTED,(SON - T 150 W)
3. CABLE : - NYFGbY PVC INSULATION FLAT STEEL WIRE ARMOURING AND PVC OUTER SHEATHING,SIZE ARE 1.5, 10, 16, 25 AND 150 mm²
 - NY Y PVC INSULATION AND SHEATHING SIZE ARE 1.5, 2,5, 16 AND 25 mm²
4. GROUNDING :
 ELECTRODE : UNLESS INDICATED OTHERWISE,GROUNDING ELECTRODES SHALL BE PROVIDED TO EACH ROAD LIGHTING POLE,TRAFFIC SIGNAL POLE AND PANELS

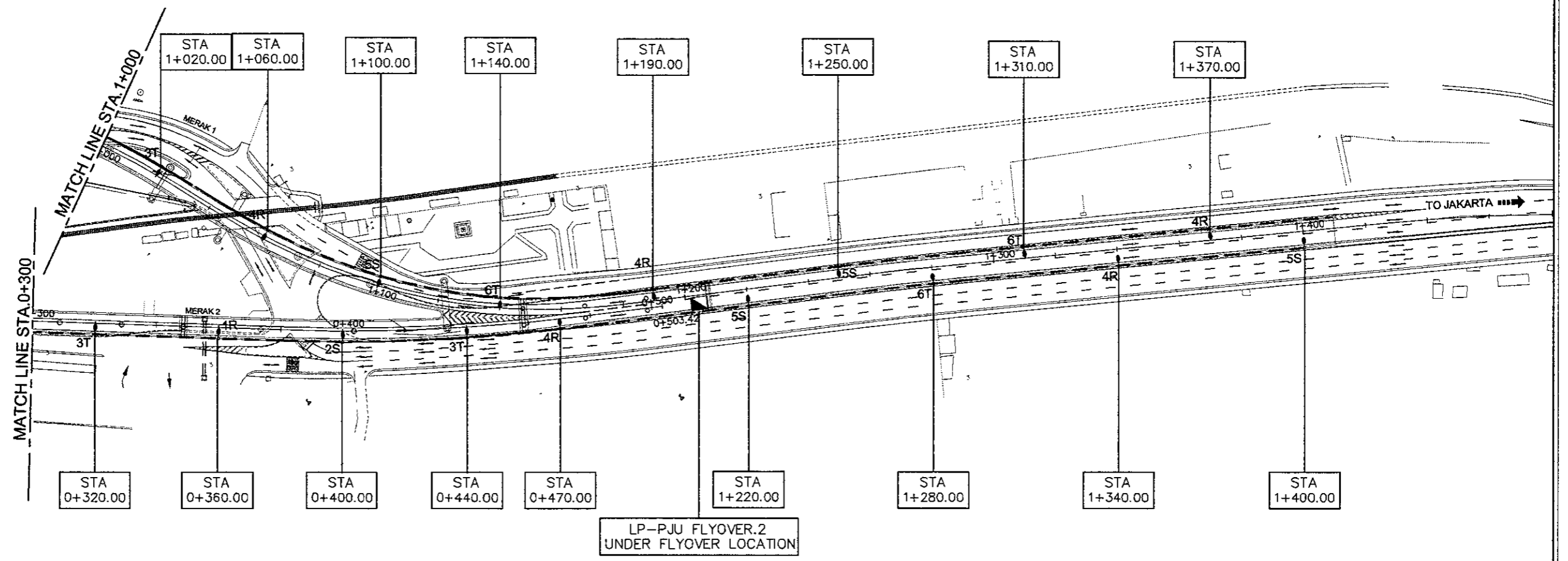
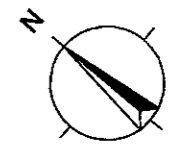
| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |

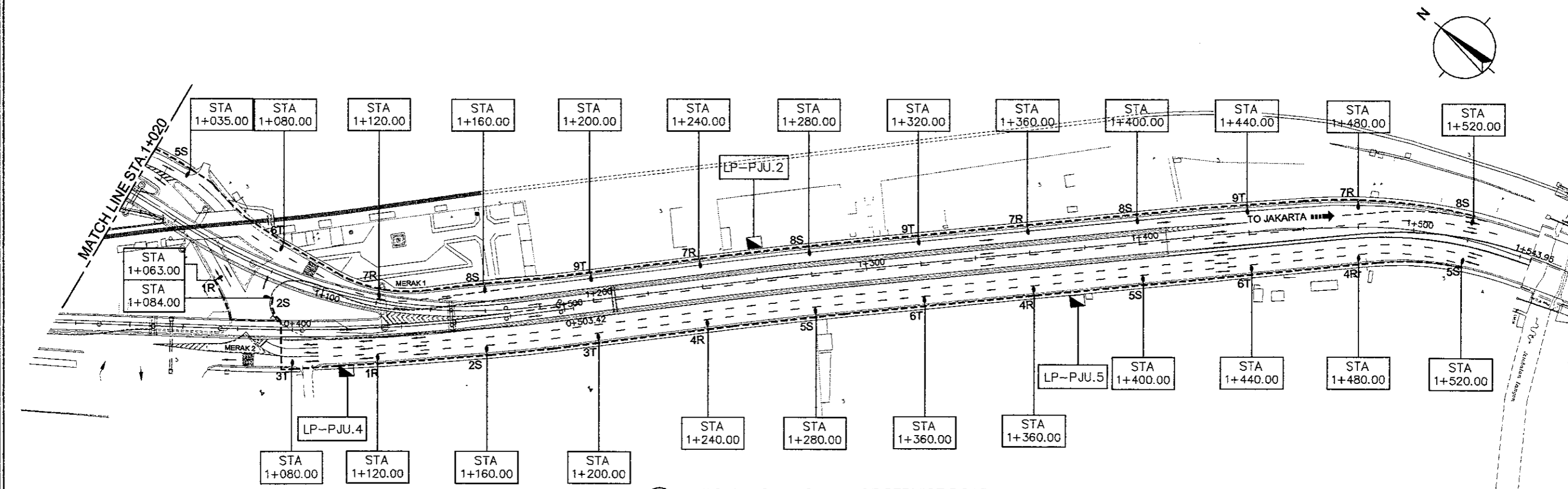
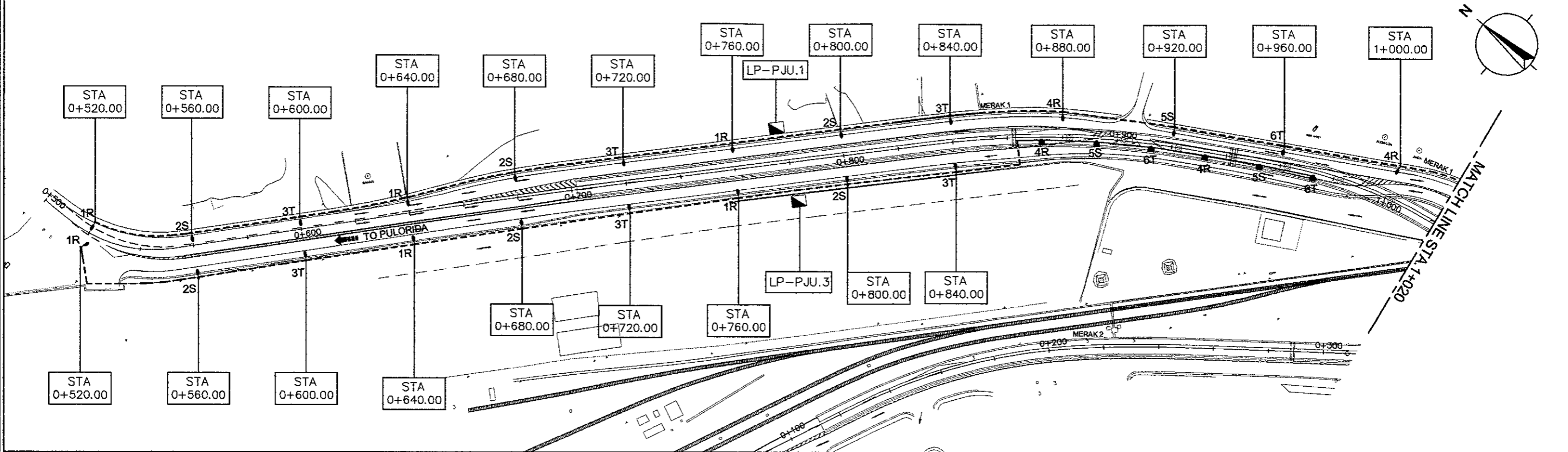


1 ROAD LIGHTING PLAN OF FLYOVER MERAK 1 & 2

 SCALE 1:1,500

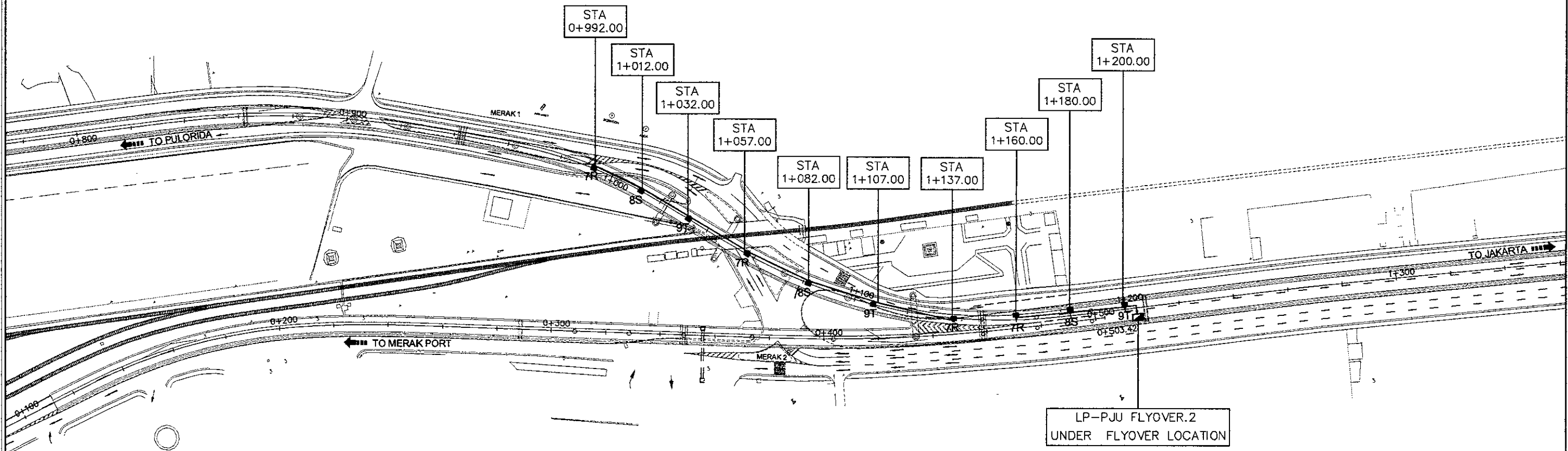
| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |





1 ROAD LIGHTING PLAN OF SERVICE ROAD
 SCALE 1:1,500

| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |



1 ROAD LIGHTING PLAN OF UNDER VIADUCT
 SCALE 1:1,500

LIGHTING FLYOVER

| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | G R O U P | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | | LOAD IN WATT | | | | |
|----------------|----------------|-------------|-----------|-------------------|--------------------|---|---|--------------|------------|------------|-------------------|--------------------|
| | | | | | SON 250 W | R | S | T | R | S | T | |
| NYFGbY 4X10mm2 | 1 | MCB.1P 2A | 1R | NY2X2,5 mm2 | 1 | | | 250 | | | | |
| | 2 | MCB.1P 2A | 2S | NY2X2,5 mm2 | 1 | | | | 250 | | | |
| | 3 | MCB.1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | | 250 | | |
| | 4 | MCB.1P 2A | 1R | NY2X2,5 mm2 | 1 | | | 250 | | | | |
| | 5 | MCB.1P 2A | 2S | NY2X2,5 mm2 | 1 | | | | 250 | | | |
| | 6 | MCB.1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | | 250 | | |
| | 7 | MCB.1P 2A | 1R | NY2X2,5 mm2 | 1 | | | 250 | | | | |
| | 8 | MCB.1P 2A | 2S | NY2X2,5 mm2 | 1 | | | | 250 | | | |
| | 9 | MCB.1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | | 250 | | |
| TOTAL | | | | | | | | 750 | 750 | 750 | 2.250 WATT | 2.812.50 VA |

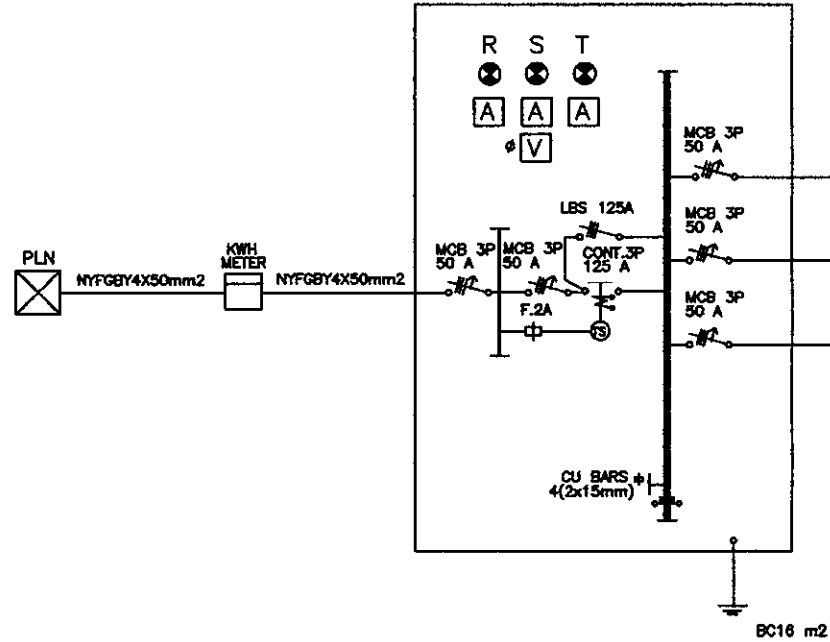
LIGHTING FLYOVER

| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | G R O U P | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | | LOAD IN WATT | | | | |
|----------------|----------------|-------------|-----------|-------------------|--------------------|---|---|--------------|-------------|------------|-------------------|--------------------|
| | | | | | SON 250 W | R | S | T | R | S | T | |
| NYFGbY 4X10mm2 | 1 | MCB.1P 2A | 4R | NY2X2,5 mm2 | 1 | | | 250 | | | | |
| | 2 | MCB.1P 2A | 5S | NY2X2,5 mm2 | 1 | | | | 250 | | | |
| | 3 | MCB.1P 2A | 6T | NY2X2,5 mm2 | 1 | | | | | 250 | | |
| | 4 | MCB.1P 2A | 4R | NY2X2,5 mm2 | 1 | | | 250 | | | | |
| | 5 | MCB.1P 2A | 5S | NY2X2,5 mm2 | 1 | | | | 250 | | | |
| | 6 | MCB.1P 2A | 6T | NY2X2,5 mm2 | 1 | | | | | 250 | | |
| | 7 | MCB.1P 2A | 4R | NY2X2,5 mm2 | 1 | | | 250 | | | | |
| TOTAL | | | | | | | | 1000 | 1000 | 750 | 2.750 WATT | 3.437.50 VA |

LIGHTING UNDER VIADUCT

| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | G R O U P | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | | LOAD IN WATT | | | | |
|----------------|----------------|-------------|-----------|-------------------|--------------------|---|---|--------------|------------|------------|-------------------|--------------------|
| | | | | | SON 150 W | R | S | T | R | S | T | |
| NYFGbY 4X10mm2 | 1 | MCB.1P 2A | 7R | NY2X2,5 mm2 | 1 | | | 150 | | | | |
| | 2 | MCB.1P 2A | 8S | NY2X2,5 mm2 | 1 | | | | 150 | | | |
| | 3 | MCB.1P 2A | 9T | NY2X2,5 mm2 | 1 | | | | | 150 | | |
| | 4 | MCB.1P 2A | 7R | NY2X2,5 mm2 | 1 | | | 150 | | | | |
| | 5 | MCB.1P 2A | 8S | NY2X2,5 mm2 | 1 | | | | 150 | | | |
| | 6 | MCB.1P 2A | 9T | NY2X2,5 mm2 | 1 | | | | | 150 | | |
| | 7 | MCB.1P 2A | 7R | NY2X2,5 mm2 | 1 | | | 150 | | | | |
| TOTAL | | | | | | | | 450 | 300 | 300 | 1.050 WATT | 1.312.50 VA |

LP-PJU.FLYOVER.1
 (UNDER VIADUCT LOCATION)



LIGHTING FLYOVER

| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | G R O U P | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | | LOAD IN WATT | | | |
|----------------|----------------|-------------|-----------|-------------------|--------------------|---|---|-------------------|------------|------------|--------------------|
| | | | | | SON 250 W | R | S | T | R | S | T |
| NYFGbY 4X10mm2 | 1 | MCB 1P 2A | 1R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 2 | MCB 1P 2A | 2S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| | 3 | MCB 1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | | 250 | |
| | 4 | MCB 1P 2A | 1R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 5 | MCB 1P 2A | 2S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| | 6 | MCB 1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | | 250 | |
| | 7 | MCB 1P 2A | 1R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 8 | MCB 1P 2A | 2S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| | 9 | MCB 1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | | 250 | |
| TOTAL | | | | | | | | 750 | 750 | 750 | |
| | | | | | TOTAL | | | 2.250 WATT | | | 2.812.50 VA |

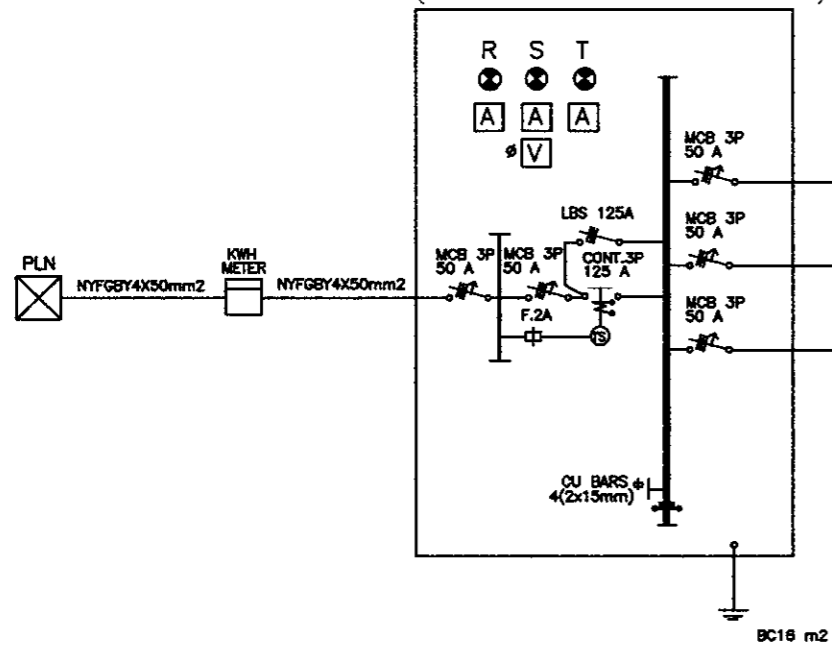
LIGHTING FLYOVER

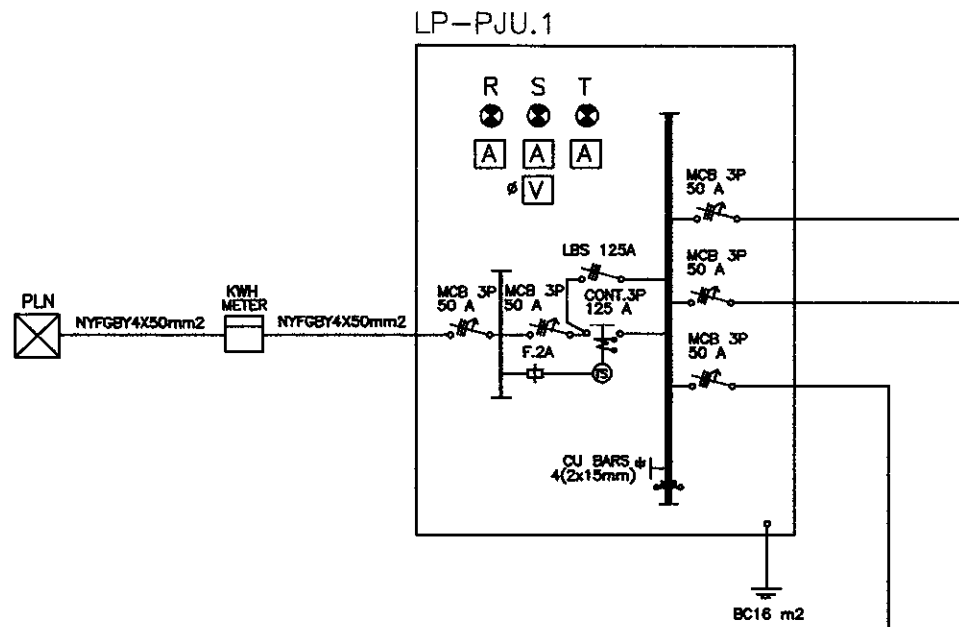
| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | G R O U P | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | | LOAD IN WATT | | | |
|----------------|----------------|-------------|-----------|-------------------|--------------------|---|---|-------------------|------------|------------|--------------------|
| | | | | | SON 250 W | R | S | T | R | S | T |
| NYFGbY 4X10mm2 | 1 | MCB 1P 2A | 4R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 2 | MCB 1P 2A | 5S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| | 3 | MCB 1P 2A | 6T | NY2X2,5 mm2 | 1 | | | | | 250 | |
| | 4 | MCB 1P 2A | 4R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 5 | MCB 1P 2A | 5S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| TOTAL | | | | | | | | 500 | 500 | 250 | |
| | | | | | TOTAL | | | 1.250 WATT | | | 1.562.50 VA |

LIGHTING UNDER VIADUCT

| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | G R O U P | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | | LOAD IN WATT | | | |
|----------------|----------------|-------------|-----------|-------------------|--------------------|---|---|-----------------|------------|------------|------------------|
| | | | | | SON 150 W | R | S | T | R | S | T |
| NYFGbY 4X10mm2 | 1 | MCB 1P 2A | 7R | NY2X2,5 mm2 | 1 | | | 150 | | | |
| | 2 | MCB 1P 2A | 8S | NY2X2,5 mm2 | 1 | | | | 150 | | |
| | 3 | MCB 1P 2A | 9T | NY2X2,5 mm2 | 1 | | | | | 150 | |
| TOTAL | | | | | | | | 150 | 150 | 150 | |
| | | | | | TOTAL | | | 450 WATT | | | 562.50 VA |

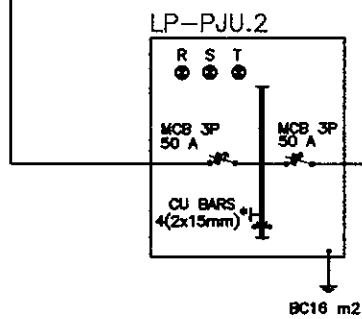
LP-PJU.FLYOVER.2
 (UNDER VIADUCT LOCATION)





| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | GROUP | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | | LOAD IN WATT | | | |
|----------------|----------------|-------------|-------|-------------------|--------------------|---|---|--------------|-----|-----|-------------|
| | | | | | SON 250 W | R | S | T | R | S | T |
| NYFGbY 4X10mm2 | 1 | MCB 1P 2A | 1R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 2 | MCB 1P 2A | 2S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| | 3 | MCB 1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | | 250 | |
| | 4 | MCB 1P 2A | 1R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 5 | MCB 1P 2A | 2S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| | 6 | MCB 1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | | 250 | |
| | 7 | MCB 1P 2A | 1R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 8 | MCB 1P 2A | 2S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| | 9 | MCB 1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | | 250 | |
| TOTAL | | | | | | | | 750 | 750 | 750 | |
| TOTAL | | | | | | | | 2,250 WATT | | | 2,812.50 VA |

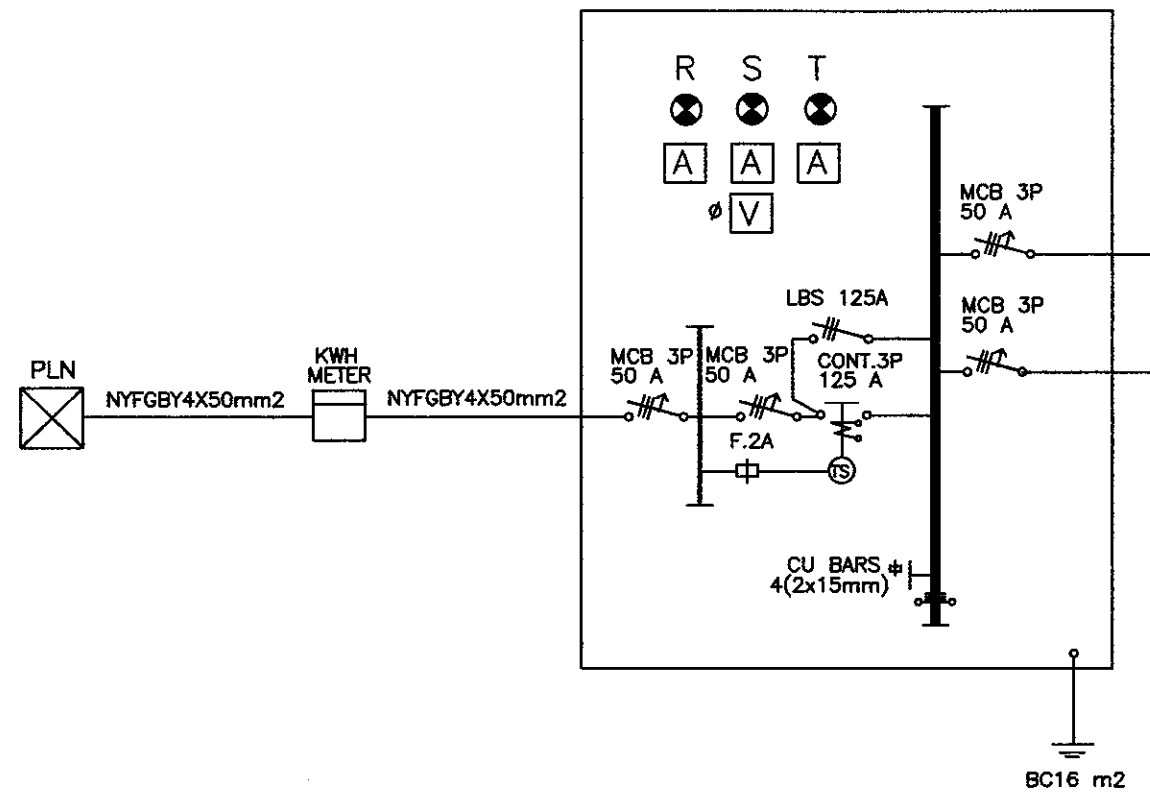
NYFGbY 4 X 25 mm2



| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | GROUP | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | | LOAD IN WATT | | | |
|----------------|----------------|-------------|-------|-------------------|--------------------|---|---|--------------|-----|-----|-------------|
| | | | | | SON 250 W | R | S | T | R | S | T |
| NYFGbY 4X10mm2 | 1 | MCB 1P 2A | 4R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 2 | MCB 1P 2A | 5S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| | 3 | MCB 1P 2A | 6T | NY2X2,5 mm2 | 1 | | | | | 250 | |
| | 4 | MCB 1P 2A | 4R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 5 | MCB 1P 2A | 5S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| | 6 | MCB 1P 2A | 6T | NY2X2,5 mm2 | 1 | | | | | 250 | |
| TOTAL | | | | | | | | 500 | 500 | 500 | |
| TOTAL | | | | | | | | 1,500 WATT | | | 1,875.00 VA |

| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | GROUP | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | | LOAD IN WATT | | | |
|----------------|----------------|-------------|-------|-------------------|--------------------|---|---|--------------|-----|-----|-------------|
| | | | | | SON 250 W | R | S | T | R | S | T |
| NYFGbY 4X10mm2 | 1 | MCB 1P 2A | 7R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 2 | MCB 1P 2A | 8S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| | 3 | MCB 1P 2A | 9T | NY2X2,5 mm2 | 1 | | | | | 250 | |
| | 4 | MCB 1P 2A | 7R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 5 | MCB 1P 2A | 8S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| | 6 | MCB 1P 2A | 9T | NY2X2,5 mm2 | 1 | | | | | 250 | |
| | 7 | MCB 1P 2A | 7R | NY2X2,5 mm2 | 1 | | | 250 | | | |
| | 8 | MCB 1P 2A | 8S | NY2X2,5 mm2 | 1 | | | | 250 | | |
| TOTAL | | | | | | | | 750 | 750 | 500 | |
| TOTAL | | | | | | | | 2,000 WATT | | | 2,500.00 VA |

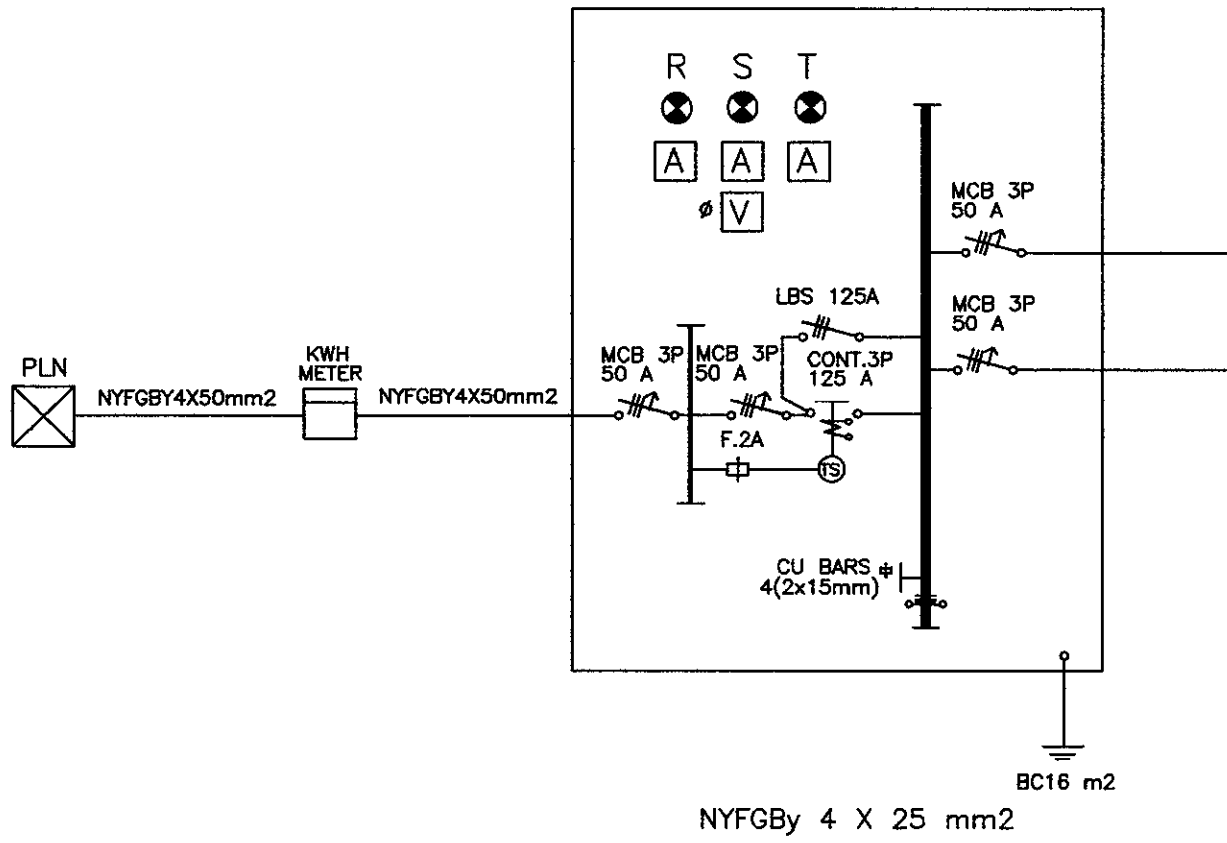
LP-PJU.3



| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | G R O U P | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | LOAD IN WATT | | |
|----------------|----------------|-------------|-----------|-------------------|--------------------|--|--------------|------------|-------------|
| | | | | | SON 250 W | | R | S | T |
| NYFGbY 4X10mm2 | 1 | MCB.1P 2A | 1R | NY2X2,5 mm2 | 1 | | 250 | | |
| | 2 | MCB.1P 2A | 2S | NY2X2,5 mm2 | 1 | | | 250 | |
| | 3 | MCB.1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | 250 |
| | 4 | MCB.1P 2A | 1R | NY2X2,5 mm2 | 1 | | 250 | | |
| | 5 | MCB.1P 2A | 2S | NY2X2,5 mm2 | 1 | | | 250 | |
| | 6 | MCB.1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | 250 |
| | 7 | MCB.1P 2A | 1R | NY2X2,5 mm2 | 1 | | 250 | | |
| | 8 | MCB.1P 2A | 2S | NY2X2,5 mm2 | 1 | | | 250 | |
| | 9 | MCB.1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | 250 |
| TOTAL | | | | | | | | 2,250 WATT | 2.812,50 VA |

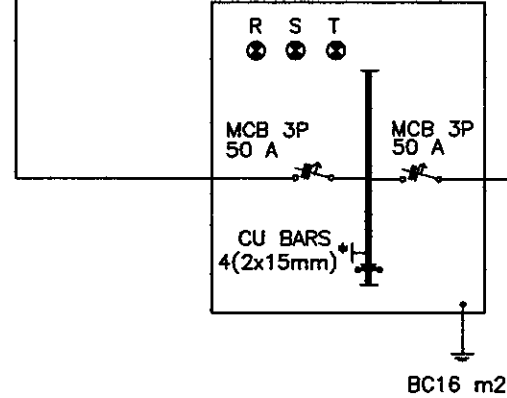
| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | G R O U P | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | LOAD IN WATT | | |
|----------------|----------------|-------------|-----------|-------------------|--------------------|--|--------------|------------|-------------|
| | | | | | SON 250 W | | R | S | T |
| NYFGbY 4X10mm2 | 1 | MCB.1P 2A | 4R | NY2X2,5 mm2 | 1 | | 250 | | |
| | 2 | MCB.1P 2A | 5S | NY2X2,5 mm2 | 1 | | | 250 | |
| | 3 | MCB.1P 2A | 6T | NY2X2,5 mm2 | 1 | | | | 250 |
| | 4 | MCB.1P 2A | 4R | NY2X2,5 mm2 | 1 | | 250 | | |
| | 5 | MCB.1P 2A | 5S | NY2X2,5 mm2 | 1 | | | 250 | |
| | 6 | MCB.1P 2A | 6T | NY2X2,5 mm2 | 1 | | | | 250 |
| TOTAL | | | | | | | | 1,500 WATT | 1,875.00 VA |

LP-PJU.4

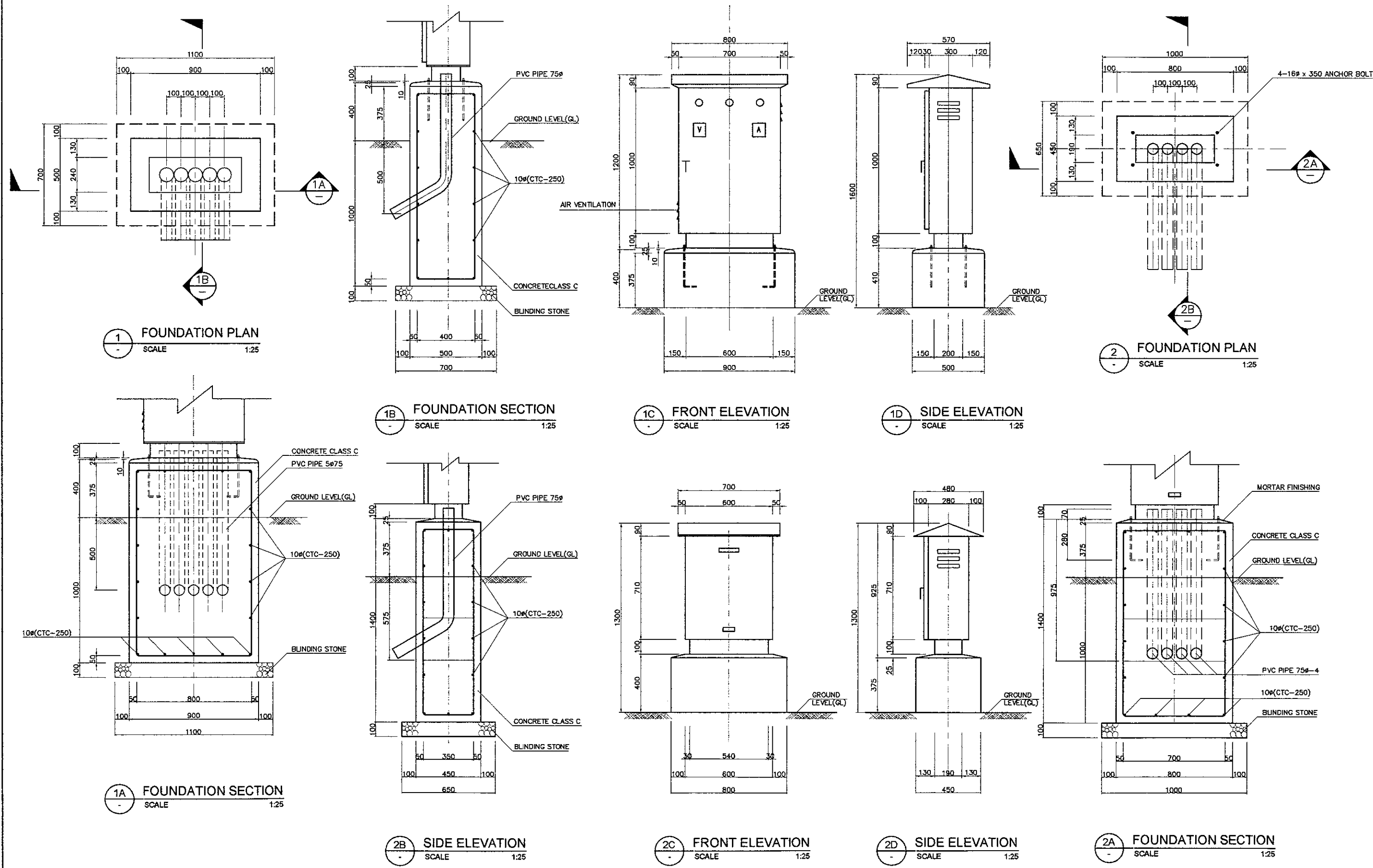


| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | GROUP | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | LOAD IN WATT | | | |
|-------------------|----------------|-------------|-------|-------------------|--------------------|--|--------------|------------|-----|-------------|
| | | | | | SON 250 W | | R | S | T | |
| NYFGbY 4X10mm2 | 1 | MCB.1P 2A | 1R | NY2X2,5 mm2 | 1 | | 250 | | | |
| | 2 | MCB.1P 2A | 2S | NY2X2,5 mm2 | 1 | | | 250 | | |
| | 3 | MCB.1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | 250 | |
| | 4 | MCB.1P 2A | 1R | NY2X2,5 mm2 | 1 | | 250 | | | |
| | 5 | MCB.1P 2A | 2S | NY2X2,5 mm2 | 1 | | | 250 | | |
| | 6 | MCB.1P 2A | 3T | NY2X2,5 mm2 | 1 | | | | 250 | |
| TOTAL | | | | | | | | 500 | 500 | 500 |
| TOTAL | | | | | | | | 1,500 WATT | | 1,875.00 VA |

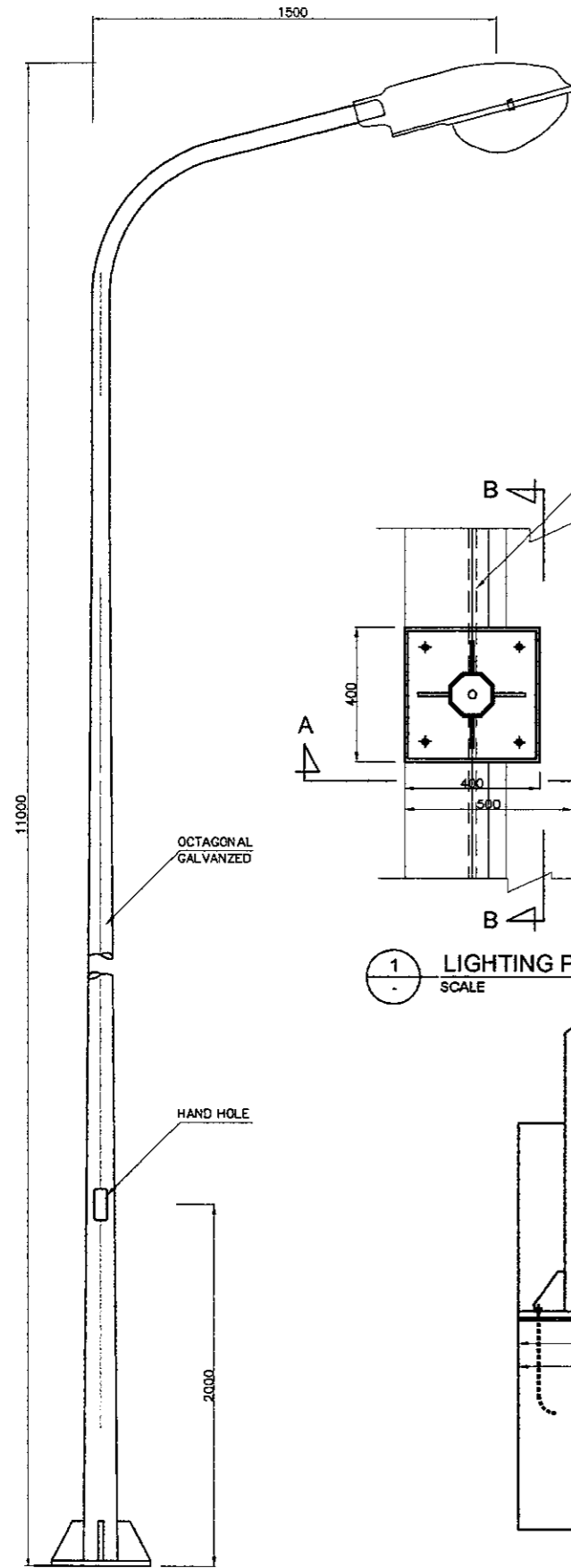
LP-PJU.5



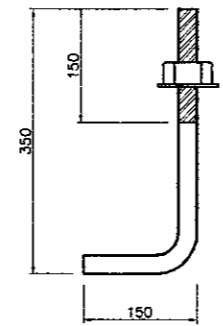
| CABLE FEEDER | NUMBER OF POLE | MCB OF POLE | GROUP | CABLE TO LIGHTING | LIGHTING HEAD TYPE | | LOAD IN WATT | | | |
|-------------------|----------------|-------------|-------|-------------------|--------------------|--|--------------|------------|-----|-------------|
| | | | | | SON 250 W | | R | S | T | |
| NYFGbY 4X10mm2 | 1 | MCB.1P 2A | 4R | NY2X2,5 mm2 | 1 | | 250 | | | |
| | 2 | MCB.1P 2A | 5S | NY2X2,5 mm2 | 1 | | | 250 | | |
| | 3 | MCB.1P 2A | 6T | NY2X2,5 mm2 | 1 | | | | 250 | |
| | 4 | MCB.1P 2A | 4R | NY2X2,5 mm2 | 1 | | 250 | | | |
| | 5 | MCB.1P 2A | 5S | NY2X2,5 mm2 | 1 | | | 250 | | |
| | 6 | MCB.1P 2A | 6T | NY2X2,5 mm2 | 1 | | | | 250 | |
| | 7 | MCB.1P 2A | 4R | NY2X2,5 mm2 | 1 | | 250 | | | |
| | 8 | MCB.1P 2A | 5S | NY2X2,5 mm2 | 1 | | | 250 | | |
| TOTAL | | | | | | | | 750 | 750 | 500 |
| TOTAL | | | | | | | | 2,250 WATT | | 2,500.00 VA |



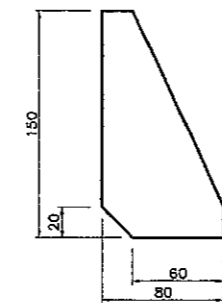
| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |



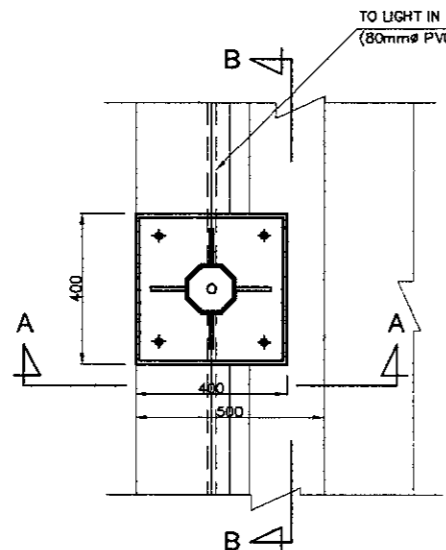
1 LIGHTING POLE
 SCALE 1:25



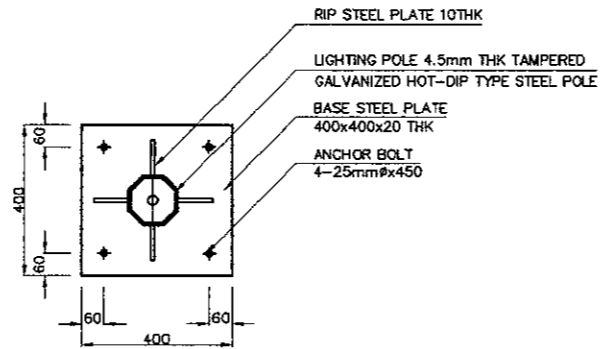
1 ANCHOR BOLT
 SCALE 1:10



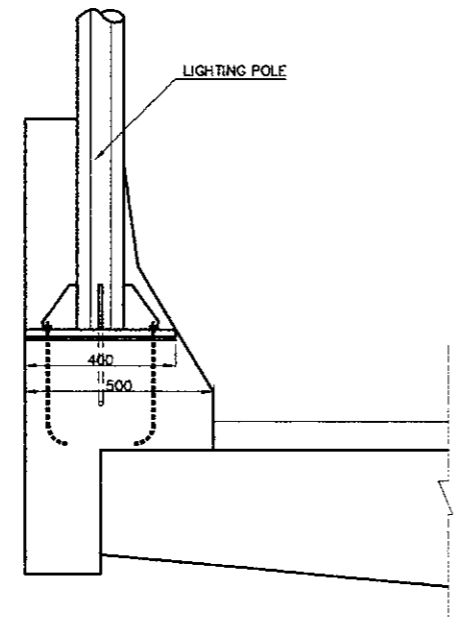
1 RIP STEEL PLATE
 SCALE 1:5



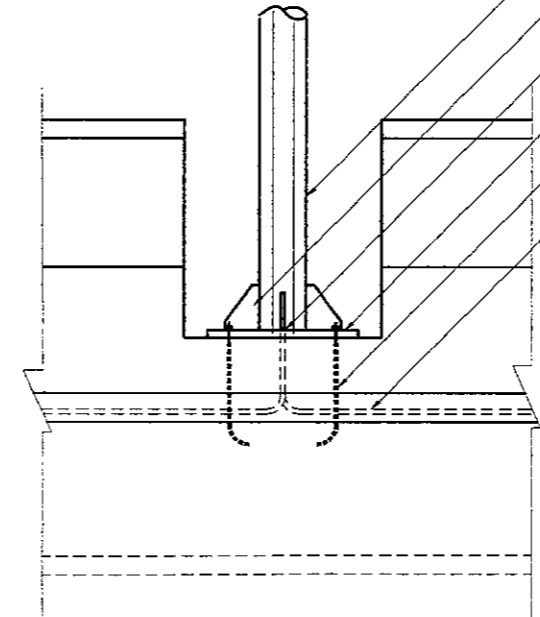
1 LIGHTING POLE PLAN
 SCALE 1:20



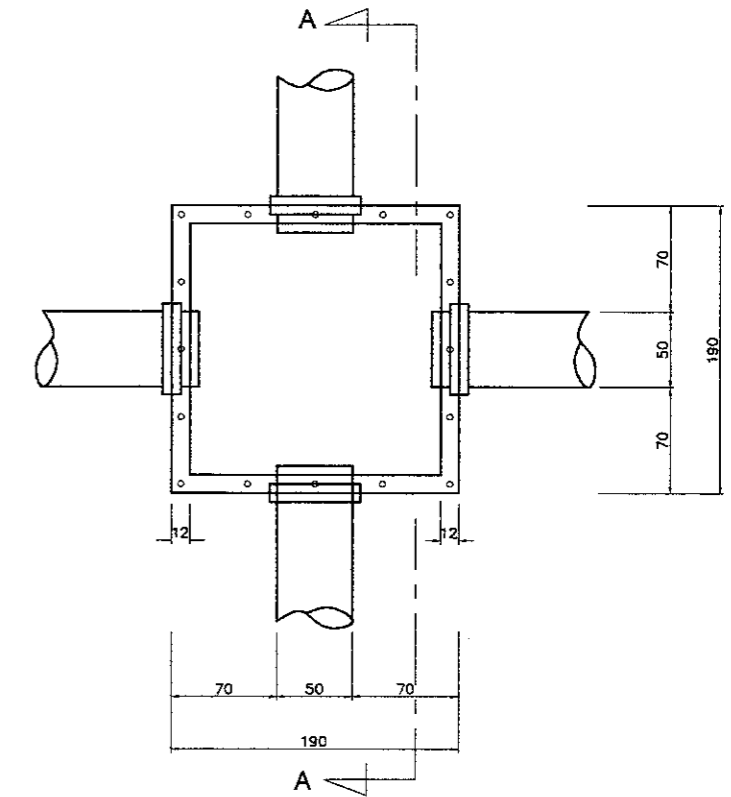
1 BASE PLATE DETAIL
 SCALE 1:20



1 SECTION A-A
 SCALE 1:20

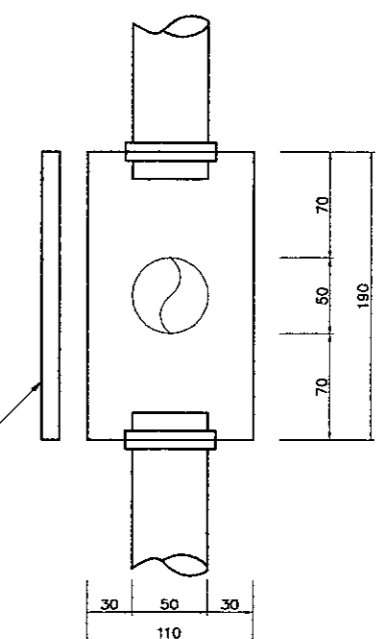


1 SECTION B-B
 SCALE 1:20

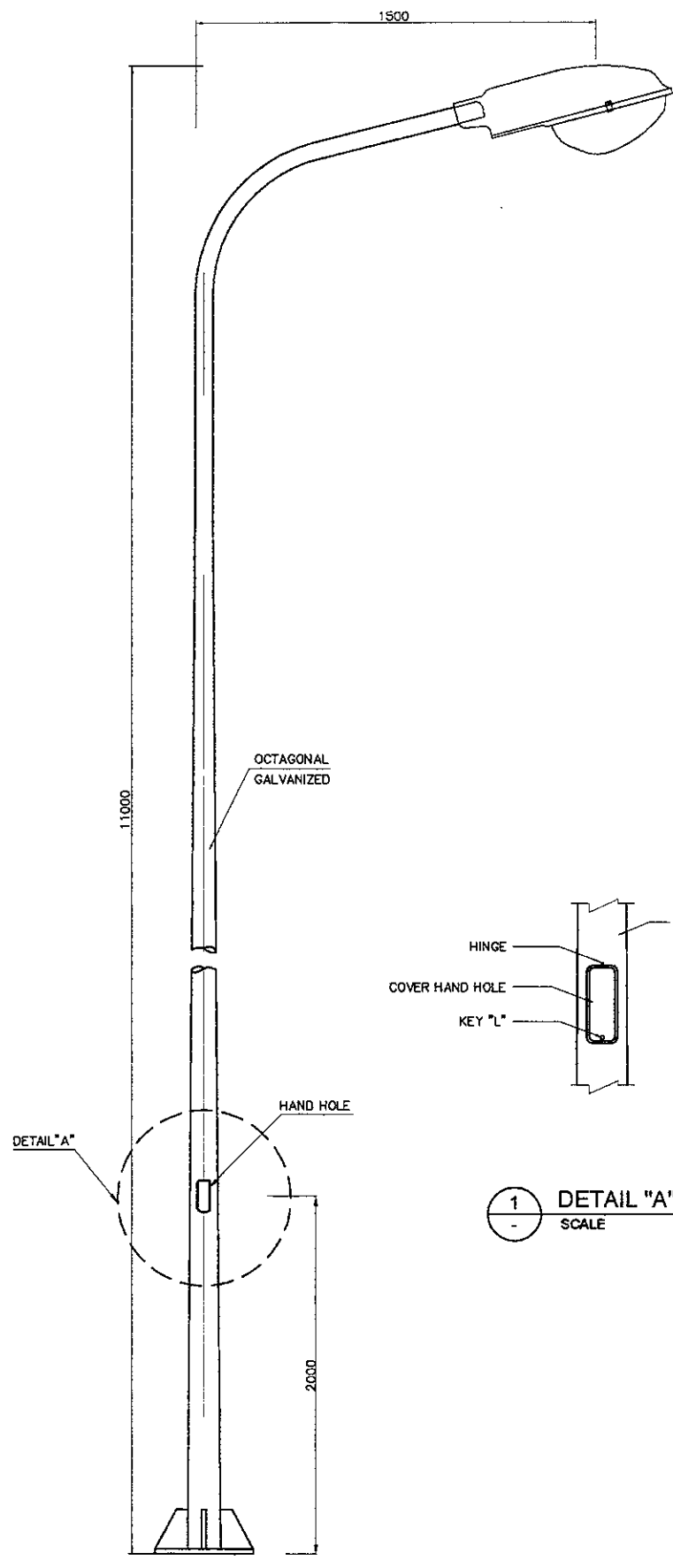


1 PULL BOX DETAIL
 SCALE 1:5

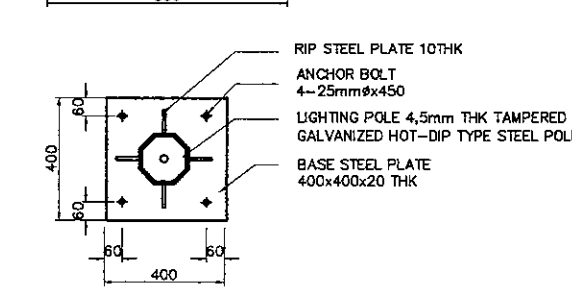
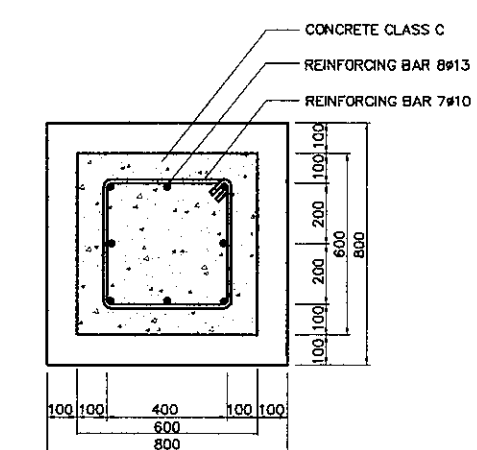
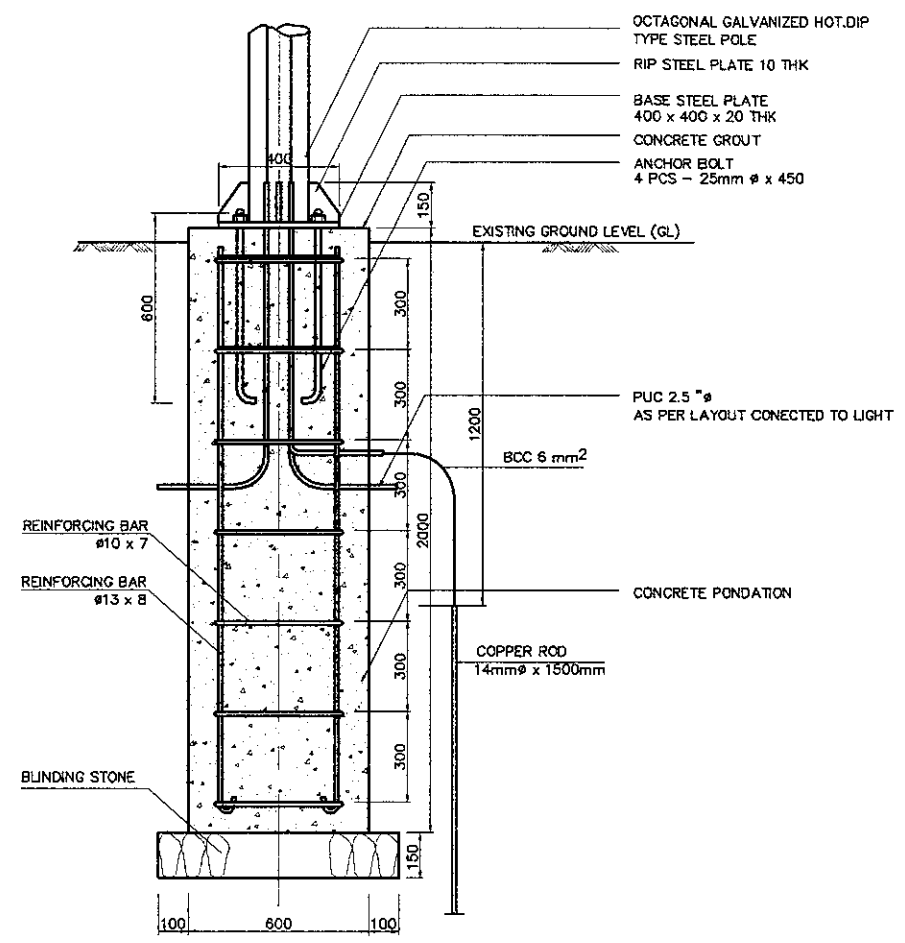
OCTAGONAL GALVANIZED HOT-DIP TYPE STEEL POLE
 RIP STEEL PLATE 10THK
 BOTTOM POLE φ250mm
 BASE STEEL PLATE 400x400x20 THK
 ANCHOR BOLT 4-25mmφx450
 TO LIGHT IN THE STRUCTURE (80mm PVC AS PER LAYOUT)



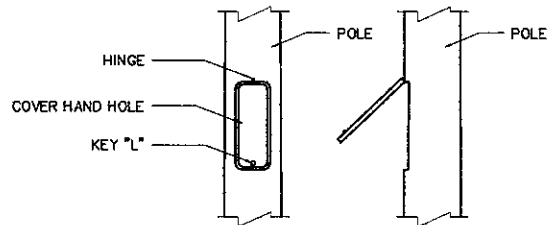
1 SECTION A-A
 SCALE 1:5



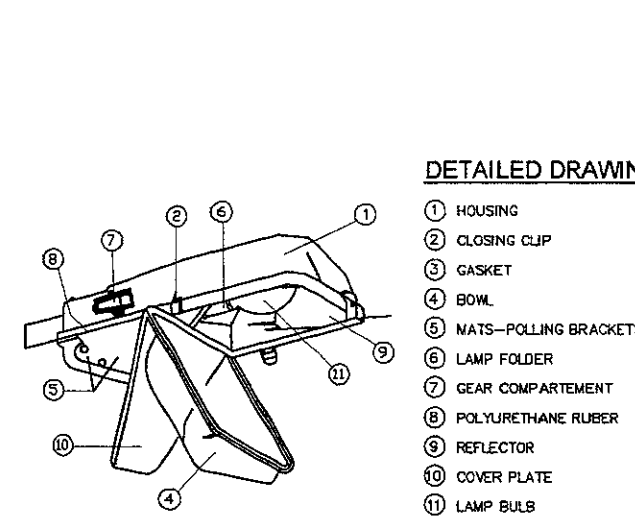
1 LIGHTING POLE
 SCALE 1:25



1 LIGHTING POLE FOUNDATION
 SCALE 1:25

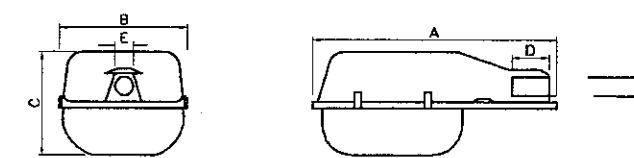


1 DETAIL "A" (HAND HOLE)
 SCALE 1:25



DETAILED DRAWING

- ① HOUSING
- ② CLOSING CLIP
- ③ GASKET
- ④ BOWL
- ⑤ MATS-POLLING BRACKETS
- ⑥ LAMP FOLDER
- ⑦ GEAR COMPARTMENT
- ⑧ POLYURETHANE RUBBER
- ⑨ REFLECTOR
- ⑩ COVER PLATE
- ⑪ LAMP BULB



1 DETAIL ARMATURE SON 250 W
 SCALE 1:25

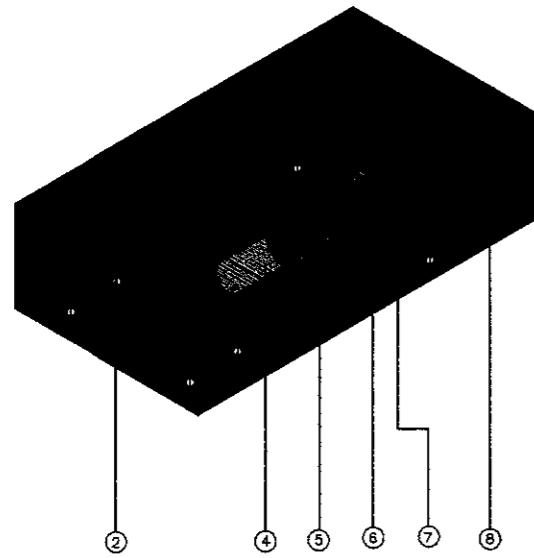
ELECTRICAL SPECIFICATION AND WEIGHT

| LUM.TYP. | LAMP | BALLAST | IGNITOR | CAPA (µF/V ±10%) | VOLTAGE (V) | CURRENT (A) | WATTAGE (W) | WEIGHT (KG) |
|--------------|----------|--------------|---------|------------------|-------------|-------------|-------------|-------------|
| SRC 510/100W | SON 100W | BSN 100 L.08 | SN 50 | 12/250 | 220 | 0.65 | 110 | 6 |
| SRC 510/150W | SON 150W | BSN 150 L.08 | SN 50 | 18/250 | 220 | 0.85 | 170 | 13.4 |
| SRC 510/250W | SON 250W | BSN 250 L.08 | SN 50 | 32/250 | 220 | 1.40 | 276 | 13.4 |
| SRC 510/400W | SON 400W | BSN 400 L.08 | SN 50 | 50/250 | 220 | 2.20 | 431 | 13.4 |

DIMENSIONS (mm)

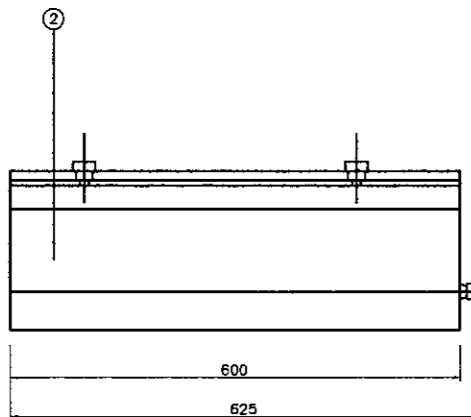
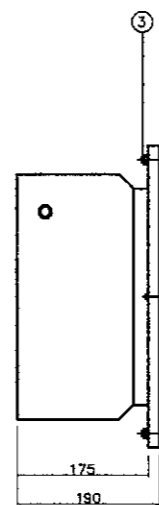
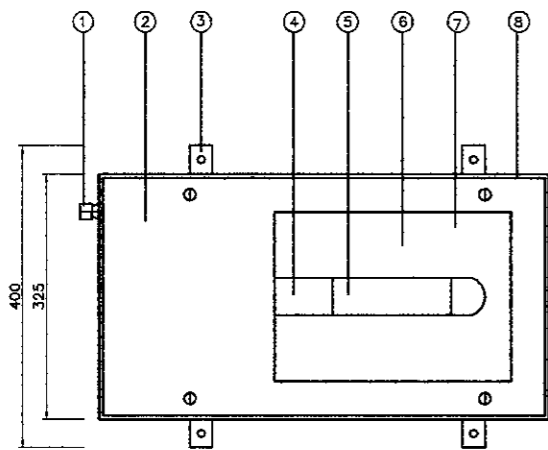
| LUM.TYP. | A | B | C | D | E | F | FIG.Nº |
|--------------|-----|-----|-----|-----|----|----|--------|
| SRC 510/100W | 578 | 425 | 295 | 109 | 45 | 42 | |
| SRC 510/150W | 798 | 425 | 425 | 120 | 65 | 50 | |
| SRC 510/250W | 798 | 425 | 425 | 120 | 65 | 60 | |
| SRC 510/400W | 798 | 425 | 425 | 120 | 65 | 60 | |

| DESIGNED BY | | CHECKED BY | | SUBMITTED BY | |
|-------------|---------|------------|------------|--------------|-----------|
| Name | R. UENO | Name | T. OKUMURA | Name | M. KIUCHI |
| Sign | | Sign | | Sign | |
| Date | | Date | | Date | |

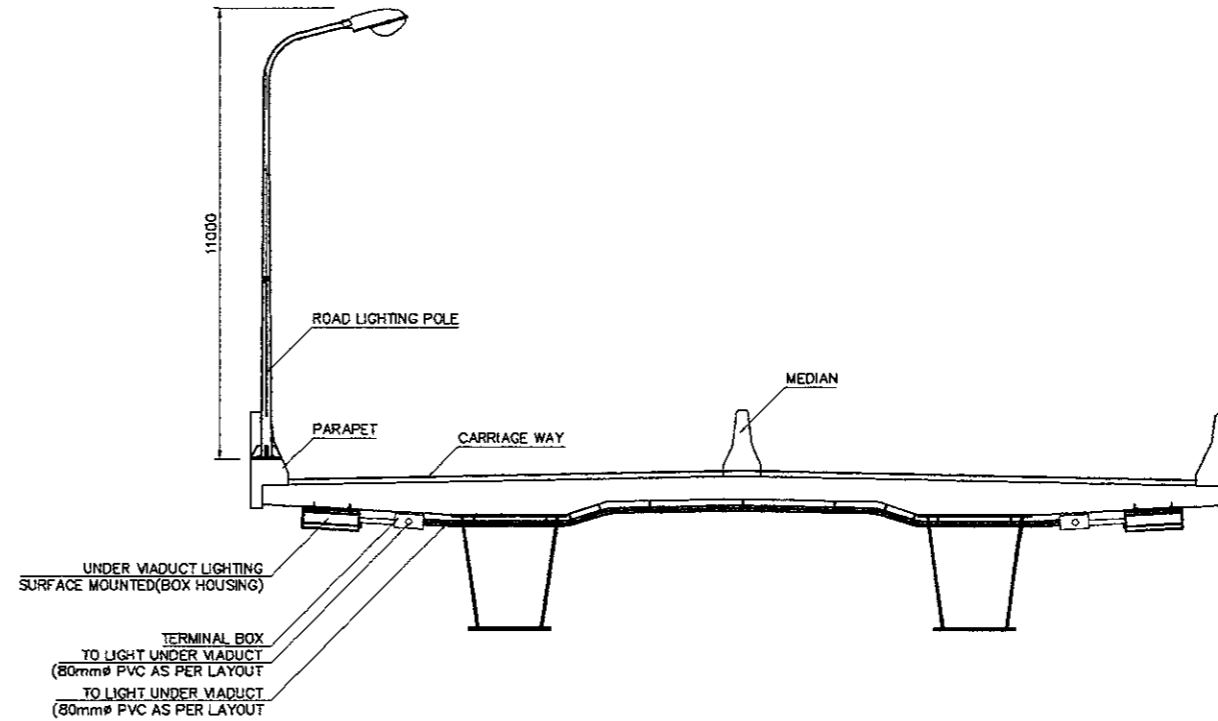


DETAILS DRAWING

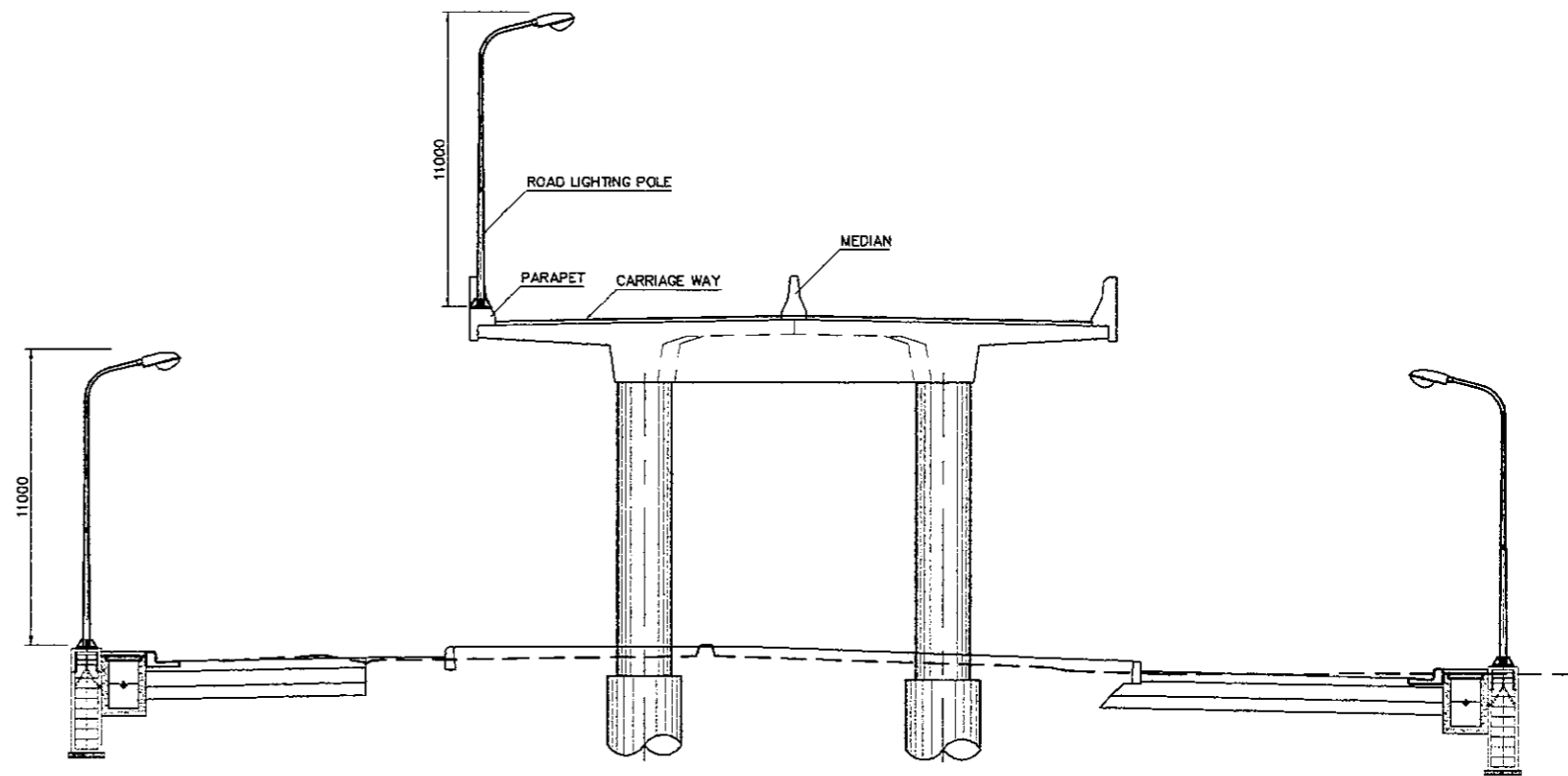
- ① SOCKET PLUG TERMINAL
- ② HOUSING
- ③ SCREW FIX POWER CONNECTION
- ④ LAMP HOLDER
- ⑤ LAMP BULB
- ⑥ REFLECTOR
- ⑦ GLASS COVER
- ⑧ INSIDE GEAR COMPARTMENT



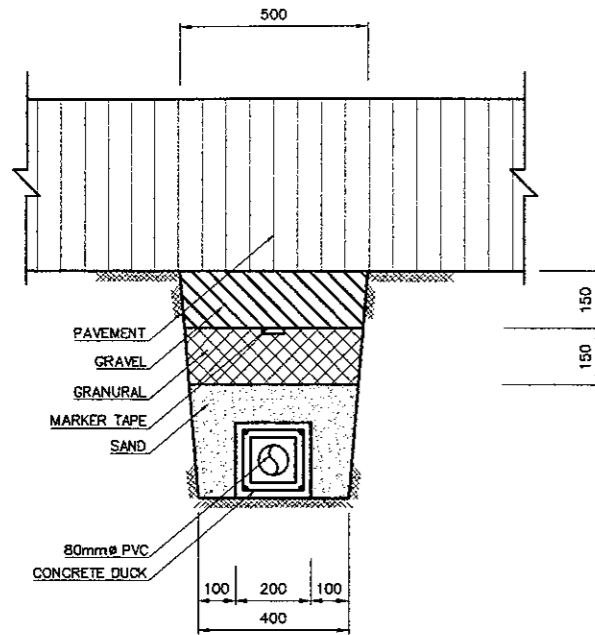
① ROAD LIGHTING UNDER VIADUCT
 SURFACE MOUNTED
 SCALE 1:10



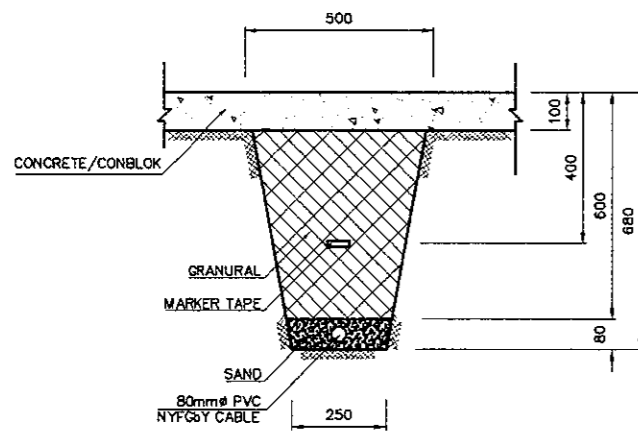
① LIGHTING SETTING UNDER VIADUCT
 SCALE 1:100



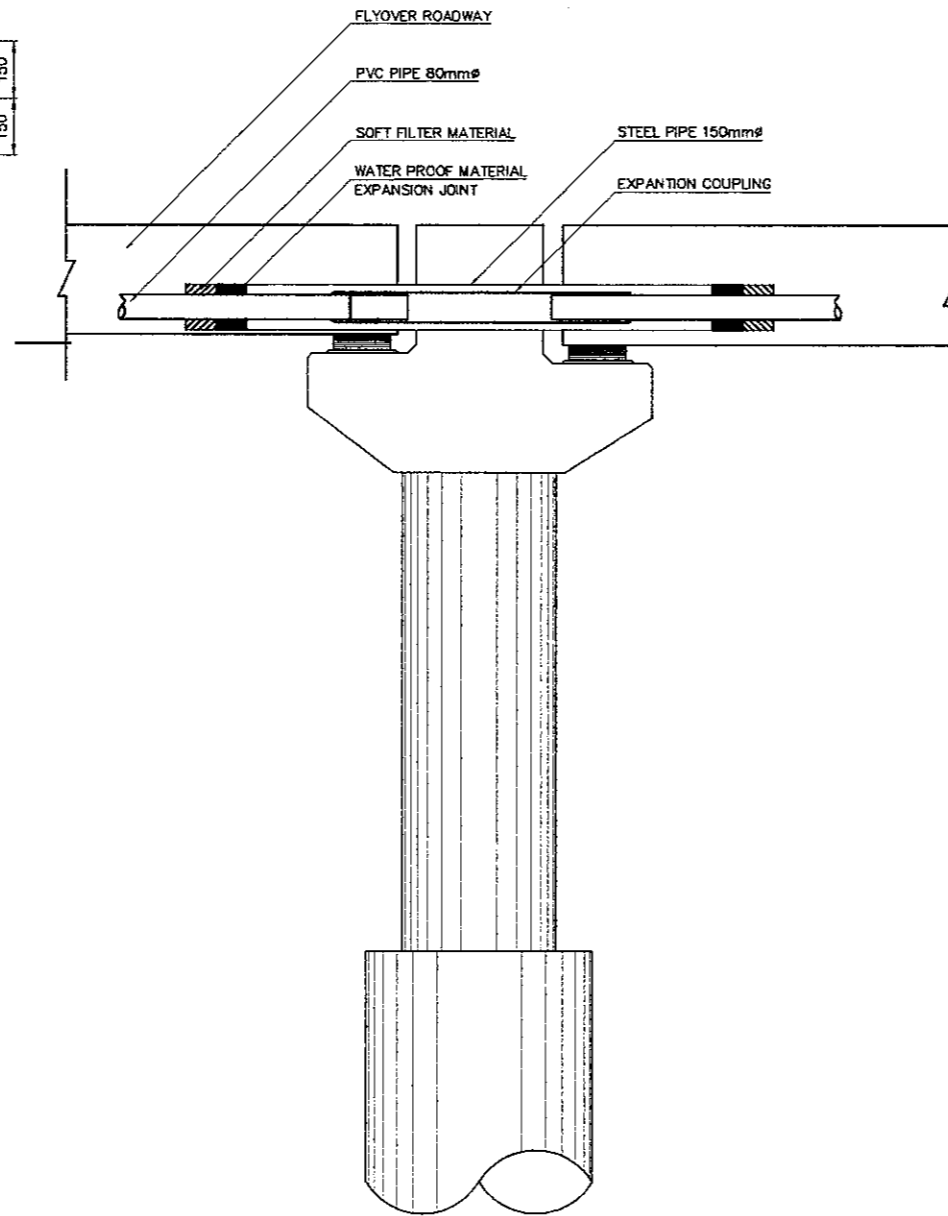
① TYPICAL ROAD CROSS SECTION
 SCALE 1:150



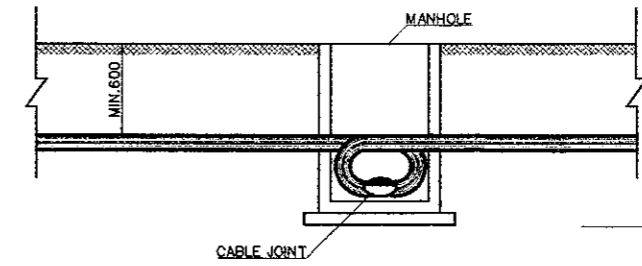
1 CONDUIT IN THE DUCT UNDER ROAD
 SCALE 1:20



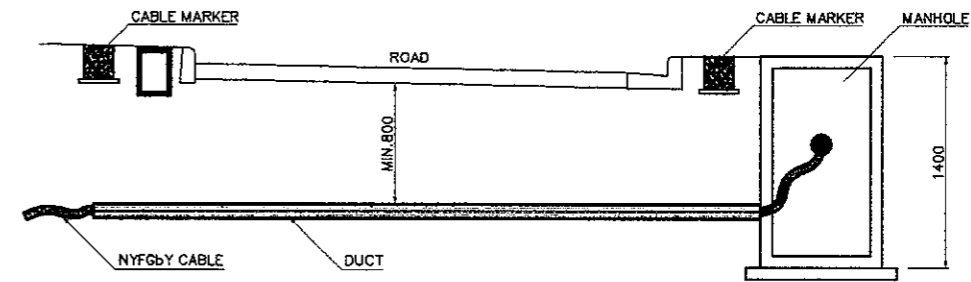
1 CONDUIT RUN UNDER SIDEWALK
 SCALE 1:20



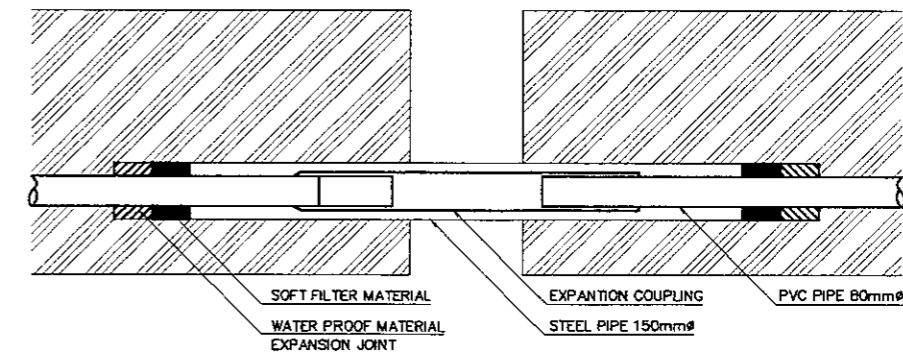
1 CONDUIT EXPANTION JOINT FOR THE BRIDGE
 SCALE 1:25



1 GENERAL INSTALLATION FOR CABLE
 SCALE 1:50



1 CABLE INSTALLATION AT ROAD CROSSING POINT
 SCALE 1:50



1 CONDUIT EXPANTION JOINT FOR THE BRIDGE
 SCALE 1:20